Five-Year Review Report

Second Five-Year Review Report
for
Gilt Edge Mine Superfund Site

EPA ID SDD987673985

Lawrence County, South Dakota

June 2012

United States Environmental Protection Agency
Region 8
Denver, Colorado

Approved by:

Date: 6/21/12

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for
Gilt Edge Mine
Lawrence County, South Dakota

List of Acronyms **5**

Executive Summary ..... **i**

Five-Year Review Summary Form ..... **iv**

1.0 Introduction **1**

2.0 Site Chronology **3**

3.0 Background **4**

3.1 PHYSICAL CHARACTERISTICS 4
3.2 LAND AND RESOURCE USE 8
3.3 HISTORY OF CONTAMINATION 9
3.4 INITIAL RESPONSE 9
3.5 BASIS FOR TAKING ACTION 10

4.0 Remedial Actions **12**

4.1 REMEDY SELECTION 12
4.2 REMEDY IMPLEMENTATION 16
4.3 OPERATION AND MAINTENANCE 17

5.0 Progress Since the Last Five-Year Review **18**

5.1 CONTINUE EFFLUENT AND SURFACE WATER MONITORING 19
5.2 ADD RELEVANT ANALYTES TO MONITORING PROGRAM 19
5.3 REVISE ANALYTICAL DETECTION LIMITS 19
5.4 REVISE PERFORMANCE STANDARDS 20
5.5 CONSIDER REPAIR TO SUSPECTED LEAKING CHANNELS 20
5.6 CONDUCT TOXICOLOGY STUDY OF SULFATE TDS 20

6.0 Five-Year Review Process **21**

6.1 ADMINISTRATIVE COMPONENTS 21
6.2 COMMUNITY INVOLVEMENT 21
6.3 DOCUMENT REVIEW 21
6.4 DATA REVIEW 25
6.5 SITE INSPECTION 27
6.6 INTERVIEWS 28

7.0 Technical Assessment **30**

7.1 QUESTION A: IS THE REMEDY FUNCTIONING AS INTENDED BY THE DECISION DOCUMENTS? 30
7.2 QUESTION B: ARE THE EXPOSURE ASSUMPTIONS, TOXICITY DATA, CLEANUP LEVELS AND RAOS USED AT THE TIME OF REMEDY SELECTION STILL VALID? 31
7.3 QUESTION C: HAS ANY OTHER INFORMATION COME TO LIGHT THAT COULD CALL INTO QUESTION THE PROTECTIVENESS OF THE REMEDY? 32
7.4 TECHNICAL ASSESSMENT SUMMARY 32

8.0 Issues **33**

9.0 Recommendations and Follow-up Actions 34
10.0 Protectiveness Statements 35
11.0 Next Review 36

Appendix A: List of Documents Reviewed A-1
Appendix B: Press Notices B-1
Appendix C: Interview Forms C-1
Appendix D: Site Inspection Checklist D-1
Appendix E: Photographs from Site Inspection Visit E-1
Appendix F: Conceptual Sequence of Events F-1
Appendix G: Surface Water Data G-1

Tables

Table 1: Chronology of Site Events 3
Table 2. OU2 Interim Remedial Action Goals 15
Table 3: Progress on Recommendations from the 2007 FYR 18
Table 4. Current South Dakota Surface Water Standards 23
Table 5. Average Monthly Cadmium Concentrations 26
Table 6: Current Site Issues 33
Table 7: Recommendations to Address Current Site Issues 34

Figures

Figure 1: Site Location Map 6
Figure 2: Detailed Site Map 7

List of Acronyms

ARAR	Applicable or Relevant and Appropriate Requirement
ARD	Acid Rock Drainage
ARSD	Administrative Rules of South Dakota
BMC	Brohm Mining Company
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CFR	Code of Federal Regulations
CIC	Community Involvement Coordinator
CP	Compliance Point
EPA	United States Environmental Protection Agency
ESD	Explanation of Significant Differences
FYR	Five-Year Review
HLP	Heap Leach Pad
IC	Institutional Control
MCL	Maximum Contaminant Level
mg/L	Milligrams per Liter
µg/L	Micrograms per Liter
µmhos/cm	Micromhos per Centimeter
NCP	National Oil and Hazardous Substances Pollution Contingency Plan
NPDES	National Pollutant Discharge Elimination System
NPL	National Priorities List
NREL	National Renewable Energy Lab
O&M	Operation and Maintenance
OU	Operable Unit
PRP	Potentially Responsible Party
RAO	Remedial Action Objective
RD/RA	Remedial Design/Remedial Action
RI/FS	Remedial Investigation/Feasibility Study
ROD	Record of Decision
RPM	Remedial Project Manager
SDDENR	South Dakota Department of Environment and Natural Resources
TBC	To-Be-Considered
TDS	Total Dissolved Solids
TSS	Total Suspended Solids
WAD	Weak Acid Dissociable

Executive Summary

Introduction

The Gilt Edge Mine Superfund site (the Site) is located in the Black Hills, Lawrence County, approximately six miles southeast of Lead, South Dakota. The Site has been used extensively for mining and mineral processing operations throughout its history, including a heap leach gold mining operation. EPA listed the Site on the National Priorities List (NPL) in December 2000.

The Site is divided into three Operable Units (OUs):

- OU1, Primary Mine Disturbance Area. OU1 addresses existing contaminant sources within the primary mine disturbance area such as acid-generating waste rock and fills, spent ore, exposed acid-generating bedrock, and sludge.
- OU2, Water Treatment, ground water and Lower Strawberry Creek. OU2 addresses: (1) management of acid rock drainage (ARD) generated at the Site, including ARD collection systems, pumping stations, pipelines, water treatment and management of ARD treatment generated sludge; (2) ground water contamination associated with the Site; and (3) contaminant sources, surface water and sediments in the Lower Strawberry Creek area.
- OU3, Ruby Gulch Waste Rock Dump. OU3 addresses contaminant sources located within the Ruby Gulch Waste Rock Dump.

Wastes associated with mining activities included waste rock, tailings and spent ores contaminated with a wide array of metals. ARD is the contamination of primary concern under OU2 and OU3. The potential impact of the metal content of the mine waste through direct exposure to human and environmental receptors is being addressed under OU1.

The April 2001 Early Action Interim Record of Decision (ROD) for OU2 selected an interim remedial action to use the existing ARD collection system at the toe of the Ruby Gulch Waste Rock Dump and the existing water treatment facility to treat ARD. Subsequently, a November 2001 Interim ROD for OU2 required ARD to be collected from the toe of the Ruby Repository and from seeps in two drainages and treated prior to discharge to Strawberry Creek. The November 2001 ROD also calls for the conversion of the pre-existing sodium hydroxide based treatment facility to a lime-based neutralization/precipitation process.

The 2001 Interim ROD for OU3 included regrading the waste rock dump in the Ruby Gulch drainage and construction of a synthetic cap and vegetative cover, clean water diversion ditches and an ARD collection gallery. The majority of construction for the OU2 and OU3 interim remedies was completed in March 2003 and April 2006, respectively.

The remedy for OU1 selected in the 2008 ROD is currently being designed but has not yet begun. Therefore, OU1 was not part of the Five-Year Review (FYR) process. The OU1 remedy will build on the interim OU2 and OU3 remedies implemented at the Site. Following completion of the OU1 remedial action, final OU2 and OU3 RODs will complete the remedy.

The triggering action for this FYR was the signing of the first FYR on April 10, 2007.

Remedial Action Objectives

The remedial action objectives (RAOs) stated in the November 2001 Interim OU2 ROD are:

- Prevent direct exposure of the population to elevated concentrations of contaminants in surface water drainage from the Site.
- Reduce or eliminate ARD water flow into Ruby Gulch and Strawberry and Bear Butte Creeks.
- Minimize expenditures for water treatment at the Site during closure activities (determine a preliminary minimum cost to closure comparison between recommended alternatives, based on present worth analysis).
- Minimize waste and waste disposal requirements.
- Integrate water treatment with overall site closure and reclamation activities.
- Maintain compatibility with site-wide RAOs and final water treatment remedial action.
- Achieve compliance, to the extent possible and practicable for the interim, with currently applicable water quality standards.

The RAOs stated in the 2001 Interim OU3 ROD are:

- Control erosion of mine waste contaminants into Ruby Gulch and Bear Butte Creek.
- Reduce formation and volume of ARD.
- Reduce leaching and migration of contaminants from mine waste into surface water.
- Reduce leaching and migration of contaminants from mine waste that may enter ground water.

Technical Assessment

The interim remedies for OU2 and OU3 are functioning as intended. The OU2 interim action has resulted in reduced migration of metal contaminants and acid water in surface water discharge to Strawberry Creek. The South Dakota Surface Water Quality Standards for protection of aquatic life are occasionally exceeded. However, contaminant levels overall have declined, with the exception that the current chronic cadmium standard is regularly exceeded. The cadmium exceedance in Ruby Gulch is unrelated to the water treatment plant effluent discharge to Strawberry Creek. The chronic cadmium exceedances in Strawberry Creek occur even during periods when this standard is met in the treatment plant effluent and therefore it is hypothesized that other contaminant pathways are present. The planned remedy at OU1 is anticipated to further reduce stream contamination from dispersed sources at the Site, and remaining contaminant sources will be evaluated in the pending OU2 RI/FS. As recommended from the previous FYR, weak acid dissociable (WAD) cyanide is monitored in effluent and surface water, but alkalinity, chromium VI, mercury, conductivity and arsenic are not consistently monitored in the surface water, and alkalinity, chromium VI, and mercury are not consistently monitored in the water treatment plant effluent. Besides alkalinity and conductivity, these parameters may have been historically below analytical detection limits. While a decision document is not required for changes to a monitoring plan, documentation of the rationale for changes will reduce confusion on what is and is not required at the Site. The OU3 interim action has controlled erosion of mine waste into local water courses; controlled formation of ARD and leaching and migration of contaminants from mine waste into surface water and local ground water;

significantly reduced quantity of ARD requiring containment and treatment; and reduced threat of release to downgradient water users. The OU1 remedy and the final OU2 and OU3 remedies are expected to address any unacceptable risk at the Site and will ensure long-term protectiveness when completed.

Conclusion

Although no unacceptable risks to human health are present at OU2, the interim remedy at OU2 is not protective because of the following issue: the current chronic cadmium South Dakota Surface Water Standard is regularly exceeded at the instream monitoring points. The source of the instream cadmium concentrations appears to be from dispersed mine waste material or sources that are not addressed in the interim remedy. The planned remedy at OU1 is anticipated to further reduce stream contamination from dispersed sources at the Site. In addition, the following actions need to be taken: evaluate sources of this contaminant in the pending OU2 remedial investigation and feasibility study (RI/FS). The RI/FS will be completed after the OU1 remedy is in place.

The interim remedy at OU3 is protective of human health and the environment. In the interim, exposure pathways that could result in unacceptable risks are being controlled.

Five-Year Review Summary Form

SITE IDENTIFICATION		
Site Name: Gilt Edge Mine		
EPA ID: SDD987673985		
Region: 8	**State:** SD	**City/County:** Lead/Lawrence

SITE STATUS	
NPL Status: Final	
Multiple OUs? Yes	**Has the site achieved construction completion?** No

REVIEW STATUS
Lead agency: EPA **If "Other Federal Agency" was selected above, enter Agency name:**
Author name: Ryan Burdge and Treat Suomi (Reviewed by EPA)
Author affiliation: Skeo Solutions
Review period: 10/01/2011 – 5/30/2012
Date of site inspection: 10/31/2011
Type of review: Statutory
Review number: 2
Triggering action date: 4/10/2007
Due date *(five years after triggering action date)*: 4/10/2012

Five-Year Review Summary Form (continued)

Issues/Recommendations

OU(s) without Issues/Recommendations Identified in the Five-Year Review:
OU3

Issues and Recommendations Identified in the Five-Year Review:

OU(s): 2	**Issue Category: Remedy Performance**			
	Issue: The current chronic cadmium standard is regularly exceeded at specific instream monitoring points.			
	Recommendation: Evaluate sources of this contaminant in the pending OU2 RI/FS.			
Affect Current Protectiveness	**Affect Future Protectiveness**	**Implementing Party**	**Oversight Party**	**Milestone Date**
Yes	Yes	EPA	EPA	4/10/2016
OU(s): 2	**Issue Category: Monitoring**			
	Issue: Alkalinity, conductivity, chromium VI, arsenic and mercury are not regularly monitored at surface water compliance points and alkalinity, chromium VI, and mercury are not regularly monitored in treatment plant effluent as recommended from the last FYR.			
	Recommendation: Review the monitoring plan. Determine if further changes are necessary.			
Affect Current Protectiveness	**Affect Future Protectiveness**	**Implementing Party**	**Oversight Party**	**Milestone Date**
No	Yes	EPA	EPA	4/10/2013

Protectiveness Statement(s)

Operable Unit:	*Protectiveness Determination:*	*Addendum Due Date (if applicable):*
2	Not Protective	Not applicable

Protectiveness Statement:
Although no unacceptable risks to human health are present at OU2, the interim remedy at OU2 is not protective because of the following issue: the current chronic cadmium South Dakota Surface Water Standard is regularly exceeded at the instream monitoring points. The source of the instream cadmium concentrations appears to be from dispersed mine waste material or sources that are not addressed in the interim remedy. The planned remedy at OU1 is anticipated to further reduce stream contamination from dispersed sources at the Site. In addition, the following actions need to be taken: evaluate sources of this contaminant in the pending OU2 remedial investigation and feasibility study (RI/FS). The RI/FS will be completed after the OU1 remedy is in place.

Operable Unit:	*Protectiveness Determination:*	*Addendum Due Date (if applicable):*
3	Protective	Not applicable

Protectiveness Statement:
The interim remedy at OU3 is protective of human health and the environment. In the interim, exposure pathways that could result in unacceptable risks are being controlled.

Second Five-Year Review Report
for
Gilt Edge Mine Superfund Site

1.0 Introduction

The purpose of a Five-Year Review (FYR) is to evaluate the implementation and performance of a remedy in order to determine if the remedy will continue to be protective of human health and the environment. The methods, findings and conclusions of FYRs are documented in FYR reports. In addition, FYR reports identify issues found during the review, if any, and document recommendations to address them.

The United States Environmental Protection Agency (EPA) prepares FYRs pursuant to the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) Section 121 and the National Oil and Hazardous Substances Pollution Contingency Plan (NCP). CERCLA Section 121 states:

> "If the President selects a remedial action that results in any hazardous substances, pollutants, or contaminants remaining at the site, the President shall review such remedial action no less often than each five years after the initiation of such remedial action to assure that human health and the environment are being protected by the remedial action being implemented. In addition, if upon such review it is the judgment of the President that action is appropriate at such site in accordance with section [104] or [106], the President shall take or require such action. The President shall report to the Congress a list of facilities for which such review is required, the results of all such reviews, and any actions taken as a result of such reviews."

EPA interpreted this requirement further in the NCP; 40 Code of Federal Regulations (CFR) Section 300.430(f)(4)(ii), which states:

> "If a remedial action is selected that results in hazardous substances, pollutants, or contaminants remaining at the site above levels that allow for unlimited use and unrestricted exposure, the lead agency shall review such actions no less often than every five years after the initiation of the selected remedial action."

EPA Region 8 with support of Skeo Solutions, an EPA contractor, conducted the FYR regarding the remedy implemented at the Gilt Edge Mine site (the Site) in Lead, Lawrence County, South Dakota. This FYR was conducted from October 2011 to April 2012. EPA is the lead agency for developing and implementing the remedy for the Superfund-financed cleanup at the Site. South Dakota Department of Environment and Natural Resources (SDDENR), as the support agency representing the State of South Dakota, has reviewed all supporting documentation and provided input to EPA during the FYR process.

The Site consists of three Operable Units (OUs); this FYR addresses the interim remedies for OU2 and OU3. The remedy for OU1 selected in the 2008 Record of Decision (ROD) has not yet begun. Therefore, OU1 was not evaluated as part of this FYR process.

The triggering action for this statutory review is the previous FYR. The FYR is required due to the fact that hazardous substances, pollutants or contaminants remain at the Site above levels that allow for unlimited use and unrestricted exposure. OU1 addresses site-wide surface conditions, OU2 addresses Site water and OU3 addresses the Ruby Gulch Waste Rock Dump.

2.0 Site Chronology

Table 1 lists the dates of important events for the Site.

Table 1: Chronology of Site Events

Event	Date
Mining activity began	1876
Intermittent gold, silver, copper, lead and zinc mining	1887-1941
Mine development program	1975-1986
Permit issued to Brohm Mining Corp. (BMC) for cyanide heap leach operation	1986
SDDENR prepared preliminary assessment of the Site	1991
Cyanide solution released into local drainages	June 21, 1991
Acid waters and metals discharged without permits	May 1992
National Pollutant Discharge Elimination System (NPDES) permit issued to BMC to address cyanide and metal releases	September 14, 1993
BMC removed 150,000 tons of tailings from Strawberry Creek drainage as required by the 1986 mining permit	1993-1994
BMC reported intent to abandon the Site by May 29, 1998	1998
State of South Dakota obtained a restraining order issued to BMC against Site abandonment	May 29, 1998
BMC's parent company, Dakota Mining Corp., filed for bankruptcy	July 1999
SDDENR assumed water treatment operations	1999
OU1 remedial investigation/feasibility study (RI/FS) initiated	September 27, 1999
SDDENR sought National Priorities List (NPL) listing	February 2000
EPA proposed the Site for listing on the NPL	May 10, 2000
OU2 and OU3 RI/FS initiated	September 25, 2000
EPA finalized the Site on the NPL	December 1, 2000
Early Action Interim ROD for OU2 (water treatment) transferred interim water treatment operations from SDDENR to EPA Region 8 Emergency Response Program	April 23, 2001
OU2 remedial action initiated; Early Action ROD activities	July 17, 2001
OU3 remedial action initiated; Ruby Gulch Waste Rock Dump grading	September 24, 2001
OU3 RI/FS completed; Interim ROD for OU3 (Ruby Gulch Waste Rock Dump) signed	August 30, 2001
OU2 RI/FS completed; Interim ROD for OU2 signed, requiring conversion of the existing sodium hydroxide treatment plant to a lime-based treatment process	November 30, 2001
OU3 remedial action initiated; Capping of the Ruby Waste Rock Dump	March 27, 2002
OU2 remedial action initiated; Interim water treatment plant modifications and ongoing interim water treatment	April 18, 2002
OU2 remedial construction completed; Early Action ROD activities	October 17, 2002
OU3 remedial construction completed; Ruby Gulch Waste Rock Dump grading	June 30, 2002
OU3 remedial action initiated; Ruby Repository Ditch modifications	April 11, 2003
OU3 remedial construction completed; Capping of the Ruby Gulch Waste Rock Dump	December 31, 2003
FYR completed	April 10, 2007
OU1 human health and ecological risk assessment completed	November 27, 2007
OU1 RI/FS completed; ROD signed for OU1	September 29, 2008
OU1 remedial design initiated and is ongoing	December 15, 2008
Additional grout and lining for Ruby Repository Ditches, OU3	2009-ongoing

3.0 Background

3.1 Physical Characteristics

The Site is located in the mining district in the Black Hills of South Dakota in Sections 4, 5, 6, 7, 8 and 9; Township 4 North; Range 4 East; Black Hills Meridian; Lawrence County, South Dakota (Figure 1). The Site is approximately six miles south-southeast of the towns of Lead and Deadwood, on county road FDR 170. It is located immediately adjacent to the north of the upper reaches of Strawberry Creek (Figure 2). The elevation of the mining district ranges from approximately 5,320 to 5,520 feet above mean sea level.

The Site encompasses areas disturbed by open pit mining and cyanide heap leaching from gold mining activities. The Site has been extensively disturbed by mining and mineral processing operations throughout its history, and many features associated with development remain, including open pits, extensive underground mine workings, and hundreds of rotary and core holes drilled throughout the surface of the mine that contribute to acid rock drainage (ARD). Other features include piping, impoundments and equipment associated with mineral processing, waste rock storage facilities, and collection, conveyance and treatment facilities to manage ARD.

During the last period of mining, the Site was operated as a large-scale open pit heap leach gold mine. The heap leach pad (HLP) is located in the north central portion of the mine area. The HLP and the HLP Extension cover an area of 37 acres and are estimated to contain approximately 2.2 million cubic yards of acid-generating, spent ore. The HLP was an integral component of the mineral processing facilities at the Site and was used to irrigate the ore with cyanide solutions to extract gold. Spent ore is rock that has been leached with cyanide to remove the gold. The spent ore pile is approximately 150 feet high and is underlain by a multi-layer liner system.

Mine waste rock is found in numerous areas of the Site where it was used as construction fill during mine development. Areas with significant volumes of waste rock fill include the Ruby Gulch, Hoodoo Gulch, Strawberry Gulch area, Stormwater Pond and Anchor Hill remediation subareas. The most significant accumulation of mine waste rock is located at the head of Ruby Gulch in the east-central portion of the Site. It covers an area of approximately 75 acres and is estimated to contain 20 million tons (12 million cubic yards) of acid-generating waste rock and spent ore. The dump is approximately 400 feet high from its crest east of the HLP to the toe in Ruby Gulch. At the time of the Site's listing on the National Priorities List (NPL), the Ruby Gulch Waste Rock Dump was considered the main source for ARD at the Site, contaminating ground water and surface water.

The Site is in mountainous terrain and drains toward Bear Butte Creek, a tributary of the Belle Fourche River that flows generally eastward toward the edge of the Black Hills (Figure 2). The Site is in the headwaters of three tributaries draining into Bear Butte Creek (Strawberry Creek, Terrible Gulch and Ruby Gulch). Strawberry Creek is a

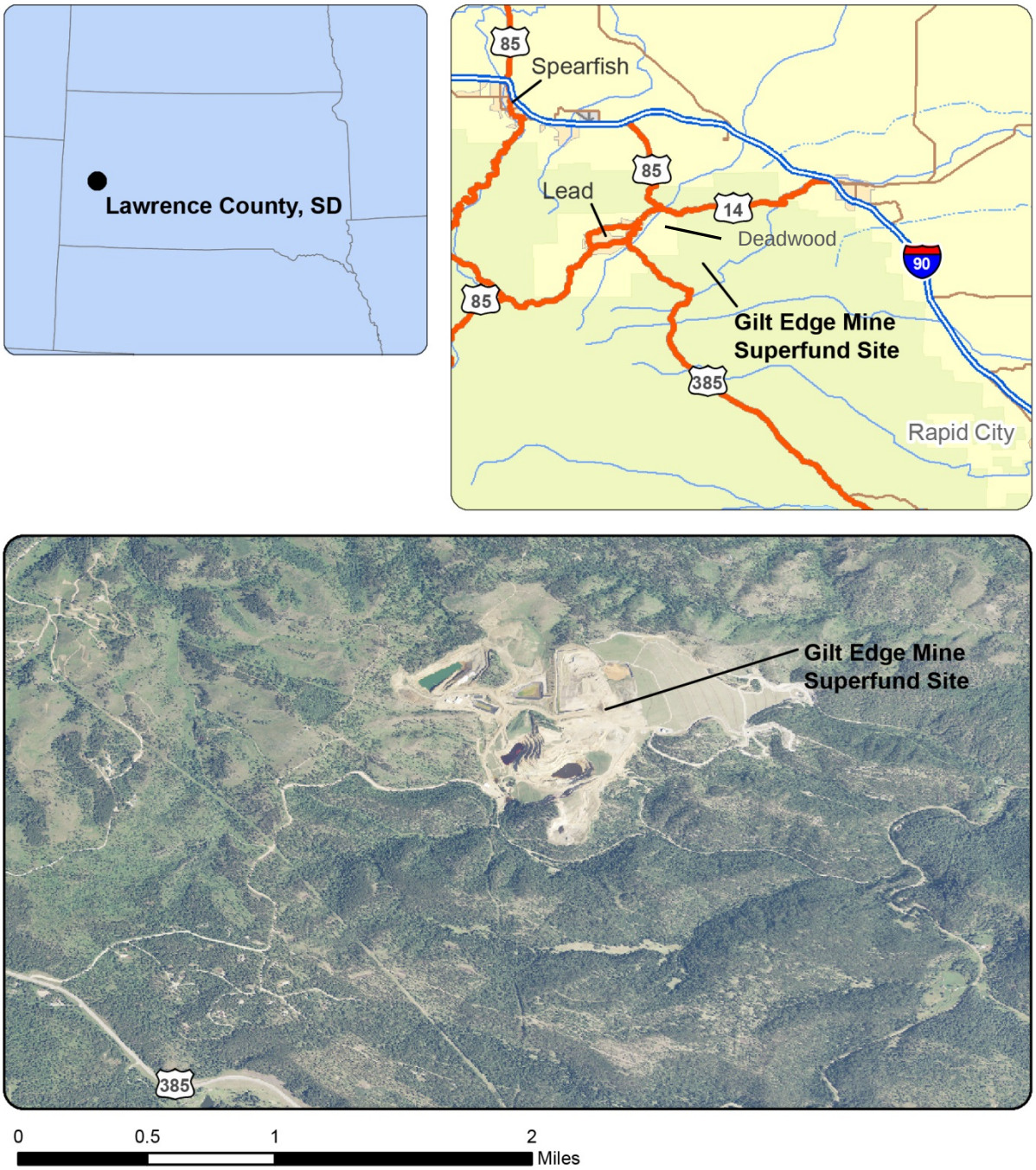
perennial stream, and Terrible Gulch and Ruby Gulch are intermittent streams. Tributary drainages contribute flow to Strawberry Creek, including Hoodoo Gulch, Boomer Gulch, Cabin Creek and several ephemeral drainages.

Site aquifers include bedrock and alluvial aquifers. Bedrock aquifers are deep and occur in the four bedrock units. Each unit has widely varying aquifer transmissivities. Ground water generally flows southeast from the topographically higher portion of the Site in the area of Anchor Hill toward Bear Butte Creek at a velocity of 50 to 100 feet per year.

Alluvial aquifers occur in unconsolidated Quaternary sediments located in the base of valleys, such as Strawberry Creek, Hoodoo Gulch and Ruby Gulch. The alluvial aquifers are unconfined aquifers. The Strawberry and Hoodoo alluvial aquifers contribute to contaminant migration at the Site. The alluvial aquifers are often perched above the deeper aquifers at the Site, with a zone of unsaturated rock between.

Ground water-surface water interactions are extensive and include natural interactions (e.g., ground water discharges that support perennial flow in Strawberry Creek) and anthropogenic interactions created by various mine development and reclamation activities. The interactions provide important pathways for contaminant transport.

Figure 1: Site Location Map



Gilt Edge Mine Superfund Site

Lawrence County, South Dakota

Disclaimer: This map and any boundary lines within the map are approximate and subject to change. The map is not a survey. The map is for informational purposes only regarding EPA's response actions at the Site, and is not intended for any other purpose.

Figure 2: Detailed Site Map

Disclaimer: This map and any boundary lines within the map are approximate and subject to change. The map is not a survey. The map is for informational purposes only regarding EPA's response actions at the Site, and is not intended for any other purpose. This map was reformatted with map data from CDM.

3.2 Land and Resource Use

Mining and mineral processing have been conducted at the Site since the late 1800s. The most recent operator, Brohm Mining Company (BMC), abandoned the mine in July 1999. Current site uses are restricted to EPA-controlled Superfund activities related to the maintenance and remediation of the Site. Within the disturbed area of the Site, EPA anticipates land use will be limited to uses compatible with the final remedy and long-term water treatment operations.

Private land use near the Site is primarily residential, with a few small ranches and businesses in the area. The town of Galena is located at the eastern site boundary, along Bear Butte Creek, and is home to several dozen families. Additional residences are dispersed to the south, west and north. Private lands are subject to zoning restrictions imposed by the county, and the Site and the surrounding area are presently zoned as a Park Forest District. Authorized land uses within the Park Forest District include detached single-family dwellings, cabins and summer homes; transportation and utility easements, alleys, and right-of ways; public parks and playgrounds; historical monuments or structures; utilities substations; plant nurseries; tree or crop growing areas and grazing lands; and other uses approved under county conditional use permits.

Based on current zoning of the Site, plausible future uses also include low-density residential use. However, ground water beneath the Site is not suitable as a drinking water source without treatment. In addition, steep features and capped areas at the Site are not conducive to residential development. EPA has determined that it is not practical to remediate the Site to meet residential use criteria because of these conditions. Engineered and institutional controls will be implemented to limit recreational activities that could damage the remedy such as vehicular damage to covers or accidental contact with ARD collection and pumping features.

EPA, in consultation with engineers from the Department of Energy's National Renewable Energy Lab (NREL), is evaluating whether the Site could be reused as a location for generating renewable energy. In May 2010, EPA and NREL erected a 55-meter meteorological tower at the Site to measure wind speeds and to assess potential wind resources.

Ground water at the Site is pumped for use as make-up water in the water treatment plant and for other general non-potable purposes. Site ground water is not used for drinking water. Bottled water is currently used on the Site for drinking water. Downgradient aquifers are used as private and municipal water sources, but contamination is localized at the Site, has not impacted private wells, and has not been identified outside of the Site boundary.

Current surface water uses may include any of the uses designated by South Dakota Water Quality Standards. Strawberry Creek's designated uses are coldwater marginal fish life propagation, limited contact recreation, fish and wildlife propagation, recreation, stock watering, and irrigation. Bear Butte Creek's designated uses are coldwater

permanent fish life propagation, limited contact recreation, fish and wildlife propagation, and irrigation. Other surface waters are designated as fish and wildlife propagation waters and irrigation waters. The extent to which these waters are used for their designated purposes is has not been surveyed.

3.3 History of Contamination

Mining and mineral processing at the Site began in 1876 when the Gilt Edge and Dakota Maid mining claims were located. Sporadic mining by numerous operators were conducted at the Site until the early 1920s. Early gold miners developed extensive underground workings that wind through the central portion of the Site and also engaged in some surface mining as well. From 1935 to 1941, the mines at the Site were in steady production and the underground workings were expanded. Beginning in 1976, an extensive mine development program at the Site was initiated to investigate potential production of gold or other minerals. In 1986, BMC commenced development of a large scale open pit, cyanide heap leach gold mine operation. BMC abandoned the Site in July 1999, leaving approximately 150 million gallons of acidic heavy-metal-laden water in three open pits, as well as millions of cubic yards of acid-generating waste rock.

During BMC's operations at the Site, some of the ARD discharges were collected and pumped to a water treatment facility using sodium hydroxide neutralization/precipitation as the treatment process. Treated water was discharged to Strawberry Creek and the treatment generated solids were returned to the Sunday Pit or the Stormwater Pond.

However, not all sources of ARD were mitigated with water treatment activities, including historical deposits of mill tailings in Strawberry and Bear Butte Creek drainages. During a 1992 EPA inspection under the National Pollutant Discharge Elimination System (NPDES), EPA found unpermitted contaminated water discharging from two areas. This included seepage from the toe of Ruby Gulch Waste Rock Dump and pollutants from several point sources entering the Strawberry Creek diversion culvert through sedimentation pond discharges. As a result, EPA required and issued a NPDES permit to BMC addressing surface water discharges in 1993. From 1993 until 1999, EPA and SDDENR issued BMC several notices of violations and fines.

3.4 Initial Response

Both SDDENR and EPA have conducted emergency response activities at the Site to prevent or mitigate imminent environmental threats. After BMC abandoned the mine in 1999, SDDENR immediately assumed site maintenance and water treatment activities using the South Dakota Regulated Substance Response Fund. In August 2000, EPA took over emergency response activities from the State of South Dakota and assumed primary responsibility for ARD collection, conveyance and treatment, as well as general site operation and maintenance (O&M). EPA proposed listing the Site on the NPL on May 11, 2000, and finalized the listing on December 1, 2000.

3.5 Basis for Taking Action

At the time the mine was abandoned in 1998, the three open pits at the Site contained millions of gallons of acidic heavy-metal-laden water (ARD), as well as millions of cubic yards of waste rock and spent ore that continued to generate acid rock drainage. EPA and SDDENR determined that if the water control and treatment systems were discontinued, uncontained hazardous releases would occur. Discharge of water without treatment poses a potential risk to the environment because contaminant concentrations are greater than the Surface Water Quality Criteria for Strawberry Creek and Bear Butte Creek. Without containment and treatment, ARD water would flow from the Site into drainages that ultimately discharge into the Madison Aquifer, a source of public drinking water. Sampling data collected from July 27, 1993 through June 6, 2000 indicated the contaminants of potential concern present in ARD discharge included:

- Arsenic
- Cadmium
- Chromium III
- Chromium VI
- Copper
- Lead
- Mercury
- Nickel
- Selenium
- Silver
- Zinc
- WAD Cyanide
- Nitrate
- TDS
- pH
- TSS

A remedial investigation was not completed for OU2 or OU3 prior to the interim remedy selection, but a focused feasibility study for OU2 was completed in August 2001 because, known sources of contamination had been documented. Known sources of contamination associated with Strawberry Creek include the HLP; Sunday, Dakota Maid and Anchor Hill Pits; and relic tailings formerly in Strawberry Creek. ARD from Ruby Waste Rock Dump was a source of contamination for the Ruby Gulch drainage where it joins Bear Butte Creek. A system designed to contain and treat ARD throughout the Site was in place and operating during active mining operations; however, several discharges and violations of permit limits had occurred on Strawberry Creek and Ruby Gulch.

Contamination of primary concern under OU2 and OU3 are heavy metals, acidity, sulfate, and suspended and dissolved solids associated with ARD. A geochemical field reconnaissance in 2000 classified mine waste materials based on their ability to generate ARD in four categories: 1) Non acid generating, 2) highly acid generating, 3) moderately

acid generating, and 4) initially acid consuming but ultimately acid generating. Different areas of the original heap leach pad and its extension were ranked across the full range of categories. The most significant threat to human health and the environment at the Site stems from the potential for releases of metal-contaminated ARD to off-site receptors, such as downstream fisheries and residential and municipal water users.

The former Ruby Gulch Waste Rock Dump was composed of highly acid-generating material overlain by moderately acid-generating materials. ARD generated from the sulfide materials of the Ruby Gulch Waste Rock Dump, if not reduced and contained, posed a major threat of erosion and contamination in the Ruby Gulch drainage and Bear Butte Creek prior to implementing the OU3 interim remedy.

4.0 Remedial Actions

In accordance with CERCLA and the NCP, the overriding goals for any remedial action are protection of human health and the environment and compliance with applicable or relevant and appropriate requirements (ARARs). Although a full remedial investigation and feasibility study were not completed for OU2 or OU3, a focused feasibility study for OU2 was completed in August 2001. A number of remedial alternatives were considered for the Site, and final selection was made based on an evaluation of each alternative against nine evaluation criteria that are specified in Section 300.430(e)(9)(iii) of the NCP. The nine criteria are:

1. Overall Protectiveness of Human Health and the Environment.
2. Compliance with ARARs.
3. Long-Term Effectiveness and Permanence.
4. Reduction of Toxicity, Mobility or Volume of Contaminants through Treatment.
5. Short-term Effectiveness.
6. Implementability.
7. Cost.
8. State Acceptance.
9. Community Acceptance.

4.1 Remedy Selection

EPA organized the remedial work into three OUs. OU1 addresses site-wide contaminant sources within the primary mine disturbance area, such as waste rock, spent ore, exposed mineralized bedrock and sludge. OU2 addresses management of ARD generated at the Site, including ARD collection systems, pumping stations, pipelines, water treatment, and management of ARD treatment generated sludge. OU3 addresses contaminant sources located within the largest ARD source, the Ruby Gulch Waste Rock Dump.

In 2001, EPA developed interim RODs for OU2 and OU3. The interim remedial actions focused on minimization, collection and treatment of ARD generated in the Ruby Gulch Waste Rock Dump. Additional ARD was collected from seeps in Hoodoo Gulch and in the upper Strawberry Creek watershed and treated prior to discharge. An illustration depicting the connection between the remedies is included in Appendix F.

<u>OU1</u>

OU1 is not addressed in this FYR, however a description is included to more fully describe remedial activities at the Site. The OU1 ROD issued in September 2008 selected an earthwork remedy that focuses on preventing direct exposure to mine waste with elevated concentrations of metals and the reduction of ARD generation. The remedial action addresses source materials, including contaminated waste rock fill materials, spent ore, exposed rock surfaces, amended tailings, sludge and underground mine workings. The remedial strategy allows for removal of mine waste from the source areas and consolidation of this waste into on-site repositories located within the Sunday and Dakota Maid Pits. The on-site repositories will be capped with a cover to limit infiltration, while

areas that previously contained contaminated fill or other source material will be covered with enough topsoil to support vegetation. Progress on the remedial design for OU1 is ongoing; some design modifications are anticipated to be documented in a pending Explanation of Significant Differences (ESD).

The planned source control/earthwork activities associated with OU1 will reduce ongoing contaminant discharge to ground water from contaminant source materials in the Strawberry Creek and Hoodoo Gulch drainages. The planned source control/earthwork activities will also reduce recharge to ground water in the Sunday and Dakota Maid Pits. However, continued collection and treatment of ground water is expected from the Sunday Pit, the Dakota Maid Pit, and the Ruby Repository so new subsurface infrastructure for ARD collection within the covered consolidation areas is a component of the OU1 remedy. After the OU1 remedy is implemented and the effectiveness of the remedy is determined, a final OU2 remedy will be implemented for site-wide ground water and surface water.

Land use controls (both institutional controls and engineered controls) will also be established as a component of the OU1 remedy. Land use controls will be used to minimize risks posed to human receptors from unaddressed contaminant sources and also to ensure that engineered elements of the remedy, such as covers, are not damaged. Land use controls will prevent the unacceptable uses of ground water that pose human or ecological risk, limit residential and off-road motorized vehicle rider uses and allow only low intensity recreational users and commercial workers.

<u>OU2</u>

The Early Action Interim ROD for OU2 issued in April 2001 selected an interim remedial action to use an existing ARD collection system at the toe of the Ruby Gulch Waste Rock Dump and the existing water treatment facility to treat ARD.

The Remedial Action Objectives (RAOs) stated in the OU2 Early Action Interim ROD are:

- Maintain site security and infrastructure.
- Capture source water and ARD.
- Treat source water and ARD on-site to reduce the toxicity of the water prior to discharge.
- If possible, treat sufficient ARD volumes to gain storage and/or dewater the Site during low precipitation cycles.
- Meet surface water discharge quality goals at the compliance point in Strawberry Creek (CP-001).

The Interim ROD for OU2 issued in November 2001 expanded the early action remedy by requiring:

- Continued collection of ARD from the toe of the Ruby Repository as well as from seeps in Hoodoo Gulch and conveyance to the water treatment facility.
- Collection of ARD seep flows west of the HLP and conveyance to the water treatment facility.
- Conversion of the existing sodium hydroxide-based water treatment process to a 250-gallon per minute net treatment capacity consisting of a lime-based neutralization/precipitation process with lime slaking and slurry chemical feed equipment upgrades. A high-density sludge process was selected after pilot test evaluations.

The RAOs stated in the November 2001 OU2 Interim ROD are:

- Prevent direct exposure of the population to elevated concentrations of contaminants in surface water drainage from the Site.
- Reduce or eliminate ARD water flow into Ruby Gulch and Strawberry and Bear Butte Creeks.
- Minimize expenditures for water treatment at the Site during closure activities (determine a preliminary minimum cost to closure comparison between recommended alternatives, based on present worth analysis).
- Minimize waste and waste disposal requirements.
- Integrate water treatment with overall site closure and reclamation activities.
- Maintain compatibility with site-wide RAOs and final water treatment remedial action.
- Achieve compliance, to the extent possible and practicable for the interim, with currently applicable water quality standards.

Numeric cleanup goals for surface water were not specified in the Interim ROD, the South Dakota Surface Water Quality Standards were identified as ARARs. The numeric surface water standards were listed in the August 2001 Feasibility Study (FS) and are included in Table 2. Although not specifically listed in the Interim ROD, these are the water quality standards the treatment system was intended to meet. A waiver of the total dissolved solids (TDS) and selenium ARARs was adopted for the interim water treatment. The recommendation for the waiver was based on the significant cost to achieve compliance. The applicable standards are anticipated to be met as a part of the final remedy.

Table 2. OU2 Interim Remedial Action Goals

Analyte	2001 Surface Water Quality Standards	Units
Arsenic	190[a]	micrograms per liter (µg/L)
Cadmium	2.87[ad]	µg/L
Chromium (III)	554[ad]	µg/L
Chromium (VI)	10	µg/L
Copper	37.11[ad]	µg/L
Lead	10.94[ad]	µg/L
Mercury	0.012[af]	µg/L
Nickel	507.89[ad]	µg/L
Selenium	Not established[g]	µg/L
Silver	37.4[ad]	µg/L
Zinc	100[ad]	µg/L
Weak Acid Dissociable (WAD) cyanide)	5.2[a]	µg/L
TDS	Not established[g]	milligrams per liter (mg/L)
pH	6.6-8.6[c]	Standard Units
Total suspended solids (TSS)	90[ce]	mg/L

Note: Metals limits are dissolved unless otherwise noted.
a. Limit established by Administrative Rules of South Dakota (ARSD) 74:51:01:55.
b. Limit established by ARSD 74:51:01:52.
c. Limit established by ARSD 74:51:01:46.
d. Hardness dependent criteria in mg/L. Value given is based on a $CaCO_3$ hardness of 400 mg/L.
e. Established for CP-001.
f. Criteria based on total recoverable fraction of the metal.
g. ARSD limits were waived for selenium and TDS.

OU3

The Interim ROD for OU3 issued in November 2001 selected an interim remedial action to regrade waste rock in the upper Ruby Gulch drainage, construct a composite cap, install lateral drainage structures to limit erosion and convey runoff, and construct surface water run-on diversions. The repository cap selected consists of a geomembrane liner covered by protective soil material with natural vegetation. This interim remedy maintains the previously deposited mine waste material in Ruby Gulch within this capped repository. Numerical performance standards were not established for OU3.

The RAOs stated in the 2001 Interim OU3 ROD are to:

- Control erosion of mine waste contaminants into Ruby Gulch and Bear Butte Creek.
- Reduce formation and volume of ARD.
- Reduce leaching and migration of contaminants from mine waste into surface water.
- Reduce leaching and migration of contaminants from mine waste that may enter ground water.

4.2 Remedy Implementation

OU2

The OU2 remedial design for the interim remedy began July 17, 2001, and was completed in March 2003. Construction was completed in October 2003. Under this action, an ARD collection and conveyance system was constructed for Hoodoo Gulch and Pond C. The existing sodium hydroxide water treatment process was converted to a lime-based neutralization and precipitation process. The lime-based, high-density sludge process was selected following pilot testing at the Site. The sludge is disposed of on-site on the HLP Extension.

The ability of the water treatment process to meet TDS and selenium water quality standards is uncertain. Because of this, these standards were waived for the short term, with the understanding that they will be addressed during final remedial actions.

Water samples are collected weekly from the effluent and at two downstream surface water compliance points:

- CP-001 – In Strawberry Creek, 10 yards downstream from the confluence of Strawberry Creek and Boomer Creek.
- CP-003 (replaced former CP-002) – In Ruby Gulch below Ruby Waste Rock Dump and the final sedimentation pond, approximately 1,000 feet below former CP-002.

Samples are analyzed for physical parameters and heavy metals and compared to state surface water standards. The final remedy will determine if the existing treatment system can achieve long-term cleanup goals.

OU3

Remedial design for the interim remedy for OU3 began September 24, 2001, and was completed in March 2002. Construction was completed in April 2006. Under the interim OU3 ROD, waste rock was regraded and placed in the upper Ruby Gulch drainage. A composite cap was constructed with a geomembrane liner, protective fill and soil layers, and vegetation. Lateral drainage structures and surface water controls and run-on diversion channels were constructed to reduce surface water infiltration. Rock, fill and soil material were sourced from excess rock and soils from the Highway 385 project and from on-site sources.

In 2009, $3.5 million in American Recovery and Reinvestment Act (ARRA) funds were used to implement the ditch grouting and lining work for OU3. Approximately 1,000 linear feet of the ditches were cleaned of rock, riprap and other loose debris, drilled to an average depth of 20 feet and pressure grouted, which involves injecting concrete to seal joints, cracks and fractures. In 2010 and 2011, drilling and pressure grouting continued and some ditches were also lined with an impermeable geomembrane to reduce

infiltration. Approximately 3,200 linear feet of ditch were grouted and approximately 660 linear feet of ditch were lined with geomembrane to reduce or eliminate surface water infiltration into the Ruby Repository. Additional ditch work is ongoing. These activities are anticipated to reduce the potential for mobilization of residual heavy metal constituents from the waste rock to surface water.

4.3 Operation and Maintenance

O&M costs for the interim OU2 remedy were estimated at approximately $3 million per year. Actual operating costs have been approximately $2 to $2.3 million per year for OU2. OU2 operating costs include collection and treatment of the water discharging from the Ruby Repository (OU3) and maintenance of the pumps system that conveys water to the water treatment plant. O&M costs for the interim OU3 remedy were estimated at $31,100, per year. Actual OU3 O&M costs have been approximately $15,000 per year. Operating costs include inspection of the cover, noxious weed spraying, and removal of saplings, but exclude the ditch modifications.

O&M activities include ongoing water capture, collection and treatment and site water quality monitoring performed by EPA contractors. Numerous ARD collection and conveyance facilities exist at the Site. Generally, ARD is collected from the drainages within the Site and pumped to the mine pits for storage prior to treatment. ARD is collected then transferred using pumping systems at Ruby Repository, Hoodoo Gulch and Pond E. The ARD is pumped from these locations to the Sunday or Anchor Hill Pits for storage or directly to the water treatment plant for treatment. More than 750 million gallons of contaminated mine water have been treated in the past 5 years. Treatment plant discharge and surface water from Strawberry Creek are sampled weekly.

Ten staff members are employed full time at the Site to ensure a constant O&M presence, including continuous operation of the collection and treatment system. A dump inspection is conducted every other week by driving across every bench of the Ruby Gulch Waste Repository to inspect visually for erosion, appropriate vegetation cover and or other damage. A fence survey was conducted in 2011 to ensure unauthorized access is prevented to maintain public safety. Recent improvements to O&M included changing out the pumps that feed the water treatment plant to improve efficiency and installation of a backup system that will run for 4.5 days with a backup generator.

5.0 Progress Since the Last Five-Year Review

The protectiveness statement from the 2007 FYR for the Site stated the following:

"RAOs are being met under the Interim RODS for OU2 and OU3. Therefore, the remedy as implemented is currently protective of human health and the environment. Residual risks associated with remaining contaminated environmental media will be addressed under OU1."

The 2007 FYR included six issues and recommendations. Each recommendation and its current status is discussed below.

Table 3: Progress on Recommendations from the 2007 FYR

Section	Issues	Recommendations	Party Responsible	Milestone Date	Action Taken and Outcome	Date of Action
5.1	Occasional exceedance of applicable State Surface Water Quality Standards (OU2), including temperature, total suspended solids and nitrate.	Continue monitoring.	EPA	NA	Complete: Surface water monitoring is ongoing.	8/31/2009
5.2	Alkalinity, WAD cyanide, total cyanide, chromium VI and dissolved mercury not measured in water treatment facility effluent during most or all the monitoring period.	Improve monitoring program.	EPA	9/2007	Complete: The monitoring program was improved.	9/30/2008
5.3	Detection limit for WAD cyanide is twice the water quality standard.	Revise analytical detection limits.	EPA	9/2007	Complete: In 2007, no analytical technique was available that provided a lower detection limit.	9/2007
5.4	New effluent standard for ammonia. The standard is calculated using equations in Appendix A referenced in § 74:51:01:49	Revise performance standards.	EPA	9/2007	Complete: Updated performance standards for ammonia are reported with sampling.	9/30/2008

Section	Issues	Recommendations	Party Responsible	Milestone Date	Action Taken and Outcome	Date of Action
5.5	Clean water diversion ditches may discharge to waste rock mass due to suspected leaky channel liner, unlined fractured bedrock ditches and sediment dams in the ditches.	Consider repair to suspected leaking channels.	EPA	9/2008	Started but not complete: Grout was injected into the bedrock fractures to reduce leakage, geosynthetic liner was utilized in certain ditch areas.	To be completed 4/10/2015
5.6	ROD-required site-specific toxicology study of sulfate TDS has not been performed.	Conduct study.	EPA	9/2008	Considered and not implemented: EPA decided not to perform toxicity studies for sulfate and TDS as information gained may not be pertinent to future water quality standards.	NA

5.1 Continue Effluent and Surface Water Monitoring

Surface water monitoring is ongoing. Temperature and TSS values occasionally exceeded applicable standards between August 2006 and November 2011. There were no exceedances of the nitrate standards between August 2006 and November 2011.

5.2 Add Analytes to Monitoring Program

WAD cyanide was added to the monitoring program in September 2008. However, alkalinity, chromium VI and dissolved mercury are not monitored in water treatment facility effluent or the surface water compliance points, as was recommended by the previous FYR. In addition, conductivity and arsenic are monitored in the treatment plant effluent but are not consistently monitored at the surface water compliance points. According to personnel involved in the Site, certain contaminants had been below the analytical detection limits and therefore were not included in the monitoring program; while a decision document is not required to change a monitoring program, documentation to support the changes to the monitoring program is recommended for consistency and site history.

5.3 Revise Analytical Detection Limits

The Practical Quantification Limit of WAD cyanide analysis, 0.010 mg/l, is twice the chronic water quality standard (0.0052 mg/L). In 2007, it was determined that due to interferences inherent in mine effluent, no reliable analytical technique was available that would accurately provide a lower detection limit. However, since then, a newer method has been identified (D7365) that may provide a lower detection limit. The suitability of

this newer method for the site water will be investigated further during the RI/FS for OU2.

5.4 Revise Performance Standards

Updated performance standards for ammonia are reported on all weekly and monthly reports.

5.5 Consider Repair to Suspected Leaking Channels

A study to evaluate the amount of leakage in Ruby Cap diversions was completed by EPA contractors Pacific Western Technologies LTD in July 2007. Beginning in 2009, grout was injected into the bedrock fractures to reduce leakage and additional geosynthetic liner was installed in certain areas. Inspection of the grouting and liner work was conducted November 2011. An evaluation of the impact of this work on the reduction of surface water infiltration to the repository is expected to continue into the spring and summer of 2012.

5.6 Conduct Toxicology Study of Sulfate TDS

EPA decided not to perform toxicity studies for sulfate and TDS since potential study results are not anticipated to be used by the state water quality program in setting stream standards for these parameters.

6.0 Five-Year Review Process

6.1 Administrative Components

EPA Region 8 initiated the FYR in October 2011 and scheduled its completion for April 2012. The EPA site review team was led by EPA Remedial Project Manager (RPM) Joy Jenkins and also included the former RPM for the Site, Kathy Hernandez, EPA Community Involvement Coordinator (CIC) Chris Wardell and contractor support provided to EPA by Skeo Solutions. In October 2011, EPA held a scoping call with the review team to discuss the Site and items of interest as they related to the protectiveness of the remedy currently in place. A review schedule was established that consisted of the following activities:

- Community notification.
- Document review.
- Data collection and review.
- Site inspection.
- Local interviews.
- FYR Report development and review.

6.2 Community Involvement

In December 15, 2011, a public notice was published in the *Rapid City Journal* newspaper announcing the commencement of the FYR process for the Site, providing contact information for Joy Jenkins and Chris Wardell, and inviting community participation. The press notice is available in Appendix B. No one contacted EPA as a result of this advertisement; however, EPA contacted and interviewed several public officials and known interested parties of Lead, Deadwood, Sturgis and Spearfish, South Dakota. A summary of those interviews is presented in Section 6.6.

The FYR Report will be made available to the public once it has been finalized. Copies of this document will be placed in the designated site repository: Phoebe Apperson Hearst Public Library, 315 Main Street, Lead, South Dakota 57754.

6.3 Document Review

This FYR included a review of relevant documents, including the RODs, remedial action reports and recent monitoring data. A complete list of the documents reviewed can be found in Appendix A.

Remedial actions are required to comply with the chemical-specific, action-specific and location-specific ARARs identified in the RODs. In performing the FYR for compliance with ARARs, only those ARARs that address the protectiveness of the remedy are reviewed.

ARARs Review

Surface water

South Dakota Administrative Rules - Chapter 74:51:01, Surface Water Quality Standards for protection of aquatic life are considered ARARs for surface water. Specifically, the RAO's state the remedy will "Achieve compliance, to the extent possible and practicable for the interim, with currently applicable water quality standards." The Interim ROD does not specify numeric standards and the standards listed in the 2001 FS do not discuss the basis of the metals standards. In addition, the final site remedy is anticipated to comply with current standards. Therefore, current State standards are included in Table 4 and current water quality was evaluated with both the current standards as well as the numerical values listed in the 2001 FS. State surface water quality standards for TDS and selenium are waived in the short term.

Table 4. Current South Dakota Surface Water Standards

Parameter	Conditions	Units	Water Treatment Plant Effluent (End of Pipe)	CP-001 (Strawberry Creek)	CP-003 (Ruby Gulch)
Total alkalinity as $CaCO_3$	30-day average	mg/L	<750	<750	<750
	Daily maximum	mg/L	<1,313	<1,313	<1,313
Total Dissolved Solids	30-day average	mg/L	<2,500	<2,500	<2,500
	Daily maximum	mg/L	<4,375	<4,375	<4,375
Nitrates as N	30-day average	mg/L	<50	<50	<50
	Daily maximum	mg/L	<88	<88	<88
pH	See section 74:51:01:07--no change in receiving water greater than 0.5 units	Standard Units	>6.5-<9.0	>6.5-<9.0	>6.5-<9.5
Conductivity at 25º Celsius	30-day average	micromhos per centimeter (µmhos/cm)	<2,500	<2,500	<2,500
	Daily maximum	µmhos/cm	<4,375	<4,375	<4,375
Sodium adsorption ratio	$\frac{(Na^{+})}{\sqrt{\frac{Ca^{+2} + Mg^{+2}}{2}}}$ where Na^{+}, Ca^{+2}, and Mg^{+2} are expressed as milliequivalents per liter	Not applicable	<10	<10	<10
Dissolved oxygen	Daily minimum	mg/L	>5.0	>5.0	NA
Total ammonia as N	30-day average	mg/L	Equal to or less than the result for Equation 3† in Appendix A of ARSD 74:51:01	Equal to or less than the result for Equation 3† in Appendix A of ARSD 74:51:01	NA
	Daily maximum	mg/L	Equal to or less than the result for Equation 1†† in Appendix A of ARSD 74:51:01	Equal to or less than the result for Equation 1†† in Appendix A of ARSD 74:51:01	NA

Parameter	Conditions	Units	Water Treatment Plant Effluent (End of Pipe)	CP-001 (Strawberry Creek)	CP-003 (Ruby Gulch)
Total Suspended Solids	30-day average for Bear Butte and Strawberry creeks, 24-hour composited sample for treatment plant discharge	mg/L	<10	<90	NA
	Daily maximum for Bear Butte and Strawberry creeks, grab sample maximum for treatment plant discharge	mg/L	<17.5	<158	NA
Temperature	See section 74:51:01:31; no temp change over spawning beds, <4ºF change	ºFahrenheit	<75 (23.9 ºCelsius)	<75 (23.9 ºCelsius)	NA

Parameter	Units	All Locations	
		Acute[a]	Chronic[a]
Arsenic	µg/L	340	150
Cadmium	µg/L	7.71	0.648
Chromium (III)	µg/L	1,773.32	230.79
Chromium (VI)	µg/L	16	11
Copper	µg/L	49.63	29.310
WAD cyanide	µg/L	22	5.2
Lead	µg/L	280.84	10.911
Mercury	µg/L	1.4	.77
Nickel	µg/L	1,511.45	168.012
Selenium	µg/L	12.9	4.6
Silver	µg/L	34.96	---
Zinc	µg/L	379.37	382.413

a. Acute and chronic standards are a function of hardness for some constituents. The maximum allowable hardness of 400 mg/L $CaCO_3$ was utilized to compute the standards shown above.

Ground water

The OU3 interim ROD considers the Safe Drinking Water Act MCLs relevant and appropriate, because the aquifers found beneath the Gilt Edge Mine OU3 are a source for public water supplies. However, OU3 does not directly address ground water contamination. Specific MCLs and ground water cleanup goals were not included in the interim RODs. The final site remedy is anticipated to include ground water remedial action goals.

6.4 Data Review

November 2006 through October 2011 monitoring data from the water treatment facility effluent and the two downstream compliance points were evaluated and compared to current applicable surface water standards. Monitoring data and corresponding standards are summarized in a table provided in Appendix G.

The current South Dakota Surface Water Standards, shown in Table 4, differ from the standards that were in applicable at the time of OU2 Interim ROD development, presented in Table 2. Overall, contaminant levels have declined since the interim remedies were implemented. Effluent temperature, TSS and nitrate, elevated during the prior FYR, have declined and are consistently below the current standards. However, effluent and surface water data indicate occasional exceedances of several parameters and consistent exceedance of the current cadmium standard. Although the weekly samples were consistently below the hardness-based standard for acute exposure, the monthly averages in the treatment plant effluent, CP-001 and CP-003 have consistently exceeded the current standard for chronic exposure since the interim remedy was implemented (Table 5). The chronic cadmium standard exceedances in the treatment plant effluent have occurred primarily during the winter months. The source of cadmium exceedance in Ruby Gulch is unrelated to the water treatment plant effluent that discharges to Strawberry Creek. Exceedance of the chronic cadmium standard in Strawberry Creek occurs even when the treatment plant discharge meets the standard. Therefore, it is hypothesized that other sources and contaminant pathways influence both Strawberry Creek and Ruby Gulch. These will be investigated further in the OU2 RI/FS. At the same time, the cadmium standard listed in the 2001 FS (2.87 µg/L) was only exceeded six times in this FYR period, but it is not clear whether the 2001 standard is based on acute or chronic exposure.

Within 228 weekly sampling events, the following exceedances from the current South Dakota Surface Water Standards occurred:

Water Treatment Effluent

- One exceedance of the temperature standard.
- Four exceedances of the 24-hour TSS standard.
- One exceedance of the copper standard.
- 19 of 57 monthly averages exceeded the monthly conductivity standard.

CP-001

- Two exceedances of the TSS standard.

CP-003

- Six exceedances of the pH standard (also exceeding the original standards).
- 14 exceedances of the copper standard.
- One exceedance of the lead standard.
- Six exceedances of the zinc standard.

With the exception of TDS and selenium, for which there is a waiver, no other parameters exceeded the South Dakota surface water standards in the effluent discharge point, CP-001 or CP-003.

Table 5. Average Monthly Cadmium Concentrations

Date	Water Treatment Plant Effluent (End of Pipe)		CP-001 (Strawberry Creek)		CP-003 (Ruby Gulch)	
	Concentration	Standard[a]	Concentration	Standard[a]	Concentration	Standard[a]
Units	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
Nov-06	0.5	0.64	**1.25**	0.64	Not sampled (NS)[b]	---
Dec-06	0.5	0.64	**1.50**	0.64	NS	---
Jan-07	**0.9**	0.64	**1.50**	0.64	NS	---
Feb-07	**0.8**	0.64	**1.00**	0.64	NS	---
Mar-07	**1**	0.64	**1.00**	0.64	NS	---
Apr-07	0.5	0.64	**0.60**	0.59	**0.50**	0.14
May-07	0.5	0.64	0.50	0.55	**0.75**	0.26
Jun-07	0.3	0.64	**0.80**	0.56	NS	---
Jul-07	**0.8**	0.64	**1.05**	0.64	NS	---
Aug-07	0.5	0.64	**0.93**	0.64	NS	---
Sep-07	0.3	0.64	**0.71**	0.64	NS	---
Oct-07	0.3	0.64	**0.94**	0.64	NS	---
Nov-07	0.5	0.64	**1.00**	0.64	NS	---
Dec-07	0.5	0.64	**1.05**	0.64	NS	---
Jan-08	0.3	0.64	**0.90**	0.64	NS	---
Feb-08	0.5	0.64	**0.90**	0.64	NS	---
Mar-08	0.4	0.64	**0.84**	0.64	NS	---
Apr-08	0.3	0.64	0.54	0.64	**7.25**	0.40
May-08	0.4	0.64	**0.90**	0.30	**18.38**	0.47
Jun-08	0.5	0.64	**1.00**	0.53	**10.30**	0.37
Jul-08	0.5	0.64	**1.25**	0.64	**1.33**	0.30
Aug-08	0.6	0.64	**1.00**	0.64	NS	---
Sep-08	**0.7**	0.64	**1.00**	0.64	NS	---
Oct-08	**1.4**	0.64	**1.25**	0.64	NS	---
Nov-08	**0.8**	0.64	**1.00**	0.64	NS	---
Dec-08	**0.7**	0.64	**1.00**	0.64	NS	---
Jan-09	0.6	0.64	**1.00**	0.64	NS	---
Feb-09	**0.9**	0.64	**1.00**	0.64	NS	---

Date	Water Treatment Plant Effluent (End of Pipe)		CP-001 (Strawberry Creek)		CP-003 (Ruby Gulch)	
	Concentration	Standard[a]	Concentration	Standard[a]	Concentration	Standard[a]
Mar-09	0.6	0.64	**0.88**	0.64	**3.00**	0.25
Apr-09	0.6	0.64	**0.83**	0.48	**7.46**	0.32
May-09	0.4	0.64	**0.53**	0.52	**0.50**	0.14
Jun-09	0.6	0.64	**0.77**	0.64	**0.50**	0.24
Jul-09	0.4	0.64	**0.90**	0.64	**0.50**	0.29
Aug-09	0.5	0.64	**0.94**	0.64	NS	---
Sep-09	0.4	0.64	**0.92**	0.64	NS	---
Oct-09	**1.2**	0.64	**1.10**	0.64	0.27	0.42
Nov-09	**0.9**	0.64	**1.08**	0.64	0.19	0.28
Dec-09	**0.7**	0.64	**1.06**	0.64	NS	---
Jan-10	**0.8**	0.64	**12.3**	0.64	NS	---
Feb-10	**1.0**	0.64	**1.20**	0.64	NS	---
Mar-10	**0.9**	0.64	**1.14**	0.64	**0.35**	0.26
Apr-10	**1.7**	0.64	**0.68**	0.47	**0.21**	0.18
May-10	0.4	0.64	**0.55**	0.46	**1.30**	0.27
Jun-10	0.3	0.64	0.61	0.64	0.15	0.19
Jul-10	0.4	0.64	**0.73**	0.64	0.40	0.64
Aug-10	0.4	0.64	**1.05**	0.64	**0.45**	0.40
Sep-10	0.6	0.64	**0.93**	0.64	NS	---
Oct-10	**0.7**	0.64	**1.00**	0.64	NS	---
Nov-10	**1.0**	0.64	**1.10**	0.64	NS	---
Dec-10	**0.9**	0.64	**1.20**	0.64	NS	---
Jan-11	**1.3**	0.64	**1.10**	0.64	NS	---
Feb-11	**0.8**	0.64	**0.98**	0.64	0.15	0.20
Mar-11	NS	0.64	**1.03**	0.42	0.15	0.20
Apr-11	NS	0.64	**0.75**	0.27	0.15	0.16
May-11	0.6	0.64	**0.75**	0.37	**0.18**	0.14
Jun-11	0.3	0.64	**1.03**	0.64	0.15	0.21
Jul-11	0.3	0.64	**0.85**	0.64	0.15	0.22
Aug-11	0.3	0.64	**0.78**	0.64	NS	---
Sep-11	0.4	0.64	**0.83**	0.64	NS	---

a. Monthly chronic standard is a function of water hardness, and therefore the standard changes.
b. Flows are not sampled when there is no flowing water instream or no discharge from the treatment plant.

6.5 Site Inspection

The site inspection was held on October 31, 2011. Participants included Joy Jenkins and Kathy Hernandez of EPA Region 8, Dorthea Hoyt of Pacific Western Technologies, LTD., Paul Hight of CDM, and Treat Suomi and Kirby Webster of Skeo Solutions. The group began with a health and safety briefing and an overview of site activities at the on-site office. Participants then toured the Site, including the wastewater treatment plant, monitoring wells and fencing. The site inspection checklist was completed and is included in Appendix D. General conditions were noted and photographed (Appendix E).

The site perimeter is mostly fenced and possible road and trail entrances have gates or are blocked by boulders. The fence has “no trespassing” signs, as well as “danger keep out” signs. O&M staff completed a fence survey in 2011.

The site tour began at the top of the old Boneyard, which provided a view toward the office. Pond C, D, Anchor Pit and Storm Pond were all viewed, as were the drainage ditches that have been enhanced to divert fresh water from being collected into wastewater reservoirs. Monitoring wells were clearly labeled and locked. The OU2 water treatment facility was toured. Ditch improvement work (grouting and liner repair) performed in 2011 for OU3 was observed. The surface of the Ruby Gulch Repository cap was clear of trees or any debris that could be damaging to the liner.

On October 31, 2011, Skeo Solutions staff visited the designated local site repository for the Site at the Phoebe Apperson Hearst Public Library, 315 Main Street, Lead, South Dakota 57754. Relevant documents were found in hard copy and on disk.

6.6 Interviews

During the FYR process, interviews were conducted with parties impacted by the Site, and regulatory agencies involved in site activities or aware of the Site. The purpose of the interviews was to document the perceived status of the Site and any perceived problems or successes with the phases of the remedy that have been implemented to date. Interviews are summarized below and complete interviews are included in Appendix C.

Joy Jenkins, EPA RPM: Ms. Jenkins believes the interim and early action remedies appear to be improving the water quality of surface water flowing from the Site, as intended by the OU2 and OU3 interim RODs.

Mark Lawrensen, SDDENR: Mr. Lawrensen believes the current remedy is functioning as intended and is not aware of any problems during the past five years.

Paul Hight, Site-wide O&M Contractor: Mr. Hight has overseen O&M operations for the past five years. He believes the water treatment and repository are successfully controlling contaminant releases while the final remedy is being designed.

Dorthea Hoyt, OU3 Contractor: Ms. Hoyt has overseen the grouting work conducted in OU3 from 2009 through 2011. She believes the measures implemented to improve the performance of the Ruby Repository remedy should improve the remedial performance.

Community Interviews: Among the interviewed community members, many individuals have a general knowledge about the Site, such as its location and some of the history leading up to EPA listing the Site on the NPL in December 2000. There were a few individuals that lived near the Site or have been involved with EPA actions that know more specific details about the Site’s history and cleanup actions to date. There were also individuals that know very little about the Site, its location or its history.

Most individuals stated that their main concern is ARD generated at the Site. They know that EPA is treating the ARD, but are concerned that water treatment will have to go on forever to keep the contaminated water from entering nearby streams and creeks. There were a few individuals that expressed the need for downstream monitoring and biological monitoring. Other individuals stated that they did not have any environmental concerns and think EPA is doing a good job.

Overall, most individuals did not have health concerns regarding the Site. Those with health concerns stated that their main concern is exposure to water from Bear Butte Creek or Strawberry Creek if it were to become contaminated from the Site. A couple of individuals had concerns on what would happen if a catastrophic event were to affect the Site, such as a long-term power outage at the water treatment plant, a high water event or an earthquake.

Most individuals did not have major concerns regarding the current remedial actions at the Site. A few individuals did have some concern about EPA treating water at the Site in perpetuity, and concern about EPA having the money to do so for the foreseeable future. Other individuals expressed concerns about the mine waste caps and ensuring they are protected from damage or puncture from various possible activities. There was also a concern regarding ground water contamination and what is being done to monitor and treat contaminated ground water. Lastly, some individuals expressed concern over the cost to tax payers to remediate the Site.

Most individuals preferred to have information about the Site emailed to them. It was suggested that EPA provide an annual update to interested residents and elected officials. In addition to the annual update, many individuals would like to see some information on the impact of employment of site workers and contractors on the local economy. There were also individuals that would like to see quarterly or annual water monitoring and discharge reports.

7.0 Technical Assessment

7.1 Question A: Is the remedy functioning as intended by the decision documents?

Yes, the OU2 remedy is functioning as intended by the interim decision documents. The OU2 interim action has resulted in reduced migration of metal contaminants and acid water in surface water discharge to Strawberry Creek. The capacity of the ARD treatment plant was increased to a design rate of 250 gallons per minute (gpm), and at most times of the year the treatment plant can effectively treat up to 340 gpm. This increased capacity reduces the threat of contaminant release to downgradient water users and reduced the operating costs of the waste treatment plant system compared to the previously existing system.

Contamination in water treatment plant effluent and surface water compliance points has declined and is generally in compliance with the relevant surface water standards. However, concentrations of several parameters have infrequently exceeded current surface water standards. The current chronic cadmium standard is the only numeric value that is regularly exceeded. As discussed in Section 6.4, these exceedances primarily occur in the treatment plant effluent during the winter months and it is hypothesized that other sources and contaminant transport pathways are influencing the cadmium concentrations in Strawberry Creek and Ruby Gulch. The planned remedy at OU1 is anticipated to further reduce stream contamination from dispersed sources at the Site, and remaining contaminant sources will be evaluated in the pending OU2 RI/FS. At the same time, water quality regularly meets the numeric water quality standards applicable at the time the OU2 Interim ROD was signed, as presented in the 2001 FS. As discussed in Section 5.2, after the previous FYR, some but not all of the identified analytes were added to the monitoring program. Personnel involved at the Site indicated that besides alkalinity and conductivity, certain parameters identified in the last FYR had been consistently below the detection limits; however, the decision to discontinue analysis for these parameters was not well documented. A review of the monitoring plan will determine what if any analytes need to be added or removed from the monitoring program; this process will be documented in EPA's Site file. The final OU2 remedy will modify the treatment plant as needed in order to achieve compliance with all ARARs.

Yes, the OU3 remedy is functioning as intended by the interim decision documents. The OU3 interim action has controlled erosion of mine waste into local water courses, controlled formation of ARD and leaching and migration of contaminants from mine waste into surface water and local ground water. It has also significantly reduced ARD quantity requiring containment and treatment, and reduced threat of release to downgradient water users. Recent modifications to the clean water diversion ditches to route clean water away from the repository are designed to further reduce the quantity of water requiring treatment. An evaluation of the impact of this work on the reduction of surface water infiltration to the repository is expected to continue into the spring and summer of 2012. The OU1 remedy will include capping of the uppermost portions of the Ruby Repository that were left uncapped in the 2001 Interim OU 3 Remedy and is therefore expected to complete the OU3 remedy.

The OU1 remedial action will build on the interim OU2 and OU3 remedies implemented at the Site. Once the OU1 remedy is implemented and the effectiveness of the remedy is determined, a final remedy for ground water will be identified and implemented under OU2. Final RODs will be issued.

The Site is currently fenced and public access is restricted. Ground water contamination is localized on-site and is not used for drinking water. The final Site remedy will include land use controls to prevent the unacceptable uses of ground water that pose human or ecological risk, limit residential and off-road motorized vehicle rider uses and allow only low-intensity recreational users and commercial workers. The land use controls will consist of a combination of both institutional controls, which may include community awareness programs and land-use restrictions, and engineered controls. In the interim, exposure pathways are controlled through access restrictions and treatment of contaminated surface water, prior to discharge to Strawberry Creek.

7.2 Question B: Are the exposure assumptions, toxicity data, cleanup levels and RAOs used at the time of remedy selection still valid?

No, although the exposure assumptions and RAOs used at the time of interim remedy selection are still valid, the South Dakota Water Quality Standards have become more stringent than at the time of the OU2 Interim ROD development. It is assumed that the more stringent water quality criteria are based on updated general toxicity data and information. The regular exceedance of the current chronic water quality standard for cadmium puts into question the protectiveness of the remedy with respect to aquatic life exposure. A baseline risk assessment was not conducted for the OU2 and OU3 interim remedies, but was conducted under OU1. Any risks to humans and the environment above a level of concern as estimated in the OU1 Baseline Risk Assessment will be addressed in the OU1 remedial design.

Water treatment discharge and surface water quality are sampled regularly and compared to the current, applicable South Dakota surface water standards. State surface water quality standards for TDS and selenium were waived with the understanding that they will be part of the final remedy. The previous FYR assumed that the waiver of TDS also includes a waiver of the conductivity standard, as the two are related. However, no waiver for conductivity was issued for the interim remedy.

The OU2 Interim ROD dictated that a site-specific toxicology study of sulfate TDS would be done to establish an applicable site standard for TDS. EPA, in consultation with the State determined that the state standards are more stringent and will be upheld for the Site in the interim. The decision to not conduct the ROD-required site-specific toxicology study of sulfate TDS has not been recorded in a decision document.

7.3 Question C: Has any other information come to light that could call into question the protectiveness of the remedy?

No, no new information has come to light that could call into question the protectiveness of the remedy.

7.4 Technical Assessment Summary

The interim remedies for OU2 and OU3 are functioning as intended. The OU2 interim action has resulted in reduced migration of metal contaminants and acid water in surface water discharge to Strawberry Creek. The South Dakota Surface Water Quality Standards for protection of aquatic life are occasionally exceeded. However, contaminant levels overall have declined, with the exception that the current chronic cadmium standard is regularly exceeded. The cadmium exceedance in Ruby Gulch is unrelated to the water treatment plant effluent discharge to Strawberry Creek. The chronic cadmium exceedances in Strawberry Creek occur even during periods when this standard is met in the treatment plant effluent and therefore it is hypothesized that other contaminant pathways are present. The planned remedy at OU1 is anticipated to further reduce stream contamination from dispersed sources at the Site, and remaining contaminant sources will be evaluated in the pending OU2 RI/FS. As recommended from the previous FYR, WAD cyanide is monitored in effluent and surface water, but alkalinity, chromium VI, dissolved mercury, conductivity and arsenic are not consistently monitored in the surface water, and alkalinity, chromium VI, and mercury are not consistently monitored in the water treatment plant effluent. Besides alkalinity and conductivity, certain parameters may have been historically below analytical detection limits. While a decision document is not required for changes to a monitoring plan, documentation of the rationale for changes will reduce confusion on what is and is not required at the Site. The OU3 interim action has controlled erosion of mine waste into local water courses; controlled formation of ARD and leaching and migration of contaminants from mine waste into surface water and local ground water; significantly reduced quantity of ARD requiring containment and treatment; and reduced threat of release to downgradient water users. The OU1 remedy and the final OU2 and OU3 remedies are expected to address any unacceptable risk at the Site and will ensure long-term protectiveness when completed.

8.0 Issues

Table 6 summarizes the current site issues.

Table 6: Current Site Issues

Issue	Affects Current Protectiveness (Yes or No)	Affects Future Protectiveness (Yes or No)
The current chronic cadmium standard is regularly exceeded at specific instream monitoring points.	Yes	Yes
Alkalinity, conductivity, chromium VI, arsenic and mercury are not regularly monitored at surface water compliance points and alkalinity, chromium VI, and mercury are not regularly monitored in treatment plant effluent as recommended from the last FYR.	No	Yes

9.0 Recommendations and Follow-up Actions

Table 7 provides recommendations to address the current site issues.

Table 7: Recommendations to Address Current Site Issues

Issue	Recommendations / Follow-Up Actions	Party Responsible	Oversight Agency	Milestone Date	Affects Protectiveness? (Yes or No)	
					Current	Future
The current chronic cadmium standard is regularly exceeded at specific instream monitoring points.	Evaluate sources of this contaminant in the pending OU2 RI/FS.	EPA	EPA	4/10/2017	Yes	Yes
Alkalinity, conductivity, chromium VI, arsenic and mercury are not regularly monitored at surface water compliance points and alkalinity, chromium VI, and mercury are not regularly monitored in treatment plant effluent as recommended from the last FYR.	Review the monitoring plan. Determine if further changes are necessary.	EPA	EPA	4/10/2013	No	Yes

10.0 Protectiveness Statements

Although no unacceptable risks to human health are present at OU2, the interim remedy at OU2 is not protective because of the following issue: the current chronic cadmium South Dakota Surface Water Standard is regularly exceeded at the instream monitoring points. The source of the instream cadmium concentrations appears to be from dispersed mine waste material or sources that are not addressed in the interim remedy. The planned remedy at OU1 is anticipated to further reduce stream contamination from dispersed sources at the Site. In addition, the following actions need to be taken: evaluate sources of this contaminant in the pending OU2 RI/FS. The RI/FS will be completed after the OU1 remedy is in place.

The interim remedy at OU3 is protective of human health and the environment. In the interim, exposure pathways that could result in unacceptable risks are being controlled.

11.0 Next Review

The Site is a statutory site that requires ongoing FYRs as long as waste is left on-site that does not allow for unrestricted use and unlimited exposure. The next FYR will be due within five years of the signature date of this FYR.

Appendix A: List of Documents Reviewed

CDM, February 2008. Gilt Edge Superfund Site, Lawrence County, South Dakota, Remedial Investigation Report for the Gilt Edge Superfund Site.

CDM, May 2008. Gilt Edge Superfund Site, Lawrence County, South Dakota, Feasibility Study for the Gilt Edge Superfund Site Operable Unit 1 (OU1).

United States Environmental Protection Agency (EPA), April 2001. Early Action Record of Decision, Operable Unit 2, Water Treatment Operations, Gilt Edge Mine NPL Site, Lawrence County, South Dakota.

EPA, April 2001. Interim Record of Decision, Operable Unit 3, Ruby Gulch Waste Rock Dump. Gilt Edge Mine NPL Site, Lawrence County, South Dakota.

EPA, August 2001. Interim Record of Decision, Operable Unit 2 Water Treatment Plant Operations, Gilt Edge Mine NPL Site, Lawrence County, South Dakota.

EPA, April 2007, Five-Year Review, OU2 and OU3, Gilt Edge Mine NPL Site, Lawrence County, South Dakota.

EPA, September 2008. Record of Decision, Operable Unit 1, Gilt Edge Mine NPL Site, Lawrence County, South Dakota.

Appendix B: Press Notices

EPA Five-Year Review Planned for the Gilt Edge Mine Superfund Site

The U.S. Environmental Protection Agency (EPA) is conducting the second five-year review of the remedial actions performed under the Superfund program for the Gilt Edge Mine Superfund Site. The purpose of a five-year review is to evaluate the implementation and performance of a remedy to determine if it is or will be protective of human health and the environment. The five-year review is scheduled to be completed by April 10, 2012.

The 360-acre site encompasses areas disturbed by open pit mining and cyanide heap-leaching from gold mining activities. The site is located in Lawrence County, about 6.5 miles east of Lead at the headwaters of the cold-water fisheries and municipal water supplies of the northern Black Hills in South Dakota. The site is divided into three Operable Units (OUs). This five-year review will encompass OU2 and OU3.

Ongoing cleanup activities include collection and treatment of acid rock drainage water and consolidation and containment of mine wastes, including the construction of the Ruby Gulch Waste Rock Repository.

EPA invites community participation in the Five-Year Review process: Community members are always encouraged to contact EPA staff with any information that may help EPA make its determination regarding the protectiveness and effectiveness of the remedies at the site.

Additional site information is available at:
Phoebe Apperson Hearst Public Library - 315 West Main Street - Lead, SD 57754
Or visit the EPA website at: www.epa.gov/region8/superfund/sd/giltedge

Questions? Contact:
Chris Wardell - Community Involvement Coordinator
U.S. EPA, Region 8 - 800-227-8917, ext 312-6062
Email: wardell.christopher@epa.gov

Joy Jenkins - Remedial Project Manager
U.S. EPA, Region 8 - 800-227-8917, ext. 312-6873
Email: jenkins.joy@epa.gov

Appendix C: Interview Forms

Gilt Edge Mine Superfund Site **Five-Year Review Interview Form**

Site Name: **Gilt Edge Mine Site** **EPA ID No.:** **SDD987673985**
Interviewer Name: **Ryan Burdge** **Affiliation:** **SKEO**
Subject Name: **Joy Jenkins** **Affiliation:** **EPA**
Subject Contact Information: **303-312-6873 jenkins.joy@epa.gov**
Time: **9 AM central** **Date:** **12/13/11**
Interview Location: **Remote: written interview**

Interview Format (circle one): **In Person** **Phone** **Mail** **Other: email**

Interview Category: **EPA Remedial Project Manager**

1. What is your overall impression of the project, including cleanup, maintenance and reuse activities (as appropriate)?

   The interim and early action remedies appear to be improving the water quality of surface water that leaves the Site as intended by the RODs. The on-site operators appear very capable of managing and treating the various sources of contaminated water at the Site.

2. What have been the effects of this Site on the surrounding community, if any?

   I believe the water treatment activities have provided a positive impact on the community. The water treatment activities help protect the drinking water source for Sturgis, South Dakota and the improved appearance of the creeks downstream of the Site are aesthetically pleasing to nearby residents and recreationalists. And presumably the improved water quality has improved the stream habitat.

3. Are you aware of any complaints or inquiries regarding site-related environmental issues or remedial activities since the implementation of the cleanup?

   No, I am not aware of any complaints. A nearby resident has inquired about using a ground water monitoring well as a water source. However, the use of the well for domestic purposes is not compatible with current and future ground water monitoring plans.

4. What is your assessment of the current performance of the remedy in place at the Site?

   The water treatment activities have greatly improved the downstream water quality and in-stream habitat appearance. The Ruby Repository has significantly reduced the amount of ARD water generated from this area. Both of these remedies are early action or interim response actions and further response actions at the Site will continue to optimize the remedies for the Site.

5. Are you comfortable with the status of the institutional controls at the Site? If not, what are the associated outstanding issues?

   Because the site-wide remedy is not complete, there are no institutional controls in place. A

plan for institutional controls will be developed during the remedial design/remedial action for OU1 – Surface contamination.

6. Are you aware of any community concerns regarding the Site or the operation and management of its remedy? If so, please provide details.

   No community concerns have been brought to my attention to date as the RPM.

7. Do you have any comments, suggestions or recommendations regarding the management or operation of the Site's remedy?

   Not at this time.

Gilt Edge Mine Superfund Site Five-Year Review Interview Form

Site Name: **Gilt Edge Mine Site** **EPA ID No.:** **SDD987673985**
Interviewer Name: **Ryan Burdge** **Affiliation:** **Skeo**
Subject Name: **Mark Lawrensen** **Affiliation:** **SDDENR**
Subject Contact Information: **mark.lawrensen@state.sd.us**
Time: **9 AM central** **Date:** **12/13/11**
Interview Location: **Remote: written interview**

Interview Format (circle one): **In Person** **Phone** **Mail** **Other: email**

Interview Category: **State Agency**

1. What is your overall impression of the project, including cleanup, maintenance and reuse activities (as appropriate)?

The project is moving forward toward closure.

2. What is your assessment of the current performance of the remedy in place at the Site?

   The current remedy is meeting its intended purpose.

3. Are you aware of any complaints or inquiries regarding site-related environmental issues or remedial activities from residents in the past five years?

   No.

4. Has your office conducted any site-related activities or communications in the past five years? If so, please describe the purpose and results of these activities.

   The State is the support agency to EPA and has been involved with EPA since the beginning of the project.

5. Are you aware of any changes to state laws that might affect the protectiveness of the Site's remedy?

   No.

6. Are you comfortable with the status of the institutional controls at the Site? If not, what are the associated outstanding issues?

   There are currently no institutional controls at the Site.

7. Are you aware of any changes in projected land use(s) at the Site?

   No.

8. Do you have any comments, suggestions or recommendations regarding the management or operation of the Site's remedy?

   No.

Gilt Edge Mine Superfund Site Five-Year Review Interview Form

Site Name: **Gilt Edge Mine Superfund Site** **EPA ID No.:** **SDD987673985**
Interviewer Name: **Ryan Burdge** **Affiliation:** **Skeo**
Subject Name: **Paul Hight** **Affiliation:** **CDM**
Subject Contact Information: **605 578-1038 or hightpk@cdm.com**
Time: **08:00** **Date:** **12/21/2011**
Interview Location: **Gilt Edge Mine Superfund Site**

Interview Format (circle one): **In Person** **Phone** **Mail** **Other:**

Interview Category: **O&M Contractor**

1. What is your overall impression of the project, including cleanup, maintenance and reuse activities (as appropriate)?

   During the past five years I have been involved with Site O&M. In that period I believe that the project proceeded smoothly. There have been no ARD releases, no serious accidents or injuries, and we have successfully treated and discharged more than 750 million gallons of contaminated mine water.

2. What is your assessment of the current performance of the remedy in place at the Site?

   In the past five years the remedial investigation/feasibility study (RI/FS) was completed and the final remedial design (RD) is being developed. During that same period, Site operations have been optimized so that ARD storage levels have been drawn down to all-time record low levels. I think of the current situation like a "holding pattern" while the RD is finalized, approved and implemented. The current O&M approach provides the time necessary to finish the RD and also provides a high level of confidence to our clients (EPA and SDDENR) that the Site is under control and well managed.

3. What are the findings from the monitoring data? What are the key trends in contaminant levels that are being documented over time at the Site?

   I am not involved with trend analysis of the sampling program. However, I can say that routine weekly O&M samples consistently show contaminant levels within the SD AWQC compliance limits.

4. Is there a continuous on-site O&M presence? If so, please describe staff responsibilities and activities. Alternatively, please describe staff responsibilities and the frequency of site inspections and activities if there is not a continuous on-site O&M presence.

   There is a 24/7/365 O&M presence at the Site. Most of the time (nights and weekends), there are only two CDM Engineering Technicians (Operators) working at the Site. Monday through Friday, during the daytime, there is also the Site Operations Manager and Senior Mechanic working. Responsibilities include a variety of administrative record keeping and documentation, reporting and maintenance on all site equipment and infrastructure, operation of a high density sludge (HDS) water treatment plant, operation of various pumping stations,

road maintenance and snow removal, surface water and monitor well sampling, construction and/or demolition activities as directed by EPA, and a variety "special projects" as agreed upon by EPA and SDDENR.

5. Have there been any significant changes in site O&M requirements, maintenance schedules or sampling routines since start-up or in the last five years? If so, do they affect the protectiveness or effectiveness of the remedy? Please describe changes and impacts.

   There have been changes in a number of areas since the project started. For example, the type of water treatment plant being used changed from the original sodium hydroxide system to the current HDS system. This change resulted in significantly better discharge water quality. Another change has been the construction of the current Hoodoo Gulch capture and pump back station. This has resulted in significantly and consistently better water quality leaving Hoodoo Gulch and flowing into Strawberry Creek. A third example would be the construction of five fresh water interception and diversion systems that resulted in an annual diversion of approximately 35 Mgal that would have otherwise entered the ARD storage circuit and required treatment. The bottom line is that of the changes I have seen over the years, the net result has been more cost effectiveness and better discharge water quality.

6. Have there been unexpected O&M difficulties or costs at the Site since start-up or in the last five years? If so, please provide details.

   Two O&M "difficulties" come to mind. First is the barge pumps used in both Anchor Hill Pit and Sunday Pit. The pump life over the years was becoming shorter and shorter. The ARD contained in these pit lakes is very aggressive and hard on the pumps. We saw the average pump life go from 2-3 years down to 6-12 months. We are now changing pump styles and manufacturers in an attempt to correct this problem. The second problem area is with the vertical sump pump at the Hoodoo pump station. There have been several bearing failures associated with this pump. We have repaired the pump and changed the manner in which the bearings are lubricated and the seals flushed. This has helped, and fortunately, new bearings and seals for this pump are typically less than $1,200. The last set of bearings and seals lasted 18 months.

7. Have there been opportunities to optimize O&M activities or sampling efforts? Please describe changes and any resulting or desired cost savings or improved efficiencies.

   Yes. Three examples come to mind that have resulted in large cost savings to the project. First is the fresh water interception and diversion systems described in QUESTION #5 above. Diverting 35 Mgal per year results in an annual treatment cost savings of approximately $350,000. Second, CDM personnel modified multimedia filter backwashing operations at the water treatment plant (WTP) so that the backwash water was captured and fed back into the reactor tank throughout the day. This operational change was inexpensive to construct and relatively easy implement. It resulted in approximately 6 - 7 Mgal that are treated and released, as opposed to the original procedure that called for the backwash water to be sent back into Sunday Pit. The net savings provided by this optimization are on the order of $60,000 to $70,000 per year. Finally, CDM personnel proposed and conducted a

WTP maximum sustainable treatment rate study. We found that the WTP could effectively treat ARD contaminated water at rates of up to 340 gpm. This is more than 30 percent above the maximum design capacity of the WTP. Although the enhanced treatment rate does not directly save money, it allows for more project schedule flexibility and operational capabilities when dealing with unusually wet years at the Site.

8. Do you have any comments, suggestions or recommendations regarding O&M activities and schedules at the Site?

   I think that the CDM project and site staff consistently deliver a high-quality work effort that our clients (EPA and SDDENR) have come to recognize and appreciate. The staff is dedicated to maintaining this high level of service.

Appendix D: Site Inspection Checklist

FIVE-YEAR REVIEW SITE INSPECTION CHECKLIST	
I. SITE INFORMATION	
Site name: Gilt Edge Mine	**Date of inspection: October 31, 2011**
Location and Region: Lead, SD, Region 8	**EPA ID: SDD987673985**
Agency, office, or company leading the five-year review: EPA Region 8	**Weather/temperature: Clear, sunny, 62°F**
Remedy Includes: (Check all that apply) ☒ Landfill cover/containment ☐ Access controls ☐ Institutional controls ☐ Ground water pump and treatment ☒ Surface water collection and treatment ☐ Other _____ ☐ Monitored natural attenuation ☐ Ground water containment ☐ Vertical barrier walls	
Attachments: ☒ Inspection team roster attached ☐ Site map attached	
II. INTERVIEWS (Check all that apply)	
1. **O&M site manager** Paul Hight (Name) Environmental Engineer (Title) 12/21/2011 (Date) Interviewed ☐ at site ☐ at office ☒ by email Phone no. _____ Problems, suggestions; ☒ Report attached _____	
2. **O&M staff** _____ (Name) _____ (Title) mm/dd/yyyy (Date) Interviewed ☐ at site ☐ at office ☐ by phone Phone no. _____ Problems, suggestions; ☐ Report attached _____	

3. **Local regulatory authorities and response agencies** (i.e., State and Tribal offices, emergency response office, police department, office of public health or environmental health, zoning office, recorder of deeds, or other city and county offices, etc.). Fill in all that apply.

Agency South Dakota DENR

Contact	Name	Title	Date	Phone No.
	Mark Lawrensen	Chief, Grounwater Quality Program	12/13/2011	605-773-3296

Problems; suggestions; ☒ Report attached _____

Agency _____

Contact	Name	Title	Date	Phone No.
	_____	_____	_____	_____

Problems; suggestions; ☐ Report attached

Agency _____

Contact	Name	Title	Date	Phone No.
	_____	_____	_____	_____

Problems; suggestions; ☐ Report attached

Agency _____

Contact	Name	Title	Date	Phone No.
	_____	_____	_____	_____

Problems; suggestions; ☐ Report attached

4. **Other interviews** (optional) ☐ Report attached

III. ON-SITE DOCUMENTS & RECORDS VERIFIED (Check all that apply)

1. **O&M Documents**

☒ O&M manual	☒ Readily available	☒ Up to date	☐ N/A
☒ As-built drawings	☒ Readily available	☒ Up to date	☐ N/A
☒ Maintenance logs	☒ Readily available	☒ Up to date	☐ N/A

Remarks: _____

2. **Site-Specific Health and Safety Plan** ☒ Readily available ☐ Up to date ☐ N/A

☐ Contingency plan/emergency response plan ☒ Readily available ☐ Up to date ☐ N/A

Remarks: _____

3. **O&M and OSHA Training Records** ☒ Readily available ☐ Up to date ☐ N/A

Remarks: _____

4.	**Permits and Service Agreements**			
	☐ Air discharge permit	☐ Readily available	☐ Up to date	☒ N/A
	☐ Effluent discharge	☐ Readily available	☐ Up to date	☒ N/A
	☐ Waste disposal, POTW	☐ Readily available	☐ Up to date	☒ N/A
	☐ Other permits _____	☐ Readily available	☐ Up to date	☒ N/A
	Remarks: _____			
5.	**Gas Generation Records**	☐ Readily available	☐ Up to date	☒ N/A
	Remarks: _____			
6.	**Settlement Monument Records**	☐ Readily available	☐ Up to date	☒ N/A
	Remarks: _____			
7.	**Ground water Monitoring Records**	☒ Readily available	☐ Up to date	☐ N/A
	Remarks:			
8.	**Leachate Extraction Records**	☐ Readily available	☐ Up to date	☐ N/A
	Remarks: _____			
9.	**Discharge Compliance Records**			
	☐ Air	☐ Readily available	☐ Up to date	☒ N/A
	☒ Water (effluent)	☒ Readily available	☒ Up to date	☐ N/A
	Remarks: _____			
10.	**Daily Access/Security Logs**	☒ Readily available	☐ Up to date	☐ N/A
	Remarks: _____			

IV. O&M COSTS

1.	**O&M Organization**	
	☐ State in-house	☐ Contractor for State
	☐ PRP in-house	☐ Contractor for PRP
	☐ Federal Facility in-house	☐ Contractor for Federal Facility
	☐ Contractor for EPA	

2. **O&M Cost Records**

☒ Readily available ☒ Up to date

☐ Funding mechanism/agreement in place ☐ Unavailable

Original O&M cost estimate _____ ☐ Breakdown attached

Total annual cost by year for review period if available

From Date	To Date	Total cost	☐ Breakdown attached
From Date	To Date	Total cost	☐ Breakdown attached
From Date	To Date	Total cost	☐ Breakdown attached
From Date	To Date	Total cost	☐ Breakdown attached
From Date	To Date	Total cost	☐ Breakdown attached

3. **Unanticipated or Unusually High O&M Costs During Review Period**

Describe costs and reasons: None

V. ACCESS AND INSTITUTIONAL CONTROLS ☒ Applicable ☐ N/A

A. Fencing

1. **Fencing damaged** ☐ Location shown on site map ☒ Gates secured ☐ N/A

Remarks:

B. Other Access Restrictions

1. **Signs and other security measures** ☐ Location shown on site map ☐ N/A

Remarks: Signage on fences.

C. Institutional Controls (ICs) Have not yet been implemented

1. **Implementation and enforcement**

Site conditions imply ICs not properly implemented ☐ Yes ☐ No ☒ N/A

Site conditions imply ICs not being fully enforced ☐ Yes ☐ No ☒ N/A

Type of monitoring (e.g., self-reporting, drive by) _____

Frequency _____

Responsible party/agency

Contact	_____	mm/dd/yyyy	_____
Name	Title	Date	Phone no.

Reporting is up-to-date ☐ Yes ☐ No ☒ N/A

Reports are verified by the lead agency ☐ Yes ☐ No ☒ N/A

Specific requirements in deed or decision documents have been met ☐ Yes ☐ No ☒ N/A

Violations have been reported ☐ Yes ☐ No ☒ N/A

Other problems or suggestions: ☐ Report attached

2. **Adequacy** ☐ ICs are adequate ☐ ICs are inadequate ☐ N/A

Remarks: ICs are to be implemented under OU1.

D. General

1. **Vandalism/trespassing** ☐ Location shown on site map ☒ No vandalism evident

Remarks: _____

2. **Land use changes on site** ☒ N/A

Remarks:

3. **Land use changes off site** ☒ N/A

Remarks: _____

VI. GENERAL SITE CONDITIONS

A. Roads ☒ Applicable ☐ N/A

1. Roads damaged ☐ Location shown on site map ☒ Roads adequate ☐ N/A

Remarks:

B. Other Site Conditions

Remarks:

VII. LANDFILL COVERS ☒ Applicable ☐ N/A

A. Landfill Surface

1.	**Settlement** (Low spots) Arial extent _____ Remarks: _____	☐ Location shown on site map	☒ Settlement not evident Depth _____
2.	**Cracks** Lengths _____ Remarks: _____	☐ Location shown on site map Widths _____	☒ Cracking not evident Depths _____
3.	**Erosion** Arial extent _____ Remarks:	☐ Location shown on site map	☒ Erosion not evident Depth _____
4.	**Holes** Arial extent _____ Remarks: _____	☐ Location shown on site map	☒ Holes not evident Depth _____
5.	**Vegetative Cover** ☒ No signs of stress Remarks:	☒ Grass ☐ Trees/Shrubs (indicate size and locations on a diagram)	☒ Cover properly established
6.	**Alternative Cover** (armored rock, concrete, etc.) Remarks:		☒ N/A
7.	**Bulges** Arial extent _____ Remarks: _____	☐ Location shown on site map	☒ Bulges not evident Height _____
8.	**Wet Areas/Water Damage** ☐ Wet areas ☐ Ponding ☐ Seeps ☐ Soft subgrade Remarks: _____	☒ Wet areas/water damage not evident ☐ Location shown on site map ☐ Location shown on site map ☐ Location shown on site map ☐ Location shown on site map	 Arial extent _____ Arial extent _____ Arial extent _____ Arial extent _____
9.	**Slope Instability** ☒ No evidence of slope instability Arial extent _____ Remarks: _____	☐ Slides	☐ Location shown on site map
B. Benches	☒ Applicable ☐ N/A (Horizontally constructed mounds of earth placed across a steep landfill side slope to interrupt the slope in order to slow down the velocity of surface runoff and intercept and convey the runoff to a lined channel.)		
1.	**Flows Bypass Bench** Remarks: _____	☐ Location shown on site map	☒ N/A or okay

2.	**Bench Breached**	☐ Location shown on site map	☒ N/A or okay
	Remarks: _____		
3.	**Bench Overtopped**	☐ Location shown on site map	☒ N/A or okay
	Remarks: _____		
C. Letdown Channels		☒ Applicable	☐ N/A
	(Channel lined with erosion control mats, riprap, grout bags, or gabions that descend down the steep side slope of the cover and will allow the runoff water collected by the benches to move off of the landfill cover without creating erosion gullies.)		
1.	**Settlement** (Low spots)	☐ Location shown on site map	☒ No evidence of settlement
	Arial extent _____		Depth _____
	Remarks: _____		
2.	**Material Degradation**	☐ Location shown on site map	☒ No evidence of degradation
	Material type_____		Arial extent _____
	Remarks: _____		
3.	**Erosion**	☐ Location shown on site map	☒ No evidence of erosion
	Arial extent _____		Depth _____
	Remarks: _____		
4.	**Undercutting**	☐ Location shown on site map	☒ No evidence of undercutting
	Arial extent _____		Depth _____
	Remarks: _____		
5.	**Obstructions**	Type _____	☒ No obstructions
	☐ Location shown on site map	Arial extent _____	
	Size _____		
	Remarks: _____		
6.	**Excessive Vegetative Growth**	Type _____	
	☒ No evidence of excessive growth		
	☐ Vegetation in channels does not obstruct flow		
	☐ Location shown on site map	Arial extent _____	
	Remarks: _____		
D. Cover Penetrations		☐ Applicable	☒ N/A
1.	**Gas Vents**	☐ Active	☐ Passive
	☐ Properly secured/locked	☐ Functioning	☐ Routinely sampled ☐ Good condition
	☐ Evidence of leakage at penetration	☐ Needs Maintenance	☐ N/A
	Remarks: _____		

2. **Gas Monitoring Probes**

☐ Properly secured/locked ☐ Functioning ☐ Routinely sampled ☐ Good condition

☐ Evidence of leakage at penetration ☐ Needs Maintenance ☐ N/A

Remarks: _____

3. **Monitoring Wells** (within surface area of landfill)

☐ Properly secured/locked ☐ Functioning ☐ Routinely sampled ☐ Good condition

☐ Evidence of leakage at penetration ☐ Needs Maintenance ☐ N/A

Remarks: _____

4. **Extraction Wells Leachate**

☐ Properly secured/locked ☐ Functioning ☐ Routinely sampled ☐ Good condition

☐ Evidence of leakage at penetration ☐ Needs Maintenance ☐ N/A

Remarks: _____

5. **Settlement Monuments** ☐ Located ☐ Routinely surveyed ☐ N/A

Remarks: _____

E. Gas Collection and Treatment ☐ Applicable ☒ N/A

1. **Gas Treatment Facilities**

☐ Flaring ☐ Thermal destruction ☐ Collection for reuse

☐ Good condition ☐ Needs Maintenance

Remarks: _____

2. **Gas Collection Wells, Manifolds and Piping**

☐ Good condition ☐ Needs Maintenance

Remarks: _____

3. **Gas Monitoring Facilities** (e.g., gas monitoring of adjacent homes or buildings)

☐ Good condition ☐ Needs Maintenance ☐ N/A

Remarks: _____

F. Cover Drainage Layer ☒ Applicable ☐ N/A

1. **Outlet Pipes Inspected** ☒ Functioning ☐ N/A

Remarks: _____

2. **Outlet Rock Inspected** ☒ Functioning ☐ N/A

Remarks: _____

G. Detention/Sedimentation Ponds ☒ Applicable ☐ N/A

1. **Siltation** Area extent _____ Depth _____ ☐ N/A

☐ Siltation not evident

Remarks: _____

2.	**Erosion**	Area extent _____	Depth _____
	☒ Erosion not evident		
	Remarks: _____		
3.	**Outlet Works**	☐ Functioning	☒ N/A
	Remarks: _____		
4.	**Dam**	☐ Functioning	☒ N/A
	Remarks: _____		
H. Retaining Walls		☐ Applicable	☒ N/A
1.	**Deformations**	☐ Location shown on site map	☐ Deformation not evident
	Horizontal displacement _____		Vertical displacement _____
	Rotational displacement _____		
	Remarks: _____		
2.	**Degradation**	☐ Location shown on site map	☐ Degradation not evident
	Remarks: _____		
I. Perimeter Ditches/Off-Site Discharge		☐ Applicable	☒ N/A
1.	**Siltation**	☐ Location shown on site map	☐ Siltation not evident
	Area extent _____		Depth _____
	Remarks: _____		
2.	**Vegetative Growth**	☐ Location shown on site map	☐ N/A
	☐ Vegetation does not impede flow		
	Area extent _____		Type _____
	Remarks: There is some vegetative growth in ditch, but does not appear to impede flow.		
3.	**Erosion**	☐ Location shown on site map	☐ Erosion not evident
	Area extent _____		Depth _____
	Remarks: _____		
4.	**Discharge Structure**	☐ Functioning	☒ N/A
	Remarks: _____		
VIII. VERTICAL BARRIER WALLS		☐ Applicable	☒ N/A
1.	**Settlement**	☐ Location shown on site map	☐ Settlement not evident
	Area extent _____		Depth _____
	Remarks: _____		

2. **Performance Monitoring** Type of monitoring _____

☐ Performance not monitored

Frequency _____ ☐ Evidence of breaching

Head differential _____

Remarks: _____

IX. GROUND WATER/SURFACE WATER REMEDIES ☒ Applicable ☐ N/A

A. Ground water Extraction Wells, Pumps, and Pipelines ☒ Applicable ☐ N/A

1. **Pumps, Wellhead Plumbing, and Electrical**

☒ Good condition ☐ All required wells properly operating ☐ Needs Maintenance ☐ N/A

Remarks: _____

2. **Extraction System Pipelines, Valves, Valve Boxes, and Other Appurtenances**

☒ Good condition ☐ Needs Maintenance

Remarks: _____

3. **Spare Parts and Equipment**

☒ Readily available ☐ Good condition ☐ Requires upgrade ☐ Needs to be provided

Remarks: _____

B. Surface Water Collection Structures, Pumps, and Pipelines ☒ Applicable ☐ N/A

1. **Collection Structures, Pumps, and Electrical**

☒ Good condition ☐ Needs Maintenance

Remarks: _____

2. **Surface Water Collection System Pipelines, Valves, Valve Boxes, and Other Appurtenances**

☒ Good condition ☐ Needs Maintenance

Remarks: _____

3. **Spare Parts and Equipment**

☒ Readily available ☐ Good condition ☐ Requires upgrade ☐ Needs to be provided

Remarks: _____

C. Treatment System ☒ Applicable ☐ N/A

1. **Treatment Train** (Check components that apply)

☒ Metals removal ☐ Oil/water separation ☐ Bioremediation

☐ Air stripping ☐ Carbon adsorbers

☐ Filters _____

☐ Additive (e.g., chelation agent, flocculent) _____

☐ Others _____

☐ Good condition ☐ Needs Maintenance

☐ Sampling ports properly marked and functional

☐ Sampling/maintenance log displayed and up to date

☐ Equipment properly identified

☐ Quantity of ground water treated annually _____

☐ Quantity of surface water treated annually Varies, approximately 100-160 million gallons

Remarks: _____

2. **Electrical Enclosures and Panels** (properly rated and functional)

☐ N/A ☒ Good condition ☐ Needs Maintenance

Remarks: _____

3. **Tanks, Vaults, Storage Vessels**

☐ N/A ☒ Good condition ☐ Proper secondary containment ☐ Needs Maintenance

Remarks: _____

4. **Discharge Structure and Appurtenances**

☐ N/A ☒ Good condition ☐ Needs Maintenance

Remarks: _____

5. **Treatment Building(s)**

☐ N/A ☒ Good condition (esp. roof and doorways) ☐ Needs repair

☐ Chemicals and equipment properly stored

Remarks: _____

6. **Monitoring Wells** (pump and treatment remedy)

☒ Properly secured/locked ☐ Functioning ☒ Routinely sampled ☐ Good condition

☐ All required wells located ☐ Needs Maintenance ☐ N/A

Remarks: _____

D. Monitoring Data

1. **Monitoring Data**

☐ Is routinely submitted on time ☒ Is of acceptable quality

2. **Monitoring data suggests:**

☐ Ground water plume is effectively contained ☐ Contaminant concentrations are declining

E. Monitored Natural Attenuation			
1. **Monitoring Wells** (natural attenuation remedy)			
☐ Properly secured/locked	☐ Functioning	☐ Routinely sampled	☐ Good condition
☐ All required wells located	☐ Needs Maintenance		☒ N/A
Remarks:			

X. OTHER REMEDIES
If there are remedies applied at the site and not covered above, attach an inspection sheet describing the physical nature and condition of any facility associated with the remedy. An example would be soil vapor extraction.

XI. OVERALL OBSERVATIONS	
A.	**Implementation of the Remedy**
	Describe issues and observations relating to whether the remedy is effective and functioning as designed. Begin with a brief statement of what the remedy is to accomplish (i.e., to contain contaminant plume, minimize infiltration and gas emission, etc.). The remedy to contain and collect acid rock drainage is functioning effectively as designed.
B.	**Adequacy of O&M**
	Describe issues and observations related to the implementation and scope of O&M procedures. In particular, discuss their relationship to the current and long-term protectiveness of the remedy. No issues were observed.
C.	**Early Indicators of Potential Remedy Problems**
	Describe issues and observations such as unexpected changes in the cost or scope of O&M or a high frequency of unscheduled repairs that suggest that the protectiveness of the remedy may be compromised in the future. No issues were observed.
D.	**Opportunities for Optimization**
	Describe possible opportunities for optimization in monitoring tasks or the operation of the remedy. Recent optimization in water treatment appears to be working successfully.

Site Inspection Team:
Joy Jenkins, EPA Region 8
Kathy Hernandez, EPA Region 8
Dorthea Hoyt, Pacific Western Technologies, LTD.
Paul Hight, CDM
Treat Suomi, Skeo Solutions
Kirby Webster, Skeo Solutions

Appendix E: Photographs from Site Inspection Visit

Site entrance sign.

Secured entrance gate.

Warning sign on perimeter fencing.

View from Boneyard Hill toward office, Dakota Maid Pit and Pond D.

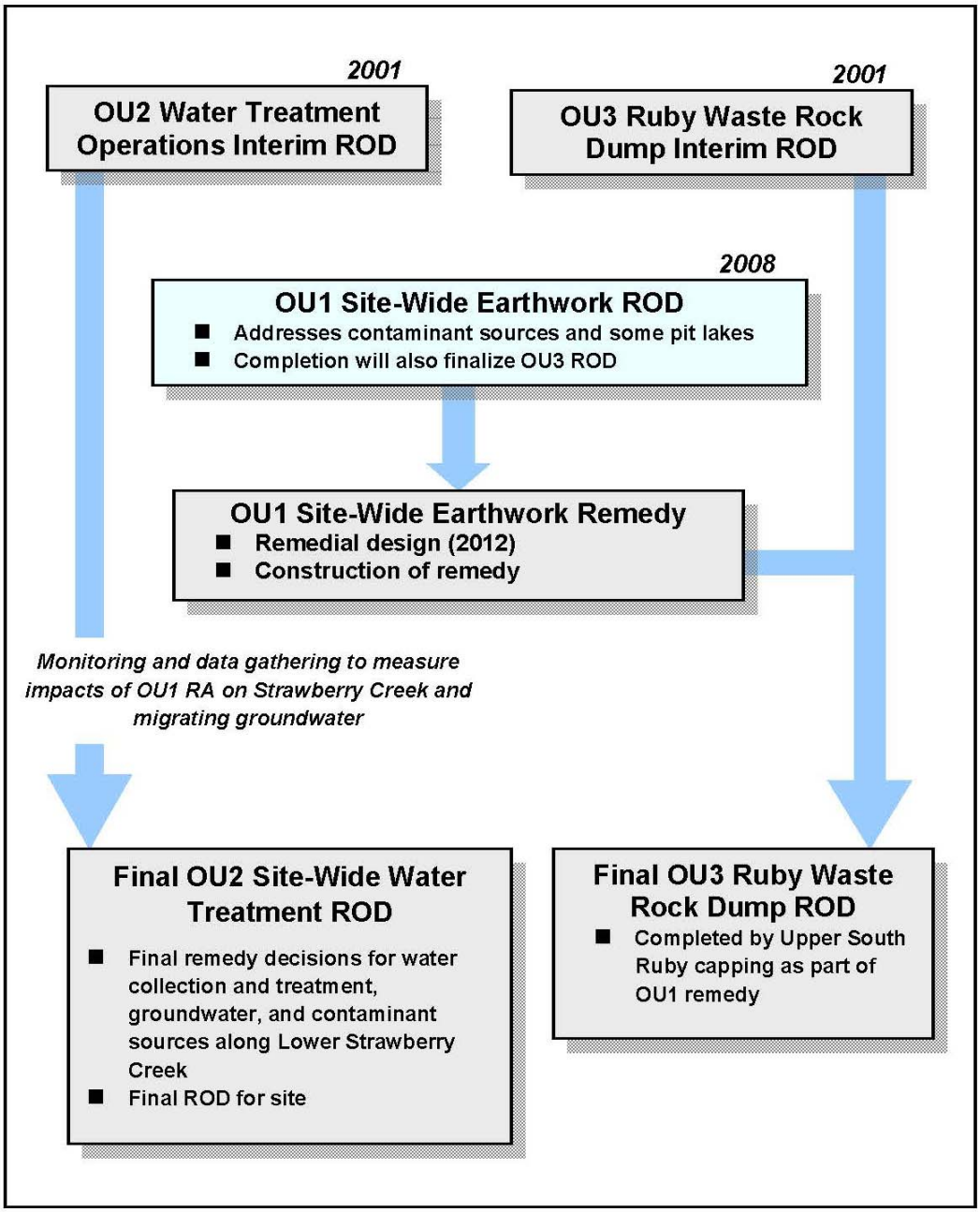
View of Anchor Pit and Surge Pond.

Drainage ditch along Ruby Repository.

Drainage ditch along Ruby Repository.

Water treatment plant.

Appendix F: Conceptual Sequence of Events



Appendix G: Surface Water Data

Appendix G: Surface Water Data

SUMMARY OF WTP END OF PIPE DISCHARGE @ STRAWBERRY CREEK SAMPLING

Units are mg/l unless otherwise noted

Water Treatment Plant End-Of-Pipe		General Constituents											
	Limit Type	Temperature (deg C)	Conductivity (umhos/cm)	pH (s.u.)	TDS	TSS	Alkalinity	Ammonia			Nitrate	Sulfate	WAD CN
SD Surface Water Quality Standards	30-day	---	2500	---	2500	---	750	Equation 3	Ammonia standard based on pH and Temp.	Exceedence	50	---	---
	24-hour	---	---	---	---	10	---	---			---	---	---
	Daily Max	---	4375	---	4375	---	1313	Equation 1			88	---	---
	Grab	---	---	---	---	17.5	---	---			---	---	---
	General	23.9	---	6.5-9.0	---	---	---	---			---	---	---
	Acute	---	---	---	---	---	---	---			---	---	0.022
	Chronic	---	---	---	---	---	---	---			---	---	0.0052
	Admin Rule	74:51:01:46	74:51:01:53	74:51:01:46	74:51:01:52	74:51:01:32	74:51:01:52	74:51:01:46			74:51:01:52		74:51:01 App B
	ND Rule	ND = No Val	ND = No Val	ND = No Val	ND = DL	ND = DL	ND = No Val	ND = 1/2 DL			ND = No Val	ND = No Val	ND = 1/2 DL
Date	Sampler												
October 2003 Avg's	CDM	12.4	3103	7.37	3325	11	25		4.81	na			
November 2003 Avg's	CDM	6.8	3848	7.36	4022	12	23		4.84	na			
December 2003 Avg's	CDM	4.7	3868	7.42	4096	6	26		4.62	na	68.6		
January 2004 Avg's	CDM	3.4	3920	7.37	4003	13	27		4.82	na	80.5		
February 2004 Avg's	CDM	3.8	3950	7.33	4087	17	27		4.94	na	86.4		<0.005
March 2004 Avg's	CDM	4.1	3492	7.26	3503	7	23		5.17	na	70.3		<0.005
April 2004 Avg's	CDM	9.8	3078	7.35	3058	5	21		4.88	na	42.6		<0.005
May 2004 Avg's	CDM	13.0	3344	7.36	3323	<7.6	25		4.85	na	53.9		<0.005
June 2004 Avg's	CDM	n/a	3483	7.58	3565	<10	26			na	54.7		<0.005
July 2004 Avg's	CDM	20.4	3363	7.57	3601	<10	24		2.78	na	43.9		<0.005
August 2004 Avg's	CDM	n/a	3490	7.77	3307	12	28			na	32.4		<0.005
September 2004 Avg's	CDM	n/a	3420	7.61	4280	23	30			na	31.3		<0.005
October 2005 Avg's	CDM	12.8	2930	7.77	2890	<5	30		3.23	na	17.9		<0.005
November 2005 Avg's		7.3	3008	7.31		<5.5			5.00	na	20.2		
December 2005 Avg's	CDM	4.9	3028	7.3		<5.5			5.08	na	21.7		
January 2006 Avg's	CDM	5.5	2964	7.26		<5.2			5.18	na	22.2		
February 2006 Avg's	CDM	3.8	3158	7.31		<5.5			5.03	na	23.4		
March 2006 Avg's	CDM	5.0	2485	7.37		<4			4.81	na	24.2		
April 2006 Avg's	CDM	9.4	1658	7.62		<4			3.85	na	13.2		
May 2006 Avg's	CDM	14.1	1946	7.57		<5			4.04	na	10.8		
June 2006 Avg's	CDM	23.0	2345	7.75		<10			1.93	na	10.3		
July 2006 Avg's	CDM	22.4	2455	7.87		<4			1.72	na	9.7		
August 2006 Avg's	CDM	20.1	2574	7.83		<6			2.12	na	9.5		
September 2006 Avg's	CDM	13.7	2440	7.45		<7			4.53	na	8.7		
October 2006 Avg's	CDM	12.2	2703	7.17		<6			5.46	na	6.9		
November 2006													
11/6/2006	CDM	8.6	2600	6.98		<4			24.52	na	7.4		
11/13/2006	CDM	6.3	2650	6.90		<4			26.15	na	7.8		
11/20/2006	CDM	8.3	2620	7.03		<4			23.47	na	8.4		
11/27/2006	CDM	6.3	2670	6.90		<4			26.15	na	8.3		
November 2006 Avg's	CDM	7.4	2635	6.95		4			6.00	na	8.0		
December 2006													
12/4/2006	CDM	4.9	2600	6.84		<4			27.31	na	8.9		
12/11/2006	CDM	5.5	2590	7.00		<4			24.10	na	9.0		
12/18/2006	CDM	7.0	2590	6.98		<4			24.52	na	9.3		
12/26/2006	CDM	5.3	2580	6.96		<4			24.94	na	9.6		
December 2006 Avg's	CDM	5.7	2590	6.95		4			6.01	na	9.2		
January 2007													
1/2/2007	CDM	5.0	2600	6.88		<4			26.54	na	9.5		
1/8/2007	CDM	5.0	2560	6.84		<4			27.31	na	9.1		
1/15/2007	CDM	4.3	2600	6.91		<4			25.95	na	9.8		
1/22/2007	CDM	4.1	2580	7.11		<4			21.72	na	9.6		
1/29/2007	CDM	5.3	2580	6.88		<4			26.54	na	9.1		
January 2007 Avg's	CDM	4.7	2584	6.92		4			6.06	na	9.4		
February 2007													
2/5/2007	CDM	5.0	2650	6.87		<4			26.74	na	10.1		
2/26/2007	CDM	6.3	2470	7.02		<4			23.68	na	8.7		
February 2007 Avg's	CDM	5.7	2560	6.95		4					9.4		
March 2007													
3/4/2007	CDM	5.0	2630	6.8		<4			28.05	na	9.2		
3/12/2007	CDM	5.8	2270	6.91		<4			25.95	na	9.5		
3/19/2007	CDM	10.7	1740	7.12		<4			21.50	na	8.6		
3/26/2007	CDM	8.8	1680	7.44		<4			14.50	na	7.7		
March 2007 Avg's	CDM	7.6	2080	7.07		4			5.73	na	8.7		
April 2007													
4/3/2007	CDM	9.2	1790	7.61		<4			11.19	na	10.2		
4/9/2007	CDM	6.8	1650	7.47		<4			13.89	na	9.0		
4/16/2007	CDM	9.7	1710	7.36		<10			16.20	na	8.5		
4/23/2007	CDM	8.5	1610	7.53		<4			12.69	na	8.6		
4/30/2007	CDM	13.2	1700	7.87		<4			7.15	na	9.9		
April 2007 Avg's	CDM	9.5	1692	7.57		5.2			4.06	na	9.2		
May 2007													
5/7/2007	CDM	8.8	1430	7.59		<4			11.56	na	7.0		
5/14/2007	CDM	13.2	1700	7.65		<4			10.49	na	9.9		
5/21/2007	CDM	15.7	1920	7.94		<4			6.28	na	9.4		
5/29/2007	CDM	15.5	1910	7.80		<4			8.11	na	8.6		
May 2007 Avg's	CDM	13.3	1740	7.75		4			3.34	na	8.7		
June 2007													
6/5/2007	CDM	12.6	1750	7.60		<4			11.37	na	6.4		
6/11/2007	CDM	16.5	1810	7.79		<4			8.25	na	6.6		
6/18/2007	CDM	15.1	2110	7.75		<4			8.85	na	6.4		
6/25/2007	CDM	19.3	2220	8.04		<4			5.21	na	6.3		
June 2007 Avg's	CDM	15.9	1973	7.80		4			2.88	na	6.4		
July 2007													
7/2/2007	CDM	21.3	2230	7.90		<4			6.77	na	6.1		
7/9/2007	CDM	21.8	2220	8.01		<4			5.51	na	6.4		
7/16/2007	CDM	22.3	2150	8.10		<4			4.64	na	6.2		
7/23/2007	CDM	24.7	2170	7.99		<4			5.72	na	5.7		
7/30/2007	CDM	21.9	2170	8.05		<4			5.11	na	6.1		
July 2007 Avg's	CDM	22.4	2188	8.01		4			1.42	na	6.1		
August 2007													
8/6/2007	CDM	23.4	2090	7.94		<4			6.28	na	5.5		
8/13/2007	CDM	22.3	2130	7.98		<4			5.83	na	5.2		
8/20/2007	CDM	n/a	2110	8.17		<4			4.05	na	5.5		
8/27/2007	CDM	20.1	2160	7.87		<4			7.15	na	5.4		
August 2007 Avg's	CDM	21.9	2123	7.99		4					5.4		
September 2007													
9/10/2007	CDM	14.1	2220	7.71		<4			9.48	na	5.3		
9/17/2007	CDM	16.1	2300	7.80		<4			8.11	na	5.6		
9/25/2007	CDM	13.6	2410	7.24		<4			18.84	na	7.0		
September 2007 Avg's	CDM	14.6	2310	7.58		4			3.97	na	6.0		
October 2007													
1/2007 NOTE - Effluent to Su	CDM	13.6	2500	8.37		10.4			2.75	na	7.7		
Pond and filters were offline.													
10/8/2007	CDM	11.6	2540	7.19		<4			19.95	na	14.1		
10/15/2007	CDM	11.8	2860	7.24		<10			18.84	na	26.4		
10/22/2007	CDM	9.3	2890	7.18		<10			20.17	na	28.8		
10/29/2007	CDM	9.3	2950	7.43		<4			14.71	na	28.3		
October 2007 Avg's	CDM	10.5	2810	7.26		7			5.18	na	21.1		
11/1/2007													
11/5/2007	CDM	8.2	2970	7.24		<10			18.84	na	32.0		
11/12/2007	CDM	10.7	2910	7.41		<4			15.13	na	18.5		

SUMMARY OF WTP END OF PIPE DISCHARGE @ STRAWBERRY CREEK SAMPLING

Units are mg/l unless otherwise noted

Water Treatment Plant End-Of-Pipe		General Constituents											
	Limit Type	Temperature (deg C)	Conductivity (umhos/cm)	pH (s.u.)	TDS	TSS	Alkalinity	Ammonia			Nitrate	Sulfate	WAD CN
SD Surface Water Quality Standards	30-day	---	2500	---	2500	---	750	Equation 3	Ammonia standard based on pH and Temp.	Exceedence	50	---	---
	24-hour	---	---	---	---	10	---	---			---	---	---
	Daily Max	---	4375	---	4375	---	1313	Equation 1			88	---	---
	Grab	---	---	---	---	17.5	---	---			---	---	---
	General	23.9	---	6.5-9.0	---	---	---	---			---	---	---
	Acute	---	---	---	---	---	---	---			---	---	0.022
	Chronic	---	---	---	---	---	---	---			---	---	0.0052
	Admin Rule	74:51:01:46	74:51:01:53	74:51:01:46	74:51:01:52	74:51:01:32	74:51:01:52	74:51:01:46			74:51:01:52		74:51:01 App B
	ND Rule	ND = No Val	ND = No Val	ND = No Val	ND = DL	ND = DL	ND = No Val	ND = 1/2 DL			ND = No Val	ND = No Val	ND = 1/2 DL
Date	Sampler												
11/19/2007	CDM	8.5	2890	7.31		<4			17.29	na	19.3		
11/26/2007	CDM	4.7	2890	7.3		<4			17.51	na	17.9		
November 2007 Avg's	CDM	8.0	2915	7.32		5.5			5.00	na	21.9		
December 2007													
12/3/2007	CDM	4.4	2940	7.09		<4			22.16	na	17.7		
12/10/2007	CDM	7.5	2950	7.32		<4			17.07	na	16.3		
12/17/2007	CDM	4.1	2960	7.09		<4			22.16	na	16.9		
12/26/2007	CDM	6.9	2960	6.96		<4			24.94	na	18.0		
December 2007 Avg's	CDM	5.7	2953	7.12		4			5.61	na	17.2		
January 2008													
1/2/2008	CDM	3.2	2980	7.24		<4			18.84	na	16.3		
1/7/2008	CDM	8.6	2960	7.27		<4			18.17	na	16.9		
1/14/2008	CDM	4.9	2990	7.27		<4			18.17	na	16.2		
1/21/2008	CDM	3.3	2970	7.28		<4			17.95	na	15.5		
1/28/2008	CDM	6.6	2980	7.37		<4			15.98	na	17.4		
January 2008 Avg's	CDM	5.3	2976	7.29		4			5.09	na	16.5		
February 2008													
2/4/2008	CDM	4.7	3000	7.27		<4			18.17	na	16.8		
2/11/2008	CDM	4.0	3000	7.46		<4			14.09	na	17.2		
2/18/2008	CDM	3.4	2980	7.45		<4			14.30	na	16.3		
2/25/2008	CDM	3.6	2990	7.54		<4			12.50	na	16.2		
February 2008 Avg's	CDM	3.9	2993	7.43		4			4.59	na	16.6		
March 2008													
3/4/2008	CDM	5.6	2960	7.14		<4			21.06	na	15.8		
3/10/2008	CDM	4.1	2980	7.46		<4			14.09	na	16.3		
3/17/2008	CDM	4.4	2880	7.3		<4			17.51	na	15.3		
3/24/2008	CDM	6.3	2780	7.58		<4			11.74	na	13.4		
3/31/2008	CDM	10.0	2640	7.42		<4			14.92	na	11.6		
March 2008 Avg's	CDM	6.1	2848	7.38		4			4.77	na	14.5		
April 2008													
4/7/2008	CDM	4.4	2560	7.64		<4			10.66	na	10.7		
4/14/2008	CDM	5.7	2470	7.55		<4			12.31	na	9.4		
4/22/2008	CDM	6.9	1610	7.65		<4			10.49	na	4.2		
4/28/2008	CDM	8.2	1860	7.62		<4			11.01	na	4.6		
April 2008 Avg's	CDM	6.3	2125	7.62		4			3.87	na	7.2		
May 2008													
05/06/08	CDM	8.4	1660	7.72		<4			9.32	na	5.6		
05/12/08	CDM	10.1	1440	7.43		<4			14.71	na	7.3		
05/19/08	CDM	12.1	1770	7.62		<4			11.01	na	9.0		
05/27/08	CDM	9.4	1700	8.18		<4			3.98	na	4.4		
May 2008 Avg's	CDM	10.0	1643	7.74		4			3.37	na	6.6		
June 2008													
06/02/08	CDM	11.9	1670	8.13		<4			4.38	na	3.79		
6/9/2008	CDM	10.4	1560	8.06		<4			5.01	na	2.97		
6/16/2008	CDM	15.0	1890	7.91		<4			6.64	na	2.58		
6/23/2008	CDM	17.6	2030	8.06		<4			5.01	na	3.28		
6/30/2008	CDM	18.3	2010	8.06		<4			5.01	na	3.44		
June 2008 Avg's	CDM	14.6	1832	8.04		4			2.19	na	3.2		
July 2008													
7/7/2008	CDM	19.7	2000	8.08		<4			4.82	na	8.77		
7/14/2008	CDM	19.8	2090	8.08		<4			4.82	na	10.8		
7/21/2008	CDM	21.1	2090	8.13		<4			4.38	na	12.0		
7/28/2008	CDM	22.5	2180	8.17		<4			4.05	na	12.0		
July 2008 Avg's	CDM	20.8	2090	8.12		4			1.33	na	10.9		
August 2008													
8/4/2008	CDM	22.4	2170	8.23		<4			3.61	na	9.0		
8/11/2008	CDM	20.7	2170	8.21		<4			3.75	na	8.6		
8/18/2008	CDM	19.2	2180	7.95		<4			6.17	na	8.7		
8/25/2008	CDM	19.2	2270	7.99		<4			5.72	na	14.6		
August 2008 Avg's	CDM	20.4	2198	8.10		4			1.41	na	10.2		
September 2008													
9/2/2008	CDM	15.1	2440	7.97		<4			5.94	na	13.6		<0.010
9/8/2008	CDM	12.6	2280	7.58		<4			11.74	na	14.8		<0.010
9/15/2008	CDM	13.9	2280	7.80		<4			8.11	na	12.0		<0.010
9/22/2008	CDM	15.1	2430	7.83		<4			7.68	na	15.9		<0.010
9/29/2008	CDM	13.7	2460	7.39		<4			15.55	na	17.3		<0.010
September 2008 Avg's	CDM	14.1	2378	7.71		4			3.47	na	14.7		0.0050
October 2008													
10/6/2008	CDM	13.9	2420	7.24		<4			18.84	na	15.1		<0.010
10/13/2008	CDM	9.4	2260	7.06		<4			22.82	na	13.0		<0.010
10/20/2008	CDM	10.1	2390	7.10		<4			21.94	na	11.6		<0.010
10/27/2008	CDM	6.1	2430	6.96		<4			24.94	na	12.6		<0.010
October 2008 Avg's	CDM	9.9	2375	7.09		4			5.67	na	13.1		0.0050
November 2008													
11/3/2008	CDM	10.0	2490	7.20		<4			19.73	na	12.0		<0.010
11/11/2008	CDM	4.4	2350	6.99		<10			24.31	na	12.2		<0.010
11/17/2008	CDM	4.0	2290	6.97		<4			24.73	na	12.5		<0.010
11/24/2008	CDM	4.4	2450	6.97		<4			24.73	na	12.7		<0.010
November 2008 Avg's	CDM	5.7	2395	7.03		5.5			5.82	na	12.4		0.0050
December 2008													
12/1/2008	CDM	n/a	2410	7.25		<4			18.61	na	11.4		<0.010
12/8/2008	CDM	4.5	2430	7.09		<4			22.16	na	11.5		<0.010
12/15/2008	CDM	3.7	2410	6.94		<4			25.35	na	10.7		<0.010
12/22/2008	CDM	3.2	2470	6.96		<4			24.94	na	11.1		<0.010
12/29/2009	CDM	8.0	2400	7.04		<4			23.25	na	11.0		<0.010
December 2008 Avg's	CDM	4.9	2424	7.06		4			5.76	na	11.1		0.0050
January 2009													
1/5/2009	CDM	3.1	2530	6.98		<5			24.52	na	10.9		<0.010
1/13/2009	CDM	5.7	2540	6.86		<4			26.93	na	10.4		<0.010
1/19/2009	CDM	3.0	2340	6.90		<4			26.15	na	11.3		<0.010
1/26/2009	CDM	5.2	2490	7.00		<4			24.10	na	14.6		<0.010
January 2009 Avg's	CDM	4.3	2475	6.94		4.25			6.03	na	11.8		0.0050
February 2009													
2/2/2009	CDM	3.2	2480	7.31		<4			17.29	na	9.9		<0.010
2/9/2009	CDM	2.3	2560	7.21		<4			19.50	na	10.3		<0.010
2/17/2009	CDM	3.8	2580	6.93		<4			25.55	na	9.3		<0.010
2/23/2009	CDM	3.9	2450	7.07		<4			22.60	na	10.6		<0.010
February 2009 Avg's	CDM	3.3	2518	7.13		4			5.56	na	10.0		0.0050

March 2009

SUMMARY OF WTP END OF PIPE DISCHARGE @ STRAWBERRY CREEK SAMPLING

Units are mg/l unless otherwise noted

Water Treatment Plant End-Of-Pipe		General Constituents											
	Limit Type	Temperature (deg C)	Conductivity (umhos/cm)	pH (s.u.)	TDS	TSS	Alkalinity	Ammonia			Nitrate	Sulfate	WAD CN
SD Surface Water Quality Standards	30-day	---	2500	---	2500	---	750	Equation 3	Ammonia standard based on pH and Temp.	Exceedence	50	---	---
	24-hour	---	---	---	---	10	---	---			---	---	---
	Daily Max	---	4375	---	4375	---	1313	Equation 1			88	---	---
	Grab	---	---	---	---	17.5	---	---			---	---	---
	General	23.9	---	6.5-9.0	---	---	---	---			---	---	---
	Acute	---	---	---	---	---	---	---			---	---	0.022
	Chronic	---	---	---	---	---	---	---			---	---	0.0052
	Admin Rule	74:51:01:46	74:51:01:53	74:51:01:46	74:51:01:52	74:51:01:32	74:51:01:52	74:51:01:46			74:51:01:52		74:51:01 App B
	ND Rule	ND = No Val	ND = No Val	ND = No Val	ND = DL	ND = DL	ND = No Val	ND = 1/2 DL			ND = No Val	ND = No Val	ND = 1/2 DL
Date	Sampler												
3/2/2009	CDM	4.3	2440	6.96		<4			24.94	na	10.3		<0.010
3/9/2009	CDM	1.9	1930	7.00		<4			24.10	na	6.9		<0.010
3/16/2009	CDM	5.8	2160	7.05		<4			23.03	na	10.7		<0.010
3/23/2009	CDM	8.2	1590	7.32		<4			17.07	na	10.9		<0.010
March 2009 Avg's	CDM	5.1	2030	7.08		4			5.69	na	9.7		0.0050
April 2009													
4/1/2009	CDM	3.4	2080	7.09		<4			22.16	na	6.8		<0.010
4/6/2009	CDM	4.1	2100	7.10		<4			21.94	na	8.4		<0.010
4/14/2009	CDM	7.6	1380	7.68		<5			9.98	na	11.2		<0.010
4/20/2009	CDM	8.4	1680	7.5		<5			13.28	na	8.0		<0.010
4/27/2009	CDM	6.5	1660	7.31		<4			17.29	na	11.5		<0.010
April 2009 Avg's	CDM	6.0	1780	7.34		4.4			4.92	na	9.2		0.0050
May 2009													
5/4/2009	CDM	10.4	1710	7.54		<4			12.50	na	11.8		<0.010
5/11/2009	CDM	9.9	1740	7.34		<4			16.63	na	19.9		<0.010
5/18/2009	CDM	13.6	1830	7.47		<10			13.89	na	17.2		<0.010
5/26/2009	CDM	11.9	1820	7.42		<4			14.92	na	17.9		<0.010
May 2009 Avg's	CDM	11.5	1775	7.44		5.5			4.54	na	16.7		0.0050
June 2009													
6/1/2009	CDM	11.7	1700	7.61		<4			11.19	na	9.2		<0.010
6/8/2009	CDM	9.6	1940	7.04		<4			23.25	na	11.2		<0.010
6/15/2009	CDM	13.0	1890	7.38		<4			15.77	na	11.7		<0.010
6/22/2009	CDM	13.7	1840	7.64		<4			10.66	na	7.3		<0.010
6/29/2009	CDM	14.3	1940	7.54		<4			12.50	na	5.7		<0.010
June 2009 Avg's	CDM	12.5	1862	7.44		4			4.54	na	9.0		0.0050
July 2009													
7/7/2009	CDM	17.3	1960	7.49		<4			13.48	na	7.1		<0.010
7/13/2009	CDM	16.9	1960	7.8		<4			8.11	na	6.5		<0.010
7/20/2009	CDM	17.6	2030	7.76		<4			8.70	na	9.2		<0.010
7/27/2009	CDM	16.5	2340	7.83		<4			7.68	na	9.01		<0.010
July 2009 Avg.		17.1	2073	7.72		4			2.92	na	8.0		0.0050
August 2009													
8/3/2009	CDM	17.9	2330	7.71		<4			9.48	na	9.81		<0.010
8/10/2009	CDM	16.1	2280	7.91		<4			6.64	na	8.88		<0.010
8/17/2009	CDM	15.2	2490	7.70		<4			9.64	na	9.75		<0.010
8/24/2009	CDM	19.1	2470	7.66		<4			10.31	na	12.3		<0.010
8/31/2009	CDM	18.7	2340	7.60		<4			11.37	na	15.0		<0.010
August 2009 Avg.		17.4	2382	7.72		4			2.88	na	11.1		0.0050
September 2009													
9/8/2009	CDM	18.7	2500	7.84		<4			7.55	na	14.4		<0.010
9/14/2009	CDM	16.0	2170	7.64		<4			10.66	na	12.8		<0.010
9/21/2009	CDM	14.0	2190	7.55		<4			12.31	na	12.8		<0.010
9/28/2009	CDM	17.9	2210	7.36		<4			16.20	na	13.8		<0.010
September Avg.		16.7	2268	7.60		4			3.44	na	13.5		0.0050
October 2009													
10/5/2009	CDM	7.3	2140	7.01		<4			23.89	na	8.3		<0.010
10/12/2009	CDM	4.9	2210	6.99		<4			24.31	na	9.3		<0.010
10/19/2009	CDM	9.5	2310	7.31		<4			17.29	na	12.7		<0.010
10/26/2009	CDM	9.3	2200	6.93		<4			25.55	na	9.1		<0.010
October Avg.		7.8	2215	7.06		4			5.75	na	9.8		0.0050
November 2009													
11/2/2009	CDM	4.0	2220	6.92		<4			25.75	na	10.4		<0.010
11/9/2009	CDM	6.3	2100	7.09		<4			22.16	na	9.4		<0.010
11/16/2009	CDM	4.7	2150	7.01		<4			23.89	na	9.2		<0.010
11/23/2009	CDM	7.2	2260	6.97		<4			24.73	na	8.4		<0.010
11/30/2009	CDM	4.1	2360	7.31		<4			17.29	na	8.0		<0.010
November 2009 Avg.		5.3	2218	7.06		4			5.75	na	9.1		0.0050
December 2009													
12/7/2009 - WTP shutdown									39.00	na			
12/14/2009	CDM	3.1	2550	7.15		<4			20.84	na	9.0		<0.010
12/21/2009	CDM	3.5	2600	7.27		<4			18.17	na	9.3		<0.010
12/28/2009	CDM	4.8	2530	6.93		<4			25.55	na	11.3		<0.010
December 2009 Avg.		3.8	2560	7.12		4			5.60	na	9.9		0.0050
January 2010													
1/4/2010	CDM	3.4	2580	7.03		<4			23.47	na	12.2		<0.010
1/11/2010	CDM	3.3	2860	7.95		18			6.17	na	11.2		<0.010
1/18/2010	CDM	2.4	2680	6.83		<4			27.49	na	14.7		<0.010
1/26/2010	CDM	2.6	2690	7.08		<4			22.38	na	15.4		<0.010
January 2010 Avg.		2.9	2703	7.22		7.5			5.29	na	13.4		0.0050
February 2010													
2/1/2010	CDM	3.3	2710	6.92		<4			25.75	na	12.5		<0.010
2/8/2010	CDM	2.9	2770	7.04		<4			23.25	na	8.9		<0.010
2/16/2010	CDM	2.7	2790	7.05		<4			23.03	na	8.6		<0.010
2/22/2010	CDM	5.0	2840	7.10		<4			21.94	na	10.5		<0.010
February 2010 Avg.		3.5	2778	7.03		4			5.83	na	10.1		0.0050
March 2010													
3/1/2010	CDM	6.6	2810	7.16		<4			20.62	na	16.1		<0.010
3/8/2010	CDM	7.1	2680	7.28		<4			17.95	na	19.2		<0.010
3/15/2010	CDM	5.3	2480	7.16		<4			20.62	na	20.1		<0.010
3/22/2010	CDM	5.6	1960	7.24		<4			18.84	na	18.9		<0.010
3/29/2010	CDM	8.3	1800	7.35		<4			16.41	na	18.6		<0.010
March 2010 Avg.		6.6	2346	7.24		4			5.25	na	18.6		0.0050
April 2010													
4/5/2010	CDM	5.3	1960	7.15		<4			20.84	na	18.1		<0.010
4/12/2010	CDM	8.4	1510	7.47		<10			13.89	na	13.5		<0.010
4/19/2010	CDM	9.6	1470	7.70		<4			9.64	na	6.1		<0.010
4/26/2010	CDM	5.5	1680	7.65		12.8			10.49	na	5.2		<0.010
April 2010 Avg.		7.2	1655	7.49		7.7			4.35	na	10.7		0.0050
May 2010													
5/3/2010	CDM	6.8	1620	7.55		10			12.31	na	4.6		<0.010
5/10/2010	CDM	8.1	1880	7.49		<4			13.48	na	4.4		<0.010
5/17/2010	CDM	9.4	1610	7.87		6.4			7.15	na	4.9		<0.010
5/24/2010	CDM	10.0	2190	7.64		<4			10.66	na	4.0		<0.010
May 2010 Avg.		8.6	1825	7.64		6.1			3.78	na	4.5		0.0050
June 2010													
6/1/2010	CDM	10.4	2360	7.81		<4			7.96	na	4.0		<0.010
6/7/2010	CDM	11.1	2440	7.60		<4			11.37	na	4.0		<0.010

SUMMARY OF WTP END OF PIPE DISCHARGE @ STRAWBERRY CREEK SAMPLING

Units are mg/l unless otherwise noted

Water Treatment Plant End-Of-Pipe		General Constituents											
	Limit Type	Temperature (deg C)	Conductivity (umhos/cm)	pH (s.u.)	TDS	TSS	Alkalinity	Ammonia			Nitrate	Sulfate	WAD CN
SD Surface Water Quality Standards	30-day	---	2500	---	2500	---	750	Equation 3	Ammonia standard based on pH and Temp.	Exceedence	50	---	---
	24-hour	---	---	---	---	10	---	---			---	---	---
	Daily Max	---	4375	---	4375	---	1313	Equation 1			88	---	---
	Grab	---	---	---	---	17.5	---	---			---	---	---
	General	23.9	---	6.5-9.0	---	---	---	---			---	---	---
	Acute	---	---	---	---	---	---	---			---	---	0.022
	Chronic	---	---	---	---	---	---	---			---	---	0.0052
	Admin Rule	74:51:01:46	74:51:01:53	74:51:01:46	74:51:01:52	74:51:01:32	74:51:01:52	74:51:01:46			74:51:01:52		74:51:01 App B
	ND Rule	ND = No Val	ND = No Val	ND = No Val	ND = DL	ND = DL	ND = No Val	ND = 1/2 DL			ND = No Val	ND = No Val	ND = 1/2 DL
Date	Sampler												
6/14/2010	CDM	20.0	1870	7.65		<4			10.49	na	5.5		<0.010
6/21/2010	CDM	18.8	1880	7.95		<4			6.17	na	6.1		<0.010
6/28/2010	CDM	16.8	2230	7.67		<4			10.14	na	6.7		<0.010
June 2010 Avg.		15.4	2156	7.74		4			3.19	na	5.2		0.0050
July 2010													
7/6/2010	CDM	15.6	2360	7.68		<4		0.127	9.98	no	5.2		<0.010
7/12/2010	CDM	16.6	2590	7.98		<4		0.152	5.83	no	4.7		<0.010
7/19/2010	CDM	19.6	2170	7.91		<4		0.084	6.64	no	4.6		<0.010
7/26/2010	CDM	18.0	2170	7.88		<4		0.053	7.02	no	2.8		<0.010
July 2010 Avg.		17.5	2323	7.86		4		0.104	2.39	no	4.3		0.0050
August 2010													
8/2/2010	CDM	20.8	2120	8.06		<4		0.070	5.01	no	2.5		<0.010
8/2/2010 duplicate	CDM	20.8	2120	8.10		<4		0.070	4.64	no	2.5		<0.010
8/9/2010	CDM	21.3	2480	7.92		<4		0.142	6.52	no	6.7		<0.010
8/16/2010	CDM	18.4	2440	7.93		4.8		0.102	6.40	no	9.5		<0.010
8/23/2010	CDM	19.8	2450	7.95		<4		0.102	6.17	no	9.8		<0.010
8/30/2010	CDM	20.3	2450	8.00		<5		0.093	5.62	no	11.2		<0.010
August 2010 Avg.		20.2	2343	7.99		4.36		0.1018	1.66	no	7.0		0.0050
September 2010													
9/7/2010	CDM	19.2	2520	8.10		<4		0.130	4.64	no	8.2		<0.010
9/13/2010	CDM	15.5	2540	7.82		<4		0.170	7.82	no	8.4		<0.010
9/20/2010	CDM	17.5	2470	7.77		<4		0.181	8.55	no	8.9		<0.010
9/27/2010	CDM	15.1	2550	7.65		<4		0.222	10.49	no	8.4		<0.010
September 2010 Avg.		16.8	2520	7.84		4		0.17575	2.58	no	8.5		0.0050
October 2010													
10/4/2010	CDM	14.2	2640	7.73		<4		0.285	9.16	no	7.9		<0.010
10/11/2010	CDM	13.0	2200	7.78		<4		0.335	8.40	no	11.2		<0.010
10/18/2010	CDM	8.6	2530	7.60		<4		0.292	11.37	no	8.6		<0.010
10/25/2010	CDM	12.0	2530	7.33		<4		0.346	16.85	no	9.5		<0.010
October 2010 Avg.		12.0	2475	7.61		4		0.3145	3.89	no	9.3		0.0050
November 2010													
11/1/2010	CDM	9.3	2650	7.24		<4		0.550	18.84	no	5.6		<0.010
11/8/2010	CDM	9.7	2640	7.27		<4		0.688	18.17	no	6.6		<0.010
11/15/2010	CDM	5.2	2560	7.11		<4		0.950	21.72	no	7.9		<0.010
11/22/2010	CDM	4.3	2610	7.27		<4		0.932	18.17	no	7.3		<0.010
11/30/2010	CDM	2.4	2590	7.44		<4		0.988	14.50	no	8.3		<0.010
November 2010 Avg.		6.2	2610	7.27		4		0.8216	5.16	no	7.1		0.0050
December 2010													
12/6/2010	CDM	0.3	2720	7.33		<4		0.952	16.85	no	6.9		<0.010
12/13/2010	CDM	7.6	2760	7.28		<4		0.908	17.95	no	7.4		<0.010
12/20/2010	CDM	5.1	2760	7.21		<4		0.876	19.50	no	7.4		<0.010
12/27/2010	CDM	4.6	2740	7.24		<4		1.050	18.84	no	8.0		<0.010
December 2010 Avg.		4.4	2745	7.27		4		0.9465	5.16	no	7.4		0.0050
January 2011													
1/3/2011	CDM	4.6	2760	7.30		<4		1.120	17.51	no	7.5		<0.010
1/10/2011	CDM	5.2	2600	7.91		16		1.110	6.64	no	8.0		<0.010
1/17/2011	CDM	4.4	2650	7.37		<4		1.200	15.98	no	7.3		<0.010
1/24/2011	CDM	3.0	2560	7.40		<4		1.280	15.34	no	7.1		<0.010
1/31/2011	CDM	3.2	2520	7.52		<4		1.340	12.89	no	6.2		<0.010
January 2011 Avg.		4.1	2618	7.50		6.4		1.21	4.32	no	7.2		0.0050
February 2011													
2/7/2011	CDM	3.6	2660	7.35		<4		1.400	16.41	no	5.4		<0.010
2/14/2011	CDM	4.3	2650	7.45		<4		1.570	14.30	no	4.4		<0.010
2/21/2011 - no sample													
2/28/2011 - no sample													
February 2011 Avg.		4.0	2655	7.40		4		1.485	4.70	no	4.9		0.0050
March 2011													
3/7/2011 - no sample													
3/14/2011 - no sample													
3/21/2011 - no sample													
3/28/2011 - no sample													
April 2011													
4/4/2011 - no sample													
4/11/2011 - no sample													
4/18/2011 - no sample													
4/25/2011 - no sample													
May 2011													
5/2/2011	CDM	6.0	1460	7.29		<4		0.068	17.73	no	7.0		<0.010
5/9/2011	CDM	7.0	1540	7.50		<4		<0.050	13.28	no	9.0		
5/16/2011	CDM	9.5	1660	7.57		<4		<0.050	11.93	no	7.4		
5/23/2011	CDM	10.8	1200	7.60		4		0.076	11.37	no	4.6		<0.010
5/31/2011	CDM	11.1	1600	7.71		9.2		<0.050	9.48	no	2.6		<0.010
May 2011 Avg.		8.9	1492	7.53		5.04		0.0588	4.19	no	6.1		0.0050
June 2011													
6/6/2011	CDM	16.8	1640	8.09		8		<0.050	4.73	no	3.4		<0.010
6/13/2011	CDM	14.0	1740	7.88		<4		<0.050	7.02	no	2.2		<0.010
6/20/2011	CDM	14.3	1900	7.67		<4		0.050	10.14	no	8.2		<0.010
6/27/2011	CDM	13.5	1970	7.66		<4		0.071	10.31	no	7.1		<0.010
June 2011 Avg.		14.7	1813	7.83		5		0.05525	3.00	no	5.2		0.0050
July 2011													
7/5/2011	CDM	18.6	2110	7.78		<4		0.091	8.40	no	7.8		<0.010
7/11/2011	CDM	15.9	2350	7.89		<4		0.091	6.89	no	8.6		<0.010
7/18/2011	CDM	18.9	2430	7.92		<4		0.065	6.52	no	10.4		<0.010
7/25/2011	CDM	15.5	2380	8.07		<4		0.058	4.92	no	11.1		<0.010
July 2011 Avg.		17.2	2318	7.92		4		0.07625	2.25	no	9.5		0.0050
August 2011													
8/1/2011	CDM	20.6	2490	7.76		<4		0.077	8.70	no	11.8		<0.010
8/8/2011	CDM	18.7	2460	7.83		<4		0.061	7.68	no	11.2		<0.010
8/15/2011	CDM	20.6	2320	7.97		<4		<0.050	5.94	no	8.1		<0.010
8/22/2011	CDM	19.2	2060	7.80		<4		0.050	8.11	no	8.3		<0.010
8/29/2011	CDM	18.7	2460	7.99		<4		<0.050	5.72	no	5.8		<0.010
August 2011 Avg.		19.6	2358	7.87		4		0.0576	2.07	no	9.0		0.0050
September 2011													
9/6/2011	CDM	18.6	2440	7.90		<4		0.059	6.77	no	7.4		<0.010
9/12/2011	CDM	16.7	2330	7.75		<4		0.072	8.85	no	5.8		<0.010
9/19/2011	CDM	14.3	2300	7.94		<4		<0.050	6.28	no	6.3		<0.010
9/26/2011	CDM	15.0	2380	7.55		<4		0.059	12.31	no	8.6		<0.010
September 2011 Avg.		16.2	2363	7.79		4		0.06	2.87	no	7.0		0.0050

October 2011

SUMMARY OF WTP END OF PIPE DISCHARGE @ STRAWBERRY CREEK SAMPLING

Units are mg/l unless otherwise noted

Water Treatment Plant End-Of-Pipe		General Constituents											
	Limit Type	Temperature (deg C)	Conductivity (umhos/cm)	pH (s.u.)	TDS	TSS	Alkalinity	Ammonia			Nitrate	Sulfate	WAD CN
SD Surface Water Quality Standards	30-day	---	2500	---	2500	---	750	Equation 3	Ammonia standard based on pH and Temp.	Exceedence	50	---	---
	24-hour	---	---	---	---	10	---	---			---	---	---
	Daily Max	---	4375	---	4375	---	1313	Equation 1			88	---	---
	Grab	---	---	---	---	17.5	---	---			---	---	---
	General	23.9	---	6.5-9.0	---	---	---	---			---	---	---
	Acute	---	---	---	---	---	---	---			---	---	0.022
	Chronic	---	---	---	---	---	---	---			---	---	0.0052
	Admin Rule	74:51:01:46	74:51:01:53	74:51:01:46	74:51:01:52	74:51:01:32	74:51:01:52	74:51:01:46			74:51:01:52		74:51:01 App B
	ND Rule	ND = No Val	ND = No Val	ND = No Val	ND = DL	ND = DL	ND = No Val	ND = 1/2 DL			ND = No Val	ND = No Val	ND = 1/2 DL
Date	Sampler												
10/3/2011	CDM	15.1	2000	7.45		<4		0.095	14.30	no	10.9		<0.010
10/10/2011	CDM	10.6	2000	7.63		<4		0.160	10.84	no	11.6		<0.010
10/17/2011	CDM	10.9	2000	7.59		<4		0.242	11.56	no	10.7		<0.010
10/24/2011	CDM	9.9	1990	7.69		<4		0.258	9.81	no	10.3		<0.010

SUMMARY OF WTP END OF PIPE DISCHARGE @ STRAWBERRY CREEK SAMPLING

Water Treatment Plant End-Of-Pipe		Dissolved Metals													
	Limit Type	As	Cd			Cr (III)			Cr (VI)	Cu			Pb		
SD Surface Water Quality Standards	30-day	---		Cd standard based on hardness	Exceedence		Cr (III) standard based on hardness	Exceedence	---		Cu standard based on hardness	Exceedence		Pb standard based on hardness	Exceedence
	24-hour	---							---						
	Daily Max	---							---						
	Grab	---							---						
	General	---							---						
	Acute	0.340							0.016						
	Chronic	0.150							0.011						
	Admin Rule	74:51:01 App B	74:51:01 App B			74:51:01 App B			74:51:01 App B	74:51:01 App B			74:51:01 App B		
	ND Rule	ND = 1/2 DL	ND = 1/2 DL			ND = 1/2 DL			ND = 1/2 DL	ND = 1/2 DL			ND = 1/2 DL		
Date	Sampler														
October 2003 Avg's	CDM	<0.005	<0.001	0.00064	no	0.002	0.2307	no		0.02400	0.02928	no	0.001	0.01094	no
November 2003 Avg's	CDM	<0.005	<0.001	0.00064	no	0.009	0.2307	no		0.02300	0.02928	no	0.001	0.01094	no
December 2003 Avg's	CDM	<0.005	<0.001	0.00064	no	0.006	0.2307	no		0.02900	0.02928	no	0.002	0.01094	no
January 2004 Avg's	CDM	<0.005	<0.001	0.00064	no	0.005	0.2307	no		0.02867	0.02928	no	0.0	0.01094	no
February 2004 Avg's	CDM	0.0	0.0010	0.00064	Yes	0.005	0.2307	no		0.03333	0.02928	Yes	<0.001	0.01094	no
March 2004 Avg's	CDM	<0.005	0.0010	0.00064	Yes	0.005	0.2307	no		0.02260	0.02928	no	<0.001	0.01094	no
April 2004 Avg's	CDM	<0.005	<0.001	0.00064	no	0.002	0.2307	no		0.02000	0.02928	no	<0.001	0.01094	no
May 2004 Avg's	CDM	<0.005	<0.001	0.00064	no	0.004	0.2307	no		0.02780	0.02928	no	<0.001	0.01094	no
June 2004 Avg's	CDM	<0.005	<0.001	0.00064	no	0.018	0.2307	no		0.02350	0.02928	no	<0.001	0.01094	no
July 2004 Avg's	CDM	<0.005	<0.001	0.00064	no	0.017	0.2307	no		0.02475	0.02928	no	<0.001	0.01094	no
August 2004 Avg's	CDM	<0.005	<0.001	0.00064	no	0.009	0.2307	no		0.03200	0.02928	Yes	<0.001	0.01094	no
September 2004 Avg's	CDM	<0.005	<0.001	0.00064	no	0.009	0.2307	no		0.01500	0.02928	no	<0.001	0.01094	no
October 2005 Avg's	CDM	<0.005	<0.001	0.00064	no	0.005	0.2307	no		0.00960	0.02928	no	<0.001	0.01094	no
November 2005 Avg's		<0.005	0.001	0.00064	Yes	0.002	0.2307	no		0.01625	0.02928	no	<0.001	0.01094	no
December 2005 Avg's	CDM	<0.005	<0.001	0.00064	no	0.002	0.2307	no		0.01125	0.02928	no	<0.001	0.01094	no
January 2006 Avg's	CDM	<0.005	<0.001	0.00064	no	0.001	0.2307	no		0.01120	0.02928	no	<0.001	0.01094	no
February 2006 Avg's	CDM	<0.005	<0.001	0.00064	no	0.002	0.2307	no		0.01033	0.02928	no	<0.001	0.01094	no
March 2006 Avg's	CDM	<0.005	0.001	0.00064	Yes	0.001	0.2307	no		0.01250	0.02928	no	<0.001	0.01094	no
April 2006 Avg's	CDM	<0.005	<0.001	0.00064	no	<0.001	0.2307	no		0.00775	0.02928	no	<0.001	0.01094	no
May 2006 Avg's	CDM	<0.005	<0.001	0.00064	no	<0.001	0.2307	no		0.00540	0.02928	no	<0.001	0.01094	no
June 2006 Avg's	CDM	<0.005	<0.001	0.00064	no	0.002	0.2307	no		0.00800	0.02928	no	<0.001	0.01094	no
July 2006 Avg's	CDM	<0.005	<0.001	0.00064	no	0.002	0.2307	no		0.00625	0.02928	no	<0.001	0.01094	no
August 2006 Avg's	CDM	<0.005	<0.001	0.00064	no	0.001	0.2307	no		0.01340	0.02928	no	<0.001	0.01094	no
September 2006 Avg's	CDM	<0.005	<0.001	0.00064	no	0.002	0.2307	no		0.00833	0.02928	no	<0.001	0.01094	no
October 2006 Avg's	CDM	<0.005	<0.001	0.00064	no	<0.001	0.2307	no		0.01800	0.02928	no	<0.001	0.01094	no
November 2006															
11/6/2006	CDM	<0.005	<0.001	0.00774	no	<0.001	1.77330	no		0.00600	0.04962	no	<00.001	0.28085	no
11/13/2006	CDM	<0.005	<0.001	0.00774	no	<0.001	1.77330	no		0.00600	0.04962	no	<0.001	0.28085	no
11/20/2006	CDM	<0.005	<0.001	0.00774	no	<0.001	1.77330	no		0.00500	0.04962	no	<0.001	0.28085	no
11/27/2006	CDM	<0.005	<0.001	0.00774	no	<0.001	1.77330	no		0.00800	0.04962	no	<0.001	0.28085	no
November 2006 Avg's	CDM	0.0025	0.0005	0.00064	no	0.0005	0.2307	no		0.0063	0.02928	no	0.0005	0.01094	no
December 2006															
12/4/2006	CDM	<0.005	<0.001	0.00774	no	<0.001	1.77330	no		0.00500	0.04962	no	<0.001	0.28085	no
12/11/2006	CDM	<0.005	<0.001	0.00774	no	<0.001	1.77330	no		0.00600	0.04962	no	<0.001	0.28085	no
12/18/2006	CDM	<0.005	<0.001	0.00774	no	<0.001	1.77330	no		0.01000	0.04962	no	<0.001	0.28085	no
12/26/2006	CDM	<0.005	<0.001	0.00774	no	<0.001	1.77330	no		0.00600	0.04962	no	<0.001	0.28085	no
December 2006 Avg's	CDM	0.0025	0.0005	0.00064	no	0.0005	0.2307	no		0.0068	0.02928	no	0.0005	0.01094	no
January 2007															
1/2/2007	CDM	<0.005	<0.001	0.00774	no	<0.001	1.77330	no		0.00600	0.04962	no	<0.001	0.28085	no
1/8/2007	CDM	<0.005	<0.002	0.00774	no	<0.001	1.77330	no		0.00500	0.04962	no	<0.001	0.28085	no
1/15/2007	CDM	<0.005	<0.001	0.00774	no					0.00600	0.04962	no	<0.001	0.28085	no
1/22/2007	CDM	<0.005	<0.001	0.00774	no					<0.005	0.04962	no	<0.001	0.28085	no
1/29/2007	CDM	<0.005	0.002	0.00774	no					0.00900	0.04962	no	<0.001	0.28085	no
January 2007 Avg's	CDM	0.0025	0.0009	0.00064	Yes	0.0005	0.2307	no		0.0057	0.02928	no	0.0005	0.01094	no
February 2007															
2/5/2007	CDM	<0.005	<0.001	0.00774	no					0.00600	0.04962	no	<0.001	0.28085	no
2/26/2007	CDM	<0.005	0.001	0.00774	no					<0.005	0.04962	no	<0.001	0.28085	no
February 2007 Avg's	CDM	0.0025	0.0008	0.00064	Yes					0.0043	0.02928	no	0.0005	0.01094	no
March 2007															
3/4/2007	CDM	<0.005	0.002	0.00774	no					<0.005	0.04962	no	<0.001	0.28085	no
3/12/2007	CDM	<0.005	<0.001	0.00774	no					<0.005	0.04962	no	<0.001	0.28085	no
3/19/2007	CDM	<0.005	0.001	0.00774	no					<0.005	0.04962	no	<0.001	0.28085	no
3/26/2007	CDM	<0.005	<0.001	0.00774	no					<0.005	0.04962	no	<0.001	0.28085	no
March 2007 Avg's	CDM	0.0025	0.0010	0.00064	Yes					0.00250	0.02928	no	0.0005	0.01094	no

April 2007

SUMMARY OF WTP END OF PIPE DISCHARGE

Water Treatment Plant End-Of-Pipe		Dissolved Metals										
	Limit Type	Hg	Ni			Se	Ag			Zn		
SD Surface Water Quality Standards	30-day	---		Ni standard based on hardness	Exceedence	---		Ag standard based on hardness	Exceedence		Zn standard based on hardness	Exceedence
	24-hour	---				---						
	Daily Max	---				---						
	Grab	---				---						
	General	---				---						
	Acute	0.00140				---						
	Chronic	0.00077				0.0046						
	Admin Rule	74:51:01 App B	74:51:01 App B			74:51:01 App B	74:51:01 App B			74:51:01 App B		
	ND Rule	ND = 1/2 DL	ND = 1/2 DL			ND = 1/2 DL	ND = 1/2 DL			ND = 1/2 DL		
Date	Sampler											
October 2003 Avg's	CDM	<0.0002	<0.005	0.16804	no	0.006	<0.001	NA	NA	<0.050	0.382	no
November 2003 Avg's	CDM	<0.0002	<0.005	0.16804	no	0.007	<0.001	NA	NA	<0.050	0.382	no
December 2003 Avg's	CDM	<0.0002	<0.005	0.16804	no	0.012	<0.001	NA	NA	<0.050	0.382	no
January 2004 Avg's	CDM	<0.0002	<0.005	0.16804	no	0.021	<0.001	NA	NA	<0.050	0.382	no
February 2004 Avg's	CDM	<0.0002	0.0090	0.16804	no	0.021	<0.001	NA	NA	<0.050	0.382	no
March 2004 Avg's	CDM	<0.0002	0.0196	0.16804	no	0.020	<0.001	NA	NA	<0.050	0.382	no
April 2004 Avg's	CDM	<0.0002	0.0143	0.16804	no	0.012	<0.001	NA	NA	<0.050	0.382	no
May 2004 Avg's	CDM	<0.0002	0.0190	0.16804	no	0.014	<0.001	NA	NA	<0.050	0.382	no
June 2004 Avg's	CDM	<0.0002	0.0138	0.16804	no	0.015	<0.001	NA	NA	0.065	0.382	no
July 2004 Avg's	CDM	<0.0002	0.0153	0.16804	no	0.012	<0.001	NA	NA	0.110	0.382	no
August 2004 Avg's	CDM	<0.0002	0.0203	0.16804	no	0.013	<0.001	NA	NA	0.069	0.382	no
September 2004 Avg's	CDM	<0.0002	0.0190	0.16804	no	0.011	<0.001	NA	NA	<0.050	0.382	no
October 2005 Avg's	CDM	<0.0002	0.0186	0.16804	no	0.008	<0.001	NA	NA	<0.050	0.382	no
November 2005 Avg's			0.0180	0.16804	no	0.009	<0.001	NA	NA	<0.050	0.382	no
December 2005 Avg's	CDM		0.0193	0.16804	no	0.009	<0.001	NA	NA	<0.050	0.382	no
January 2006 Avg's	CDM		0.0154	0.16804	no	0.009	<0.001	NA	NA	<0.050	0.382	no
February 2006 Avg's	CDM		0.0183	0.16804	no	0.010	<0.001	NA	NA	<0.050	0.382	no
March 2006 Avg's	CDM		0.0110	0.16804	no	0.007	<0.001	NA	NA	<0.050	0.382	no
April 2006 Avg's	CDM		0.0060	0.16804	no	0.006	<0.001	NA	NA	<0.050	0.382	no
May 2006 Avg's	CDM		0.0112	0.16804	no	0.006	<0.001	NA	NA	<0.050	0.382	no
June 2006 Avg's	CDM		0.0148	0.16804	no	0.006	<0.001	NA	NA	<0.050	0.382	no
July 2006 Avg's	CDM		0.0135	0.16804	no	0.006	<0.001	NA	NA	<0.050	0.382	no
August 2006 Avg's	CDM		0.0138	0.16804	no	0.005	<0.001	NA	NA	<0.050	0.382	no
September 2006 Avg's	CDM		0.0105	0.16804	no	0.006	<0.001	NA	NA	<0.050	0.382	no
October 2006 Avg's	CDM		0.0085	0.16804	no	0.006	<0.001	NA	NA	<0.050	0.382	no
November 2006												
11/6/2006	CDM		0.0120	1.51289	no	0.006	<0.001	0.03491	no	<0.050	0.379	no
11/13/2006	CDM		0.0120	1.51289	no	0.007	<0.001	0.03491	no	<0.050	0.379	no
11/20/2006	CDM		0.0170	1.51289	no	0.006	<0.001	0.03491	no	0.084	0.379	no
11/27/2006	CDM		0.0150	1.51289	no	0.006	<0.001	0.03491	no	0.053	0.379	no
November 2006 Avg's	CDM		0.0140	0.16804	no	0.0063	0.0005	NA	NA	0.047	0.382	no
December 2006												
12/4/2006	CDM		0.0070	1.51289	no	0.005	<0.001	0.03491	no	0.087	0.379	no
12/11/2006	CDM		0.0140	1.51289	no	0.006	<0.001	0.03491	no	0.155	0.379	no
12/18/2006	CDM		0.0110	1.51289	no	0.005	<0.001	0.03491	no	0.089	0.379	no
12/26/2006	CDM		0.0210	1.51289	no	0.007	<0.001	0.03491	no	<0.050	0.379	no
December 2006 Avg's	CDM		0.0133	0.16804	no	0.0058	0.0005	NA	NA	0.089	0.382	no
January 2007												
1/2/2007	CDM		0.0090	1.51289	no	0.007	<0.001	0.03491	no	0.076	0.379	no
1/8/2007	CDM		0.0160	1.51289	no	0.007	<0.001	0.03491	no	0.054	0.379	no
1/15/2007	CDM		0.0190	1.51289	no	0.006	<0.001	0.03491	no	<0.050	0.379	no
1/22/2007	CDM		0.0120	1.51289	no	0.008	<0.001	0.03491	no	<0.050	0.379	no
1/29/2007	CDM		0.0120	1.51289	no	0.006	<0.001	0.03491	no	0.075	0.379	no
January 2007 Avg's	CDM		0.0136	0.16804	no	0.0068	0.0005	NA	NA	0.051	0.382	no
February 2007												
2/5/2007	CDM		0.0190	1.51289	no	0.007	<0.001			<0.050	0.379	no
2/26/2007	CDM		0.0080	1.51289	no	0.006	<0.001			0.102	0.379	no
February 2007 Avg's	CDM		0.0135	0.16804	no	0.0065	0.0005	NA	NA	0.064		
March 2007												
3/4/2007	CDM		0.0070	1.51289	no	0.005	<0.001	0.03491	no	<0.050	0.379	no
3/12/2007	CDM		0.0070	1.51289	no	0.006	<0.001	0.03491	no	<0.050	0.379	no
3/19/2007	CDM		0.0050	1.51289	no	<0.005	<0.001	0.03491	no	<0.050	0.379	no
3/26/2007	CDM		<0.005	1.51289	no	<0.005	<0.001	0.03491	no	<0.050	0.379	no
March 2007 Avg's	CDM		0.0054	0.16804	no	0.00400	0.0005	NA	NA	0.025	0.382	no

April 2007

SUMMARY OF WTP END OF PIPE DISCHARGE @ STRAWBERRY CREEK SAMPLING

Water Treatment Plant End-Of-Pipe		Dissolved Metals													
	Limit Type	As	Cd			Cr (III)			Cr (VI)	Cu			Pb		
SD Surface Water Quality Standards	30-day	---		Cd standard based on hardness	Exceedence		Cr (III) standard based on hardness	Exceedence	---		Cu standard based on hardness	Exceedence		Pb standard based on hardness	Exceedence
	24-hour	---							---						
	Daily Max	---							---						
	Grab	---							---						
	General	---							---						
	Acute	0.340							0.016						
	Chronic	0.150							0.011						
	Admin Rule	74:51:01 App B	74:51:01 App B			74:51:01 App B			74:51:01 App B	74:51:01 App B			74:51:01 App B		
	ND Rule	ND = 1/2 DL	ND = 1/2 DL			ND = 1/2 DL			ND = 1/2 DL	ND = 1/2 DL			ND = 1/2 DL		
Date	Sampler														
4/3/2007	CDM	<0.005	<0.001	0.00774	no					<0.005	0.04962	no	<0.001	0.28085	no
4/9/2007	CDM	<0.005	<0.001	0.00774	no					<0.005	0.04962	no	<0.001	0.28085	no
4/16/2007	CDM	<0.005	<0.001	0.00774	no					<0.005	0.04962	no	<0.001	0.28085	no
4/23/2007	CDM	<0.005	<0.001	0.00774	no					<0.005	0.04962	no	<0.001	0.28085	no
4/30/2007	CDM	<0.005	<0.001	0.00774	no					<0.005	0.04962	no	<0.001	0.28085	no
April 2007 Avg's	CDM	0.0025	0.0005	0.00064	no					0.00250	0.02928	no	0.0005	0.01094	no
May 2007															
5/7/2007	CDM	<0.005	<0.001	0.00774	no					<0.005	0.04962	no	<0.001	0.28085	no
5/14/2007	CDM	<0.005	<0.001	0.00774	no					0.00700	0.04962	no	<0.001	0.28085	no
5/21/2007	CDM	<0.005	<0.001	0.00774	no					0.00600	0.04962	no	<0.001	0.28085	no
5/29/2007	CDM	<0.005	<0.001	0.00774	no					0.00700	0.04962	no	<0.001	0.28085	no
May 2007 Avg's	CDM	0.0025	0.0005	0.00064	no					0.00563	0.02928	no	0.0005	0.01094	no
June 2007															
6/5/2007	CDM	<0.005	<0.0005	0.00774	no					<0.005	0.04962	no	<0.001	0.28085	no
6/11/2007	CDM	<0.005	<0.0005	0.00774	no					<0.005	0.04962	no	<0.001	0.28085	no
6/18/2007	CDM	<0.005	<0.0005	0.00774	no					0.00600	0.04962	no	<0.001	0.28085	no
6/25/2007	CDM	<0.005	<0.0005	0.00774	no					<0.005	0.04962	no	<0.001	0.28085	no
June 2007 Avg's	CDM	0.0025	0.0003	0.00064	no					0.00338	0.02928	no	0.0005	0.01094	no
July 2007															
7/2/2007	CDM	<0.005	<0.0005	0.00774	no					<0.005	0.04962	no	<0.001	0.28085	no
7/9/2007	CDM	<0.005	0.0010	0.00774	no					0.01000	0.04962	no	<0.001	0.28085	no
7/16/2007	CDM	<0.005	<0.0005	0.00774	no					0.00600	0.04962	no	<0.001	0.28085	no
7/23/2007	CDM	<0.005	0.0005	0.00774	no					0.00700	0.04962	no	<0.001	0.28085	no
7/30/2007	CDM	<0.005	0.0020	0.00774	no					0.01300	0.04962	no	<0.001	0.28085	no
July 2007 Avg's	CDM	0.0025	0.0008	0.00064	Yes					0.00770	0.02928	no	0.0005	0.01094	no
August 2007															
8/6/2007	CDM	<0.005	<0.001	0.00774	no					0.01000	0.04962	no	<0.001	0.28085	no
8/13/2007	CDM	<0.005	<0.0005	0.00774	no					0.00800	0.04962	no	<0.001	0.28085	no
8/20/2007	CDM	<0.005	<0.0005	0.00774	no					0.00700	0.04962	no	<0.001	0.28085	no
8/27/2007	CDM	<0.005	0.0010	0.00774	no					0.00900	0.04962	no	<0.001	0.28085	no
August 2007 Avg's	CDM	0.0025	0.0005	0.00064	no					0.00850	0.02928	no	0.0005	0.01094	no
September 2007															
9/10/2007	CDM	<0.005	<0.0005	0.00774	no					0.00700	0.04962	no	<0.001	0.28085	no
9/17/2007	CDM	<0.005	<0.0005	0.00774	no					0.00800	0.04962	no	<0.001	0.28085	no
9/25/2007	CDM	<0.005	<0.0005	0.00774	no					0.00800	0.04962	no	<0.001	0.28085	no
September 2007 Avg's	CDM	0.0025	0.0003	0.00064	no					0.00767	0.02928	no	0.0005	0.01094	no
October 2007															
0/1/2007 NOTE - Effluent to Surg Pond and filters were offline.	CDM	<0.005	<0.001	0.00774	no					0.01000	0.04962	no	<0.001	0.28085	no
10/8/2007	CDM	<0.005	<0.0005	0.00774	no					0.00900	0.04962	no	<0.001	0.28085	no
10/15/2007	CDM	0.006	<0.0005	0.00774	no					0.01000	0.04962	no	<0.001	0.28085	no
10/22/2007	CDM		<0.0005	0.00774	no					0.01200	0.04962	no	<0.001	0.28085	no
10/29/2007	CDM	<0.005	<0.0005	0.00774	no					0.01200	0.04962	no	<0.001	0.28085	no
October 2007 Avg's	CDM	0.0037	0.0003	0.00064	no					0.01075	0.02928	no	0.0005	0.01094	no
November 2007															
11/5/2007	CDM	<0.005	0.0010	0.00774	no					0.01600	0.04962	no	<0.001	0.28085	no
11/12/2007	CDM	<0.005	<0.0005	0.00774	no					0.00900	0.04962	no	<0.001	0.28085	no
11/19/2007	CDM	<0.005	<0.0005	0.00774	no					0.00900	0.04962	no	<0.001	0.28085	no
11/26/2007	CDM	<0.005	0.0005	0.00774	no					0.01100	0.04962	no	<0.001	0.28085	no
November 2007 Avg's	CDM	0.0025	0.0005	0.00064	no					0.01125	0.02928	no	0.0005	0.01094	no
December 2007															
12/3/2007	CDM	<0.005	<0.0005	0.00774	no					0.01200	0.04962	no	<0.001	0.28085	no
12/10/2007	CDM	<0.005	0.0008	0.00774	no					0.01200	0.04962	no	<0.001	0.28085	no

SUMMARY OF WTP END OF PIPE DISCHARGE

Water Treatment Plant End-Of-Pipe		Dissolved Metals										
	Limit Type	Hg	Ni			Se	Ag			Zn		
SD Surface Water Quality Standards	30-day	---		Ni standard based on hardness	Exceedence	---		Ag standard based on hardness	Exceedence		Zn standard based on hardness	Exceedence
	24-hour	---				---						
	Daily Max	---				---						
	Grab	---				---						
	General	---				---						
	Acute	0.00140				---						
	Chronic	0.00077				0.0046						
	Admin Rule	74:51:01 App B	74:51:01 App B			74:51:01 App B	74:51:01 App B			74:51:01 App B		
	ND Rule	ND = 1/2 DL	ND = 1/2 DL			ND = 1/2 DL	ND = 1/2 DL			ND = 1/2 DL		
Date	Sampler											
4/3/2007	CDM		0.0070	1.51289	no	<0.005	<0.001	0.03491	no	<0.050	0.379	no
4/9/2007	CDM		<0.005	1.51289	no	<0.005	<0.001	0.03491	no	<0.050	0.379	no
4/16/2007	CDM		0.0100	1.51289	no	<0.005	<0.001	0.03491	no	<0.050	0.379	no
4/23/2007	CDM		<0.005	1.51289	no	<0.005	<0.001	0.03491	no	<0.050	0.379	no
4/30/2007	CDM		0.0070	1.51289	no	0.006	<0.001	0.03491	no	<0.050	0.379	no
April 2007 Avg's	CDM		0.0058	0.16804	no	0.00320	0.0005	NA	NA	0.025	0.382	no
May 2007												
5/7/2007	CDM		<0.005	1.51289	no	0.007	0.001	0.03491	no	<0.050	0.379	no
5/14/2007	CDM		0.0100	1.51289	no	<0.005	<0.001	0.03491	no	<0.050	0.379	no
5/21/2007	CDM		<0.005	1.51289	no	<0.005	<0.001	0.03491	no	<0.050	0.379	no
5/29/2007	CDM		0.0070	1.51289	no	<0.005	<0.001	0.03491	no	<0.050	0.379	no
May 2007 Avg's	CDM		0.0055	0.16804	no	0.00363	0.0006	NA	NA	0.025	0.382	no
June 2007												
6/5/2007	CDM		0.0100	1.51289	no	<0.005	<0.001	0.03491	no	<0.050	0.379	no
6/11/2007	CDM		0.0090	1.51289	no	<0.005	<0.001	0.03491	no	<0.050	0.379	no
6/18/2007	CDM		0.0110	1.51289	no	0.008	<0.001	0.03491	no	<0.050	0.379	no
6/25/2007	CDM		0.0100	1.51289	no	0.005	<0.001	0.03491	no	<0.050	0.379	no
June 2007 Avg's	CDM		0.0100	0.16804	no	0.00450	0.0005	NA	NA	0.025	0.382	no
July 2007												
7/2/2007	CDM		0.0070	1.51289	no	<0.005	<0.001	0.03491	no	<0.050	0.379	no
7/9/2007	CDM		0.0050	1.51289	no	<0.005	<0.001	0.03491	no	<0.050	0.379	no
7/16/2007	CDM		0.0180	1.51289	no	0.006	<0.001	0.03491	no	<0.050	0.379	no
7/23/2007	CDM		0.0140	1.51289	no	<0.005	<0.001	0.03491	no	<0.050	0.379	no
7/30/2007	CDM		0.0120	1.51289	no	0.006	<0.001	0.03491	no	<0.050	0.379	no
July 2007 Avg's	CDM		0.0112	0.16804	no	0.00390	0.0005	NA	NA	0.025	0.382	no
August 2007												
8/6/2007	CDM		0.0110	1.51289	no	<0.005	<0.001	0.03491	no	<0.050	0.379	no
8/13/2007	CDM		0.0090	1.51289	no	0.005	<0.001	0.03491	no	<0.050	0.379	no
8/20/2007	CDM		0.0110	1.51289	no	0.005	<0.001	0.03491	no	<0.050	0.379	no
8/27/2007	CDM		0.0080	1.51289	no	<0.005	<0.001	0.03491	no	<0.050	0.379	no
August 2007 Avg's	CDM		0.0098	0.16804	no	0.00375	0.0005	NA	NA	0.025	0.382	no
September 2007												
9/10/2007	CDM		0.0060	1.51289	no	0.005	<0.001	0.03491	no	<0.050	0.379	no
9/17/2007	CDM		0.0090	1.51289	no	0.005	<0.001	0.03491	no	<0.050	0.379	no
9/25/2007	CDM		<0.005	1.51289	no	<0.005	<0.001	0.03491	no	<0.050	0.379	no
September 2007 Avg's	CDM		0.0058	0.16804	no	0.00417	0.0005	NA	NA	0.025	0.382	no
October 2007												
0/1/2007 NOTE - Effluent to Surg Pond and filters were offline.	CDM		0.0080	1.51289	no	<0.005	<0.001	0.03491	no	<0.050	0.379	no
10/8/2007	CDM		0.0110	1.51289	no	0.007	<0.001	0.03491	no	<0.050	0.379	no
10/15/2007	CDM		0.0070	1.51289	no	0.012	<0.001	0.03491	no	<0.050	0.379	no
10/22/2007	CDM		0.0060	1.51289	no	0.007	<0.001	0.03491	no	<0.050	0.379	no
10/29/2007	CDM		0.0060	1.51289	no	0.012	<0.001	0.03491	no	<0.050	0.379	no
October 2007 Avg's	CDM		0.0075	0.16804	no	0.00950	0.0005	NA	NA	0.025	0.382	no
November 2007												
11/5/2007	CDM		<0.005	1.51289	no	0.009	<0.001	0.03491	no	<0.050	0.379	no
11/12/2007	CDM		0.0120	1.51289	no	0.008	<0.001	0.03491	no	<0.050	0.379	no
11/19/2007	CDM		0.0220	1.51289	no	0.010	<0.001	0.03491	no	<0.050	0.379	no
11/26/2007	CDM		0.0180	1.51289	no	0.011	<0.001	0.03491	no	<0.050	0.379	no
November 2007 Avg's	CDM		0.0136	0.16804	no	0.00950	0.0005	NA	NA	0.025	0.382	no
December 2007												
12/3/2007	CDM		0.0060	1.51289	no	0.007	<0.001	0.03491	no	<0.050	0.379	no
12/10/2007	CDM		0.0090	1.51289	no	0.008	<0.001	0.03491	no	<0.050	0.379	no

SUMMARY OF WTP END OF PIPE DISCHARGE @ STRAWBERRY CREEK SAMPLING

Water Treatment Plant End-Of-Pipe		Dissolved Metals													
	Limit Type	As	Cd			Cr (III)			Cr (VI)	Cu			Pb		
SD Surface Water Quality Standards	30-day	---		Cd standard based on hardness	Exceedence		Cr (III) standard based on hardness	Exceedence	---		Cu standard based on hardness	Exceedence		Pb standard based on hardness	Exceedence
	24-hour	---							---						
	Daily Max	---							---						
	Grab	---							---						
	General	---							---						
	Acute	0.340							0.016						
	Chronic	0.150							0.011						
	Admin Rule	74:51:01 App B	74:51:01 App B			74:51:01 App B			74:51:01 App B	74:51:01 App B			74:51:01 App B		
	ND Rule	ND = 1/2 DL	ND = 1/2 DL			ND = 1/2 DL			ND = 1/2 DL	ND = 1/2 DL			ND = 1/2 DL		
Date	Sampler														
12/17/2007	CDM	<0.005	0.0006	0.00774	no					0.01000	0.04962	no	<0.001	0.28085	no
12/26/2007	CDM	<0.005	<0.0005	0.00774	no					0.00900	0.04962	no	<0.001	0.28085	no
December 2007 Avg's	CDM	0.0025	0.0005	0.00064	no					0.01075	0.02928	no	0.0005	0.01094	no
January 2008															
1/2/2008	CDM	<0.005	0.0007	0.00774	no					0.01400	0.04962	no	<0.001	0.28085	no
1/7/2008	CDM	<0.005	<0.0005	0.00774	no					0.01200	0.04962	no	<0.001	0.28085	no
1/14/2008	CDM	<0.005	<0.0005	0.00774	no					0.01000	0.04962	no	<0.001	0.28085	no
1/21/2008	CDM	<0.005	<0.0005	0.00774	no					0.01300	0.04962	no	<0.001	0.28085	no
1/28/2008	CDM	<0.005	<0.0005	0.00774	no					0.01100	0.04962	no	<0.001	0.28085	no
January 2008 Avg's	CDM	0.0025	0.0003	0.00064	no					0.01200	0.02928	no	0.0005	0.01094	no
February 2008															
2/4/2008	CDM	<0.005	0.0005	0.00774	no					0.01200	0.04962	no	<0.001	0.28085	no
2/11/2008	CDM	<0.005	<0.0005	0.00774	no					0.00600	0.04962	no	<0.001	0.28085	no
2/18/2008	CDM	<0.005	0.0006	0.00774	no					0.01000	0.04962	no	<0.001	0.28085	no
2/25/2008	CDM	<0.005	0.0008	0.00774	no					0.01100	0.04962	no	<0.001	0.28085	no
February 2008 Avg's	CDM	0.0025	0.0005	0.00064	no					0.00975	0.02928	no	0.0005	0.01094	no
March 2008															
3/4/2008	CDM	<0.005	0.0006	0.00774	no					0.01000	0.04962	no	<0.001	0.28085	no
3/10/2008	CDM	<0.005	0.0006	0.00774	no					0.01000	0.04962	no	<0.001	0.28085	no
3/17/2008	CDM	<0.005	<0.0005	0.00774	no					0.00800	0.04962	no	<0.001	0.28085	no
3/24/2008	CDM	<0.005	<0.0005	0.00774	no					0.00800	0.04962	no	<0.001	0.28085	no
3/31/2008	CDM	<0.005	<0.0005	0.00774	no					<0.005	0.04962	no	<0.001	0.28085	no
March 2008 Avg's	CDM	0.0025	0.0004	0.00064	no					0.00770	0.02928	no	0.0005	0.01094	no
April 2008															
4/7/2008	CDM	<0.005	<0.0005	0.00774	no					<0.005	0.04962	no	<0.001	0.28085	no
4/14/2008	CDM	<0.005	<0.0005	0.00774	no					<0.005	0.04962	no	<0.001	0.28085	no
4/22/2008	CDM	<0.005	<0.0005	0.00774	no					<0.005	0.04962	no	<0.001	0.28085	no
4/28/2008	CDM	<0.005	<0.0005	0.00774	no					<0.005	0.04962	no	<0.001	0.28085	no
April 2008 Avg's	CDM	0.0025	0.0003	0.00064	no					0.00250	0.02928	no	0.0005	0.01094	no
May 2008															
05/06/08	CDM	<0.005	<0.0005	0.00774	no					<0.005	0.04962	no	<0.001	0.28085	no
05/12/08	CDM	<0.005	<0.001	0.00774	no					<0.005	0.04962	no	<0.001	0.28085	no
05/19/08	CDM	<0.005	<0.001	0.00774	no					<0.005	0.04962	no	<0.001	0.28085	no
05/27/08	CDM	<0.005	<0.001	0.00774	no					<0.005	0.04962	no	<0.001	0.28085	no
May 2008 Avg's	CDM	0.0025	0.0004	0.00064	no					0.00250	0.02928	no	0.0005	0.01094	no
June 2008															
06/02/08	CDM	<0.005	<0.001	0.00774	no					<0.005	0.04962	no	<0.001	0.28085	no
6/9/2008	CDM	<0.005	<0.001	0.00774	no					0.00500	0.04962	no	<0.001	0.28085	no
6/16/2008	CDM	<0.005	<0.001	0.00774	no					<0.005	0.04962	no	<0.001	0.28085	no
6/23/2008	CDM	<0.005	<0.001	0.00774	no					<0.005	0.04962	no	<0.001	0.28085	no
6/30/2008	CDM	<0.005	<0.001	0.00774	no					<0.005	0.04962	no	<0.001	0.28085	no
June 2008 Avg's	CDM	0.0025	0.0005	0.00064	no					0.00300	0.02928	no	0.0005	0.01094	no
July 2008															
7/7/2008	CDM	<0.005	<0.001	0.00774	no					<0.005	0.04962	no	<0.001	0.28085	no
7/14/2008	CDM	<0.005	<0.001	0.00774	no					<0.005	0.04962	no	<0.001	0.28085	no
7/21/2008	CDM	<0.005	<0.001	0.00774	no					<0.005	0.04962	no	<0.001	0.28085	no
7/28/2008	CDM	<0.005	<0.001	0.00774	no					0.00600	0.04962	no	<0.001	0.28085	no
July 2008 Avg's	CDM	0.0025	0.0005	0.00064	no					0.00338	0.02928	no	0.0005	0.01094	no
August 2008															
8/4/2008	CDM	<0.005	<0.001	0.00774	no					0.00500	0.04962	no	<0.001	0.28085	no
8/11/2008	CDM	<0.005	<0.001	0.00774	no					0.00600	0.04962	no	<0.001	0.28085	no
8/18/2008	CDM	<0.005	<0.001	0.00774	no					0.00700	0.04962	no	<0.001	0.28085	no
8/25/2008	CDM	<0.005	0.001	0.00774	no					0.00800	0.04962	no	<0.001	0.28085	no

SUMMARY OF WTP END OF PIPE DISCHARGE

Water Treatment Plant End-Of-Pipe		Dissolved Metals										
	Limit Type	Hg	Ni			Se	Ag			Zn		
SD Surface Water Quality Standards	30-day	---		Ni standard based on hardness	Exceedence	---		Ag standard based on hardness	Exceedence		Zn standard based on hardness	Exceedence
	24-hour	---				---						
	Daily Max	---				---						
	Grab	---				---						
	General	---				---						
	Acute	0.00140				---						
	Chronic	0.00077				0.0046						
	Admin Rule	74:51:01 App B	74:51:01 App B			74:51:01 App B	74:51:01 App B			74:51:01 App B		
	ND Rule	ND = 1/2 DL	ND = 1/2 DL			ND = 1/2 DL	ND = 1/2 DL			ND = 1/2 DL		
Date	Sampler											
12/17/2007	CDM		0.0110	1.51289	no	0.011	<0.001	0.03491	no	<0.050	0.379	no
12/26/2007	CDM		0.0180	1.51289	no	0.012	<0.001	0.03491	no	<0.050	0.379	no
December 2007 Avg's	CDM		0.0110	0.16804	no	0.00950	0.0005	NA	NA	0.025	0.382	no
January 2008												
1/2/2008	CDM		0.0050	1.51289	no	0.006	<0.001	0.03491	no	<0.050	0.379	no
1/7/2008	CDM		0.0100	1.51289	no	0.008	<0.001	0.03491	no	<0.050	0.379	no
1/14/2008	CDM		0.0170	1.51289	no	0.012	<0.001	0.03491	no	<0.050	0.379	no
1/21/2008	CDM		0.0110	1.51289	no	0.011	<0.001	0.03491	no	<0.050	0.379	no
1/28/2008	CDM		0.0190	1.51289	no	0.013	<0.001	0.03491	no	<0.050	0.379	no
January 2008 Avg's	CDM		0.0124	0.16804	no	0.01000	0.0005	NA	NA	0.025	0.382	no
February 2008												
2/4/2008	CDM		0.0220	1.51289	no	0.012	<0.001	0.03491	no	<0.050	0.379	no
2/11/2008	CDM		0.0130	1.51289	no	0.011	<0.001	0.03491	no	<0.050	0.379	no
2/18/2008	CDM		0.0120	1.51289	no	0.011	<0.001	0.03491	no	<0.050	0.379	no
2/25/2008	CDM		0.0160	1.51289	no	0.008	<0.001	0.03491	no	<0.050	0.379	no
February 2008 Avg's	CDM		0.0158	0.16804	no	0.01050	0.0005	NA	NA	0.025	0.382	no
March 2008												
3/4/2008	CDM		0.0110	1.51289	no	0.010	<0.001	0.03491	no	<0.050	0.379	no
3/10/2008	CDM		0.0130	1.51289	no	0.010	<0.001	0.03491	no	<0.050	0.379	no
3/17/2008	CDM		0.0140	1.51289	no	0.012	<0.001	0.03491	no	<0.050	0.379	no
3/24/2008	CDM		0.0150	1.51289	no	0.010	<0.001	0.03491	no	<0.050	0.379	no
3/31/2008	CDM		0.0210	1.51289	no	0.011	<0.001	0.03491	no	<0.050	0.379	no
March 2008 Avg's	CDM		0.0148	0.16804	no	0.01060	0.0005	NA	NA	0.025	0.382	no
April 2008												
4/7/2008	CDM		0.0150	1.51289	no	0.007	<0.001	0.03491	no	<0.050	0.379	no
4/14/2008	CDM		0.0200	1.51289	no	0.007	<0.001	0.03491	no	<0.050	0.379	no
4/22/2008	CDM		0.0070	1.51289	no	<0.005	<0.001	0.03491	no	<0.050	0.379	no
4/28/2008	CDM		0.0130	1.51289	no	<0.005	<0.001	0.03491	no	<0.050	0.379	no
April 2008 Avg's	CDM		0.0138	0.16804	no	0.00475	0.0005	NA	NA	0.025	0.382	no
May 2008												
05/06/08	CDM		0.0090	1.51289	no	<0.005	<0.001	0.03491	no	<0.050	0.379	no
05/12/08	CDM		0.0090	1.51289	no	<0.005	<0.001	0.03491	no	<0.050	0.379	no
05/19/08	CDM		0.0060	1.51289	no	0.005	<0.001	0.03491	no	<0.050	0.379	no
05/27/08	CDM		0.0130	1.51289	no	<0.005	<0.001	0.03491	no	<0.050	0.379	no
May 2008 Avg's	CDM		0.0093	0.16804	no	0.00313	0.0005	NA	NA	0.025	0.382	no
June 2008												
06/02/08	CDM		0.0130	1.51289	no	<0.005	<0.001	0.03491	no	<0.050	0.379	no
6/9/2008	CDM		0.0120	1.51289	no	<0.005	<0.001	0.03491	no	<0.050	0.379	no
6/16/2008	CDM		0.0150	1.51289	no	<0.005	<0.001	0.03491	no	<0.050	0.379	no
6/23/2008	CDM		0.0100	1.51289	no	<0.005	<0.001	0.03491	no	<0.050	0.379	no
6/30/2008	CDM		0.0140	1.51289	no	<0.005	<0.001	0.03491	no	<0.050	0.379	no
June 2008 Avg's	CDM		0.0128	0.16804	no	0.00250	0.0005	NA	NA	0.025	0.382	no
July 2008												
7/7/2008	CDM		0.0080	1.51289	no	0.005	<0.001	0.03491	no	<0.050	0.379	no
7/14/2008	CDM		0.0140	1.51289	no	0.006	<0.001	0.03491	no	<0.050	0.379	no
7/21/2008	CDM		0.0120	1.51289	no	0.006	<0.001	0.03491	no	<0.050	0.379	no
7/28/2008	CDM		0.0060	1.51289	no	<0.005	<0.001	0.03491	no	<0.050	0.379	no
July 2008 Avg's	CDM		0.0100	0.16804	no	0.00488	0.0005	NA	NA	0.025	0.382	no
August 2008												
8/4/2008	CDM		0.0100	1.51289	no	0.006	<0.001	0.03491	no	<0.050	0.379	no
8/11/2008	CDM		0.0120	1.51289	no	0.005	<0.001	0.03491	no	<0.050	0.379	no
8/18/2008	CDM		0.0080	1.51289	no	<0.005	<0.001	0.03491	no	<0.050	0.379	no
8/25/2008	CDM		0.0060	1.51289	no	0.007	<0.001	0.03491	no	<0.050	0.379	no

SUMMARY OF WTP END OF PIPE DISCHARGE @ STRAWBERRY CREEK SAMPLING

Water Treatment Plant End-Of-Pipe		Dissolved Metals													
	Limit Type	As	Cd			Cr (III)			Cr (VI)	Cu			Pb		
SD Surface Water Quality Standards	30-day	---		Cd standard based on hardness	Exceedence		Cr (III) standard based on hardness	Exceedence	---		Cu standard based on hardness	Exceedence		Pb standard based on hardness	Exceedence
	24-hour	---							---						
	Daily Max	---							---						
	Grab	---							---						
	General	---							---						
	Acute	0.340							0.016						
	Chronic	0.150							0.011						
	Admin Rule	74:51:01 App B	74:51:01 App B			74:51:01 App B			74:51:01 App B	74:51:01 App B			74:51:01 App B		
	ND Rule	ND = 1/2 DL	ND = 1/2 DL			ND = 1/2 DL			ND = 1/2 DL	ND = 1/2 DL			ND = 1/2 DL		
Date	Sampler														
August 2008 Avg's	CDM	0.0025	0.0006	0.00064	no					0.00650	0.02928	no	0.0005	0.01094	no
September 2008															
9/2/2008	CDM	<0.005	<0.001	0.00774	no					0.00800	0.04962	no	<0.001	0.28085	no
9/8/2008	CDM	<0.005	<0.001	0.00774	no					0.00700	0.04962	no	<0.001	0.28085	no
9/15/2008	CDM	<0.005	0.001	0.00774	no					0.00700	0.04962	no	<0.001	0.28085	no
9/22/2008	CDM	<0.005	<0.001	0.00096	no					0.00700	0.00653	Yes	<0.001	0.02780	no
9/29/2008	CDM	<0.005	0.001	0.00774	no					0.00700	0.04962	no	<0.001	0.28085	no
September 2008 Avg's	CDM	0.0025	0.0007	0.00064	Yes					0.00720	0.02928	no	0.0005	0.01094	no
October 2008															
10/6/2008	CDM	<0.005	0.003	0.00774	no				<0.010	0.00600	0.04962	no	<0.001	0.28085	no
10/13/2008	CDM	<0.005	0.001	0.00774	no					<0.005	0.04962	no	<0.001	0.28085	no
10/20/2008	CDM	<0.005	0.001	0.00774	no					0.00500	0.04962	no	0.002	0.28085	no
10/27/2008	CDM	<0.005	<0.001	0.00774	no					0.00500	0.04962	no	<0.001	0.28085	no
October 2008 Avg's	CDM	0.0025	0.0014	0.00064	Yes				0.0050	0.00463	0.02928	no	0.0009	0.01094	no
November 2008															
11/3/2008	CDM	<0.005	0.001	0.00774	no					0.00500	0.04962	no	<0.001	0.28085	no
11/11/2008	CDM	<0.005	<0.001	0.00774	no					0.00700	0.04962	no	<0.001	0.28085	no
11/17/2008	CDM	<0.005	<0.001	0.00774	no					0.00700	0.04962	no	<0.001	0.28085	no
11/24/2008	CDM	<0.005	0.001	0.00774	no					0.01000	0.04962	no	<0.001	0.28085	no
November 2008 Avg's	CDM	0.0025	0.0008	0.00064	Yes					0.00725	0.02928	no	0.0005	0.01094	no
December 2008															
12/1/2008	CDM	<0.005	<0.001	0.00774	no					0.00900	0.04962	no	<0.001	0.28085	no
12/8/2008	CDM	<0.005	<0.001	0.00774	no					0.00600	0.04962	no	<0.001	0.28085	no
12/15/2008	CDM	<0.005	0.001	0.00774	no					0.00800	0.04962	no	<0.001	0.28085	no
12/22/2008	CDM	<0.005	0.001	0.00774	no					0.00900	0.04962	no	<0.001	0.28085	no
12/29/2009	CDM	<0.005	<0.001	0.00774	no					0.00900	0.04962	no	<0.001	0.28085	no
December 2008 Avg's	CDM	0.0025	0.0007	0.00064	Yes					0.00820	0.02928	no	0.0005	0.01094	no
January 2009															
1/5/2009	CDM	<0.005	<0.001	0.00774	no				<0.010	0.00900	0.04962	no	<0.001	0.28085	no
1/13/2009	CDM	<0.005	<0.001	0.00774	no					0.00900	0.04962	no	<0.001	0.28085	no
1/19/2009	CDM	<0.005	0.001	0.00774	no					0.01100	0.04962	no	<0.001	0.28085	no
1/26/2009	CDM	<0.005	<0.001	0.00774	no					0.00900	0.04962	no	<0.001	0.28085	no
January 2009 Avg's	CDM	0.0025	0.0006	0.00064	no				0.0050	0.00950	0.02928	no	0.0005	0.01094	no
February 2009															
2/2/2009	CDM	<0.005	<0.001	0.00774	no					0.00700	0.04962	no	<0.001	0.28085	no
2/9/2009	CDM	<0.005	0.001	0.00774	no					0.00800	0.04962	no	<0.001	0.28085	no
2/17/2009	CDM	<0.005	0.001	0.00774	no					0.01100	0.04962	no	<0.001	0.28085	no
2/23/2009	CDM	<0.005	0.001	0.00774	no					0.01000	0.04962	no	<0.001	0.28085	no
February 2009 Avg's	CDM	0.0025	0.0009	0.00064	Yes					0.00900	0.02928	no	0.0005	0.01094	no
March 2009															
3/2/2009	CDM	<0.005	0.001	0.00774	no					0.00900	0.04962	no	<0.001	0.28085	no
3/9/2009	CDM	<0.005	<0.001	0.00774	no					0.00800	0.04962	no	<0.001	0.28085	no
3/16/2009	CDM	<0.005	<0.001	0.00774	no					0.00700	0.04962	no	<0.001	0.28085	no
3/23/2009	CDM	<0.005	<0.001	0.00774	no					0.00600	0.04962	no	<0.001	0.28085	no
March 2009 Avg's	CDM	0.0025	0.0006	0.00064	no					0.00750	0.02928	no	0.0005	0.01094	no
April 2009															
4/1/2009	CDM	<0.005	<0.0005	0.00774	no					0.00600	0.04962	no	<0.001	0.28085	no
4/6/2009	CDM	<0.005	<0.001	0.00774	no					0.00600	0.04962	no	<0.001	0.28085	no
4/14/2009	CDM	<0.005	<0.001	0.00774	no					0.00600	0.04962	no	<0.001	0.28085	no
4/20/2009	CDM	<0.005	0.0012	0.00774	no					0.00700	0.04962	no	<0.001	0.28085	no
4/27/2009	CDM	<0.005	0.0006	0.00774	no					0.00600	0.04962	no	<0.001	0.28085	no
April 2009 Avg's	CDM	0.0025	0.0006	0.00064	no					0.00620	0.02928	no	0.0005	0.01094	no

SUMMARY OF WTP END OF PIPE DISCHARGE

Water Treatment Plant End-Of-Pipe		Dissolved Metals										
	Limit Type	Hg	Ni			Se	Ag			Zn		
SD Surface Water Quality Standards	30-day	---		Ni standard based on hardness	Exceedence	---		Ag standard based on hardness	Exceedence		Zn standard based on hardness	Exceedence
	24-hour	---				---						
	Daily Max	---				---						
	Grab	---				---						
	General	---				---						
	Acute	0.00140				---						
	Chronic	0.00077				0.0046						
	Admin Rule	74:51:01 App B	74:51:01 App B			74:51:01 App B	74:51:01 App B			74:51:01 App B		
	ND Rule	ND = 1/2 DL	ND = 1/2 DL			ND = 1/2 DL	ND = 1/2 DL			ND = 1/2 DL		
Date	Sampler											
August 2008 Avg's	CDM		0.0090	0.16804	no	0.00513	0.0005	NA	NA	0.025		
September 2008												
9/2/2008	CDM		0.0100	1.51289	no	0.007	<0.001	0.03491	no	<0.050	0.379	no
9/8/2008	CDM		0.0140	1.51289	no	0.006	<0.001	0.03491	no	<0.050	0.379	no
9/15/2008	CDM		0.0090	1.51289	no	0.007	<0.001	0.03491	no	<0.050	0.379	no
9/22/2008	CDM		0.0100	0.24498	no	0.007	<0.001	0.00086	no	<0.050	0.061	no
9/29/2008	CDM		0.0120	1.51289	no	0.007	<0.001	0.03491	no	<0.050	0.379	no
September 2008 Avg's	CDM		0.0110	0.16804	no	0.00680	0.0005	NA	NA	0.025	0.382	no
October 2008												
10/6/2008	CDM		0.0130	1.51289	no	0.006	<0.001	0.03491	no	<0.050	0.379	no
10/13/2008	CDM		0.0060	1.51289	no	0.006	<0.001	0.03491	no	<0.050	0.379	no
10/20/2008	CDM		0.0090	1.51289	no	<0.005	<0.001	0.03491	no	<0.050	0.379	no
10/27/2008	CDM		0.0120	1.51289	no	0.006	<0.001	0.03491	no	<0.050	0.379	no
October 2008 Avg's	CDM		0.0100	0.16804	no	0.00513	0.0005	NA	NA	0.025	0.382	no
November 2008												
11/3/2008	CDM		0.0080	1.51289	no	0.007	<0.001	0.03491	no	<0.050	0.379	no
11/11/2008	CDM		0.0090	1.51289	no	0.007	<0.001	0.03491	no	<0.050	0.379	no
11/17/2008	CDM		0.0090	1.51289	no	0.008	<0.001	0.03491	no	<0.050	0.379	no
11/24/2008	CDM		0.0150	1.51289	no	0.006	<0.001	0.03491	no	<0.050	0.379	no
November 2008 Avg's	CDM		0.0103	0.16804	no	0.00700	0.0005	NA	NA	0.025	0.382	no
December 2008												
12/1/2008	CDM		0.0160	1.51289	no	0.006	<0.001	0.03491	no	<0.050	0.379	no
12/8/2008	CDM		0.0180	1.51289	no	0.008	<0.001	0.03491	no	<0.050	0.379	no
12/15/2008	CDM		0.0130	1.51289	no	0.006	<0.001	0.03491	no	<0.050	0.379	no
12/22/2008	CDM		0.0170	1.51289	no	0.006	<0.001	0.03491	no	<0.050	0.379	no
12/29/2009	CDM		0.0180	1.51289	no	0.006	<0.001	0.03491	no	<0.050	0.379	no
December 2008 Avg's	CDM		0.0164	0.16804	no	0.00640	0.0005	NA	NA	0.025	0.382	no
January 2009												
1/5/2009	CDM		0.0180	1.51289	no	0.008	<0.001	0.03491	no	<0.050	0.379	no
1/13/2009	CDM		0.0130	1.51289	no	0.005	<0.001	0.03491	no	<0.050	0.379	no
1/19/2009	CDM		0.0170	1.51289	no	0.007	<0.001	0.03491	no	<0.050	0.379	no
1/26/2009	CDM		0.0090	1.51289	no	0.006	<0.001	0.03491	no	<0.050	0.379	no
January 2009 Avg's	CDM		0.0143	0.16804	no	0.00650	0.0005	NA	NA	0.025	0.382	no
February 2009												
2/2/2009	CDM		0.0100	1.51289	no	0.005	<0.001	0.03491	no	<0.050	0.379	no
2/9/2009	CDM		0.0120	1.51289	no	0.007	<0.001	0.03491	no	<0.050	0.379	no
2/17/2009	CDM		0.0130	1.51289	no	0.006	<0.001	0.03491	no	<0.050	0.379	no
2/23/2009	CDM		<0.005	1.51289	no	<0.005	<0.001	0.03491	no	<0.050	0.379	no
February 2009 Avg's	CDM		0.0094	0.16804	no	0.00513	0.0005	NA	NA	0.025	0.382	no
March 2009												
3/2/2009	CDM		0.0120	1.51289	no	0.007	<0.001	0.03491	no	<0.050	0.379	no
3/9/2009	CDM		0.0120	1.51289	no	0.006	<0.001	0.03491	no	<0.050	0.379	no
3/16/2009	CDM		0.0150	1.51289	no	0.006	<0.001	0.03491	no	<0.050	0.379	no
3/23/2009	CDM		0.0090	1.51289	no	<0.005	<0.001	0.03491	no	<0.050	0.379	no
March 2009 Avg's	CDM		0.0120	0.16804	no	0.00538	0.0005	NA	NA	0.025	0.382	no
April 2009												
4/1/2009	CDM		0.0090	1.51289	no	<0.005	<0.001	0.03491	no	<0.050	0.379	no
4/6/2009	CDM		0.0090	1.51289	no	<0.005	<0.001	0.03491	no	<0.050	0.379	no
4/14/2009	CDM		0.0080	1.51289	no	<0.005	<0.001	0.03491	no	<0.050	0.379	no
4/20/2009	CDM		0.0070	1.51289	no	<0.005	<0.001	0.03491	no	<0.050	0.379	no
4/27/2009	CDM		0.0070	1.51289	no	<0.005	<0.001	0.03491	no	<0.050	0.379	no
April 2009 Avg's	CDM		0.0080	0.16804	no	0.00250	0.0005	NA	NA	0.025	0.382	no

SUMMARY OF WTP END OF PIPE DISCHARGE @ STRAWBERRY CREEK SAMPLING

Water Treatment Plant End-Of-Pipe		Dissolved Metals													
	Limit Type	As	Cd			Cr (III)			Cr (VI)	Cu			Pb		
SD Surface Water Quality Standards	30-day	---		Cd standard based on hardness	Exceedence		Cr (III) standard based on hardness	Exceedence	---		Cu standard based on hardness	Exceedence		Pb standard based on hardness	Exceedence
	24-hour	---							---						
	Daily Max	---							---						
	Grab	---							---						
	General	---							---						
	Acute	0.340							0.016						
	Chronic	0.150							0.011						
	Admin Rule	74:51:01 App B	74:51:01 App B			74:51:01 App B			74:51:01 App B	74:51:01 App B			74:51:01 App B		
	ND Rule	ND = 1/2 DL	ND = 1/2 DL			ND = 1/2 DL			ND = 1/2 DL	ND = 1/2 DL			ND = 1/2 DL		
Date	Sampler														
May 2009															
5/4/2009	CDM	<0.005	<0.0005	0.00774	no					0.00600	0.04962	no	<0.001	0.28085	no
5/11/2009	CDM	<0.005	<0.001	0.00774	no					0.01000	0.04962	no	<0.001	0.28085	no
5/18/2009	CDM	<0.005	0.0005	0.00774	no					0.01000	0.04962	no	<0.001	0.28085	no
5/26/2009	CDM	<0.005	<0.001	0.00774	no					0.01500	0.04962	no	<0.001	0.28085	no
May 2009 Avg's	CDM	0.0025	0.0004	0.00064	no					0.01025	0.02928	no	0.0005	0.01094	no
June 2009															
6/1/2009	CDM	<0.005	<0.001	0.00774	no					0.01000	0.04962	no	<0.001	0.28085	no
6/8/2009	CDM	<0.005	0.0008	0.00774	no					0.00900	0.04962	no	<0.001	0.28085	no
6/15/2009	CDM	<0.005	<0.001	0.00774	no					0.00700	0.04962	no	<0.001	0.28085	no
6/22/2009	CDM	<0.005	0.0005	0.00774	no					0.00700	0.04962	no	<0.001	0.28085	no
6/29/2009	CDM	<0.005	<0.001	0.00774	no					0.00900	0.04962	no	<0.001	0.28085	no
June 2009 Avg's	CDM	0.0025	0.0006	0.00064	no					0.00840	0.02928	no	0.0005	0.01094	no
July 2009															
7/7/2009	CDM	<0.005	0.00060	0.00774	no	0.0005	1.77330	no		0.00900	0.04962	no	<0.001	0.28085	no
7/13/2009	CDM	<0.005	0.00025	0.00774	no	0.0005	1.77330	no		0.00800	0.04962	no	<0.001	0.28085	no
7/20/2009	CDM	<0.005	0.00025	0.00774	no					0.00800	0.04962	no	<0.001	0.28085	no
7/27/2009	CDM	<0.005	0.00050	0.00774	no					0.00700	0.04962	no	<0.001	0.28085	no
July 2009 Avg.		0.0025	0.00040	0.00064	no	0.00050	0.2307	no		0.00800	0.02928	no	0.0005	0.01094	no
August 2009															
8/3/2009	CDM	<0.005	0.0005	0.00774	no					0.00700	0.04962	no	<0.001	0.28085	no
8/10/2009	CDM	<0.005	0.0003	0.00774	no					0.00700	0.04962	no	<0.001	0.28085	no
8/17/2009	CDM	<0.005	0.0005	0.00774	no					0.00800	0.04962	no	<0.001	0.28085	no
8/24/2009	CDM	<0.005	0.0006	0.00774	no					0.00800	0.04962	no	<0.001	0.28085	no
8/31/2009	CDM	<0.005	0.0005	0.00774	no	0.0010	1.77330	no		0.00700	0.04962	no	<0.001	0.28085	no
August 2009 Avg.		0.0025	0.0005	0.00064	no	0.0010	0.2307	no		0.00740	0.02928	no	0.0005	0.01094	no
September 2009															
9/8/2009	CDM	<0.005	0.0002	0.00774	no					0.00800	0.04962	no	<0.001	0.28085	no
9/14/2009	CDM	<0.005	0.0005	0.00774	no					0.00700	0.04962	no	<0.001	0.28085	no
9/21/2009	CDM	<0.005	0.0004	0.00774	no					0.00800	0.04962	no	<0.001	0.28085	no
9/28/2009	CDM	<0.005	0.0007	0.00774	no					0.01000	0.04962	no	<0.001	0.28085	no
September Avg.		0.0025	0.0004	0.00064	no					0.00825	0.02928	no	0.0005	0.01094	no
October 2009															
10/5/2009	CDM	<0.005	0.0014	0.00774	no					0.00800	0.04962	no	<0.001	0.28085	no
10/12/2009	CDM	<0.005	0.0017	0.00774	no					0.01000	0.04962	no	<0.001	0.28085	no
10/19/2009	CDM	<0.005	0.0009	0.00774	no					0.00600	0.04962	no	<0.001	0.28085	no
10/26/2009	CDM	<0.005	0.0009	0.00774	no					0.00700	0.04962	no	<0.001	0.28085	no
October Avg.		0.0025	0.0012	0.00064	Yes					0.00775	0.02928	no	0.00050	0.01094	no
November 2009															
11/2/2009	CDM	<0.005	0.0010	0.00774	no					0.00600	0.04962	no	<0.001	0.28085	no
11/9/2009	CDM	<0.005	0.0010	0.00774	no					0.00800	0.04962	no	<0.001	0.28085	no
11/16/2009	CDM	<0.005	0.0012	0.00774	no					0.00700	0.04962	no	<0.001	0.28085	no
11/23/2009	CDM	<0.005	0.0008	0.00774	no					0.00700	0.04962	no	<0.001	0.28085	no
11/30/2009	CDM	<0.005	0.0005	0.00774	no					0.00600	0.04962	no	<0.001	0.28085	no
November 2009 Avg.		0.0025	0.0009	0.00064	Yes					0.00680	0.02928	no	0.0005	0.01094	no
December 2009															
12/7/2009 - WTP shutdown															
12/14/2009	CDM	<0.005	0.0004	0.00774	no					0.00900	0.04962	no	<0.001	0.28085	no
12/21/2009	CDM	<0.005	0.0007	0.00774	no					0.00747	0.04962	no	<0.001	0.28085	no
12/28/2009	CDM	<0.005	0.0009	0.00774	no					0.00999	0.04962	no	<0.001	0.28085	no
December 2009 Avg.		0.0025	0.0007	0.00064	Yes					0.00882	0.02928	no	0.0005	0.01094	no

SUMMARY OF WTP END OF PIPE DISCHARGE

Water Treatment Plant End-Of-Pipe		Dissolved Metals										
	Limit Type	Hg	Ni			Se	Ag			Zn		
SD Surface Water Quality Standards	30-day	---		Ni standard based on hardness	Exceedence	---		Ag standard based on hardness	Exceedence		Zn standard based on hardness	Exceedence
	24-hour	---				---						
	Daily Max	---				---						
	Grab	---				---						
	General	---				---						
	Acute	0.00140				---						
	Chronic	0.00077				0.0046						
	Admin Rule	74:51:01 App B	74:51:01 App B			74:51:01 App B	74:51:01 App B			74:51:01 App B		
	ND Rule	ND = 1/2 DL	ND = 1/2 DL			ND = 1/2 DL	ND = 1/2 DL			ND = 1/2 DL		
Date	Sampler											
May 2009												
5/4/2009	CDM		0.0110	1.51289	no	0.006	<0.001	0.03491	no	<0.050	0.379	no
5/11/2009	CDM		0.0100	1.51289	no	0.005	<0.001	0.03491	no	<0.050	0.379	no
5/18/2009	CDM		0.0130	1.51289	no	0.006	<0.001	0.03491	no	<0.050	0.379	no
5/26/2009	CDM		0.0070	1.51289	no	0.007	<0.001	0.03491	no	<0.050	0.379	no
May 2009 Avg's	CDM		0.0103	0.16804	no	0.00600	0.0005	NA	NA	0.025	0.382	no
June 2009												
6/1/2009	CDM		0.0110	1.51289	no	<0.005	<0.001	0.03491	no	<0.050	0.379	no
6/8/2009	CDM		0.0110	1.51289	no	0.005	<0.001	0.03491	no	<0.050	0.379	no
6/15/2009	CDM		0.0160	1.51289	no	<0.005	<0.001	0.03491	no	<0.050	0.379	no
6/22/2009	CDM		0.0080	1.51289	no	<0.005	<0.001	0.03491	no	<0.050	0.379	no
6/29/2009	CDM		0.0070	1.51289	no	<0.005	<0.001	0.03491	no	<0.050	0.379	no
June 2009 Avg's	CDM		0.0106	0.16804	no	0.00300	0.0005	NA	NA	0.025	0.382	no
July 2009												
7/7/2009	CDM		0.0080	1.51289	no	<0.005	<0.001	0.03491	no	<0.050	0.379	no
7/13/2009	CDM		0.0060	1.51289	no	<0.005	<0.001	0.03491	no	<0.050	0.379	no
7/20/2009	CDM		0.0080	1.51289	no	<0.005	<0.001	0.03491	no	<0.050	0.379	no
7/27/2009	CDM		0.0090	1.51289	no	0.005	<0.001	0.03491	no	<0.050	0.379	no
July 2009 Avg.			0.0078	0.16804	no	0.00313	0.0005	NA	NA	0.025	0.382	no
August 2009												
8/3/2009	CDM		0.0120	1.51289	no	<0.005	<0.001	0.03491	no	<0.050	0.379	no
8/10/2009	CDM		0.0130	1.51289	no	0.0060	<0.001	0.03491	no	<0.050	0.379	no
8/17/2009	CDM		0.0170	1.51289	no	0.0050	<0.001	0.03491	no	<0.050	0.379	no
8/24/2009	CDM		0.0180	1.51289	no	0.0060	<0.001	0.03491	no	<0.050	0.379	no
8/31/2009	CDM		0.0025	1.51289	no	<0.005	<0.001	0.03491	no	<0.050	0.379	no
August 2009 Avg.			0.0125	0.16804	no	0.00440	0.0005	NA	NA	0.025	0.382	no
September 2009												
9/8/2009	CDM		0.0070	1.51289	no	0.0080	<0.001	0.03491	no	<0.050	0.379	no
9/14/2009	CDM		0.0070	1.51289	no	0.0050	<0.001	0.03491	no	<0.050	0.379	no
9/21/2009	CDM		0.0130	1.51289	no	0.0070	<0.001	0.03491	no	<0.050	0.379	no
9/28/2009	CDM		0.0150	1.51289	no	0.0060	<0.001	0.03491	no	<0.050	0.379	no
September Avg.			0.0105	0.16804	no	0.00650	0.0005	NA	NA	0.025	0.382	no
October 2009												
10/5/2009	CDM		0.0160	1.51289	no	0.0050	<0.001	0.03491	no	<0.050	0.379	no
10/12/2009	CDM		0.0090	1.51289	no	0.0060	<0.001	0.03491	no	<0.050	0.379	no
10/19/2009	CDM		0.0110	1.51289	no	0.0070	<0.001	0.03491	no	<0.050	0.379	no
10/26/2009	CDM		0.0150	1.51289	no	0.0080	<0.001	0.03491	no	<0.050	0.379	no
October Avg.			0.0128	0.16804	no	0.00650	0.0005	NA	NA	0.025	0.382	no
November 2009												
11/2/2009	CDM		0.0100	1.51289	no	0.0070	<0.001	0.03491	no	<0.050	0.379	no
11/9/2009	CDM		0.0050	1.51289	no	0.0060	<0.001	0.03491	no	<0.050	0.379	no
11/16/2009	CDM		0.0080	1.51289	no	0.0025	<0.001	0.03491	no	<0.050	0.379	no
11/23/2009	CDM		0.0130	1.51289	no	0.0060	<0.001	0.03491	no	<0.050	0.379	no
11/30/2009	CDM		0.0070	1.51289	no	0.0050	<0.001	0.03491	no	<0.050	0.379	no
November 2009 Avg.			0.0086	0.16804	no	0.00530	0.0005	NA	NA	0.025	0.382	no
December 2009												
12/7/2009 - WTP shutdown												
12/14/2009	CDM		0.0150	1.51289	no	0.0090	<0.001	0.03491	no	<0.050	0.379	Yes
12/21/2009	CDM		0.0108	1.51289	no	0.0060	<0.001	0.03491	no	<0.050	0.379	Yes
12/28/2009	CDM		0.0123	1.51289	no	0.0066	<0.001	0.03491	no	<0.050	0.379	Yes
December 2009 Avg.			0.0127	0.16804	no	0.00720	0.0005	NA	NA	0.025	0.382	no

SUMMARY OF WTP END OF PIPE DISCHARGE @ STRAWBERRY CREEK SAMPLING

Water Treatment Plant End-Of-Pipe		Dissolved Metals													
	Limit Type	As	Cd			Cr (III)			Cr (VI)	Cu			Pb		
SD Surface Water Quality Standards	30-day	---		Cd standard based on hardness	Exceedence		Cr (III) standard based on hardness	Exceedence	---		Cu standard based on hardness	Exceedence		Pb standard based on hardness	Exceedence
	24-hour	---							---						
	Daily Max	---							---						
	Grab	---							---						
	General	---							---						
	Acute	0.340							0.016						
	Chronic	0.150							0.011						
	Admin Rule	74:51:01 App B	74:51:01 App B			74:51:01 App B			74:51:01 App B	74:51:01 App B			74:51:01 App B		
	ND Rule	ND = 1/2 DL	ND = 1/2 DL			ND = 1/2 DL			ND = 1/2 DL	ND = 1/2 DL			ND = 1/2 DL		
Date	Sampler														
January 2010															
1/4/2010	CDM	<0.005	0.0010	0.00774	no	NC	1.77330	na		0.01000	0.04962	no	<0.001	0.28085	no
1/11/2010	CDM	<0.005	0.0004	0.00774	no	NC	1.77330	na		0.00250	0.04962	no	<0.001	0.28085	no
1/18/2010	CDM	<0.005	0.0012	0.00774	no	NC	1.77330	na		0.01100	0.04962	no	<0.001	0.28085	no
1/26/2010	CDM	<0.005	0.0007	0.00774	no	NC	1.77330	na		0.01100	0.04962	no	<0.001	0.28085	no
January 2010 Avg.		0.0025	0.0008	0.00064	Yes	NC	0.2307	na		0.00863	0.02928	no	0.0005	0.01094	no
February 2010															
2/1/2010	CDM	<0.005	0.0012	0.00774	no	NC	1.77330	na		0.01200	0.04962	no	<0.001	0.28085	no
2/8/2010	CDM	<0.005	0.0009	0.00774	no	NC	1.77330	na		0.01300	0.04962	no	<0.001	0.28085	no
2/16/2010	CDM	<0.005	0.0007	0.00774	no	NC	1.77330	na		0.01300	0.04962	no	<0.001	0.28085	no
2/22/2010	CDM	<0.005	0.0010	0.00774	no	NC	1.77330	na		0.01300	0.04962	no	<0.001	0.28085	no
February 2010 Avg.		0.0025	0.0010	0.00064	Yes	NC	0.2307	na		0.01275	0.02928	no	0.0005	0.01094	no
March 2010															
3/1/2010	CDM	<0.005	0.0011	0.00774	no	NC	1.77330	na		0.01400	0.04962	no	<0.001	0.28085	no
3/8/2010	CDM	<0.005	0.0013	0.00774	no	NC	1.77330	na		0.01400	0.04962	no	<0.001	0.28085	no
3/15/2010	CDM	<0.005	0.0006	0.00774	no	NC	1.77330	na		0.01100	0.04962	no	<0.001	0.28085	no
3/22/2010	CDM	<0.005	0.0011	0.00774	no	NC	1.77330	na		0.01100	0.04962	no	<0.001	0.28085	no
3/29/2010	CDM	<0.005	0.0003	0.00774	no	NC	1.77330	na		0.00900	0.04962	no	<0.001	0.28085	no
March 2010 Avg.		0.0025	0.0009	0.00064	Yes	NC	0.2307	na		0.01180	0.02928	no	0.0005	0.01094	no
April 2010															
4/5/2010	CDM	<0.005	0.0014	0.00774	no	NC	1.77330	na		0.00900	0.04962	no	<0.001	0.28085	no
4/12/2010	CDM	<0.005	0.0008	0.00774	no	NC	1.77330	na		0.00600	0.04962	no	<0.001	0.28085	no
4/19/2010	CDM	<0.005	0.0004	0.00774	no	NC	1.77330	na		0.00700	0.04962	no	<0.001	0.28085	no
4/26/2010	CDM	<0.005	0.0040	0.00774	no	NC	1.77330	na		0.00800	0.04962	no	<0.001	0.28085	no
April 2010 Avg.		0.0025	0.0017	0.00064	Yes	NC	0.2307	na		0.00750	0.02928	no	0.0005	0.01094	no
May 2010															
5/3/2010	CDM	<0.005	0.0005	0.00774	no	NC	1.77330	na		0.00800	0.04962	no	0.00050	0.28085	no
5/10/2010	CDM	<0.010	0.0004	0.00774	no		1.77330	na		0.00700	0.04962	no	0.00050	0.28085	no
5/17/2010	CDM	<0.010	0.0006	0.00774	no		1.77330	na		0.00800	0.04962	no	0.00050	0.28085	no
5/24/2010	CDM	<0.010	0.0002	0.00774	no		1.77330	na		0.00600	0.04962	no	0.00050	0.28085	no
May 2010 Avg.		0.0044	0.0004	0.00064	no		0.2307	na		0.00725	0.02928	no	0.0005	0.01094	no
June 2010															
6/1/2010	CDM	<0.010	0.0004	0.00774	no		1.77330	na		0.00700	0.04962	no	0.00050	0.28085	no
6/7/2010	CDM	<0.010	0.0004	0.00774	no		1.77330	na		0.00700	0.04962	no	0.00050	0.28085	no
6/14/2010	CDM	<0.010	0.0002	0.00774	no		1.77330	na		0.00700	0.04962	no	0.00050	0.28085	no
6/21/2010	CDM	<0.010	0.0003	0.00774	no		1.77330	na		0.00700	0.04962	no	0.00050	0.28085	no
6/28/2010	CDM	<0.010	0.0002	0.00774	no		1.77330	na		0.00600	0.04962	no	0.00050	0.28085	no
June 2010 Avg.		0.0050	0.0003	0.00064	no		0.2307	na		0.00680	0.02928	no	0.0005	0.01094	no
July 2010															
7/6/2010	CDM	<0.005	0.0003	0.00774	no		1.77330	na		0.00700	0.04962	no	<0.001	0.28085	no
7/12/2010	CDM	<0.005	0.0004	0.00774	no		1.77330	na		0.00700	0.04962	no	<0.001	0.28085	no
7/19/2010	CDM	<0.005	0.0006	0.00774	no		1.77330	na		0.01200	0.04962	no	<0.001	0.28085	no
7/26/2010	CDM	<0.005	0.0004	0.00774	no		1.77330	na		0.00700	0.04962	no	<0.001	0.28085	no
July 2010 Avg.		0.0025	0.0004	0.00064	no		0.2307	na		0.00825	0.02928	no	0.0005	0.01094	no
August 2010															
8/2/2010	CDM	<0.005	<0.0003	0.00774	no		1.77330	na		0.00600	0.04962	no	<0.001	0.28085	no
8/2/2010 duplicate	CDM	<0.005	<0.0003	0.00774	no		1.77330	na		0.00600	0.04962	no	<0.001	0.28085	no
8/9/2010	CDM	<0.005	0.0005	0.00774	no		1.77330	na		0.00700	0.04962	no	<0.001	0.28085	no
8/16/2010	CDM	<0.005	0.0004	0.00774	no		1.77330	na		0.00600	0.04962	no	<0.001	0.28085	no
8/23/2010	CDM	<0.005	0.0004	0.00774	no		1.77330	na		0.01000	0.04962	no	<0.001	0.28085	no
8/30/2010	CDM	<0.005	0.0004	0.00774	no		1.77330	na		0.00900	0.04962	no	<0.001	0.28085	no
August 2010 Avg.		0.0025	0.0004	0.00064	no		0.2307	na		0.00760	0.02928	no	0.0005	0.01094	no

SUMMARY OF WTP END OF PIPE DISCHARGE

Water Treatment Plant End-Of-Pipe		Dissolved Metals										
	Limit Type	Hg	Ni			Se	Ag			Zn		
SD Surface Water Quality Standards	30-day	---		Ni standard based on hardness	Exceedence	---		Ag standard based on hardness	Exceedence		Zn standard based on hardness	Exceedence
	24-hour	---				---						
	Daily Max	---				---						
	Grab	---				---						
	General	---				---						
	Acute	0.00140				---						
	Chronic	0.00077				0.0046						
	Admin Rule	74:51:01 App B	74:51:01 App B			74:51:01 App B	74:51:01 App B			74:51:01 App B		
	ND Rule	ND = 1/2 DL	ND = 1/2 DL			ND = 1/2 DL	ND = 1/2 DL			ND = 1/2 DL		
Date	Sampler											
January 2010												
1/4/2010	CDM		0.0080	1.51289	no	0.0060	<0.001	0.03491	no	<0.050	0.379	no
1/11/2010	CDM		0.0150	1.51289	no	0.0070	<0.001	0.03491	no	<0.050	0.379	no
1/18/2010	CDM		0.0130	1.51289	no	0.0080	<0.001	0.03491	no	<0.050	0.379	no
1/26/2010	CDM		0.0120	1.51289	no	0.0090	<0.001	0.03491	no	<0.050	0.379	no
January 2010 Avg.			0.0120	0.16804	no	0.00750	0.00050	NA	NA	0.025	0.382	no
February 2010												
2/1/2010	CDM		0.0150	1.51289	no	0.0060	<0.001	0.03491	no	<0.050	0.379	no
2/8/2010	CDM		0.0110	1.51289	no	0.0080	<0.001	0.03491	no	<0.050	0.379	no
2/16/2010	CDM		0.0120	1.51289	no	0.0080	<0.001	0.03491	no	<0.050	0.379	no
2/22/2010	CDM		0.0080	1.51289	no	0.0070	<0.001	0.03491	no	<0.050	0.379	no
February 2010 Avg.			0.0115	0.16804	no	0.00725	0.0005	NA	NA	0.025	0.382	no
March 2010												
3/1/2010	CDM		0.0130	1.51289	no	0.0100	<0.001	0.03491	no	<0.050	0.379	no
3/8/2010	CDM		0.0200	1.51289	no	0.0120	<0.001	0.03491	no	<0.050	0.379	no
3/15/2010	CDM		0.0130	1.51289	no	0.0110	<0.001	0.03491	no	<0.050	0.379	no
3/22/2010	CDM		0.0070	1.51289	no	0.0060	<0.001	0.03491	no	<0.050	0.379	no
3/29/2010	CDM		0.0080	1.51289	no	0.0070	<0.001	0.03491	no	<0.050	0.379	no
March 2010 Avg.			0.0122	0.16804	no	0.00920	0.0005	NA	NA	0.025	0.382	no
April 2010												
4/5/2010	CDM		0.0050	1.51289	no	0.0060	<0.001	0.03491	no	<0.050	0.379	no
4/12/2010	CDM		0.0060	1.51289	no	<0.005	<0.001	0.03491	no	<0.050	0.379	no
4/19/2010	CDM		0.0080	1.51289	no	<0.005	<0.001	0.03491	no	<0.050	0.379	no
4/26/2010	CDM		0.0090	1.51289	no	<0.005	<0.001	0.03491	no	<0.050	0.379	no
April 2010 Avg.			0.0070	0.16804	no	0.00338	0.0005	NA	NA	0.025	0.382	no
May 2010												
5/3/2010	CDM		0.0130	1.51289	no	<0.005	<0.001	0.03491	Yes	<0.050	0.379	no
5/10/2010	CDM		0.01400	1.51289	no	<0.005	0.00050	0.03491	no	0.02500	0.379	no
5/17/2010	CDM		0.00600	1.51289	no	<0.005	0.00050	0.03491	no	0.02500	0.379	no
5/24/2010	CDM		0.01500	1.51289	no	<0.005	0.00050	0.03491	no	0.02500	0.379	no
May 2010 Avg.			0.0120	0.16804	no	0.00250	0.0005	NA	NA	0.025	0.382	no
June 2010												
6/1/2010	CDM		0.01500	1.51289	no	<0.005	0.00050	0.03491	no	0.02500	0.379	no
6/7/2010	CDM		0.01700	1.51289	no	0.0060	0.00050	0.03491	no	0.02500	0.379	no
6/14/2010	CDM		0.00700	1.51289	no	<0.005	0.00050	0.03491	no	0.02500	0.379	no
6/21/2010	CDM		0.01000	1.51289	no	<0.005	0.00050	0.03491	no	0.02500	0.379	no
6/28/2010	CDM		0.01400	1.51289	no	0.0050	0.00050	0.03491	no	0.02500	0.379	no
June 2010 Avg.			0.0126	0.16804	no	0.00370	0.0005	NA	NA	0.025	0.382	no
July 2010												
7/6/2010	CDM		0.01400	1.51289	no	<0.005	0.00050	0.03491	no	<0.050	0.379	no
7/12/2010	CDM		0.02000	1.51289	no	0.0070	<0.001	0.03491	no	<0.050	0.379	no
7/19/2010	CDM		0.00700	1.51289	no	<0.005	<0.001	0.03491	no	<0.050	0.379	no
7/26/2010	CDM		0.01600	1.51289	no	<0.005	<0.001	0.03491	no	<0.050	0.379	no
July 2010 Avg.			0.0143	0.16804	no	0.00363	0.0005	NA	NA	0.025	0.382	no
August 2010												
8/2/2010	CDM		0.02000	1.51289	no	<0.005	<0.001	0.03491	no	<0.050	0.379	no
8/2/2010 duplicate	CDM		0.02200	1.51289	no	<0.005	<0.001	0.03491	no	<0.050	0.379	no
8/9/2010	CDM		0.01600	1.51289	no	0.0050	<0.001	0.03491	no	<0.050	0.379	no
8/16/2010	CDM		0.02400	1.51289	no	0.0060	<0.001	0.03491	no	<0.050	0.379	no
8/23/2010	CDM		0.01500	1.51289	no	0.0050	<0.001	0.03491	no	<0.050	0.379	no
8/30/2010	CDM		0.02700	1.51289	no	0.0070	<0.001	0.03491	no	<0.050	0.379	no
August 2010 Avg.			0.0208	0.16804	no	0.00510	0.0005	NA	NA	0.025	0.382	no

SUMMARY OF WTP END OF PIPE DISCHARGE @ STRAWBERRY CREEK SAMPLING

Water Treatment Plant End-Of-Pipe		Dissolved Metals													
	Limit Type	As	Cd			Cr (III)			Cr (VI)	Cu			Pb		
SD Surface Water Quality Standards	30-day	---		Cd standard based on hardness	Exceedence		Cr (III) standard based on hardness	Exceedence	---		Cu standard based on hardness	Exceedence		Pb standard based on hardness	Exceedence
	24-hour	---							---						
	Daily Max	---							---						
	Grab	---							---						
	General	---							---						
	Acute	0.340							0.016						
	Chronic	0.150							0.011						
	Admin Rule	74:51:01 App B	74:51:01 App B			74:51:01 App B			74:51:01 App B	74:51:01 App B			74:51:01 App B		
	ND Rule	ND = 1/2 DL	ND = 1/2 DL			ND = 1/2 DL			ND = 1/2 DL	ND = 1/2 DL			ND = 1/2 DL		
Date	Sampler														
September 2010															
9/7/2010	CDM	<0.005	0.0007	0.00774	no		1.77330	na		0.00800	0.04962	no	<0.001	0.28085	no
9/13/2010	CDM	<0.005	0.0005	0.00774	no		1.77330	na		0.01000	0.04962	no	<0.001	0.28085	no
9/20/2010	CDM	<0.005	0.0006	0.00774	no		1.77330	na		0.00700	0.04962	no	<0.001	0.28085	no
9/27/2010	CDM	<0.005	0.0006	0.00774	no		1.77330	na		0.00700	0.04962	no	<0.001	0.28085	no
September 2010 Avg.		0.0025	0.0006	0.00064	no		0.2307	na		0.00800	0.02928	no	0.0005	0.01094	no
October 2010															
10/4/2010	CDM	<0.005	0.0005	0.00774	no		1.77330	na		0.00800	0.04962	no	<0.001	0.28085	no
10/11/2010	CDM	<0.005	0.0008	0.00774	no		1.77330	na		0.00900	0.04962	no	<0.001	0.28085	no
10/18/2010	CDM	<0.005	0.0007	0.00774	no		1.77330	na		0.00800	0.04962	no	<0.001	0.28085	no
10/25/2010	CDM	<0.005	0.0006	0.00774	no		1.77330	na		0.01000	0.04962	no	<0.001	0.28085	no
October 2010 Avg.		0.0025	0.0007	0.00064	Yes		0.2307	na		0.00875	0.02928	no	0.0005	0.01094	no
November 2010															
11/1/2010	CDM	<0.005	0.0009	0.00774	no		1.77330	na		0.00700	0.04962	no	<0.001	0.28085	no
11/8/2010	CDM	<0.005	0.0010	0.00774	no		1.77330	na		0.00900	0.04962	no	<0.001	0.28085	no
11/15/2010	CDM	<0.005	0.0009	0.00774	no		1.77330	na		0.01100	0.04962	no	<0.001	0.28085	no
11/22/2010	CDM	<0.005	0.0006	0.00774	no		1.77330	na		0.00800	0.04962	no	<0.001	0.28085	no
11/30/2010	CDM	<0.005	0.0015	0.00774	no		1.77330	na		0.00900	0.04962	no	<0.001	0.28085	no
November 2010 Avg.		0.0025	0.0010	0.00064	Yes		0.2307	na		0.00880	0.02928	no	0.0005	0.01094	no
December 2010															
12/6/2010	CDM	<0.005	0.0008	0.00774	no		1.77330	na		0.01000	0.04962	no	<0.001	0.28085	no
12/13/2010	CDM	<0.005	0.0009	0.00774	no		1.77330	na		0.01000	0.04962	no	<0.001	0.28085	no
12/20/2010	CDM	<0.005	0.0011	0.00774	no		1.77330	na		0.01000	0.04962	no	<0.001	0.28085	no
12/27/2010	CDM	<0.005	0.0009	0.00774	no		1.77330	na		0.01000	0.04962	no	<0.001	0.28085	no
December 2010 Avg.		0.0025	0.0009	0.00064	Yes		0.2307	na		0.01000	0.02928	no	0.0005	0.01094	no
January 2011															
1/3/2011	CDM	<0.005	0.0017	0.00774	no		1.77330	na		0.01000	0.04962	no	<0.001	0.28085	no
1/10/2011	CDM	<0.005	0.0016	0.00774	no		1.77330	na		0.01100	0.04962	no	<0.001	0.28085	no
1/17/2011	CDM	<0.005	0.0010	0.00774	no		1.77330	na		0.01100	0.04962	no	<0.001	0.28085	no
1/24/2011	CDM	<0.005	0.0010	0.00774	no		1.77330	na		0.01200	0.04962	no	<0.001	0.28085	no
1/31/2011	CDM	<0.005	0.0012	0.00774	no		1.77330	na		0.01100	0.04962	no	<0.001	0.28085	no
January 2011 Avg.		0.0025	0.0013	0.00064	Yes		0.2307	na		0.01100	0.02928	no	0.0005	0.01094	no
February 2011															
2/7/2011	CDM	<0.005	0.0009	0.00774	no		1.77330	na		0.01100	0.04962	no	<0.001	0.28085	no
2/14/2011	CDM	<0.005	0.0006	0.00774	no		1.77330	na		0.01100	0.04962	no	<0.001	0.28085	no
2/21/2011 - no sample															
2/28/2011 - no sample															
February 2011 Avg.		0.0025	0.0008	0.00064	Yes		0.2307	na		0.01100	0.02928	no	0.0005	0.01094	no
March 2011															
3/7/2011 - no sample															
3/14/2011 - no sample															
3/21/2011 - no sample															
3/28/2011 - no sample															
April 2011															
4/4/2011 - no sample															
4/11/2011 - no sample															
4/18/2011 - no sample															
4/25/2011 - no sample															
May 2011															
5/2/2011	CDM	<0.005	0.0008	0.00774	no		1.77330	na		0.00500	0.04962	no	<0.001	0.28085	no
5/9/2011	CDM	<0.005	0.0008	0.00774	no		1.77330	na		<0.005	0.04962	no	<0.001	0.28085	no
5/16/2011	CDM	<0.005	0.0005	0.00774	no		1.77330	na		<0.005	0.04962	no	<0.001	0.28085	no
5/23/2011	CDM	<0.005	0.0005	0.00774	no		1.77330	na		<0.005	0.04962	no	<0.001	0.28085	no

SUMMARY OF WTP END OF PIPE DISCHARGE

Water Treatment Plant End-Of-Pipe		Dissolved Metals										
	Limit Type	Hg	Ni			Se	Ag			Zn		
SD Surface Water Quality Standards	30-day	---		Ni standard based on hardness	Exceedence	---		Ag standard based on hardness	Exceedence		Zn standard based on hardness	Exceedence
	24-hour	---				---						
	Daily Max	---				---						
	Grab	---				---						
	General	---				---						
	Acute	0.00140				---						
	Chronic	0.00077				0.0046						
	Admin Rule	74:51:01 App B	74:51:01 App B			74:51:01 App B	74:51:01 App B			74:51:01 App B		
	ND Rule	ND = 1/2 DL	ND = 1/2 DL			ND = 1/2 DL	ND = 1/2 DL			ND = 1/2 DL		
Date	Sampler											
September 2010												
9/7/2010	CDM		0.00800	1.51289	no	0.0050	<0.001	0.03491	no	<0.050	0.379	no
9/13/2010	CDM		0.01100	1.51289	no	0.0070	<0.001	0.03491	no	<0.050	0.379	no
9/20/2010	CDM		0.01400	1.51289	no	0.0050	<0.001	0.03491	no	<0.050	0.379	no
9/27/2010	CDM		0.02000	1.51289	no	0.0070	<0.001	0.03491	no	<0.050	0.379	no
September 2010 Avg.			0.0133	0.16804	no	0.00600	0.0005	NA	NA	0.025	0.382	no
October 2010												
10/4/2010	CDM		0.02100	1.51289	no	0.0060	<0.001	0.03491	no	<0.050	0.379	no
10/11/2010	CDM		0.00700	1.51289	no	<0.005	<0.001	0.03491	no	<0.050	0.379	no
10/18/2010	CDM		0.01000	1.51289	no	0.0060	<0.001	0.03491	no	<0.050	0.379	no
10/25/2010	CDM		0.01800	1.51289	no	0.0070	<0.001	0.03491	no	<0.050	0.379	no
October 2010 Avg.			0.0140	0.16804	no	0.00538	0.0005	NA	NA	0.025	0.382	no
November 2010												
11/1/2010	CDM		0.01700	1.51289	no	0.0070	<0.001	0.03491	no	<0.050	0.379	no
11/8/2010	CDM		0.02200	1.51289	no	0.0080	<0.001	0.03491	no	<0.050	0.379	no
11/15/2010	CDM		0.01500	1.51289	no	0.0060	<0.001	0.03491	no	<0.050	0.379	no
11/22/2010	CDM		0.01900	1.51289	no	0.0070	<0.001	0.03491	no	<0.050	0.379	no
11/30/2010	CDM		0.01100	1.51289	no	0.0070	<0.001	0.03491	no	<0.050	0.379	no
November 2010 Avg.			0.0168	0.16804	no	0.00700	0.0005	NA	NA	0.025	0.382	no
December 2010												
12/6/2010	CDM		0.01000	1.51289	no	0.0060	<0.001	0.03491	no	<0.050	0.379	no
12/13/2010	CDM		0.02100	1.51289	no	0.0060	<0.001	0.03491	no	<0.050	0.379	no
12/20/2010	CDM		0.00900	1.51289	no	0.0050	<0.001	0.03491	no	<0.050	0.379	no
12/27/2010	CDM		0.01100	1.51289	no	0.0070	<0.001	0.03491	no	<0.050	0.379	no
December 2010 Avg.			0.0128	0.16804	no	0.00600	0.0005	NA	NA	0.025	0.382	no
January 2011												
1/3/2011	CDM		0.01100	1.51289	no	0.0060	<0.001	0.03491	no	<0.050	0.379	no
1/10/2011	CDM		0.01000	1.51289	no	0.0070	<0.001	0.03491	no	<0.050	0.379	no
1/17/2011	CDM		0.01200	1.51289	no	0.0070	<0.001	0.03491	no	<0.050	0.379	no
1/24/2011	CDM		0.01300	1.51289	no	0.0060	<0.001	0.03491	no	<0.050	0.379	no
1/31/2011	CDM		0.01600	1.51289	no	0.0070	<0.001	0.03491	no	<0.050	0.379	no
January 2011 Avg.			0.0124	0.16804	no	0.00660	0.0005	NA	NA	0.025	0.382	no
February 2011												
2/7/2011	CDM		0.01600	1.51289	no	0.0070	<0.001	0.03491	no	<0.050	0.379	no
2/14/2011	CDM		0.00800	1.51289	no	<0.005	<0.001	0.03491	no	<0.050	0.379	no
2/21/2011 - no sample												
2/28/2011 - no sample												
February 2011 Avg.			0.0120	0.16804	no	0.00475	0.0005	NA	NA	0.025	0.382	no
March 2011												
3/7/2011 - no sample												
3/14/2011 - no sample												
3/21/2011 - no sample												
3/28/2011 - no sample												
April 2011												
4/4/2011 - no sample												
4/11/2011 - no sample												
4/18/2011 - no sample												
4/25/2011 - no sample												
May 2011												
5/2/2011	CDM		0.00500	1.51289	no	<0.005	<0.001	0.03491	no	<0.050	0.379	no
5/9/2011	CDM		0.00600	1.51289	no	<0.005	<0.001	0.03491	no	<0.050	0.379	no
5/16/2011	CDM		0.00900	1.51289	no	<0.005	<0.001	0.03491	no	<0.050	0.379	no
5/23/2011	CDM		0.00600	1.51289	no	<0.005	<0.001	0.03491	no	<0.050	0.379	no

SUMMARY OF WTP END OF PIPE DISCHARGE @ STRAWBERRY CREEK SAMPLING

Water Treatment Plant End-Of-Pipe		Dissolved Metals													
	Limit Type	As	Cd			Cr (III)			Cr (VI)	Cu			Pb		
SD Surface Water Quality Standards	30-day	---		Cd standard based on hardness	Exceedence		Cr (III) standard based on hardness	Exceedence	---		Cu standard based on hardness	Exceedence		Pb standard based on hardness	Exceedence
	24-hour	---							---						
	Daily Max	---							---						
	Grab	---							---						
	General	---							---						
	Acute	0.340							0.016						
	Chronic	0.150							0.011						
	Admin Rule	74:51:01 App B	74:51:01 App B			74:51:01 App B			74:51:01 App B	74:51:01 App B			74:51:01 App B		
	ND Rule	ND = 1/2 DL	ND = 1/2 DL			ND = 1/2 DL			ND = 1/2 DL	ND = 1/2 DL			ND = 1/2 DL		
Date	Sampler														
5/31/2011	CDM	<0.005	0.0006	0.00774	no		1.77330	na		<0.005	0.04962	no	<0.001	0.28085	no
May 2011 Avg.		0.0025	0.0006	0.00064	no		0.2307	na		0.00300	0.02928	no	0.0005	0.01094	no
June 2011															
6/6/2011	CDM	<0.005	<0.0003	0.00774	no		1.77330	na		0.00600	0.04962	no	<0.001	0.28085	no
6/13/2011	CDM	<0.005	0.0003	0.00774	no		1.77330	na		0.00600	0.04962	no	<0.001	0.28085	no
6/20/2011	CDM	<0.005	0.0003	0.00774	no		1.77330	na		0.00600	0.04962	no	<0.001	0.28085	no
6/27/2011	CDM	<0.005	0.0003	0.00774	no		1.77330	na		<0.005	0.04962	no	<0.001	0.28085	no
June 2011 Avg.		0.0025	0.0003	0.00064	no		0.2307	na		0.00513	0.02928	no	0.0005	0.01094	no
July 2011															
7/5/2011	CDM	<0.005	<0.0003	0.00774	no		1.77330	na		0.00500	0.04962	no	<0.001	0.28085	no
7/11/2011	CDM	<0.005	0.0004	0.00774	no		1.77330	na		<0.005	0.04962	no	<0.001	0.28085	no
7/18/2011	CDM	<0.005	0.0004	0.00774	no		1.77330	na		0.00600	0.04962	no	<0.001	0.28085	no
7/25/2011	CDM	<0.005	0.0003	0.00774	no		1.77330	na		0.00600	0.04962	no	<0.001	0.28085	no
July 2011 Avg.		0.0025	0.0003	0.00064	no		0.2307	na		0.00488	0.02928	no	0.0005	0.01094	no
August 2011															
8/1/2011	CDM	<0.005	0.0004	0.00774	no		1.77330	na		0.00700	0.04962	no	<0.001	0.28085	no
8/8/2011	CDM	<0.005	<0.0003	0.00774	no		1.77330	na		0.00900	0.04962	no	<0.001	0.28085	no
8/15/2011	CDM	<0.005	0.0003	0.00774	no		1.77330	na		0.00700	0.04962	no	<0.001	0.28085	no
8/22/2011	CDM	<0.005	0.0003	0.00774	no		1.77330	na		0.00800	0.04962	no	<0.001	0.28085	no
8/29/2011	CDM	<0.005	0.0004	0.00774	no		1.77330	na		0.00700	0.04962	no	<0.001	0.28085	no
August 2011 Avg.		0.0025	0.0003	0.00064	no		0.2307	na		0.00760	0.02928	no	0.0005	0.01094	no
September 2011															
9/6/2011	CDM	<0.005	0.0004	0.00774	no		1.77330	na		0.00700	0.04962	no	<0.001	0.28085	no
9/12/2011	CDM	<0.005	0.0004	0.00774	no		1.77330	na		0.00800	0.04962	no	<0.001	0.28085	no
9/19/2011	CDM	<0.005	0.0005	0.00774	no		1.77330	na		0.00600	0.04962	no	<0.001	0.28085	no
9/26/2011	CDM	<0.005	<0.0003	0.00774	no		1.77330	na		0.00700	0.04962	no	<0.001	0.28085	no
September 2011 Avg.		0.0025	0.0004	0.00064	no		0.2307	na		0.00700	0.02928	no	0.0005	0.01094	no
October 2011															
10/3/2011	CDM	<0.005	0.0005	0.00774	no		1.77330	na		0.00800	0.04962	no	<0.001	0.28085	no
10/10/2011	CDM	<0.005	0.0005	0.00774	no		1.77330	na		0.00900	0.04962	no	<0.001	0.28085	no
10/17/2011	CDM	<0.005	0.0005	0.00774	no		1.77330	na		0.00800	0.04962	no	<0.001	0.28085	no
10/24/2011	CDM	<0.005	0.0008	0.00774	no		1.77330	na		0.00800	0.04962	no	<0.001	0.28085	no

SUMMARY OF WTP END OF PIPE DISCHARGE

Water Treatment Plant End-Of-Pipe		Dissolved Metals										
	Limit Type	Hg	Ni			Se	Ag			Zn		
SD Surface Water Quality Standards	30-day	---		Ni standard based on hardness	Exceedence	---		Ag standard based on hardness	Exceedence		Zn standard based on hardness	Exceedence
	24-hour	---				---						
	Daily Max	---				---						
	Grab	---				---						
	General	---				---						
	Acute	0.00140				---						
	Chronic	0.00077				0.0046						
	Admin Rule	74:51:01 App B	74:51:01 App B			74:51:01 App B	74:51:01 App B			74:51:01 App B		
	ND Rule	ND = 1/2 DL	ND = 1/2 DL			ND = 1/2 DL	ND = 1/2 DL			ND = 1/2 DL		
Date	Sampler											
5/31/2011	CDM		0.00900	1.51289	no	<0.005	<0.001	0.03491	no	<0.050	0.379	no
May 2011 Avg.			0.0070	0.16804	no	0.00250	0.0005	NA	NA	0.025	0.382	no
June 2011												
6/6/2011	CDM		0.00900	1.51289	no	<0.005	<0.001	0.03491	no	<0.050	0.379	no
6/13/2011	CDM		0.01100	1.51289	no	<0.005	<0.001	0.03491	no	<0.050	0.379	no
6/20/2011	CDM		0.01100	1.51289	no	<0.005	<0.001	0.03491	no	<0.050	0.379	no
6/27/2011	CDM		0.01300	1.51289	no	<0.005	<0.001	0.03491	no	<0.050	0.379	no
June 2011 Avg.			0.0110	0.16804	no	0.00250	0.0005	NA	NA	0.025	0.382	no
July 2011												
7/5/2011	CDM		0.00900	1.51289	no	<0.005	<0.001	0.03491	no	<0.050	0.379	no
7/11/2011	CDM		0.01000	1.51289	no	0.0070	<0.001	0.03491	no	<0.050	0.379	no
7/18/2011	CDM		0.00800	1.51289	no	0.0070	<0.001	0.03491	no	<0.050	0.379	no
7/25/2011	CDM		0.00900	1.51289	no	<0.005	<0.001	0.03491	no	<0.050	0.379	no
July 2011 Avg.			0.0090	0.16804	no	0.00475	0.0005	NA	NA	0.025	0.382	no
August 2011												
8/1/2011	CDM		0.01100	1.51289	no	0.0070	<0.001	0.03491	no	<0.050	0.379	no
8/8/2011	CDM		0.01000	1.51289	no	0.0070	<0.001	0.03491	no	<0.050	0.379	no
8/15/2011	CDM		0.01100	1.51289	no	0.0060	<0.001	0.03491	no	<0.050	0.379	no
8/22/2011	CDM		0.01200	1.51289	no	<0.005	<0.001	0.03491	no	<0.050	0.379	no
8/29/2011	CDM		0.02000	1.51289	no	0.0050	<0.001	0.03491	no	<0.050	0.379	no
August 2011 Avg.			0.0128	0.16804	no	0.00550	0.0005	NA	NA	0.025	0.382	no
September 2011												
9/6/2011	CDM		0.01000	1.51289	no	0.0070	<0.001	0.03491	no	<0.050	0.379	no
9/12/2011	CDM		0.00900	1.51289	no	<0.005	<0.001	0.03491	no	<0.050	0.379	no
9/19/2011	CDM		0.01500	1.51289	no	0.0060	<0.001	0.03491	no	<0.050	0.379	no
9/26/2011	CDM		0.01800	1.51289	no	0.0050	<0.001	0.03491	no	<0.050	0.379	no
September 2011 Avg.			0.0130	0.16804	no	0.00513	0.0005	NA	NA	0.025	0.382	no
October 2011												
10/3/2011	CDM		0.01800	1.51289	no	0.0070	<0.001	0.03491	no	<0.050	0.379	no
10/10/2011	CDM		0.01300	1.51289	no	<0.005	<0.001	0.03491	no	<0.050	0.379	no
10/17/2011	CDM		0.02000	1.51289	no	0.0070	<0.001	0.03491	no	<0.050	0.379	no
10/24/2011	CDM		0.00600	1.51289	no	<0.005	<0.001	0.03491	no	<0.050	0.379	no

SUMMARY OF SURFACE WATER COMPLIANCE POINT SAMPLING

Units are mg/l unless otherwise noted

CP-001

		General Constituents											
	Limit Type	Temperature (deg C)	Conductivity (umhos/cm)	pH (s.u.)	TDS	TSS	Alkalinity	Ammonia			Nitrate	Sulfate	WAD CN
SD Surface Water Quality Standards	30-day	---	2500	---	2500	---	750	Equation 3	Ammonia standard based on pH and Temp.	Exceedence	50	---	---
	24-hour	---	---	---	---	90	---	---			---	---	---
	Daily Max	---	4375	---	4375	---	1313	Equation 1			88	---	---
	Grab	---	---	---	---	158	---	---			---	---	---
	General	23.9	---	6.5-9.0	---	---	---	---			---	---	---
	Acute	---	---	---	---	---	---	---			---	---	0.022
	Chronic	---	---	---	---	---	---	---			---	---	0.0052
	Admin Rule	74:51:01:46	74:51:01:53	74:51:01:46	74:51:01:52	74:51:01:46	74:51:01:52	74:51:01:46			74:51:01:52		74:51:01 App B
	ND Rule	ND = No Val	ND = No Val	ND = No Val	ND = DL	ND = DL	ND = No Val	ND = 1/2 DL			ND = No Val	ND = No Val	ND = 1/2 DL
Date	Sampler												
November 2000 Averages	FHI			7.52		11		0.269	4.24	no	13.90		0.0050
December 2000 Averages	FHI			7.43		11		0.282	4.59	no	15.50		0.0050
January 2001 Averages	FHI			7.49		12		0.227	4.38	no	12.32		0.0050
February 2001 Averages	FHI			7.36		13		0.289	4.84	no	15.35		0.0050
March 2001 Averages	FHI			7.48		17		0.186	4.40	no	10.90		0.0050
April 2001 Averages	FHI			7.69		25		0.099	3.56	no	4.93		0.0050
May 2001 Averages	FHI			7.79		10		0.094	3.16	no	10.80		0.0050
June 2001 Averages	FHI			7.75		13		<0.050	3.33	no	12.30		0.0050
July 2001 Averages	FHI			7.84		11		<0.050	2.96	no	20.10		0.0050
August 2001 Averages	FHI			7.79		13		<0.050	3.16	no	13.60		0.0050
September 2001 Averages	FHI			7.77		<10		0.073	3.24	no	13.40		0.0050
October 2001 Averages	FHI			7.71		10		0.076	3.48	no	11.90		0.0050
November 2001 Averages	FHI			7.76		10		0.086	3.28	no	12.73		0.0050
December 2001 Averages	FHI			7.75		<10		0.091	3.32	no	8.76		0.0050
January 2002 Avg's	FHI			7.68		<10		<0.050	3.61	no	1.08		0.0050
February 2002 Avg's	FHI			7.59		<10		<0.050	3.97	no	0.72		0.0050
March 2002 Avg's	FHI			7.68		<10		<0.050	3.61	no	0.59		0.0050
April 2002 Avg's	FHI			7.81		13		<0.050	3.08	no	1.22		0.0050
May 2002 Avg's	FHI			7.74		24		0.066	3.36	no	15.72		0.0050
June 2002 Avg's	FHI			7.81		10		0.074	3.08	no	34.40		0.0050
July 2002 Avg's	FHI			7.76		11		0.075	3.28	no	21.85		0.0050
August 2002 Avg's	CDM			8.05		<10		<0.050	2.19	no	9.27		0.0050
September 2002 Avg's	CDM			8.03		11		<0.050	2.26	no	1.17		0.0050
October 2002 Avg's	CDM			8.00		11		0.073	2.36	no	0.47		0.0050
November 2002 Avg's	CDM			7.91		<10		0.053	2.69	no	0.96		0.0050
December 2002 Avg's	CDM			7.82		16		<0.050	3.04	no	0.83		0.0050
January 2003 Avg's	CDM			7.73		<10		0.103	3.40	no	0.67		0.0050
February 2003 Avg's	CDM			7.78		<10		<0.050	3.20	no	0.53		0.0050
March 2003 Avg's	CDM			7.81		14		0.090	3.08	no	1.15		0.0050
April 2003 Avg's	CDM			7.89		<10		<0.050	2.77	no	1.46		0.0050
May 2003 Avg's	CDM			7.81		19		<0.050	3.08	no	0.90		0.0050
June 2003 Avg's	CDM			7.98		<10		<0.050	2.43	no	0.56		0.0050
July 2003 Avg's	CDM			8.12		<10		<0.05	1.96	no	0.14		0.0050
August 2003 Avg's	CDM			8.09		<10		<0.050	2.05	no	0.06		0.0050
September 2003 Avg's	CDM			8.08		<10		<0.050	2.09	no	0.09		0.0050
October 2003 Avg's	CDM	7.1		7.87		<10		<0.050	2.85	no	8.36		0.0050
November 2003 Avg's	CDM	1.6		7.66		<11		<0.050	3.69	no	31.10		0.0050
December 2003 Avg's	CDM	0.7		7.73		<10		0.063	3.40	no	36.50		0.0050
January 2004 Avg's	CDM	0.6		7.68		11		0.078	3.61	no	37.47		0.0050
February 2004 Avg's	CDM	0.6		7.77		10		0.051	3.24	no	32.30		0.0050
March 2004 Avg's	CDM	2.6		7.77		10		0.051	3.24	no	30.80		0.0050
April 2004 Avg's	CDM	6.4		7.76		<10		<0.050	3.28	no	29.53		0.0050
May 2004 Avg's	CDM	10.0		7.81		18		<0.050	3.07	no	35.78		0.0050
June 2004 Avg's	CDM	tba		7.83		<10		<0.050		no	37.98		0.0050
July 2004 Avg's	CDM	tba		7.93		<10		<0.050		no	26.38		0.0050
August 2004 Avg's	CDM	tba		7.97		<10		<0.050		no	12.74		0.0050
September 2004 Avg's	CDM	11.5		7.98		<10		<0.050	2.43	no	2.04		0.0050
October 2004 Avg's	CDM	5.3		8.03		10		<0.050	2.26	no	1.53		0.0050
November 2004 Avg's	CDM	4.0		7.96		<10		<0.050	2.51	no	1.08		0.0050
December 2004 Avg's	CDM	0.7		7.80		<10		<0.050	3.14	no	0.89		0.0050
January 2005 Avg's	CDM	0.5		7.84		<10		<0.050	2.96	no	0.79		0.0050
February 2005 Avg's	CDM	1.3		7.82		<10		<0.050	3.06	no	0.66		0.0050
March 2005 Avg's	CDM	1.3		7.84		<10		0.055	2.98	no	0.46		0.0050
April 2005 Avg's	CDM	3.3		7.90		<10		<0.050	2.75	no	2.11		0.0050
May 2005 Avg's	CDM	6.2		7.84		16		<0.050	2.96	no	1.19		0.0050
June 2005 Avg's	CDM	12.4		7.95		<10		<0.050	2.54	no	0.80		0.0050
July 2005 Avg's	CDM	14.4		8.04		<10		<0.050	2.21	no	0.26		0.0050
August 2005 Avg's	CDM	14.0		7.98		<10		<0.050	2.44	no	0.15		0.0050
September 2005 Avg's	CDM	10.1		8.01		<10		<0.050	2.34	no	0.08		0.0050
October 2005 Avg's	CDM	5.5		7.76		<10		<0.050	3.27	no	8.45		0.0050
November 2005 Avg's	CDM	3.3		7.69		<10		0.064	3.57	no	13.40		0.0050
December 2005 Avg's	CDM	1.9		7.61		<10		0.113	3.88	no	11.70		0.0050
January 2006 Avg's	CDM	1.5		7.61		<10		0.123	3.90	no	14.50		0.0050
February 2006 Avg's	CDM	1.3		7.61		<12		0.146	3.91	no	16.80		0.0050
March 2006 Avg's	CDM	1.9		7.74		<17		0.228	3.37	no	12.81		0.0050
April 2006 Avg's	CDM	7.5		7.82		<13.5		0.439	3.06	no	5.15		0.0050
May 2006 Avg's	CDM	10.9		7.85		<14		<0.050	2.92	no	1.79		0.0050
June 2006 Avg's	CDM	19.8		8.00		<10		<0.050	1.69	no	2.11		0.0050
July 2006 Avg's	CDM	18.5		7.95		<10		<0.050	1.99	no	4.71		0.0050
August 2006 Avg's	CDM	15.7		7.86		<9		<0.050	2.67	no	5.43		0.0050
September 2006 Avg's	CDM	8.7		7.80		<10		<0.050	3.13	no	5.86		0.0050
October 2006 Avg's	CDM	9.4		7.88		<10		<0.050	2.80	no	3.12		0.0050
November 2006 Avg's	CDM	3.9		7.73		<10		<0.050	3.42	no	4.66		0.0050
December 2006 Avg's	CDM	2.5		7.61		<10		0.051	3.90	no	5.73		0.0050
January 2007 Avg's	CDM	1.7		7.54		<10		0.053	4.15	no	6.31		0.0050
February 2007 Avg's	CDM	3.7		7.73		<10		0.053	3.42	no	3.49		0.0050
March 2007 Avg's	CDM	4.1		7.73		<10		<0.050	3.40	no	4.63		0.0050
April 2007													
4/3/2007	CDM	6.5		7.86		<10		<0.050	7.28	no	1.96		<0.010
4/9/2007	CDM	2.1		7.75		<10			8.85	na			
4/16/2007	CDM	5.9		7.76		<10		<0.050	8.70	no	3.21		<0.010
4/23/2007	CDM	5.6		7.88		<10			7.02	na			
4/30/2007	CDM	8.7		7.92		<10			6.52	na			
April 2007 Avg's	CDM	5.8		7.83		10		0.025	2.99	no	2.59		0.0050
May 2007													
5/7/2007	CDM	7.2		7.83		10		<0.050	7.68	no	0.68		<0.010
5/14/2007	CDM	9.8		7.90		<10			6.77	na			
5/21/2007	CDM	12.7		8.00		<10		<0.050	5.62	no	3.19		<0.010
5/29/2007	CDM	10.1		7.92		<10			6.52	na			
May 2007 Avg's	CDM	10.0		7.91		10		0.025	2.68	no	1.93		0.0050
June 2007													
6/5/2007	CDM	11.3		7.87		<10		<0.050	7.15	no	0.55		<0.010
6/11/2007	CDM	13.7		7.92		<10			6.52	na			
6/18/2007	CDM	10.6		7.93		<10			6.40	na			
6/25/2007	CDM	13.4		na		na			na	na			
June 2007 Avg's	CDM	12.3		7.91		10		0.025	2.71	no	0.55		0.0050
July 2007													
7/2/2007	CDM	15.7		7.97		<10		<0.050	5.94	no	2.22		<0.010
7/9/2007	CDM	15.1		7.92	988	<10			6.52	na			
7/16/2007	CDM	14.8		7.92		<10		<0.050	6.52	no	3.27		<0.010
7/23/2007	CDM	19.3		7.91		<10			6.64	na			
7/30/2007	CDM	16.0		7.94	1120	<10			6.28	na			
July 2007 Avg's	CDM	16.2		7.93	1054	10		0.025	2.35	no	2.75		0.0050
August 2007													
8/6/2007	CDM	18.3		7.77		20		<0.050	8.55	no	2.83		<0.010
8/13/2007	CDM	16.6		8.01	1200	<10			5.51	na			
8/20/2007	CDM	na		8.02		<10		<0.050	5.41	no	2.82		<0.010
8/27/2007	CDM	14.3		7.94		<10			6.28	na			
August 2007 Avg's	CDM	16.4		7.94	1200	13		0.025	2.31	no	2.83		0.0050

SUMMARY OF SURFACE WATER COMPLIANCE POINT SAMPLING

Units are mg/l unless otherwise noted

CP-001		General Constituents											
	Limit Type	Temperature (deg C)	Conductivity (umhos/cm)	pH (s.u.)	TDS	TSS	Alkalinity	Ammonia			Nitrate	Sulfate	WAD CN
SD Surface Water Quality Standards	30-day	---	2500	---	2500	---	750	Equation 3	Ammonia standard based on pH and Temp.	Exceedence	50	---	---
	24-hour	---	---	---	---	90	---	---			---	---	---
	Daily Max	---	4375	---	4375	---	1313	Equation 1			88	---	---
	Grab	---	---	---	---	158	---	---			---	---	---
	General	23.9	---	6.5-9.0	---	---	---	---			---	---	---
	Acute	---	---	---	---	---	---	---			---	---	0.022
	Chronic	---	---	---	---	---	---	---			---	---	0.0052
	Admin Rule	74:51:01:46	74:51:01:53	74:51:01:46	74:51:01:52	74:51:01:46	74:51:01:52	74:51:01:46			74:51:01:52		74:51:01 App B
	ND Rule	ND = No Val	ND = No Val	ND = No Val	ND = DL	ND = DL	ND = No Val	ND = 1/2 DL			ND = No Val	ND = No Val	ND = 1/2 DL
Date	Sampler												
September 2007													
9/4/2007	CDM	14.2		8.14		<10		<0.050	4.30	no	0.70		<0.010
9/10/2007	CDM	7.7		7.91		<10			6.64	na			
9/17/2007	CDM	12.4		7.90		<10		<0.050	6.77	no	3.09		<0.010
9/25/2007	CDM	8.4		7.77		<10			8.55	na			
September 2007 Avg's	CDM	10.7		7.93		10		0.025	2.62	no	1.90		0.0050
October 2007													
10/1/2007	CDM	7.2		8.03		<10		<0.050	5.30	no	0.36		<0.010
10/8/2007	CDM	7.6		7.74		26			9.01	na			
10/15/2007	CDM	6.8		7.75		<10		0.083	8.85	no	16.70		<0.010
10/22/2007	CDM	2.0		7.63		<10			10.84	na			
10/29/2007	CDM	7.6		7.66		<10		0.155	10.31	no	18.70		<0.010
October 2007 Avg's	CDM	6.2		7.76		13		0.088	3.27	no	11.92		0.0050
November 2007													
11/5/2007	CDM	2.9		7.62		<10		0.160	11.01	no	21.10		<0.010
11/12/2007	CDM	5.1		7.64		<10			10.66	na			
11/19/2007	CDM	2.6		7.62		<10		0.120	11.01	no	13.00		<0.010
11/26/2007	CDM	2.2		7.60		<10			11.37	na			
November 2007 Avg's	CDM	3.2		7.62		10		0.140	3.85	no	17.05		0.0050
December 2007													
12/3/2007	CDM	0.8		7.59		<10		0.224	11.56	no	12.50		<0.010
12/10/2007	CDM	3.9		7.55		<10			12.31	na			
12/17/2007	CDM	0.3		7.60		<10		0.279	11.37	no	11.70		<0.010
12/26/2007	CDM	4.0		7.50		<10			13.28	na			
December 2007 Avg's	CDM	2.3		7.56		10		0.252	4.09	no	12.10		0.0050
January 2008													
1/2/2008	CDM	0.6		7.56		<10		0.248	12.12	no	11.30		<0.010
1/7/2008	CDM	4.7		7.54		<10			12.50	na			
1/14/2008	CDM	1.1		7.60		<10		0.295	11.37	no	11.80		<0.010
1/21/2008	CDM	-0.2		7.49		<10			13.48	na			
1/28/2008	CDM	3.0		7.54		<10		0.289	12.50	no	12.30		<0.010
January 2008 Avg's	CDM	1.8		7.55		10		0.277	4.14	no	11.80		0.0050
February 2008													
2/4/2008	CDM	3.2		7.61		<10		0.306	11.19	no	12.30		<0.010
2/11/2008	CDM	1.1		7.60		<10			11.37	na			
2/18/2008	CDM	-0.5		7.48		<10			13.68	na	12.00		<0.010
2/25/2008	CDM	0.3		7.67		<10			10.14	na			
February 2008 Avg's	CDM	1.0		7.59		10		0.306	3.97	no	12.15		0.0050
March 2008													
3/4/2008	CDM	3.4		7.56		<10		0.338	12.12	no	11.20		<0.010
3/10/2008	CDM	2.7		7.59		<10			11.56	na			
3/17/2008	CDM	0.3		7.50		<10		0.331	13.28	no	11.20		<0.010
3/24/2008	CDM	5.0		7.62		<10			11.01	na			
3/31/2008	CDM	3.3		7.60		<10		0.182	11.37	no	8.32		<0.010
March 2008 Avg's	CDM	2.9		7.57		10		0.284	4.03	no	10.24		0.0050
April 2008													
4/7/2008	CDM	0.3		7.61		<10		0.161	11.19	no	7.51		<0.010
4/14/2008	CDM	5.5		7.62		<10			11.01	na			
4/22/2008	CDM	3.5		7.77		<10		<0.050	8.55	no	1.71		<0.010
4/28/2008	CDM	8.7		7.71		<10			9.48	na			
April 2008 Avg's	CDM	4.5		7.68		10		0.093	3.62	no	4.61		0.0050
May 2008													
5/6/2008	CDM	6.3		7.55		298		<0.050	12.31	no	0.64		<0.010
5/12/2008	CDM	5.6		7.68		<10			9.98	na			
5/19/2008	CDM	9.9		7.92		<10		<0.050	6.52	no	1.02		<0.010
5/27/2008	CDM	7.1		7.77		<10			8.55	na			
May 2008 Avg's	CDM	7.2		7.73		82		0.025	3.40	no	0.83		0.0050
June 2008													
6/2/2008	CDM	10.9		7.73		13		<0.050	9.16	no	0.42		<0.010
6/9/2008	CDM	7.9		7.79		<10			8.25	na			
6/16/2008	CDM	10.7		7.82		<10		<0.050	7.82	no	0.69		<0.010
6/23/2008	CDM	14.1		7.78		<10			8.40	na			
6/30/2008	CDM	13.4		7.87		<10			7.15	na			
June 2008 Avg's	CDM	11.4		7.80		11		0.025	3.13	no	0.56		0.0050
July 2008													
7/7/2008	CDM	14.1		7.96		<10		<0.050	6.05	no	3.03		<0.010
7/14/2008	CDM	14.0		7.90		<10			6.77	na			
7/21/2008	CDM	16.8		7.92		<10		<0.050	6.52	no	5.13		<0.010
7/28/2008	CDM	16.7		7.87		<10			7.15	na			
July 2008 Avg's	CDM	15.4		7.91		10		0.025	2.54	no	4.08		0.0050
August 2008													
8/4/2008	CDM	16.2		7.93		<10		<0.050	6.40	no	4.96		<0.010
8/11/2008	CDM	16.2		7.94		<10			6.28	na			
8/18/2008	CDM	13.0		7.89		<10		<0.050	6.89	no	4.69		<0.010
8/25/2008	CDM	15.9		7.84		<10			7.55	na			
August 2008 Avg's	CDM	15.3		7.90		10		0.025	2.59	no	4.83		0.0050
September 2008													
9/2/2008	CDM	10.4		7.86		<10		<0.050	7.28	no	7.98		<0.010
9/8/2008	CDM	11.2		7.88		<10			7.02	na			
9/15/2008	CDM	8.2		7.77		<10		<0.050	8.55	no	7.33		<00.010
9/22/2008	CDM	12.0		7.80		<10			8.11	na			
9/29/2008	CDM	6.4		7.77		<10		<0.050	8.55	no	10.50		<0.010
September 2008 Avg's	CDM	9.6		7.82		10		0.025	3.06	no	8.60		0.0050
October 2008													
10/6/2008	CDM	10.1		7.82		<10		<0.050	7.82	no	9.63		<0.010
10/13/2008	CDM	1.9		7.66		<10			10.31	na			
10/20/2008	CDM	6.3		7.70		<10		<0.050	9.64	no	7.38		<0.010
10/27/2008	CDM	0.7		7.66		<10			10.31	na			
October 2008 Avg's	CDM	4.8		7.71		10		0.025	3.48	no	8.51		0.0050
November 2008													
11/3/2008	CDM	8.0		7.74		<10		<0.050	9.01	no	7.82		<0.010
11/11/2008	CDM	2.7		7.67		<10			10.14	na			
11/17/2008	CDM	3.2		7.71		<10		<0.050	9.48	no	6.58		<0.010
11/24/2008	CDM	1.5		7.66		<10			10.31	na			
November 2008 Avg's	CDM	3.9		7.70		10		0.025	3.54	no	7.20		0.0050
December 2008													
12/1/2008	CDM	1.1		7.69		<10		<0.050	9.81	no	6.88		<0.010
12/8/2008	CDM	2.9		7.64		<10			10.66	na			
12/15/2008	CDM	1.9		7.47		<10		<0.050	13.89	no	6.96		<0.010
12/22/2008	CDM	0.2		7.50		<10			13.28	na			
12/29/2009	CDM	3.7		7.66		<10		<0.050	10.31	no	6.20		<0.010

SUMMARY OF SURFACE WATER COMPLIANCE POINT SAMPLING

Units are mg/l unless otherwise noted

CP-001		General Constituents											
	Limit Type	Temperature (deg C)	Conductivity (umhos/cm)	pH (s.u.)	TDS	TSS	Alkalinity	Ammonia			Nitrate	Sulfate	WAD CN
SD Surface Water Quality Standards	30-day	---	2500	---	2500	---	750	Equation 3	Ammonia standard based on pH and Temp.	Exceedence	50	---	---
	24-hour	---	---	---	---	90	---	---			---	---	---
	Daily Max	---	4375	---	4375	---	1313	Equation 1			88	---	---
	Grab	---	---	---	---	158	---	---			---	---	---
	General	23.9	---	6.5-9.0	---	---	---	---			---	---	---
	Acute	---	---	---	---	---	---	---			---	---	0.022
	Chronic	---	---	---	---	---	---	---			---	---	0.0052
	Admin Rule	74:51:01:46	74:51:01:53	74:51:01:46	74:51:01:52	74:51:01:46	74:51:01:52	74:51:01:46			74:51:01:52		74:51:01 App B
	ND Rule	ND = No Val	ND = No Val	ND = No Val	ND = DL	ND = DL	ND = No Val	ND = 1/2 DL			ND = No Val	ND = No Val	ND = 1/2 DL
Date	Sampler												
December 2008 Avg's	CDM	2.0		7.59		10		0.025	3.96	no	6.68		0.0050
January 2009													
1/5/2009	CDM	na		7.60		<10		0.053	11.37	no	7.17		<0.010
1/13/2009	CDM	0.9		7.51		<10			13.09	na			
1/19/2009	CDM	1.5		7.58		<10			11.74	na			<0.010
1/26/2009	CDM	1.9		7.48		<10			13.68	na			
January 2009 Avg's	CDM	1.4		7.54		10		0.053	4.16	no	7.17		0.0050
February 2009													
2/2/2009	CDM	0.8		7.59		<10		0.052	11.56	no	6.85		<0.010
2/9/2009	CDM	1.8		7.61		<10			11.19	na			
2/17/2009	CDM	0.7		7.64		<10		0.061	10.66	no	6.08		<0.010
2/23/2009	CDM	0.8		7.66		<10			10.31	na			
February 2009 Avg's	CDM	1.0		7.63		10		0.057	3.83	no	6.47		0.0050
March 2009													
3/2/2009	CDM	3.7		7.60		<10		0.056	11.37	no	6.82		<0.010
3/9/2009	CDM	-0.1		7.67		<10			10.14	na			
3/16/2009	CDM	2.5		7.71		<10		<0.050	9.48	no	5.12		<0.010
3/23/2009	CDM	2.2		7.65		<10			10.49	na			
March 2009 Avg's	CDM	2.1		7.66		10		0.041	3.70	no	5.97		0.0050
April 2009													
4/1/2009	CDM	1.9		7.66		<10			10.31	na			
4/6/2009	CDM	0.6		7.64		<10		<0.050	10.66	no	3.77		<0.010
4/14/2009	CDM	4.7		7.77		22			8.55	na			
4/20/2009	CDM	6.5		7.78		<10		<0.050	8.40	no	0.73		<0.010
4/27/2009	CDM	2.7		7.79		<10			8.25	na			
April 2009 Avg's	CDM	3.3		7.73		12		0.025	3.41	no	2.25		0.0050
May 2009													
5/4/2009	CDM	7.1		7.86		<10		<0.050	7.28	no	1.94		<0.010
5/11/2009	CDM	7.3		7.85		<10			7.41	na			
5/18/2009	CDM	9.9		7.81		<10		<0.050	7.96	no	4.89		<0.010
5/26/2009	CDM	9.5		7.89		<10			6.89	na			
May 2009 Avg's	CDM	8.5		7.85		10		0.025	2.91	no	3.42		0.0050
June 2009													
6/1/2009	CDM	11.5		7.85		93			7.41	na			
6/8/2009	CDM	9.0		7.69		<10			9.81	na			
6/15/2009	CDM	11.2		7.85		<10		<0.050	7.41	no	3.66		<0.010
6/15/2009 (duplicate)	CDM	11.2		7.86		<10		<0.050	7.28	no	3.69		<0.010
6/22/2009	CDM	12.7		7.89		<10			6.89	na			
6/29/2009	CDM	13.3		7.90		<10		<0.050	6.77	no	2.40		<0.010
June 2009 Avg's	CDM	11.5		7.84		24		0.025	2.96	no	3.25		0.0050
July 2009													
7/7/2009	CDM	16.2		7.86		<10		<0.050	7.28	no	3.34		<0.010
7/13/2009	CDM	16.0		7.89		<10			6.89	na			
7/20/2009	CDM	15.8		7.83		<10			7.68	na			<0.010
7/27/2009	CDM	14.4		7.86		<10			7.28	na			
July 2009 Avg.		15.6		7.86		10		0.025	2.69	no	3.34		0.0050
August 2009													
8/3/2009	CDM	16.5		7.84		<10		<0.050	7.55	no	5.78		<0.010
8/10/2009	CDM	12.4		7.80		<10			8.11	na			
8/17/2009	CDM	11.5		7.79		<10		<0.050	8.25	no	6.43		<0.010
8/24/2009	CDM	15.6		7.83		<10			7.68	na			
8/31/2009	CDM	16.8		7.85		<10			7.41	na			
August 2009 Avg.		14.6		7.82		10		0.025	3.03	no	6.11		0.0050
September 2009													
9/8/2009	CDM	13.4		7.84		<10		<0.050	7.55	no	9.05		<0.010
9/8/2009 (duplicate)	CDM	13.4		7.83		<10		<0.050	7.68	no	9.07		<0.010
9/14/2009	CDM	12.9		7.80		<10			8.11	na			
9/21/2009	CDM	10.7		7.81		<10			7.96	na			
9/28/2009	CDM	8.6		7.70		<10			9.64	na			
September 2009 Avg.		11.8		7.80		10		0.025	3.14	no	9.06		0.0050
October 2009													
10/5/2009	CDM	4.3		7.74		<10		<0.050	9.01	no	4.71		<0.010
10/12/2009	CDM	1.7		7.71		<10			9.48	na			
10/19/2009	CDM	6.7		7.75		<10		0.102	8.85	no	7.52		<0.010
10/26/2009	CDM	6.6		7.77		<10			8.55	na			
October 2009 Avg.		4.8		7.74		10		0.064	3.35	no	6.12		0.0050
November 2009													
11/2/2009	CDM	1.9		7.72		<10		0.104	9.32	no	5.90		<0.010
11/9/2009	CDM	2.5		7.71		<10			9.48	na			
11/16/2009	CDM	-0.1		7.61		<10		0.104	11.19	no	5.43		<0.010
11/23/2009	CDM	7.0		7.66		<10			10.31	na			
11/30/2009	CDM	1.9		7.70		<10		0.109	9.64	no	5.16		<0.010
November 2009 Avg.		2.6		7.68		10		0.106	3.61	no	5.50		0.0050
December 2009													
12/7/2009	CDM	0.4		7.73		<10		<0.050	9.16	no	2.71		<0.010
12/14/2009	CDM	-0.6		7.55		<10			12.31	na			
12/21/2009	CDM	1.5		7.66		<10		0.119	10.31	no	6.94		<0.010
12/28/2009	CDM	0.4		7.61		<10			11.19	na			
December 2009 Avg.		0.4		7.64		10		0.072	3.78	no	4.83		0.0050
January 2010													
1/4/2010	CDM	0.7		7.66		<10		0.192	10.31	no	8.65		<0.010
1/11/2010	CDM	0.6		7.68		<10			9.98	na			
1/18/2010	CDM	0.8		7.60		<10		0.203	11.37	no	9.95		<0.010
1/26/2010	CDM	0.4		7.54		<10			12.50	na			
January 2010 Avg.		0.6		7.62		10		0.198	3.85	no	9.30		0.0050
February 2010													
2/1/2010	CDM	1.0		7.62		<10		0.330	11.01	no	8.85		<0.010
2/8/2010	CDM	0.5		7.56		<10			12.12	na			
2/16/2010	CDM	-0.5		7.48		<10		0.412	13.68	no	6.44		<0.010
2/22/2010	CDM	1.2		7.51		<10			13.09	na			
February 2010 Avg.		0.6		7.54		10		0.371	4.16	no	7.65		0.0050
March 2010													
3/1/2010	CDM	1.5		7.56		<10		0.468	12.12	no	12.30		<0.010
3/8/2010	CDM	4.9		7.65		<10			10.49	na			
3/15/2010	CDM	1.2		7.65		<10		0.247	10.49	no	11.60		<0.010
3/22/2010	CDM	2.9		7.78		<10			8.40	na			
3/29/2010	CDM	3.0		7.74		<10		<0.05	9.01	no	7.98		<0.010
March 2010 Avg.		2.7		7.68		10		0.247	3.62	no	10.63		0.0050

SUMMARY OF SURFACE WATER COMPLIANCE POINT SAMPLING

Units are mg/l unless otherwise noted

CP-001		General Constituents											
	Limit Type	Temperature (deg C)	Conductivity (umhos/cm)	pH (s.u.)	TDS	TSS	Alkalinity	Ammonia			Nitrate	Sulfate	WAD CN
SD Surface Water Quality Standards	30-day	---	2500	---	2500	---	750	Equation 3	Ammonia standard based on pH and Temp.	Exceedence	50	---	---
	24-hour	---	---	---	---	90	---	---			---	---	---
	Daily Max	---	4375	---	4375	---	1313	Equation 1			88	---	---
	Grab	---	---	---	---	158	---	---			---	---	---
	General	23.9	---	6.5-9.0	---	---	---	---			---	---	---
	Acute	---	---	---	---	---	---	---			---	---	0.022
	Chronic	---	---	---	---	---	---	---			---	---	0.0052
	Admin Rule	74:51:01:46	74:51:01:53	74:51:01:46	74:51:01:52	74:51:01:46	74:51:01:52	74:51:01:46			74:51:01:52		74:51:01 App B
	ND Rule	ND = No Val	ND = No Val	ND = No Val	ND = DL	ND = DL	ND = No Val	ND = 1/2 DL			ND = No Val	ND = No Val	ND = 1/2 DL
Date	Sampler												
April 2010													
4/5/2010	CDM	2.9		7.71		<10		0.086	9.48	no	7.63		<0.010
4/12/2010	CDM	4.1		7.79		<10			8.25	na			
4/19/2010	CDM	4.7		7.83		<10		<0.050	7.68	no	1.22		<0.010
4/26/2010	CDM	2.4		7.71		12			9.48	na			
April 2010 Avg.		3.5		7.76		11		0.056	3.28	no	4.43		0.0050
May 2010													
5/3/2010	CDM	5.0		7.78		<10		<0.050	8.40	no	1.17		<0.010
5/10/2010	CDM	6.4		7.71		110			9.48	na			
5/17/2010	CDM	6.3		7.76		<10		<0.050	8.70	no	0.54		<0.010
5/24/2010	CDM	9.5		7.81		<10			7.96	na			
5/24/2010 (duplicate)	CDM	9.5		7.81		<10			7.96	na			
May 2010 Avg.		7.3		7.77		35		<0.050	3.23	no	0.85		0.0050
June 2010													
6/1/2010	CDM	11.3		7.93		<10		<0.050	6.40	no	0.90		<0.010
6/7/2010	CDM	13.0		7.78		<10			8.40	na			
6/14/2010	CDM	15.1		7.85		13		<0.050	7.41	no	1.07		<0.010
6/21/2010	CDM	15.5		7.83		<10			7.68	na			
6/28/2010	CDM	13.3		7.90		<10		<0.050	6.77	no	2.87		<0.010
June 2010 Avg.		13.6		7.86		<10		<0.050	2.89	no	1.61		0.0050
July 2010													
7/6/2010	CDM	12.1		7.89		<10		0.025	6.89	no	2.18		<0.010
7/12/2010	CDM	12.4		7.84		<10			7.55	na			
7/19/2010	CDM	13.5		8.12		<10		<0.050	4.47	no	0.14		<0.010
7/26/2010	CDM	19.4		7.81		<10			7.96	na			
July 2010 Avg.		14.4		7.92		<10		<0.050	2.67	no	1.16		0.0050
August 2010													
8/2/2010	CDM	17.0		7.81		<10		<0.050	7.96	no	1.55		<0.010
8/9/2010	CDM	16.8		7.80		22			8.11	na			
8/16/2010	CDM	13.7		7.89		<10		<0.050	6.89	no	4.64		<0.010
8/23/2010	CDM	18.1		7.88		<10			7.02	na			
8/30/2010	CDM	16.6		7.90		170		<0.050	6.77	no	6.23		<0.010
August 2010 Avg.		16.4		7.86		53		0.025	2.57	no	4.14		0.0050
September 2010													
9/7/2010	CDM	10.9		7.83		<10		<0.050	7.68	no	5.01		<0.010
9/13/2010	CDM	10.7		7.81		<10			7.96	na			
9/20/2010	CDM	12.9		7.86		<10		<0.050	7.28	no	5.56		<0.010
9/27/2010	CDM	12.6		7.81		<10			7.96	na			
September 2010 Avg.		11.8		7.83		10		0.025	3.01	no	5.29		0.0050
October 2010													
10/4/2010	CDM	10.0		7.78		<10		<0.050	8.40	no	5.20		<0.010
10/11/2010	CDM	8.9		7.81		<10			7.96	na			
10/18/2010	CDM	10.3		7.68		<10		0.07	9.98	no	5.58		<0.010
10/25/2010	CDM	9.2		7.74		<10			9.01	na			
October 2010 Avg.		9.6		7.75		10		0.047	3.31	no	5.39		0.0050
November 2010													
11/1/2010	CDM	6.0		7.62		<10		0.169	11.01	no	4.39		<0.010
11/8/2010	CDM	6.4		7.66		<10			10.31	na			
11/15/2010	CDM	5.0		7.69		<10		0.26	9.81	no	4.80		<0.010
11/22/2010	CDM	2.0		7.45		<10			14.30	na			
11/30/2010	CDM	-0.5		7.58		<10		0.25	11.74	no	4.45		<0.010
November 2010 Avg.		3.8		7.60		10		0.256	3.93	no	4.55		0.0050
December 2010													
12/6/2010	CDM	-0.5		7.49		<10		0.326	13.48	no	4.84		<0.010
12/13/2010	CDM	6.0		7.61		<10			11.19	na			
12/20/2010	CDM	1.4		7.55		<10		0.24	12.31	no	4.61		<0.010
12/27/2010	CDM	1.6		7.63		<10			10.84	na			
December 2010 Avg.		2.1		7.57		10		0.282	4.05	no	4.73		0.0050
January 2011													
1/3/2011	CDM	1.7		7.50		<10		0.306	13.28	no	4.89		<0.010
1/10/2011	CDM	1.9		7.58		<10			11.74	na			
1/17/2011	CDM	2.2		7.59		<10		0.18	11.56	no	3.18		<0.010
1/24/2011	CDM	0.4		7.65		<10			10.49	na			
1/31/2011	CDM	-0.7		7.64		<10		0.20	10.66	no	3.45		<0.010
January 2011 Avg.		1.1		7.59		10		0.189	3.96	no	3.84		0.0050
February 2011													
2/7/2011	CDM	2.6		7.61		<10		0.234	11.19	no	3.33		<0.010
2/14/2011	CDM	1.4		7.64		<10			10.66	na			
2/21/2011	CDM	-0.4		7.84		<10		0.10	7.55	no	1.22		<0.010
2/28/2011	CDM	1.1		7.90		<10			6.77	na			
February 2011 Avg.		1.2		7.75		10		0.166	3.33	no	2.28		0.0050
March 2011													
3/7/2011	CDM	1.3		7.93		<10		<0.050	6.40	no	0.31		<0.010
3/14/2011	CDM	1.1		7.90		<10			6.77	na			
3/21/2011	CDM	0.9		7.75		<10		<0.05	8.85	no	0.31		<0.010
3/28/2011	CDM	0.6		7.82		<10			7.82	na			
March 2011 Avg.		1.0		7.85		10		0.025	2.92	no	0.31		0.0050
April 2011													
4/4/2011	CDM	1.7		7.82		<10		<0.050	7.82	no	0.19		<0.010
4/11/2011	CDM	2.2		7.76		<10			8.70	na			
4/18/2011	CDM	1.6		7.82		<10		<0.050	7.82	no	0.06		<0.010
4/25/2011	CDM	3.3		7.85		<10			7.41	na			
April 2011 Avg.		2.2		7.81		10		0.025	3.07	no	0.13		0.0050
May 2011													
5/2/2011	CDM	6.5		7.74		<10		<0.050	9.01	no	1.21		<0.010
5/9/2011	CDM	9.5		7.79		<10			8.25	na			
5/16/2011	CDM	6.6		7.81		<10		<0.050	7.96	no	1.73		<0.010
5/23/2011	CDM	8.5		7.62		19			11.01	na			
5/31/2011	CDM	9.3		7.80		<10		<0.050	8.11	no	0.36		<0.010
May 2011 Avg.		8.1		7.75		12		0.025	3.31	no	1.10		0.0050
June 2011													
6/6/2011	CDM	15.8		7.87		<10		<0.050	7.15	no	0.53		<0.010
6/13/2011	CDM	13.5		7.97		<10			5.94	na			
6/20/2011	CDM	11.3		7.73		359		<0.050	9.16	no	1.87		<0.010
6/27/2011	CDM	10.6		7.89		<10			6.89	na			
June 2011 Avg.		12.8		7.87		97		0.025	2.87	no	1.20		0.0050
July 2011													
7/5/2011	CDM	15.4		8.10		<10		<0.050	4.64	no	0.39		<0.010
7/11/2011	CDM	14.0		8.02		<10			5.41	na			
7/18/2011	CDM	17.6		7.94		<10		<0.050	6.28	no	4.11		<0.010
7/25/2011	CDM	15.1		7.95		<10			6.17	na			

SUMMARY OF SURFACE WATER COMPLIANCE POINT SAMPLING

Units are mg/l unless otherwise noted

CP-001		General Constituents											
	Limit Type	Temperature (deg C)	Conductivity (umhos/cm)	pH (s.u.)	TDS	TSS	Alkalinity	Ammonia			Nitrate	Sulfate	WAD CN
SD Surface Water Quality Standards	30-day	---	2500	---	2500	---	750	Equation 3	Ammonia standard based on pH and Temp.	Exceedence	50	---	---
	24-hour	---	---	---	---	90	---	---			---	---	---
	Daily Max	---	4375	---	4375	---	1313	Equation 1			88	---	---
	Grab	---	---	---	---	158	---	---			---	---	---
	General	23.9	---	6.5-9.0	---	---	---	---			---	---	---
	Acute	---	---	---	---	---	---	---			---	---	0.022
	Chronic	---	---	---	---	---	---	---			---	---	0.0052
	Admin Rule	74:51:01:46	74:51:01:53	74:51:01:46	74:51:01:52	74:51:01:46	74:51:01:52	74:51:01:46			74:51:01:52		74:51:01 App B
	ND Rule	ND = No Val	ND = No Val	ND = No Val	ND = DL	ND = DL	ND = No Val	ND = 1/2 DL			ND = No Val	ND = No Val	ND = 1/2 DL
Date	Sampler												
July 2011 Avg.		15.5		8.00		10		0.025	2.21	no	2.25		0.0050
August 2011													
8/1/2011	CDM	17.7		7.89		<10		<0.050	6.89	no	11.80		<0.010
8/8/2011	CDM	14.2		7.94		<10			6.28	na			
8/15/2011	CDM	15.5		7.96		<10		<0.050	6.05	no	3.49		<0.010
8/22/2011	CDM	15.0		7.95		<10			6.17	na			
8/29/2011	CDM	15.4		7.91		<10		<0.050	6.64	no	2.92		<0.010
August 2011 Avg.		15.6		7.93		10		0.025	2.45	no	6.07		0.0050
September 2011													
9/6/2011	CDM	12.8		7.94		<10		<0.050	6.28	no	3.71		<0.010
9/12/2011	CDM	11.5		7.90		<10			6.77	na			
9/12/2011 duplicate	CDM	11.5		7.88		<10			7.02	na			
9/19/2011	CDM	9.6		7.88		<10		<0.050	7.02	no	3.52		<0.010
9/26/2011	CDM	11.1		7.84		<10			7.55	na			
September 2011 Avg.		11.3		7.89		10		0.025	2.78	no	3.62		0.0050
October 2011													
10/3/2011	CDM	11.0		7.85		<10		<0.050	7.41	no	6.86		<0.010
10/10/2011	CDM	6.8		7.83		<10			7.68	na			
10/17/2011	CDM	6.8		7.78		<10		0.05	8.40	no	6.76		<0.010
10/24/2011	CDM	5.5		7.83		<10			7.68	na			

SUMMARY OF SURFACE WATER COMPLIANCE POINT SAMPLING

CP-001		Dissolved Metals															
	Limit Type	Al	As	Cd			Cr (III)			Cr (VI)	Cu			Fe	Pb		
SD Surface Water Quality Standards	30-day	---	---		Cd standard based on hardness	Exceedence		Cr (III) standard based on hardness	Exceedence	---		Cu standard based on hardness	Exceedence	---		Pb standard based on hardness	Exceedence
	24-hour	---	---							---				---			
	Daily Max	---	---							---				---			
	Grab	---	---							---				---			
	General	---	---							---				---			
	Acute	---	0.340							0.016				---			
	Chronic	---	0.150							0.011				---			
	Admin Rule		74:51:01 App B	74:51:01 App B			74:51:01 App B			74:51:01 App B	74:51:01 App B				74:51:01 App B		
	ND Rule	ND = DL	ND = 1/2 DL	ND = 1/2 DL			ND = 1/2 DL			ND = 1/2 DL	ND = 1/2 DL			ND = DL	ND = 1/2 DL		
Date	Sampler																
November 2000 Averages	FHI								na								
December 2000 Averages	FHI								na								
January 2001 Averages	FHI	0.262		0.00844					na		0.04711	0.02928	Yes	<0.05	<0.001	0.01094	no
February 2001 Averages	FHI	0.493		0.00600					na		0.06000	0.02928	Yes	<0.05	0.001	0.01094	no
March 2001 Averages	FHI	0.262		0.00600					na		0.05200	0.02928	Yes	0.050	0.001	0.01094	no
April 2001 Averages	FHI	0.111		0.00600					na		0.02000	0.02928	no	0.050	<0.001	0.01094	no
May 2001 Averages	FHI	0.093		0.00200					na		0.03100	0.02928	Yes	<0.050	<0.001	0.01094	no
June 2001 Averages	FHI	0.139		0.00250					na		0.03575	0.02928	Yes	0.063	<0.001	0.01094	no
July 2001 Averages	FHI	0.098		0.00200					na		0.02300	0.02928	no	0.051	0.002	0.01094	no
August 2001 Averages	FHI	0.156		0.00300					na		0.00900	0.02928	no	<0.050	0.002	0.01094	no
September 2001 Averages	FHI	0.170		0.00500					na		0.02000	0.02928	no	0.060	0.002	0.01094	no
October 2001 Averages	FHI	0.131		0.00400					na		0.03200	0.02928	Yes	<0.050	<0.001	0.01094	no
November 2001 Averages	FHI	0.107		0.00200					na		0.03500	0.02928	Yes	0.056	<0.001	0.01094	no
December 2001 Averages	FHI	0.084		0.00300					na		0.02700	0.02928	no	<0.050	<0.001	0.01094	no
January 2002 Avg's	FHI	<0.050		<0.001					na		0.00600	0.02060	no	<0.050	0.001	0.00714	no
February 2002 Avg's	FHI	0.067		0.00100					na		0.01100	0.02922	no	0.055	<0.001	0.01092	no
March 2002 Avg's	FHI	<0.050		<0.001					na		<0.005	0.01993	no	0.177	<0.001	0.00686	no
April 2002 Avg's	FHI				0.00048	na			na			0.02060	na			0.00714	na
May 2002 Avg's	FHI	0.081		0.00300	0.00064	Yes			na		0.02500	0.02928	no	<0.050	0.001	0.01094	no
June 2002 Avg's	FHI	0.082		0.00200	0.00064	Yes			na		0.05000	0.02928	Yes	<0.050	<0.001	0.01094	no
July 2002 Avg's	FHI	0.109		0.00200	0.00064	Yes			na		0.06000	0.02928	Yes	0.053	0.001	0.01094	no
August 2002 Avg's	CDM	<0.050		0.00100	0.00056	Yes			na		0.01100	0.02471	no	<0.050	0.001	0.00892	no
September 2002 Avg's	CDM	0.053		0.00100	0.00054	Yes			na		0.00800	0.02368	no	<0.050	<0.001	0.00847	no
October 2002 Avg's	CDM	<0.050		<0.001	0.00050	no			na		<0.005	0.02119	no	<0.050	<0.001	0.00739	no
November 2002 Avg's	CDM	<0.050		<0.001	0.00056	no			na		0.00700	0.02445	no	<0.050	<0.001	0.00881	no
December 2002 Avg's	CDM	<0.050		0.00100	0.00054	Yes			na		0.00500	0.02361	no	<0.050	<0.001	0.00844	no
January 2003 Avg's	CDM	<0.050		<0.001	0.00055	no			na		<0.005	0.02439	no	<0.050	<0.001	0.00878	no
February 2003 Avg's	CDM	<0.050		<0.001	0.00054	no			na		<0.005	0.02374	no	<0.050	<0.001	0.00850	no
March 2003 Avg's	CDM	0.068		0.00200	0.00052	Yes			na		0.00600	0.02270	no	<0.050	<0.001	0.00804	no
April 2003 Avg's	CDM	0.131		0.00300	0.00050	Yes			na		0.00800	0.02165	no	<0.050	<0.001	0.00759	no
May 2003 Avg's	CDM	0.077		0.00600	0.00042	Yes			na		0.01100	0.01723	no	<0.050	<0.001	0.00573	no
June 2003 Avg's	CDM	0.079		0.00300	0.00046	Yes			na		0.01000	0.01913	no	<0.050	<0.001	0.00652	no
July 2003 Avg's	CDM	<0.05		<0.001	0.00047	no			na		<0.005	0.02006	no	<0.050	<0.001	0.00691	no
August 2003 Avg's	CDM	0.060		<0.001	0.00049	no			na		0.00500	0.02093	no	<0.050	0.001	0.00728	no
September 2003 Avg's	CDM	0.078		<0.001	0.00064	no			na		0.00800	0.02884	no	<0.050	0.001	0.01075	no
October 2003 Avg's	CDM	0.176		<0.001	0.00064	no			na		0.01200	0.02928	no	<0.050	<0.001	0.01094	no
November 2003 Avg's	CDM	0.115		0.00100	0.00064	Yes			na		0.01800	0.02928	no	0.060	0.001	0.01094	no
December 2003 Avg's	CDM	0.085		0.00100	0.00064	Yes			na		0.01900	0.02928	no	0.056	<0.001	0.01094	no
January 2004 Avg's	CDM	0.086		0.00100	0.00064	Yes			na		0.02200	0.02928	no	0.055	0.001	0.01094	no
February 2004 Avg's	CDM	<0.050		0.00200	0.00064	Yes			na		0.01000	0.02928	no	0.052	<0.001	0.01094	no
March 2004 Avg's	CDM	0.027		0.00300	0.00064	Yes			na		0.01200	0.02928	no	0.051	<0.001	0.01094	no
April 2004 Avg's	CDM	0.075		0.00233	0.00064	Yes			na		0.01550	0.02928	no	0.080	<0.001	0.01094	no
May 2004 Avg's	CDM	0.027		0.00120	0.00064	Yes			na		0.01060	0.02928	no	<0.050	<0.001	0.01094	no
June 2004 Avg's	CDM	0.052		0.00100	0.00064	Yes			na		0.01050	0.02928	no	0.058	<0.001	0.01094	no
July 2004 Avg's	CDM	0.038		0.00100	0.00064	Yes			na		0.00800	0.02928	no	0.071	<0.001	0.01094	no
August 2004 Avg's	CDM	0.027		0.00100	0.00064	Yes			na		<0.005	0.02928	no	<0.050	<0.001	0.01094	no
September 2004 Avg's	CDM	0.049		<0.001	0.00059	no			na		<0.005	0.02614	no	<0.050	<0.001	0.00955	no
October 2004 Avg's	CDM	0.045		<0.001	0.00056	no			na		<0.005	0.02442	no	<0.050	<0.001	0.00879	no
November 2004 Avg's	CDM	0.040		<0.001	0.00056	no			na		<0.005	0.02464	no	<0.050	<0.001	0.00888	no
December 2004 Avg's	CDM	0.011		<0.001	0.00054	no			na		<0.005	0.02371	no	<0.050	<0.001	0.00848	no
January 2005 Avg's	CDM	<0.010		0.00100	0.00054	Yes			na		<0.005	0.02360	no	<0.050	<0.001	0.00843	no
February 2005 Avg's	CDM	0.011		<0.001	0.00054	no			na		<0.005	0.02369	no	<0.050	<0.001	0.00847	no
March 2005 Avg's	CDM	0.012		0.00200	0.00064	Yes			na		0.00700	0.02928	no	<0.050	<0.001	0.01094	no
April 2005 Avg's	CDM	0.012		<0.001	0.00057	no			na		<0.005	0.02497	no	<0.050	<0.001	0.00903	no
May 2005 Avg's	CDM	0.524		0.00260	0.00048	Yes			na		0.00800	0.02045	no	0.052	<0.001	0.00708	no
June 2005 Avg's	CDM	0.032		0.00150	0.00045	Yes			na		0.00500	0.01881	no	0.058	<0.001	0.00638	no
July 2005 Avg's	CDM	0.015		0.00100	0.00049	Yes			na		<0.005	0.02074	no	<0.050	<0.001	0.00720	no
August 2005 Avg's	CDM	0.025		0.00200	0.00064	Yes			na		0.01150	0.02928	no	<0.050	<0.001	0.01094	no
September 2005 Avg's	CDM	0.014		<0.001	0.00048	no			na		<0.005	0.02031	no	<0.050	<0.001	0.00702	no
October 2005 Avg's	CDM	0.014		0.00100	0.00064	Yes			na		<0.005	0.02928	no	<0.050	<0.001	0.01094	no
November 2005 Avg's	CDM	0.017		0.00200	0.00064	Yes			na		0.00733	0.02928	no	<0.050	<0.001	0.01094	no
December 2005 Avg's	CDM	0.021		0.00150	0.00064	Yes			na		0.00725	0.02928	no	0.069	<0.001	0.01094	no
January 2006 Avg's	CDM	0.020		0.00120	0.00064	Yes			na		0.00625	0.02928	no	<0.050	<0.001	0.01094	no
February 2006 Avg's	CDM	0.022		0.00100	0.00064	Yes			na		0.00575	0.02928	no	<0.050	<0.001	0.01094	no
March 2006 Avg's	CDM	0.024		0.00125	0.00064	Yes			na		0.00950	0.02928	no	<0.050	<0.001	0.01094	no
April 2006 Avg's	CDM	0.061		0.00150	0.00064	Yes			na		0.00825	0.02928	no	<0.050	<0.001	0.01094	no
May 2006 Avg's	CDM	0.077		0.00120	0.00048	Yes			na		0.01100	0.02026	no	<0.050	<0.001	0.00700	no
June 2006 Avg's	CDM	0.045		0.00100	0.00064	Yes			na		0.00800	0.02928	no	<0.050	<0.001	0.01094	no
July 2006 Avg's	CDM	0.048		0.00125	0.00064	Yes			na		<0.005	0.02928	no	0.080	<0.001	0.01094	no
August 2006 Avg's	CDM	0.033		<0.001	0.00064	no			na		<0.005	0.02928	no	<0.050	<0.001	0.01094	no
September 2006 Avg's	CDM	0.029		0.00200	0.00064	Yes			na		0.01050	0.02928	no	<0.050	<0.001	0.01094	no
October 2006 Avg's	CDM	0.027		0.00125	0.00064	Yes			na		0.01300	0.02928	no	<0.050	<0.001	0.01094	no
November 2006 Avg's	CDM	0.019		0.00125	0.00064	Yes			na		<0.005	0.02928	no	0.081	<0.001	0.01094	no

SUMMARY OF SURFACE WATER COMPLIANCE I

CP-001		Dissolved Metals										
	Limit Type	Hg	Ni			Se	Ag			Zn		
SD Surface Water Quality Standards	30-day	---		Ni standard based on hardness	Exceedence	---		Ag standard based on hardness	Exceedence		Zn standard based on hardness	Exceedence
	24-hour	---				---						
	Daily Max	---				---						
	Grab	---				---						
	General	---				---						
	Acute	0.00140				---						
	Chronic	0.00077				0.0046						
	Admin Rule	74:51:01 App B	74:51:01 App B			74:51:01 App B	74:51:01 App B			74:51:01 App B		
	ND Rule	ND = 1/2 DL	ND = 1/2 DL			ND = 1/2 DL	ND = 1/2 DL			ND = 1/2 DL		
Date	Sampler											
November 2000 Averages	FHI										0.382	na
December 2000 Averages	FHI										0.382	na
January 2001 Averages	FHI									0.094	0.382	no
February 2001 Averages	FHI									0.083	0.382	no
March 2001 Averages	FHI									0.111	0.382	no
April 2001 Averages	FHI									0.094	0.382	no
May 2001 Averages	FHI									0.068	0.382	no
June 2001 Averages	FHI									0.090	0.382	no
July 2001 Averages	FHI									0.068	0.382	no
August 2001 Averages	FHI									0.065	0.382	no
September 2001 Averages	FHI									0.108	0.382	no
October 2001 Averages	FHI									0.055	0.382	no
November 2001 Averages	FHI									0.074	0.382	no
December 2001 Averages	FHI									0.060	0.382	no
January 2002 Avg's	FHI									<0.050	0.270	no
February 2002 Avg's	FHI									<0.050	0.382	no
March 2002 Avg's	FHI									<0.050	0.261	no
April 2002 Avg's	FHI										0.270	na
May 2002 Avg's	FHI									0.080	0.382	no
June 2002 Avg's	FHI									0.055	0.382	no
July 2002 Avg's	FHI									0.065	0.382	no
August 2002 Avg's	CDM									0.058	0.323	no
September 2002 Avg's	CDM									<0.050	0.310	no
October 2002 Avg's	CDM									0.050	0.278	no
November 2002 Avg's	CDM									0.055	0.320	no
December 2002 Avg's	CDM									<0.050	0.309	no
January 2003 Avg's	CDM									0.050	0.319	no
February 2003 Avg's	CDM									<0.050	0.311	no
March 2003 Avg's	CDM									0.070	0.297	no
April 2003 Avg's	CDM									0.110	0.284	no
May 2003 Avg's	CDM									0.199	0.226	no
June 2003 Avg's	CDM									0.123	0.251	no
July 2003 Avg's	CDM									<0.050	0.263	no
August 2003 Avg's	CDM									<0.050	0.274	no
September 2003 Avg's	CDM									<0.050	0.377	no
October 2003 Avg's	CDM									<0.050	0.382	no
November 2003 Avg's	CDM									0.052	0.382	no
December 2003 Avg's	CDM									0.054	0.382	no
January 2004 Avg's	CDM									0.072	0.382	no
February 2004 Avg's	CDM									0.051	0.382	no
March 2004 Avg's	CDM									0.100	0.382	no
April 2004 Avg's	CDM									0.078	0.382	no
May 2004 Avg's	CDM									0.054	0.382	no
June 2004 Avg's	CDM									0.072	0.382	no
July 2004 Avg's	CDM									0.099	0.382	no
August 2004 Avg's	CDM									0.054	0.382	no
September 2004 Avg's	CDM									<0.050	0.342	no
October 2004 Avg's	CDM									<0.050	0.319	no
November 2004 Avg's	CDM									<0.050	0.322	no
December 2004 Avg's	CDM									<0.050	0.310	no
January 2005 Avg's	CDM									<0.050	0.309	no
February 2005 Avg's	CDM									<0.050	0.310	no
March 2005 Avg's	CDM							NA	NA	0.052	0.382	no
April 2005 Avg's	CDM							NA	NA	<0.050	0.327	no
May 2005 Avg's	CDM							NA	NA	0.115	0.268	no
June 2005 Avg's	CDM							NA	NA	0.054	0.247	no
July 2005 Avg's	CDM							NA	NA	<0.050	0.272	no
August 2005 Avg's	CDM							NA	NA	0.058	0.382	no
September 2005 Avg's	CDM							NA	NA	<0.050	0.266	no
October 2005 Avg's	CDM							NA	NA	0.064	0.382	no
November 2005 Avg's	CDM							NA	NA	0.079	0.382	no
December 2005 Avg's	CDM							NA	NA	0.070	0.382	no
January 2006 Avg's	CDM							NA	NA	0.063	0.382	no
February 2006 Avg's	CDM							NA	NA	0.054	0.382	no
March 2006 Avg's	CDM							NA	NA	0.060	0.382	no
April 2006 Avg's	CDM							NA	NA	0.064	0.382	no
May 2006 Avg's	CDM							NA	NA	0.053	0.265	no
June 2006 Avg's	CDM							NA	NA	<0.050	0.382	no
July 2006 Avg's	CDM							NA	NA	<0.050	0.382	no
August 2006 Avg's	CDM							NA	NA	<0.050	0.382	no
September 2006 Avg's	CDM							NA	NA	0.630	0.382	Yes
October 2006 Avg's	CDM							NA	NA	0.073	0.382	no
November 2006 Avg's	CDM							NA	NA	0.086	0.382	no

SUMMARY OF SURFACE WATER COMPLIANCE POINT SAMPLING

CP-001		Dissolved Metals															
	Limit Type	Al	As	Cd			Cr (III)			Cr (VI)	Cu			Fe	Pb		
SD Surface Water Quality Standards	30-day	---	---		Cd standard based on hardness	Exceedence		Cr (III) standard based on hardness	Exceedence	---		Cu standard based on hardness	Exceedence	---		Pb standard based on hardness	Exceedence
	24-hour	---	---							---				---			
	Daily Max	---	---							---				---			
	Grab	---	---							---				---			
	General	---	---							---				---			
	Acute	---	0.340							0.016				---			
	Chronic	---	0.150							0.011				---			
	Admin Rule		74:51:01 App B	74:51:01 App B			74:51:01 App B			74:51:01 App B	74:51:01 App B				74:51:01 App B		
	ND Rule	ND = DL	ND = 1/2 DL	ND = 1/2 DL			ND = 1/2 DL			ND = 1/2 DL	ND = 1/2 DL			ND = DL	ND = 1/2 DL		
Date	Sampler																
December 2006 Avg's	CDM	0.025		0.00150	0.00064	Yes			na		0.00800	0.02928	no	0.114	<0.001	0.01094	no
January 2007 Avg's	CDM	0.028		0.00150	0.00064	Yes			na		<0.005	0.02928	no	0.161	<0.001	0.01094	no
February 2007 Avg's	CDM	0.020		0.00100	0.00064	Yes			na		<0.005	0.02928	no	0.162	<0.001	0.01094	no
March 2007 Avg's	CDM	0.028		0.00100	0.00064	Yes			na		<0.005	0.02928	no	0.092	<0.001	0.01094	no
April 2007																	
4/3/2007	CDM	0.024		<0.001	0.00513	no			na		<0.005	0.03330	no	<0.050	<0.001	0.18104	no
4/9/2007	CDM	0.041		<0.001	0.00774	no			na		<0.005	0.04962	no	0.053	<0.001	0.28085	no
4/16/2007	CDM	0.040		<0.001	0.00751	no			na		<0.005	0.04821	no	<0.050	<0.001	0.27220	no
4/23/2007	CDM	0.102		<0.001	0.00568	no			na		<0.005	0.03677	no	0.054	<0.001	0.20206	no
4/30/2007	CDM	0.051		0.00100	0.00702	no			na		<0.005	0.04516	no	<0.050	<0.001	0.25344	no
April 2007 Avg's	CDM	0.052		0.00060	0.00059	Yes			na		0.00250	0.02629	no	0.051	0.0005	0.00961	no
May 2007																	
5/7/2007	CDM	0.082		<0.001	0.00275	no			na		0.00800	0.01820	no	<0.050	<0.001	0.09154	no
5/14/2007	CDM	0.039		<0.001	0.00570	no			na		<0.005	0.03689	no	<0.050	<0.001	0.20279	no
5/21/2007	CDM	0.064		<0.001	0.00774	no			na		<0.005	0.04962	no	<0.050	<0.001	0.28085	no
5/29/2007	CDM	0.036		<0.001	0.00762	no			na		<0.005	0.04892	no	<0.050	<0.001	0.27652	no
May 2007 Avg's	CDM	0.055		0.00050	0.00055	no			na		0.00388	0.02418	no	0.050	0.0005	0.00869	no
June 2007																	
6/5/2007	CDM	0.052		0.00070	0.00333	no			na		0.00600	0.02191	no	<0.050	<0.001	0.11306	no
6/11/2007	CDM	0.062		0.00070	0.00490	no			na		<0.005	0.03186	no	<0.050	<0.001	0.17234	no
6/18/2007	CDM	0.057		0.00090	0.00721	no			na		<0.005	0.04634	no	<0.050	<0.001	0.26066	no
6/25/2007	CDM	0.091		0.00090	0.00774	no			na		0.00800	0.04962	no	0.061	<0.001	0.28085	no
June 2007 Avg's	CDM	0.066		0.00080	0.00056	Yes			na		0.00475	0.02442	no	0.053	0.0005	0.00879	no
July 2007																	
7/2/2007	CDM	0.066		0.00100	0.00774	no			na		0.01100	0.04962	no	0.064	<0.001	0.28085	no
7/9/2007	CDM	0.050		0.00100	0.00774	no			na		0.00700	0.04962	no	<0.050	<0.001	0.28085	no
7/16/2007	CDM	0.063		<0.0005	0.00774	no			na		<0.005	0.04962	no	<0.050	<0.001	0.28085	no
7/23/2007	CDM	0.054		0.00200	0.00774	no			na		<0.005	0.04962	no	<0.050	<0.001	0.28085	no
7/30/2007	CDM	0.055		0.00100	0.00774	no			na		<0.005	0.04962	no	<0.050	<0.001	0.28085	no
July 2007 Avg's	CDM	0.058		0.00105	0.00064	Yes			na		0.00510	0.02928	no	0.053	0.0005	0.01094	no
August 2007																	
8/6/2007	CDM	0.068		0.00100	0.00774	no			na		0.00600	0.04962	no	<0.050	<0.001	0.28085	no
8/13/2007	CDM	0.068		0.00090	0.00774	no			na		<0.005	0.04962	no	0.087	<0.001	0.28085	no
8/20/2007	CDM	0.054		0.00100	0.00774	no			na		<0.005	0.04962	no	<0.050	<0.001	0.28085	no
8/27/2007	CDM	0.054		0.00080	0.00774	no			na		<0.005	0.04962	no	<0.050	<0.001	0.28085	no
August 2007 Avg's	CDM	0.061		0.00093	0.00064	Yes			na		0.00338	0.02928	no	0.059	0.0005	0.01094	no
September 2007																	
9/4/2007	CDM	0.022		<0.0005	0.00651	no			na		<0.005	0.04198	no	<0.050	<0.001	0.23392	no
9/10/2007	CDM	0.036		0.00080	0.00774	no			na		<0.005	0.04962	no	<0.050	<0.001	0.28085	no
9/17/2007	CDM	0.035		0.00080	0.00774	no			na		<0.005	0.04962	no	<0.050	<0.001	0.28085	no
9/25/2007	CDM	0.061		0.00100	0.00774	no			na		<0.005	0.04962	no	<0.050	<0.001	0.28085	no
September 2007 Avg's	CDM	0.039		0.00071	0.00064	Yes			na		0.00250	0.02928	no	0.050	0.0005	0.01094	no
October 2007																	
10/1/2007	CDM	0.017		<0.001	0.00528	no			na		<0.005	0.03426	no	<0.050	<0.001	0.18684	no
10/8/2007	CDM	0.032		0.00120	0.00774	no			na		<0.005	0.04962	no	0.063	<0.001	0.28085	no
10/15/2007	CDM	0.027		0.00100	0.00774	no			na		<0.005	0.04962	no	<0.050	<0.001	0.28085	no
10/22/2007	CDM	0.061		0.00100	0.00774	no			na		<0.005	0.04962	no	0.088	<0.001	0.28085	no
10/29/2007	CDM	0.043		0.00100	0.00774	no			na		0.00600	0.04962	no	0.109	<0.001	0.28085	no
October 2007 Avg's	CDM	0.036		0.00094	0.00064	Yes			na		0.00320	0.02928	no	0.072	0.0005	0.01094	no
November 2007																	
11/5/2007	CDM	0.039		0.00100	0.00774	no			na		0.00700	0.04962	no	0.092	<0.001	0.28085	no
11/12/2007	CDM	0.041		0.00080	0.00774	no			na		<0.005	0.04962	no	0.090	<0.001	0.28085	no
11/19/2007	CDM	0.044		0.00110	0.00774	no			na		0.00500	0.04962	no	0.096	<0.001	0.28085	no
11/26/2007	CDM	0.050		0.00110	0.00774	no			na		<0.005	0.04962	no	0.162	<0.001	0.28085	no
November 2007 Avg's	CDM	0.044		0.00100	0.00064	Yes			na		0.00425	0.02928	no	0.110	0.0005	0.01094	no
December 2007																	
12/3/2007	CDM	0.048		0.00080	0.00774	no			na		0.00600	0.04962	no	0.109	<0.001	0.28085	no
12/10/2007	CDM	0.085		0.00120	0.00774	no			na		0.00500	0.04962	no	0.106	<0.001	0.28085	no
12/17/2007	CDM	0.051		0.00110	0.00774	no			na		0.00600	0.04962	no	0.135	<0.001	0.28085	no
12/26/2007	CDM	0.061		0.00110	0.00774	no			na		0.00600	0.04962	no	0.144	<0.001	0.28085	no
December 2007 Avg's	CDM	0.061		0.00105	0.00064	Yes			na		0.00575	0.02928	no	0.124	0.0005	0.01094	no

January 2008

SUMMARY OF SURFACE WATER COMPLIANCE I

CP-001		Dissolved Metals										
	Limit Type	Hg	Ni			Se	Ag			Zn		
SD Surface Water Quality Standards	30-day	---		Ni standard based on hardness	Exceedence	---		Ag standard based on hardness	Exceedence		Zn standard based on hardness	Exceedence
	24-hour	---				---						
	Daily Max	---				---						
	Grab	---				---						
	General	---				---						
	Acute	0.00140				---						
	Chronic	0.00077				0.0046						
	Admin Rule	74:51:01 App B	74:51:01 App B			74:51:01 App B	74:51:01 App B			74:51:01 App B		
	ND Rule	ND = 1/2 DL	ND = 1/2 DL			ND = 1/2 DL	ND = 1/2 DL			ND = 1/2 DL		
Date	Sampler											
December 2006 Avg's	CDM							NA	NA	0.112	0.382	no
January 2007 Avg's	CDM		0.0133	0.16804	no		<0.001	NA	NA	0.074	0.382	no
February 2007 Avg's	CDM		0.0113	0.16804	no		<0.001	NA	NA	0.078	0.382	no
March 2007 Avg's	CDM		0.0075	0.16804	no		<0.001	NA	NA	0.058	0.382	no
April 2007												
4/3/2007	CDM		<0.005	1.05766	no		<0.001	0.01686	no	<0.050	0.265	no
4/9/2007	CDM		0.0060	1.51289	no		<0.001	0.03491	no	<0.050	0.379	no
4/16/2007	CDM		0.0070	1.47440	no		<0.001	0.03313	no	<0.050	0.370	no
4/23/2007	CDM		<0.005	1.15589	no		<0.001	0.02020	no	<0.050	0.290	no
4/30/2007	CDM		<0.005	1.39038	no		<0.001	0.02940	no	<0.050	0.349	no
April 2007 Avg's	CDM		0.0041	0.15103	no		0.0005	NA	NA	0.025	0.344	no
May 2007												
5/7/2007	CDM		<0.005	0.61490	no		<0.001	0.00560	no	<0.050	0.154	no
5/14/2007	CDM		<0.005	1.15925	no		<0.001	0.02032	no	<0.050	0.291	no
5/21/2007	CDM		<0.005	1.51289	no	<0.005	<0.001	0.03491	no	<0.050	0.379	no
5/29/2007	CDM		0.0070	1.49367	no	<0.005	<0.001	0.03402	no	<0.050	0.374	no
May 2007 Avg's	CDM		0.0036	0.13904	no	0.00250	0.0005	NA	NA	0.025	0.316	no
June 2007												
6/5/2007	CDM		<0.005	0.72623	no	<0.005	<0.001	0.00785	no	<0.050	0.182	no
6/11/2007	CDM		0.0060	1.01653	no	<0.005	<0.001	0.01556	no	<0.050	0.255	no
6/18/2007	CDM		0.0070	1.42280	no	<0.005	<0.001	0.03081	no	<0.050	0.357	no
6/25/2007	CDM		0.0090	1.51289	no	<0.005	<0.001	0.03491	no	<0.050	0.379	no
June 2007 Avg's	CDM		0.0061	0.14041	no	0.00250	0.0005	NA	NA	0.025	0.319	no
July 2007												
7/2/2007	CDM		0.0090	1.51289	no	<0.005	<0.001	0.03491	no	<0.050	0.379	no
7/9/2007	CDM		0.0080	1.51289	no	<0.005	<0.001	0.03491	no	<0.050	0.379	no
7/16/2007	CDM		0.0120	1.51289	no		<0.001	0.03491	no	<0.050	0.379	no
7/23/2007	CDM		0.0110	1.51289	no	<0.005	<0.001	0.03491	no	<0.050	0.379	no
7/30/2007	CDM		0.0130	1.51289	no	<0.005	<0.001	0.03491	no	<0.050	0.379	no
July 2007 Avg's	CDM		0.0106	0.16804	no	0.00250	0.0005	NA	NA	0.025	0.382	no
August 2007												
8/6/2007	CDM		0.0090	1.51289	no		<0.001	0.03491	no	<0.050	0.379	no
8/13/2007	CDM		0.0080	1.51289	no	<0.005	<0.001	0.03491	no	<0.050	0.379	no
8/20/2007	CDM		0.0100	1.51289	no		<0.001	0.03491	no	<0.050	0.379	no
8/27/2007	CDM		0.0080	1.51289	no		<0.001	0.03491	no	<0.050	0.379	no
August 2007 Avg's	CDM		0.0088	0.16804	no	0.00250	0.0005	NA	NA	0.025	0.382	no
September 2007												
9/4/2007	CDM		<0.005	1.30212	no		<0.001	0.02573	no	<0.050	0.326	no
9/10/2007	CDM		0.0070	1.51289	no		<0.001	0.03491	no	<0.050	0.379	no
9/17/2007	CDM		0.0100	1.51289	no		<0.001	0.03491	no	<0.050	0.379	no
9/25/2007	CDM		0.0070	1.51289	no		<0.001	0.03491	no	<0.050	0.379	no
September 2007 Avg's	CDM		0.0066	0.16804	no		0.0005	NA	NA	0.025	0.382	no
October 2007												
10/1/2007	CDM		<0.005	1.08492	no		<0.001	0.01776	no	<0.050	0.272	no
10/8/2007	CDM		0.0110	1.51289	no		<0.001	0.03491	no	<0.050	0.379	no
10/15/2007	CDM		0.0100	1.51289	no		<0.001	0.03491	no	0.051	0.379	no
10/22/2007	CDM		0.0080	1.51289	no		<0.001	0.03491	no	<0.050	0.379	no
10/29/2007	CDM		0.0090	1.51289	no		<0.001	0.03491	no	0.061	0.379	no
October 2007 Avg's	CDM		0.0081	0.16804	no		0.0005	NA	NA	0.037	0.382	no
November 2007												
11/5/2007	CDM		0.0070	1.51289	no		<0.001	0.03491	no	<0.050	0.379	no
11/12/2007	CDM		0.0120	1.51289	no		<0.001	0.03491	no	<0.050	0.379	no
11/19/2007	CDM		0.0200	1.51289	no		<0.001	0.03491	no	0.050	0.379	no
11/26/2007	CDM		0.0170	1.51289	no		<0.001	0.03491	no	0.055	0.379	no
November 2007 Avg's	CDM		0.0140	0.16804	no		0.0005	NA	NA	0.039	0.382	no
December 2007												
12/3/2007	CDM		0.0090	1.51289	no		<0.001	0.03491	no	0.050	0.379	no
12/10/2007	CDM		0.0100	1.51289	no		<0.001	0.03491	no	0.051	0.379	no
12/17/2007	CDM		0.0120	1.51289	no		<0.001	0.03491	no	0.051	0.379	no
12/26/2007	CDM		0.0190	1.51289	no		<0.001	0.03491	no	0.057	0.379	no
December 2007 Avg's	CDM		0.0125	0.16804	no		0.0005	NA	NA	0.052	0.382	no

January 2008

SUMMARY OF SURFACE WATER COMPLIANCE POINT SAMPLING

CP-001		Dissolved Metals															
	Limit Type	Al	As	Cd			Cr (III)			Cr (VI)	Cu			Fe	Pb		
SD Surface Water Quality Standards	30-day	---	---		Cd standard based on hardness	Exceedence		Cr (III) standard based on hardness	Exceedence	---		Cu standard based on hardness	Exceedence	---		Pb standard based on hardness	Exceedence
	24-hour	---	---							---				---			
	Daily Max	---	---							---				---			
	Grab	---	---							---				---			
	General	---	---							---				---			
	Acute	---	0.340							0.016				---			
	Chronic	---	0.150							0.011				---			
	Admin Rule		74:51:01 App B	74:51:01 App B			74:51:01 App B			74:51:01 App B	74:51:01 App B				74:51:01 App B		
	ND Rule	ND = DL	ND = 1/2 DL	ND = 1/2 DL			ND = 1/2 DL			ND = 1/2 DL	ND = 1/2 DL			ND = DL	ND = 1/2 DL		
Date	Sampler																
1/2/2008	CDM	0.120		0.00100	0.00774	no			na		0.01100	0.04962	no	0.187	<0.001	0.28085	no
1/7/2008	CDM	0.064		0.00090	0.00774	no			na		0.00800	0.04962	no	0.139	<0.001	0.28085	no
1/14/2008	CDM	0.066		0.00090	0.00774	no			na		0.00700	0.04962	no	0.144	<0.001	0.28085	no
1/21/2008	CDM	0.068		0.00090	0.00774	no			na		0.00800	0.04962	no	0.161	<0.001	0.28085	no
1/28/2008	CDM	0.056		0.00080	0.00774	no			na		0.00800	0.04962	no	0.143	<0.001	0.28085	no
January 2008 Avg's	CDM	0.075		0.00090	0.00064	Yes			na		0.00840	0.02928	no	0.155	0.0005	0.01094	no
February 2008																	
2/4/2008	CDM	0.074		0.00100	0.00774	no			na		0.00900	0.04962	no	0.172	<0.001	0.28085	no
2/11/2008	CDM	0.052		0.00090	0.00774	no			na		0.03000	0.04962	no	0.180	<0.001	0.28085	no
2/18/2008	CDM	0.063		0.00100	0.00774	no			na		0.00800	0.04962	no	0.186	<0.001	0.28085	no
2/25/2008	CDM	0.071		0.00070	0.00774	no			na		0.00800	0.04962	no	0.176	<0.001	0.28085	no
February 2008 Avg's	CDM	0.065		0.00090	0.00064	Yes			na		0.01375	0.02928	no	0.179	0.0005	0.01094	no
March 2008																	
3/4/2008	CDM	0.069		0.00090	0.00774	no			na		0.00700	0.04962	no	0.168	<0.001	0.28085	no
3/10/2008	CDM	0.083		0.00110	0.00774	no			na		0.00700	0.04962	no	0.204	<0.001	0.28085	no
3/17/2008	CDM	0.066		0.00050	0.00774	no			na		0.00600	0.04962	no	0.171	<0.001	0.28085	no
3/24/2008	CDM	0.066		0.00090	0.00774	no			na		0.00600	0.04962	no	0.148	<0.001	0.28085	no
3/31/2008	CDM	0.060		0.00080	0.00774	no			na		<0.005	0.04962	no	0.151	<0.001	0.28085	no
March 2008 Avg's	CDM	0.069		0.00084	0.00064	Yes			na		0.00570			0.168	0.0005	0.01094	no
April 2008																	
4/7/2008	CDM	0.050		0.00070	0.00774	no			na		0.00600	0.04962	no	0.128	<0.001	0.28085	no
4/14/2008	CDM	0.046		0.00070	0.00774	no			na		<0.005	0.04962	no	0.140	<0.001	0.28085	no
4/22/2008	CDM	0.067		0.00050	0.00710	no			na		0.00600	0.04563	no	<0.050	<0.001	0.25633	no
4/28/2008	CDM	0.052		<0.0005	0.00774	no			na		<0.005	0.04962	no	0.076	<0.001	0.28085	no
April 2008 Avg's	CDM	0.054		0.00054	0.00064	no			na		0.00425	0.02928	no	0.099	0.0005	0.01094	no
May 2008																	
5/6/2008	CDM	0.070		0.00110	0.00275	no			na		0.00700	0.01820	no	<0.050	<0.001	0.09154	no
5/12/2008	CDM	0.103		0.00100	0.00237	no			na		0.00700	0.01571	no	0.066	<0.001	0.07730	no
5/19/2008	CDM	0.075		<0.001	0.00281	no			na		0.00500	0.01858	no	0.062	<0.001	0.09368	no
5/27/2008	CDM	0.093		0.00100	0.00260	no			na		0.00700	0.01721	no	<0.050	<0.001	0.08583	no
May 2008 Avg's	CDM	0.085		0.00090	0.00030	Yes			na		0.00650	0.01134	no	0.057	0.0005	0.00339	no
June 2008																	
6/2/2008	CDM	0.095		0.00100	0.00291	no			na		0.00900	0.01920	no	0.061	<0.001	0.09726	no
6/9/2008	CDM	0.060		0.00100	0.00246	no			na		0.00800	0.01633	no	<0.050	<0.001	0.08085	no
6/16/2008	CDM	0.053		0.00100	0.00570	no			na		0.00700	0.03689	no	<0.050	<0.001	0.20279	no
6/23/2008	CDM	0.066		0.00100	0.00689	no			na		0.00500	0.04434	no	<0.050	<0.001	0.24838	no
6/30/2008	CDM	0.084		0.00100	0.00774	no			na		0.00600	0.04962	no	<0.050	<0.001	0.28085	no
June 2008 Avg's	CDM	0.072		0.00100	0.00053	Yes			na		0.00700	0.02321	no	0.052	0.0005	0.00826	no
July 2008																	
7/7/2008	CDM	0.074		0.00100	0.00774	no			na		<0.005	0.04962	no	<0.050	<0.001	0.28085	no
7/14/2008	CDM	0.072		0.00100	0.00774	no			na		0.00500	0.04962	no	<0.050	<0.001	0.28085	no
7/21/2008	CDM	0.077		0.00100	0.00774	no			na		0.00700	0.04962	no	0.211	<0.001	0.28085	no
7/28/2008	CDM	0.099		0.00200	0.00774	no			na		0.00600	0.04962	no	<0.050	<0.001	0.28085	no
July 2008 Avg's	CDM	0.081		0.00125	0.00064	Yes			na		0.00513	0.02928	no	0.090	0.0005	0.01094	no
August 2008																	
8/4/2008	CDM	0.099		0.00100	0.00774	no			na		<0.005	0.04962	no	0.050	<0.001	0.28085	no
8/11/2008	CDM	0.068		0.00100	0.00774	no			na		<0.005	0.04962	no	<0.050	<0.001	0.28085	no
8/18/2008	CDM	0.068		0.00100	0.00774	no			na		<0.005	0.04962	no	<0.050	<0.001	0.28085	no
8/25/2008	CDM	0.159		0.00100	0.00774	no			na		<0.005	0.04962	no	<0.050	<0.001	0.28085	no
August 2008 Avg's	CDM	0.099		0.00100	0.00064	Yes			na		0.00250	0.02928	no	0.050	0.0005	0.01094	no
September 2008																	
9/2/2008	CDM	0.062		0.00100	0.00774	no			na		<0.005	0.04962	no	<0.050	<0.001	0.28085	no
9/8/2008	CDM	0.048		0.00100	0.00774	no			na		<0.005	0.04962	no	<0.050	<0.001	0.28085	no
9/15/2008	CDM	0.048		0.00100	0.00774	no			na		<0.005	0.04962	no	0.069	<0.001	0.28085	no
9/22/2008	CDM	0.063		0.00100	0.00774	no			na		<0.005	0.04962	no	<0.050	<0.001	0.28085	no
9/29/2008	CDM	0.055		0.00100	0.00774	no			na		<0.005	0.04962	no	0.238	<0.001	0.28085	no
September 2008 Avg's	CDM	0.055		0.00100	0.00064	Yes			na		0.00250	0.02928	no	0.091	0.0005	0.01094	no
October 2008																	
10/6/2008	CDM	0.068		0.00200	0.00774	no			na		<0.005	0.04962	no	<0.050	<0.001	0.28085	no
10/13/2008	CDM	0.041		0.00100	0.00774	no			na		<0.005	0.04962	no	0.078	<0.001	0.28085	no
10/20/2008	CDM	0.040		0.00100	0.00774	no			na		<0.005	0.04962	no	<0.050	0.002	0.28085	no
10/27/2008	CDM	0.047		0.00100	0.00774	no			na		<0.005	0.04962	no	0.100	<0.001	0.28085	no
October 2008 Avg's	CDM	0.049		0.00125	0.00064	Yes			na		0.00250	0.02928	no	0.070	0.0009	0.01094	no

SUMMARY OF SURFACE WATER COMPLIANCE I

CP-001		Dissolved Metals										
	Limit Type	Hg	Ni			Se	Ag			Zn		
SD Surface Water Quality Standards	30-day	---		Ni standard based on hardness	Exceedence	---		Ag standard based on hardness	Exceedence		Zn standard based on hardness	Exceedence
	24-hour	---				---						
	Daily Max	---				---						
	Grab	---				---						
	General	---				---						
	Acute	0.00140				---						
	Chronic	0.00077				0.0046						
	Admin Rule	74:51:01 App B	74:51:01 App B			74:51:01 App B	74:51:01 App B			74:51:01 App B		
	ND Rule	ND = 1/2 DL	ND = 1/2 DL			ND = 1/2 DL	ND = 1/2 DL			ND = 1/2 DL		
Date	Sampler											
1/2/2008	CDM		0.0100	1.51289	no		<0.001	0.03491	no	0.051	0.379	no
1/7/2008	CDM		0.0120	1.51289	no		<0.001	0.03491	no	0.052	0.379	no
1/14/2008	CDM		0.0180	1.51289	no		<0.001	0.03491	no	<0.050	0.379	no
1/21/2008	CDM		0.0130	1.51289	no		<0.001	0.03491	no	<0.050	0.379	no
1/28/2008	CDM		0.0180	1.51289	no		<0.001	0.03491	no	<0.050	0.379	no
January 2008 Avg's	CDM		0.0142	0.16804	no		0.0005	NA	NA	0.036	0.382	no
February 2008												
2/4/2008	CDM		0.0210	1.51289	no		<0.001	0.03491	no	0.051	0.379	no
2/11/2008	CDM		0.0130	1.51289	no		<0.001	0.03491	no	0.058	0.379	no
2/18/2008	CDM		0.0130	1.51289	no		<0.001	0.03491	no	0.051	0.379	no
2/25/2008	CDM		0.0180	1.51289	no		<0.001	0.03491	no	0.057	0.379	no
February 2008 Avg's	CDM		0.0163	0.16804	no		0.0005	NA	NA	0.054	0.382	no
March 2008												
3/4/2008	CDM		0.0120	1.51289	no		<0.001	0.03491	no	0.051	0.379	no
3/10/2008	CDM		0.0140	1.51289	no		<0.001	0.03491	no	0.053	0.379	no
3/17/2008	CDM		0.0150	1.51289	no		<0.001	0.03491	no	<0.050	0.379	no
3/24/2008	CDM		0.0180	1.51289	no		<0.001	0.03491	no	<0.050	0.379	no
3/31/2008	CDM		0.0210	1.51289	no		<0.001	0.03491	no	<0.050	0.379	no
March 2008 Avg's	CDM		0.0160	0.16804	no		0.0005	NA	NA	0.036	0.382	no
April 2008												
4/7/2008	CDM		0.0140	1.51289	no		<0.001	0.03491	no	<0.050	0.379	no
4/14/2008	CDM		0.0180	1.51289	no		<0.001	0.03491	no	0.051	0.379	no
4/22/2008	CDM		0.0070	1.40336	no		<0.001	0.02996	no	<0.050	0.352	no
4/28/2008	CDM		0.0080	1.51289	no		<0.001	0.03491	no	<0.050	0.379	no
April 2008 Avg's	CDM		0.0118	0.16804	no		0.0005	NA	NA	0.032		
May 2008												
5/6/2008	CDM		0.0070	0.61490	no		<0.001	0.00560	no	<0.050	0.154	no
5/12/2008	CDM		0.0050	0.53861	no		<0.001	0.00428	no	<0.050	0.135	no
5/19/2008	CDM		<0.005	0.62619	no		<0.001	0.00581	no	<0.050	0.157	no
5/27/2008	CDM		0.0060	0.58460	no		<0.001	0.00505	no	<0.050	0.146	no
May 2008 Avg's	CDM		0.0051	0.06567	no		0.0005	NA	NA	0.025	0.149	no
June 2008												
6/2/2008	CDM		0.0070	0.64492	no		<0.001	0.00617	no	<0.050	0.161	no
6/9/2008	CDM		0.0060	0.55786	no		<0.001	0.00459	no	<0.050	0.140	no
6/16/2008	CDM		0.0080	1.15925	no		<0.001	0.02032	no	<0.050	0.291	no
6/23/2008	CDM		0.0080	1.36760	no		<0.001	0.02843	no	<0.050	0.343	no
6/30/2008	CDM		0.0140	1.51289	no		<0.001	0.03491	no	<0.050	0.379	no
June 2008 Avg's	CDM		0.0086	0.13352	no		0.0005	NA	NA	0.025	0.304	no
July 2008												
7/7/2008	CDM		0.0110	1.51289	no		<0.001	0.03491	no	<0.050	0.379	no
7/14/2008	CDM		0.0150	1.51289	no		<0.001	0.03491	no	<0.050	0.379	no
7/21/2008	CDM		0.0150	1.51289	no		<0.001	0.03491	no	<0.050	0.379	no
7/28/2008	CDM		0.0110	1.51289	no		0.001	0.03491	no	<0.050	0.379	no
July 2008 Avg's	CDM		0.0130	0.16804	no		0.0006	NA	NA	0.025	0.382	no
August 2008												
8/4/2008	CDM		0.0120	1.51289	no		<0.001	0.03491	no	<0.050	0.379	no
8/11/2008	CDM		0.0140	1.51289	no		<0.001	0.03491	no	<0.050	0.379	no
8/18/2008	CDM		0.0100	1.51289	no		<0.001	0.03491	no	<0.050	0.379	no
8/25/2008	CDM		0.0080	1.51289	no		<0.001	0.03491	no	<0.050	0.379	no
August 2008 Avg's	CDM		0.0110	0.16804	no		0.0005	NA	NA	0.025	0.382	no
September 2008												
9/2/2008	CDM		0.0110	1.51289	no		<0.001	0.03491	no	<0.050	0.379	no
9/8/2008	CDM		0.0130	1.51289	no		<0.001	0.03491	no	<0.050	0.379	no
9/15/2008	CDM		0.0100	1.51289	no		<0.001	0.03491	no	<0.050	0.379	no
9/22/2008	CDM		0.0110	1.51289	no		<0.001	0.03491	no	<0.050	0.379	no
9/29/2008	CDM		0.0380	1.51289	no		<0.001	0.03491	no	<0.050	0.379	no
September 2008 Avg's	CDM		0.0166	0.16804	no		0.0005	NA	NA	0.025	0.382	no
October 2008												
10/6/2008	CDM		0.0120	1.51289	no		<0.001	0.03491	no	<0.050	0.379	no
10/13/2008	CDM		0.0090	1.51289	no		<0.001	0.03491	no	<0.050	0.379	no
10/20/2008	CDM		0.0110	1.51289	no		<0.001	0.03491	no	0.052	0.379	no
10/27/2008	CDM		0.0120	1.51289	no		<0.001	0.03491	no	0.055	0.379	no
October 2008 Avg's	CDM		0.0110	0.16804	no		0.0005	NA	NA	0.039	0.382	no

SUMMARY OF SURFACE WATER COMPLIANCE POINT SAMPLING

CP-001		Dissolved Metals															
	Limit Type	Al	As	Cd			Cr (III)			Cr (VI)	Cu			Fe	Pb		
SD Surface Water Quality Standards	30-day	---	---		Cd standard based on hardness	Exceedence		Cr (III) standard based on hardness	Exceedence	---		Cu standard based on hardness	Exceedence	---		Pb standard based on hardness	Exceedence
	24-hour	---	---							---				---			
	Daily Max	---	---							---				---			
	Grab	---	---							---				---			
	General	---	---							---				---			
	Acute	---	0.340							0.016				---			
	Chronic	---	0.150							0.011				---			
	Admin Rule		74:51:01 App B	74:51:01 App B			74:51:01 App B			74:51:01 App B	74:51:01 App B				74:51:01 App B		
	ND Rule	ND = DL	ND = 1/2 DL	ND = 1/2 DL			ND = 1/2 DL			ND = 1/2 DL	ND = 1/2 DL			ND = DL	ND = 1/2 DL		
Date	Sampler																
November 2008																	
11/3/2008	CDM	0.044		0.00100	0.00774	no			na		<0.005	0.04962	no	<0.050	<0.001	0.28085	no
11/11/2008	CDM	0.033		0.00100	0.00774	no			na		<0.005	0.04962	no	0.102	<0.001	0.28085	no
11/17/2008	CDM	0.046		0.00100	0.00774	no			na		<0.005	0.04962	no	0.075	<0.001	0.28085	no
11/24/2008	CDM	0.054		0.00100	0.00774	no			na		0.00500	0.04962	no	0.080	<0.001	0.28085	no
November 2008 Avg's	CDM	0.044		0.00100	0.00064	Yes			na		0.00313	0.02928	no	0.077	0.0005	0.01094	no
December 2008																	
12/1/2008	CDM	0.056		0.00100	0.00774	no			na		<0.005	0.04962	no	0.106	<0.001	0.28085	no
12/8/2008	CDM	0.048		0.00100	0.00774	no			na		<0.005	0.04962	no	0.086	<0.001	0.28085	no
12/15/2008	CDM	0.059		0.00100	0.00774	no			na		<0.005	0.04962	no	0.065	<0.001	0.28085	no
12/22/2008	CDM	0.102		0.00100	0.00774	no			na		0.00600	0.04962	no	0.101	<0.001	0.28085	no
12/29/2009	CDM	0.043		0.00100	0.00774	no			na		<0.005	0.04962	no	0.066	<0.001	0.28085	no
December 2008 Avg's	CDM	0.062		0.00100	0.00064	Yes			na		0.00320	0.02928	no	0.085	0.0005	0.01094	no
January 2009																	
1/5/2009	CDM	0.065		0.00100	0.00774	no			na		<0.005	0.04962	no	0.084	<0.001	0.28085	no
1/13/2009	CDM	0.055		0.00100	0.00774	no			na		<0.005	0.04962	no	0.088	<0.001	0.28085	no
1/19/2009	CDM	0.062		0.00100	0.00774	no			na		<0.005	0.04962	no	0.081	<0.001	0.28085	no
1/26/2009	CDM	0.063		0.00100	0.00774	no			na		<0.005	0.04962	no	0.104	<0.001	0.28085	no
January 2009 Avg's	CDM	0.061		0.00100	0.00064	Yes			na		0.00250	0.02928	no	0.089	0.0005	0.01094	no
February 2009																	
2/2/2009	CDM	0.064		0.00100	0.00774	no			na		<0.005	0.04962	no	0.103	<0.001	0.28085	no
2/9/2009	CDM	0.058		0.00100	0.00774	no			na		<0.005	0.04962	no	0.066	<0.001	0.28085	no
2/17/2009	CDM	0.101		0.00100	0.00774	no			na		0.00700	0.04962	no	0.114	<0.001	0.28085	no
2/23/2009	CDM	0.053		0.00100	0.00774	no			na		0.00600	0.04962	no	0.082	<0.001	0.28085	no
February 2009 Avg's	CDM	0.069		0.00100	0.00064	Yes			na		0.00450	0.02928	no	0.091	0.0005	0.01094	no
March 2009																	
3/2/2009	CDM	0.052		0.00100	0.00774	no			na		0.00500	0.04962	no	0.080	<0.001	0.28085	no
3/9/2009	CDM	0.041		0.00100	0.00774	no			na		<0.005	0.04962	no	0.102	<0.001	0.28085	no
3/16/2009	CDM	0.045		0.00100	0.00774	no			na		<0.005	0.04962	no	0.090	<0.001	0.28085	no
3/23/2009	CDM	0.071		<0.001	0.00337	no			na		0.00500	0.02216	no	0.073	<0.001	0.11450	no
March 2009 Avg's	CDM	0.052		0.00088	0.00064	Yes			na		0.00375	0.02928	no	0.086	0.0005	0.01094	no
April 2009																	
4/1/2009	CDM	0.042		0.00070	0.00774	no			na		<0.005	0.04962	no	0.065	<0.001	0.28085	no
4/6/2009	CDM	0.058		0.00100	0.00774	no			na		<0.005	0.04962	no	0.124	<0.001	0.28085	no
4/14/2009	CDM	0.102		0.00100	0.00170	no			na		0.00900	0.01142	no	<0.050	<0.001	0.05346	no
4/20/2009	CDM	0.481		0.00120	0.00270	no			na		0.00800	0.01783	no	<0.050	<0.001	0.08940	no
4/27/2009	CDM	0.041		<0.0005	0.00349	no			na		<0.005	0.02289	no	<0.050	<0.001	0.11882	no
April 2009 Avg's	CDM	0.145		0.00083	0.00048	Yes			na		0.00490	0.02024	no	0.095	0.0005	0.00699	no
May 2009																	
5/4/2009	CDM	0.061		<0.0005	0.00374	no			na		<0.005	0.02448	no	<0.050	<0.001	0.12820	no
5/11/2009	CDM	0.061		<0.0005	0.00492	no			na		<0.005	0.03198	no	<0.050	<0.001	0.17307	no
5/18/2009	CDM	0.059		0.00060	0.00678	no			na		<0.005	0.04363	no	<0.050	<0.001	0.24405	no
5/26/2009	CDM	0.080		0.00100	0.00755	no			na		0.00600	0.04845	no	<0.050	<0.001	0.27364	no
May 2009 Avg's	CDM	0.065		0.00053	0.00052	Yes			na		0.00338	0.02256	no	0.050	0.0005	0.00798	no
June 2009																	
6/1/2009	CDM	0.214		0.00100	0.00770	no			na		<0.005	0.04938	no	<0.050	<0.001	0.27941	no
6/8/2009	CDM	0.041		0.00090	0.00774	no			na		<0.005	0.04962	no	<0.050	<0.001	0.28085	no
6/15/2009	CDM	0.057		0.00060	0.00691	no			na		<0.005	0.04446	no	<0.050	<0.001	0.24911	no
6/15/2009 (duplicate)	CDM	0.061		0.00070	0.00706	no			na		<0.005	0.04540	no	<0.050	<0.001	0.25489	no
6/22/2009	CDM	0.060		0.00070	0.00774	no			na		<0.005	0.04962	no	<0.050	<0.001	0.28085	no
6/29/2009	CDM	0.055		0.00070	0.00774	no			na		<0.005	0.04962	no	<0.050	<0.001	0.28085	no
June 2009 Avg's	CDM	0.081		0.00077	0.00064	Yes			na		0.00250	0.02928	no	0.050	0.0005	0.01094	no
July 2009																	
7/7/2009	CDM	0.076		0.00100	0.00774	no	0.0005	1.77330	no		0.00250	0.04962	no	<0.050	<0.001	0.28085	no
7/13/2009	CDM	0.060		0.00080	0.00774	no			na		0.00250	0.04962	no	<0.050	<0.001	0.28085	no
7/20/2009	CDM	0.063		0.00100	0.00774	no			na		0.00250	0.04962	no	<0.050	<0.001	0.28085	no
7/27/2009	CDM	0.059		0.00080	0.00774	no			na		0.00250	0.04962	no	<0.050	<0.001	0.28085	no
July 2009 Avg.		0.065		0.00090	0.00064	Yes	0.0005	0.2307	no		0.00250	0.02928	no	0.050	0.0005	0.01094	no
August 2009																	
8/3/2009	CDM	0.066		0.00100	0.00774	no			na		0.00250	0.04962	no	<0.050	<0.001	0.28085	no
8/10/2009	CDM	0.067		0.00080	0.00774	no			na		0.00250	0.04962	no	<0.050	<0.001	0.28085	no
8/17/2009	CDM	0.063		0.00120	0.00774	no			na		0.00600	0.04962	no	<0.050	<0.001	0.28085	no
8/24/2009	CDM	0.076		0.00090	0.00774	no			na		0.00250	0.04962	no	<0.050	<0.001	0.28085	no

SUMMARY OF SURFACE WATER COMPLIANCE I

CP-001		Dissolved Metals										
	Limit Type	Hg	Ni			Se	Ag			Zn		
SD Surface Water Quality Standards	30-day	---		Ni standard based on hardness	Exceedence	---		Ag standard based on hardness	Exceedence		Zn standard based on hardness	Exceedence
	24-hour	---				---						
	Daily Max	---				---						
	Grab	---				---						
	General	---				---						
	Acute	0.00140				---						
	Chronic	0.00077				0.0046						
	Admin Rule	74:51:01 App B	74:51:01 App B			74:51:01 App B	74:51:01 App B			74:51:01 App B		
	ND Rule	ND = 1/2 DL	ND = 1/2 DL			ND = 1/2 DL	ND = 1/2 DL			ND = 1/2 DL		
Date	Sampler											
November 2008												
11/3/2008	CDM		0.0100	1.51289	no		<0.001	0.03491	no	<0.050	0.379	no
11/11/2008	CDM		0.0110	1.51289	no		<0.001	0.03491	no	<0.050	0.379	no
11/17/2008	CDM		0.0100	1.51289	no		<0.001	0.03491	no	<0.050	0.379	no
11/24/2008	CDM		0.0140	1.51289	no		<0.001	0.03491	no	0.055	0.379	no
November 2008 Avg's	CDM		0.0113	0.16804	no		0.0005	NA	NA	0.033	0.382	no
December 2008												
12/1/2008	CDM		0.0160	1.51289	no		<0.001	0.03491	no	<0.050	0.379	no
12/8/2008	CDM		0.0150	1.51289	no		<0.001	0.03491	no	<0.050	0.379	no
12/15/2008	CDM		0.0150	1.51289	no		<0.001	0.03491	no	0.069	0.379	no
12/22/2008	CDM		0.0160	1.51289	no		<0.001	0.03491	no	0.064	0.379	no
12/29/2009	CDM		0.0160	1.51289	no		<0.001	0.03491	no	0.057	0.379	no
December 2008 Avg's	CDM		0.0156	0.16804	no		0.0005	NA	NA	0.048	0.382	no
January 2009												
1/5/2009	CDM		0.0160	1.51289	no		<0.001	0.03491	no	0.052	0.379	no
1/13/2009	CDM		0.0130	1.51289	no		<0.001	0.03491	no	<0.050	0.379	no
1/19/2009	CDM		0.0160	1.51289	no		<0.001	0.03491	no	<0.050	0.379	no
1/26/2009	CDM		0.0100	1.51289	no		<0.001	0.03491	no	<0.050	0.379	no
January 2009 Avg's	CDM		0.0138	0.16804	no		0.0005	NA	NA	0.032	0.382	no
February 2009												
2/2/2009	CDM		0.0130	1.51289	no		<0.001	0.03491	no	0.051	0.379	no
2/9/2009	CDM		0.0130	1.51289	no		<0.001	0.03491	no	0.054	0.379	no
2/17/2009	CDM		0.0140	1.51289	no		<0.001	0.03491	no	0.058	0.379	no
2/23/2009	CDM		0.0080	1.51289	no		<0.001	0.03491	no	<0.050	0.379	no
February 2009 Avg's	CDM		0.0120	0.16804	no		0.0005	NA	NA	0.047	0.382	no
March 2009												
3/2/2009	CDM		0.0130	1.51289	no		<0.001	0.03491	no	0.054	0.379	no
3/9/2009	CDM		0.0110	1.51289	no		<0.001	0.03491	no	<0.050	0.379	no
3/16/2009	CDM		0.0120	1.51289	no		<0.001	0.03491	no	<0.050	0.379	no
3/23/2009	CDM		0.0050	0.73354	no		<0.001	0.00801	no	<0.050	0.184	no
March 2009 Avg's	CDM		0.0103	0.16804	no		0.0005	NA	NA	0.032	0.382	no
April 2009												
4/1/2009	CDM		0.0072	1.51289	no		<0.001	0.03491	no	<0.050	0.379	no
4/6/2009	CDM		0.0080	1.51289	no		<0.001	0.03491	no	<0.050	0.379	no
4/14/2009	CDM		0.0070	0.40443	no		<0.001	0.00239	no	<0.050	0.101	no
4/20/2009	CDM		<0.005	0.60357	no		<0.001	0.00539	no	<0.050	0.151	no
4/27/2009	CDM		<0.005	0.75538	no		<0.001	0.00851	no	<0.050	0.189	no
April 2009 Avg's	CDM		0.0054	0.11657	no		0.0005	NA	NA	0.025	0.265	no
May 2009												
5/4/2009	CDM		<0.005	0.80233	no		<0.001	0.00961	no	<0.050	0.201	no
5/11/2009	CDM		0.0070	1.01997	no		<0.001	0.01566	no	<0.050	0.256	no
5/18/2009	CDM		0.0090	1.34802	no		<0.001	0.02761	no	<0.050	0.338	no
5/26/2009	CDM		0.0110	1.48083	no		<0.001	0.03342	no	<0.050	0.371	no
May 2009 Avg's	CDM		0.0074	0.12978	no		0.0005	NA	NA	0.025	0.295	no
June 2009												
6/1/2009	CDM		0.0100	1.50649	no		<0.001	0.03461	no	<0.050	0.378	no
6/8/2009	CDM		0.0100	1.51289	no		<0.001	0.03491	no	<0.050	0.379	no
6/15/2009	CDM		0.0100	1.37085	no		<0.001	0.02857	no	<0.050	0.344	no
6/15/2009 (duplicate)	CDM		0.0100	1.39687	no		<0.001	0.02968	no	<0.050	0.350	no
6/22/2009	CDM		0.0080	1.51289	no		<0.001	0.03491	no	<0.050	0.379	no
6/29/2009	CDM		0.0080	1.51289	no		<0.001	0.03491	no	<0.050	0.379	no
June 2009 Avg's	CDM		0.0093	0.16804	no		0.0005	NA	NA	0.025	0.382	no
July 2009												
7/7/2009	CDM		0.0090	1.51289	no		<0.001	0.03491	no	<0.050	0.379	no
7/13/2009	CDM		0.0080	1.51289	no		<0.001	0.03491	no	<0.050	0.379	no
7/20/2009	CDM		0.0100	1.51289	no		<0.001	0.03491	no	<0.050	0.379	no
7/27/2009	CDM		0.0110	1.51289	no		<0.001	0.03491	no	<0.050	0.379	no
July 2009 Avg.			0.0095	0.16804	no		0.0005	NA	NA	0.025	0.382	no
August 2009												
8/3/2009	CDM		0.0130	1.51289	no		<0.001	0.03491	no	<0.050	0.379	no
8/10/2009	CDM		0.0130	1.51289	no		<0.001	0.03491	no	<0.050	0.379	no
8/17/2009	CDM		0.0160	1.51289	no		<0.001	0.03491	no	<0.050	0.379	no
8/24/2009	CDM		0.0180	1.51289	no		<0.001	0.03491	no	<0.050	0.379	no

SUMMARY OF SURFACE WATER COMPLIANCE POINT SAMPLING

CP-001		Dissolved Metals															
	Limit Type	Al	As	Cd			Cr (III)			Cr (VI)	Cu			Fe	Pb		
SD Surface Water Quality Standards	30-day	---	---		Cd standard based on hardness	Exceedence		Cr (III) standard based on hardness	Exceedence	---		Cu standard based on hardness	Exceedence	---		Pb standard based on hardness	Exceedence
	24-hour	---	---							---				---			
	Daily Max	---	---							---				---			
	Grab	---	---							---				---			
	General	---	---							---				---			
	Acute	---	0.340							0.016				---			
	Chronic	---	0.150							0.011				---			
	Admin Rule		74:51:01 App B	74:51:01 App B			74:51:01 App B			74:51:01 App B	74:51:01 App B				74:51:01 App B		
	ND Rule	ND = DL	ND = 1/2 DL	ND = 1/2 DL			ND = 1/2 DL			ND = 1/2 DL	ND = 1/2 DL			ND = DL	ND = 1/2 DL		
Date	Sampler																
8/31/2009	CDM	0.068		0.00080	0.00774	no			na		0.00250	0.04962	no	<0.050	<0.001	0.28085	no
August 2009 Avg.		0.068		0.00094	0.00064	Yes			na		0.00320	0.02928	no	0.050	0.0005	0.01094	no
September 2009																	
9/8/2009	CDM	0.069		0.00100	0.00774	no			na		0.00250	0.04962	no	<0.050	<0.001	0.28085	no
9/8/2009 (duplicate)	CDM	0.081		0.00120	0.00774	no			na		0.00250	0.04962	no	<0.050	<0.001	0.28085	no
9/14/2009	CDM	0.069		0.00080	0.00774	no			na		0.00250	0.04962	no	<0.050	<0.001	0.28085	no
9/21/2009	CDM	0.090		0.00080	0.00774	no			na		0.00600	0.04962	no	<0.050	<0.001	0.28085	no
9/28/2009	CDM	0.050		0.00080	0.00774	no			na		0.00250	0.04962	no	<0.050	<0.001	0.28085	no
September 2009 Avg.		0.072		0.00092	0.00064	Yes			na		0.00320	0.02928	no	0.050	0.0005	0.01094	no
October 2009																	
10/5/2009	CDM	0.089		0.00160	0.00774	no			na		0.00500	0.04962	no	0.119	<0.001	0.28085	no
10/12/2009	CDM	0.029		0.00100	0.00774	no			na		0.00250	0.04962	no	0.135	<0.001	0.28085	no
10/19/2009	CDM	0.280		0.00100	0.00774	no			na		0.00250	0.04962	no	0.064	<0.001	0.28085	no
10/26/2009	CDM	0.021		0.00080	0.00774	no			na		0.00250	0.04962	no	0.091	<0.001	0.28085	no
October 2009 Avg.		0.105		0.00110	0.00064	Yes			na		0.00313	0.02928	no	0.102	0.0005	0.01094	no
November 2009																	
11/2/2009	CDM	0.025		0.00100	0.00774	no			na		0.00250	0.04962	no	0.091	<0.001	0.28085	no
11/9/2009	CDM	0.055		0.00140	0.00774	no			na		0.00600	0.04962	no	0.072	<0.001	0.28085	no
11/16/2009	CDM	0.041		0.00120	0.00774	no			na		0.00250	0.04962	no	0.138	<0.001	0.28085	no
11/23/2009	CDM	0.044		0.00090	0.00774	no			na		0.00250	0.04962	no	0.139	<0.001	0.28085	no
11/30/2009	CDM	0.064		0.00090	0.00774	no			na		0.00250	0.04962	no	0.227	<0.001	0.28085	no
November 2009 Avg.		0.046		0.00108	0.00064	Yes			na		0.00320	0.02928	no	0.133	0.0005	0.01094	no
December 2009																	
12/7/2009	CDM	0.120		0.00090	0.00774	no			na		0.00250	0.04962	no	0.127	<0.001	0.28085	no
12/14/2009	CDM	0.035		0.00120	0.00774	no			na		0.00700	0.04962	no	0.144	<0.001	0.28085	no
12/21/2009	CDM	0.070		0.00106	0.00774	no			na		0.00250	0.04962	no	0.096	<0.001	0.28085	no
12/28/2009	CDM	0.049		0.00107	0.00774	no			na		0.00506	0.04962	no	0.155	<0.001	0.28085	no
December 2009 Avg.		0.068		0.00106	0.00064	Yes			na		0.00427	0.02928	no	0.130	0.0005	0.01094	no
January 2010																	
1/4/2010	CDM	0.071		0.00130	0.00774	no			na		0.00600	0.04962	no	0.120	<0.001	0.28085	no
1/11/2010	CDM	0.100		0.00110	0.00774	no			na		0.00250	0.04962	no	0.114	<0.001	0.28085	no
1/18/2010	CDM	0.072		0.00120	0.00774	no			na		0.00250	0.04962	no	0.077	<0.001	0.28085	no
1/26/2010	CDM	0.098		0.00130	0.00774	no			na		0.00250	0.04962	no	0.068	<0.001	0.28085	no
January 2010 Avg.		0.085		0.00123	0.00064	Yes			na		0.00338	0.02928	no	0.095	0.0005	0.01094	no
February 2010																	
2/1/2010	CDM	0.077		0.00110	0.00774	no			na		0.00600	0.04962	no	0.141	<0.001	0.28085	no
2/8/2010	CDM	0.078		0.00110	0.00774	no			na		0.00500	0.04962	no	0.108	<0.001	0.28085	no
2/16/2010	CDM	0.107		0.00120	0.00774	no			na		0.00700	0.04962	no	0.178	<0.001	0.28085	no
2/22/2010	CDM	0.080		0.00140	0.00774	no			na		0.00800	0.04962	no	0.210	<0.001	0.28085	no
February 2010 Avg.		0.086		0.00120	0.00064	Yes			na		0.00650	0.02928	no	0.159	0.0005	0.01094	no
March 2010																	
3/1/2010	CDM	0.077		0.00120	0.00774	no			na		0.00800	0.04962	no	0.250	<0.001	0.28085	no
3/8/2010	CDM	0.053		0.00140	0.00774	no			na		0.00700	0.04962	no	0.130	<0.001	0.28085	no
3/15/2010	CDM	0.050		0.00100	0.00774	no			na		0.00700	0.04962	no	0.147	<0.001	0.28085	no
3/22/2010	CDM	0.040		0.00130	0.00774	no			na		0.00700	0.04962	no	0.064	<0.001	0.28085	no
3/29/2010	CDM	0.042		0.00080	0.00774	no			na		0.00600	0.04962	no	<0.05	<0.001	0.28085	no
March 2010 Avg.		0.052		0.00114	0.00064	Yes			na		0.00700	0.02928	no	0.128	0.0005	0.01094	no
April 2010																	
4/5/2010	CDM	0.041		0.00100	0.00774	no			na		0.00700	0.04962	no	0.082	<0.001	0.28085	no
4/12/2010	CDM	0.092		0.00080	0.00435	no			na		0.00700	0.02837	no	<0.05	0.0020	0.15133	no
4/19/2010	CDM	0.099		0.00040	0.00356	no			na		0.00500	0.02338	no	0.053	<0.001	0.12170	no
4/26/2010	CDM	0.058		0.00050	0.00289	no			na		0.00600	0.01907	no	0.059	0.0010	0.09655	no
April 2010 Avg.		0.073		0.00068	0.00047	Yes			na		0.00625	0.01975	no	0.061	0.0010	0.00678	no
May 2010																	
5/3/2010	CDM	0.040		0.00040	0.00551	no			na		0.00250	0.03569	no	<0.050	<0.001	0.19554	no
5/10/2010	CDM	0.032		0.0004	0.00498	no		1.22251	na		0.00250	0.03234	no	<0.050	<0.001	0.17524	no
5/17/2010	CDM	0.073		0.0008	0.00297	no		0.78983	na		0.00600	0.01957	no	<0.050	<0.001	0.09941	no
5/24/2010	CDM	0.060		0.0006	0.00542	no		1.31246	na		0.00250	0.03510	no	<0.050	<0.001	0.19192	no
5/24/2010 (duplicate)	CDM	0.069		0.0006	0.00553	no		1.33570	na		0.00700	0.03581	no	0.218	<0.001	0.19626	no
May 2010 Avg.		0.055		0.00055	0.00046	Yes		0.1565	na		0.00338	0.01953	no	0.084	0.0005	0.00669	no
June 2010																	
6/1/2010	CDM	0.065		0.0002	0.00602	no		1.43539	na		0.00250	0.03891	no	<0.050	<0.001	0.21510	no

SUMMARY OF SURFACE WATER COMPLIANCE I

CP-001		Dissolved Metals										
	Limit Type	Hg	Ni			Se	Ag			Zn		
SD Surface Water Quality Standards	30-day	---		Ni standard based on hardness	Exceedence	---		Ag standard based on hardness	Exceedence		Zn standard based on hardness	Exceedence
	24-hour	---				---						
	Daily Max	---				---						
	Grab	---				---						
	General	---				---						
	Acute	0.00140				---						
	Chronic	0.00077				0.0046						
	Admin Rule	74:51:01 App B	74:51:01 App B			74:51:01 App B	74:51:01 App B			74:51:01 App B		
	ND Rule	ND = 1/2 DL	ND = 1/2 DL			ND = 1/2 DL	ND = 1/2 DL			ND = 1/2 DL		
Date	Sampler											
8/31/2009	CDM		0.0080	1.51289	no		<0.001	0.03491	no	<0.050	0.379	no
August 2009 Avg.			0.0136	0.16804	no		0.0005	NA	NA	0.025	0.382	no
September 2009												
9/8/2009	CDM		0.0100	1.51289	no		<0.001	0.03491	no	<0.050	0.379	no
9/8/2009 (duplicate)	CDM		0.0090	1.51289	no		<0.001	0.03491	no	<0.050	0.379	no
9/14/2009	CDM		0.0090	1.51289	no		<0.001	0.03491	no	<0.050	0.379	no
9/21/2009	CDM		0.0120	1.51289	no		<0.001	0.03491	no	<0.050	0.379	no
9/28/2009	CDM		0.0150	1.51289	no		<0.001	0.03491	no	<0.050	0.379	no
September 2009 Avg.			0.0110	0.16804	no		0.0005	NA	NA	0.025	0.382	no
October 2009												
10/5/2009	CDM		0.0130	1.51289	no		<0.001	0.03491	no	<0.050	0.379	no
10/12/2009	CDM		0.0120	1.51289	no		<0.001	0.03491	no	0.052	0.379	no
10/19/2009	CDM		0.0120	1.51289	no		<0.001	0.03491	no	<0.050	0.379	no
10/26/2009	CDM		0.0140	1.51289	no		<0.001	0.03491	no	<0.050	0.379	no
October 2009 Avg.			0.0128	0.16804	no		0.0005	NA	NA	0.032	0.382	no
November 2009												
11/2/2009	CDM		0.0120	1.51289	no		<0.001	0.03491	no	<0.050	0.379	no
11/9/2009	CDM		0.0130	1.51289	no		<0.001	0.03491	no	0.059	0.379	no
11/16/2009	CDM		0.0100	1.51289	no		<0.001	0.03491	no	<0.050	0.379	no
11/23/2009	CDM		0.0130	1.51289	no		<0.001	0.03491	no	<0.050	0.379	no
11/30/2009	CDM		0.0120	1.51289	no		<0.001	0.03491	no	<0.050	0.379	no
November 2009 Avg.			0.0120	0.16804	no		0.0005	NA	NA	0.032	0.382	no
December 2009												
12/7/2009	CDM		0.0110	1.51289	no		<0.001	0.03491	no	0.053	0.379	no
12/14/2009	CDM		0.0160	1.51289	no		<0.001	0.03491	no	0.066	0.379	no
12/21/2009	CDM		0.0136	1.51289	no		<0.001	0.03491	no	<0.050	0.379	no
12/28/2009	CDM		0.0146	1.51289	no		<0.001	0.03491	no	0.054	0.379	no
December 2009 Avg.			0.0138	0.16804	no		0.0005	NA	NA	0.049	0.382	no
January 2010												
1/4/2010	CDM		0.0100	1.51289	no		<0.001	0.03491	no	0.057	0.379	no
1/11/2010	CDM		0.0140	1.51289	no		<0.001	0.03491	no	<0.050	0.379	no
1/18/2010	CDM		0.0140	1.51289	no		<0.001	0.03491	no	0.052	0.379	no
1/26/2010	CDM		0.0146	1.51289	no		<0.001	0.03491	no	0.065	0.379	no
January 2010 Avg.			0.0132	0.16804	no		0.0005	NA	NA	0.050	0.382	no
February 2010												
2/1/2010	CDM		0.0150	1.51289	no		<0.001	0.03491	no	0.054	0.379	no
2/8/2010	CDM		0.0120	1.51289	no		<0.001	0.03491	no	0.052	0.379	no
2/16/2010	CDM		0.0140	1.51289	no		<0.001	0.03491	no	0.062	0.379	no
2/22/2010	CDM		0.0120	1.51289	no		<0.001	0.03491	no	0.059	0.379	no
February 2010 Avg.			0.0133	0.16804	no		0.0005	NA	NA	0.057	0.382	no
March 2010												
3/1/2010	CDM		0.0140	1.51289	no		<0.001	0.03491	no	0.061	0.379	no
3/8/2010	CDM		0.0190	1.51289	no		<0.001	0.03491	no	0.061	0.379	no
3/15/2010	CDM		0.0130	1.51289	no		<0.001	0.03491	no	0.057	0.379	no
3/22/2010	CDM		0.0100	1.51289	no		<0.001	0.03491	no	0.052	0.379	no
3/29/2010	CDM		0.0080	1.51289	no		<0.001	0.03491	no	<0.050	0.379	no
March 2010 Avg.			0.0128	0.16804	no		0.0005	NA	NA	0.051	0.382	no
April 2010												
4/5/2010	CDM		0.0090	1.51289	no		<0.001	0.03491	no	<0.050	0.379	no
4/12/2010	CDM		0.0080	0.91584	no		<0.001	0.01258	no	<0.050	0.229	no
4/19/2010	CDM		0.0025	0.76988	no		<0.001	0.00884	no	<0.050	0.193	no
4/26/2010	CDM		0.0050	0.64118	no		<0.001	0.00609	no	<0.050	0.161	no
April 2010 Avg.			0.0061	0.11376	no		0.0005	NA	NA	0.025	0.259	no
May 2010												
5/3/2010	CDM		0.0070	1.12558	no		<0.001	0.01914	no	<0.050	0.282	no
5/10/2010	CDM		0.007	1.03028	no		<0.001	0.01599	no	<0.050	0.258	no
5/17/2010	CDM		0.003	0.65612	no		<0.001	0.00639	no	<0.050	0.164	no
5/24/2010	CDM		0.007	1.10867	no		<0.001	0.01856	no	<0.050	0.278	no
5/24/2010 (duplicate)	CDM		0.008	1.12895	no		<0.001	0.01925	no	<0.050	0.283	no
May 2010 Avg.			0.0059	0.11252	no		0.0005	NA	NA	0.0250	0.256	no
June 2010												
6/1/2010	CDM		0.009	1.21610	no		<0.001	0.02239	no	<0.050	0.305	no

SUMMARY OF SURFACE WATER COMPLIANCE POINT SAMPLING

CP-001

		Dissolved Metals															
	Limit Type	Al	As	Cd			Cr (III)			Cr (VI)	Cu			Fe	Pb		
SD Surface Water Quality Standards	30-day	---	---		Cd standard based on hardness	Exceedence		Cr (III) standard based on hardness	Exceedence	---		Cu standard based on hardness	Exceedence	---		Pb standard based on hardness	Exceedence
	24-hour	---	---							---				---			
	Daily Max	---	---							---				---			
	Grab	---	---							---				---			
	General	---	---							---				---			
	Acute	---	0.340							0.016				---			
	Chronic	---	0.150							0.011				---			
	Admin Rule		74:51:01 App B	74:51:01 App B			74:51:01 App B			74:51:01 App B	74:51:01 App B				74:51:01 App B		
	ND Rule	ND = DL	ND = 1/2 DL	ND = 1/2 DL			ND = 1/2 DL			ND = 1/2 DL	ND = 1/2 DL			ND = DL	ND = 1/2 DL		
Date	Sampler																
6/7/2010	CDM	0.064		0.0007	0.00774	no		1.77330	na		0.00250	0.04962	no	<0.050	<0.001	0.28085	no
6/14/2010	CDM	0.067		0.0006	0.00525	no		1.27743	na		0.00700	0.03402	no	<0.050	0.0010	0.18539	no
6/21/2010	CDM	0.092		0.0008	0.00774	no		1.77330	na		0.00600	0.04962	no	<0.050	0.0010	0.28085	no
6/28/2010	CDM	0.082		0.0008	0.00774	no		1.77330	na		0.00250	0.04962	no	<0.050	<0.001	0.28085	no
June 2010 Avg.		0.074		0.00061	0.00064	no		0.2307	na		0.00410	0.02928	no	<0.050	0.0007	0.01094	no
July 2010																	
7/6/2010	CDM	0.367		0.0007	0.00774	no		1.77330	na		<0.005	0.04962	no	<0.050	<0.001	0.28085	no
7/12/2010	CDM	0.077		0.0009	0.00774	no		1.77330	na		<0.005	0.04962	no	<0.050	<0.001	0.28085	no
7/19/2010	CDM	0.031		0.0004	0.00380	no		0.97212	na		<0.005	0.02485	no	<0.050	<0.001	0.13036	no
7/26/2010	CDM	0.075		0.0009	0.00774	no		1.77330	na		0.00600	0.04962	no	<0.050	<0.001	0.28085	no
July 2010 Avg.		0.138		0.00073	0.00064	Yes		0.2307	na		0.00338	0.02928	no	<0.050	0.0005	0.01094	no
August 2010																	
8/2/2010	CDM	0.071		0.0008	0.00774	no		1.77330	na		<0.005	0.04962	no	<0.050	<0.001	0.28085	no
8/9/2010	CDM	0.076		0.0015	0.00774	no		1.77330	na		<0.005	0.04962	no	<0.050	<0.001	0.28085	no
8/16/2010	CDM	0.061		0.0009	0.00774	no		1.77330	na		<0.005	0.04962	no	<0.050	<0.001	0.28085	no
8/23/2010	CDM	0.072		0.0009	0.00774	no		1.77330	na		0.00500	0.04962	no	0.051	<0.001	0.28085	no
8/30/2010	CDM	0.069		0.0009	0.00774	no		1.77330	na		<0.005	0.04962	no	0.053	<0.001	0.28085	no
August 2010 Avg.		0.070		0.00105	0.00064	Yes		0.2307	na		0.00313	0.02928	no	0.051	0.0005	0.01094	no
September 2010																	
9/7/2010	CDM	0.065		0.0011	0.00774	no		1.77330	na		0.00600	0.04962	no	0.053	<0.001	0.28085	no
9/13/2010	CDM	0.058		0.0009	0.00774	no		1.77330	na		<0.005	0.04962	no	0.059	<0.001	0.28085	no
9/20/2010	CDM	0.059		0.0008	0.00774	no		1.77330	na		<0.005	0.04962	no	0.061	<0.001	0.28085	no
9/27/2010	CDM	0.066		0.0009	0.00774	no		1.77330	na		<0.005	0.04962	no	0.056	<0.001	0.28085	no
September 2010 Avg.		0.062		0.00093	0.00064	Yes		0.2307	na		0.00338	0.02928	no	0.057	0.0005	0.01094	no
October 2010																	
10/4/2010	CDM	0.063		0.0009	0.00774	no		1.77330	na		<0.005	0.04962	no	0.085	<0.001	0.28085	no
10/11/2010	CDM	0.049		0.0008	0.00774	no		1.77330	na		<0.005	0.04962	no	0.059	<0.001	0.28085	no
10/18/2010	CDM	0.088		0.0013	0.00774	no		1.77330	na		0.00500	0.04962	no	0.180	0.001	0.28085	no
10/25/2010	CDM	0.068		0.0010	0.00774	no		1.77330	na		<0.005	0.04962	no	0.118	<0.001	0.28085	no
October 2010 Avg.		0.067		0.00100	0.00064	Yes		0.2307	na		0.00313	0.02928	no	0.111	0.0006	0.01094	no
November 2010																	
11/1/2010	CDM	0.084		0.0012	0.00774	no		1.77330	na		<0.005	0.04962	no	0.178	<0.001	0.28085	no
11/8/2010	CDM	0.088		0.0012	0.00774	no		1.77330	na		0.00600	0.04962	no	0.151	<0.001	0.28085	no
11/15/2010	CDM	0.079		0.0010	0.00774	no		1.77330	na		0.00500	0.04962	no	0.202	<0.001	0.28085	no
11/22/2010	CDM	0.124		0.0010	0.00774	no		1.77330	na		<0.005	0.04962	no	0.243	<0.001	0.28085	no
11/30/2010	CDM	0.115		0.0012	0.00774	no		1.77330	na		<0.005	0.04962	no	0.246	<0.001	0.28085	no
November 2010 Avg.		0.102		0.00110	0.00064	Yes		0.2307	na		0.00400	0.02928	no	0.211	0.0005	0.01094	no
December 2010																	
12/6/2010	CDM	0.221		0.0012	0.00774	no		1.77330	na		0.00800	0.04962	no	0.332	<0.001	0.28085	no
12/13/2010	CDM	0.091		0.0011	0.00774	no		1.77330	na		<0.005	0.04962	no	0.202	<0.001	0.28085	no
12/20/2010	CDM	0.085		0.0013	0.00774	no		1.77330	na		<0.005	0.04962	no	0.269	<0.001	0.28085	no
12/27/2010	CDM	0.098		0.0012	0.00774	no		1.77330	na		<0.005	0.04962	no	0.241	<0.001	0.28085	no
December 2010 Avg.		0.124		0.00120	0.00064	Yes		0.2307	na		0.00388	0.02928	no	0.261	0.0005	0.01094	no
January 2011																	
1/3/2011	CDM	0.108		0.0015	0.00774	no		1.77330	na		<0.005	0.04962	no	0.303	<0.001	0.28085	no
1/10/2011	CDM	0.079		0.0012	0.00774	no		1.77330	na		<0.005	0.04962	no	0.248	<0.001	0.28085	no
1/17/2011	CDM	0.056		0.0010	0.00774	no		1.77330	na		<0.005	0.04962	no	0.186	<0.001	0.28085	no
1/24/2011	CDM	0.054		0.0011	0.00774	no		1.77330	na		<0.005	0.04962	no	0.237	<0.001	0.28085	no
1/31/2011	CDM			0.0011	0.00774	no		1.77330	na		<0.005	0.04962	no	0.145	<0.001	0.28085	no
January 2011 Avg.				0.00110	0.00064	Yes		0.2307	na		0.00250	0.02928	no	0.204	0.0005	0.01094	no
February 2011																	
2/7/2011	CDM			0.0012	0.00774	no		1.77330	na		<0.005	0.04962	no	0.204	<0.001	0.28085	no
2/14/2011	CDM			0.0010	0.00774	no		1.77330	na		<0.005	0.04962	no	0.214	<0.001	0.28085	no
2/21/2011	CDM			0.0010	0.00774	no		1.77330	na		<0.005	0.04962	no	0.061	<0.001	0.28085	no
2/28/2011	CDM			0.0007	0.00532	no		1.29302	na		<0.005	0.03450	no	<0.050	<0.001	0.18829	no
February 2011 Avg.				0.00098	0.00064	Yes		0.2307	na		0.00250	0.02928	no	0.132	0.0005	0.01094	no
March 2011																	
3/7/2011	CDM			0.0003	0.00481	no		1.18692	na		<0.005	0.03126	no	<0.050	<0.001	0.16872	no
3/14/2011	CDM			0.0008	0.00496	no		1.21857	na		<0.005	0.03222	no	<0.050	<0.001	0.17452	no
3/21/2011	CDM			0.0022	0.00395	no		1.00517	na		0.00600	0.02582	no	<0.050	<0.001	0.13614	no
3/28/2011	CDM			0.0008	0.00328	no		0.85865	na		<0.005	0.02154	no	<0.050	<0.001	0.11090	no
March 2011 Avg.				0.00103	0.00042	Yes		0.1391	na		0.00338	0.01728	no	0.050	0.0005	0.00575	no

April 2011

SUMMARY OF SURFACE WATER COMPLIANCE I

CP-001		Dissolved Metals										
	Limit Type	Hg	Ni			Se	Ag			Zn		
SD Surface Water Quality Standards	30-day	---		Ni standard based on hardness	Exceedence	---		Ag standard based on hardness	Exceedence		Zn standard based on hardness	Exceedence
	24-hour	---				---						
	Daily Max	---				---						
	Grab	---				---						
	General	---				---						
	Acute	0.00140				---						
	Chronic	0.00077				0.0046						
	Admin Rule	74:51:01 App B	74:51:01 App B			74:51:01 App B	74:51:01 App B			74:51:01 App B		
	ND Rule	ND = 1/2 DL	ND = 1/2 DL			ND = 1/2 DL	ND = 1/2 DL			ND = 1/2 DL		
Date	Sampler											
6/7/2010	CDM		0.015	1.51289	no		<0.001	0.03491	no	<0.050	0.379	no
6/14/2010	CDM		0.009	1.07812	no		<0.001	0.01753	no	<0.050	0.270	no
6/21/2010	CDM		0.010	1.51289	no		<0.001	0.03491	no	<0.050	0.379	no
6/28/2010	CDM		0.011	1.51289	no		<0.001	0.03491	no	<0.050	0.379	no
June 2010 Avg.			0.0108	0.16804	no		0.0005	NA	NA	0.0250	0.382	no
July 2010												
7/6/2010	CDM		0.012	1.51289	no		<0.001	0.03491	no	<0.050	0.379	no
7/12/2010	CDM		0.015	1.51289	no		<0.001	0.03491	no	<0.050	0.379	no
7/19/2010	CDM		<0.005	0.81309	no		<0.001	0.00988	no	<0.050	0.204	no
7/26/2010	CDM		0.016	1.51289	no		<0.001	0.03491	no	<0.050	0.379	no
July 2010 Avg.			0.0114	0.16804	no		0.0005	NA	NA	0.0250	0.382	no
August 2010												
8/2/2010	CDM		0.018	1.51289	no		<0.001	0.03491	no	<0.050	0.379	no
8/9/2010	CDM		0.015	1.51289	no		<0.001	0.03491	no	<0.050	0.379	no
8/16/2010	CDM		0.020	1.51289	no		<0.001	0.03491	no	<0.050	0.379	no
8/23/2010	CDM		0.015	1.51289	no		<0.001	0.03491	no	<0.050	0.379	no
8/30/2010	CDM		0.022	1.51289	no		<0.001	0.03491	no	<0.050	0.379	no
August 2010 Avg.			0.0180	0.16804	no		0.0005	NA	NA	0.025	0.382	no
September 2010												
9/7/2010	CDM		0.011	1.51289	no		<0.001	0.03491	no	<0.050	0.379	no
9/13/2010	CDM		0.012	1.51289	no		<0.001	0.03491	no	<0.050	0.379	no
9/20/2010	CDM		0.014	1.51289	no		<0.001	0.03491	no	<0.050	0.379	no
9/27/2010	CDM		0.018	1.51289	no		<0.001	0.03491	no	<0.050	0.379	no
September 2010 Avg.			0.0138	0.16804	no		0.0005	NA	NA	0.025	0.382	no
October 2010												
10/4/2010	CDM		0.019	1.51289	no		<0.001	0.03491	no	<0.050	0.379	no
10/11/2010	CDM		0.010	1.51289	no		<0.001	0.03491	no	<0.050	0.379	no
10/18/2010	CDM		0.012	1.51289	no		<0.001	0.03491	no	0.055	0.379	no
10/25/2010	CDM		0.015	1.51289	no		<0.001	0.03491	no	<0.050	0.379	no
October 2010 Avg.			0.0140	0.16804	no		0.0005	NA	NA	0.033	0.382	no
November 2010												
11/1/2010	CDM		0.018	1.51289	no		<0.001	0.03491	no	0.053	0.379	no
11/8/2010	CDM		0.021	1.51289	no		<0.001	0.03491	no	<0.050	0.379	no
11/15/2010	CDM		0.013	1.51289	no		<0.001	0.03491	no	0.050	0.379	no
11/22/2010	CDM		0.021	1.51289	no		<0.001	0.03491	no	0.058	0.379	no
11/30/2010	CDM		0.015	1.51289	no		<0.001	0.03491	no	0.057	0.379	no
November 2010 Avg.			0.0175	0.16804	no		0.0005	NA	NA	0.048	0.382	no
December 2010												
12/6/2010	CDM		0.012	1.51289	no		<0.001	0.03491	no	0.059	0.379	no
12/13/2010	CDM		0.013	1.51289	no		<0.001	0.03491	no	0.058	0.379	no
12/20/2010	CDM		0.012	1.51289	no		<0.001	0.03491	no	0.065	0.379	no
12/27/2010	CDM		0.012	1.51289	no		<0.001	0.03491	no	0.058	0.379	no
December 2010 Avg.			0.0123	0.16804	no		0.0005	NA	NA	0.060	0.382	no
January 2011												
1/3/2011	CDM		0.014	1.51289	no		<0.001	0.03491	no	0.071	0.379	no
1/10/2011	CDM		0.014	1.51289	no		<0.001	0.03491	no	0.073	0.379	no
1/17/2011	CDM		0.011	1.51289	no		<0.001	0.03491	no	0.059	0.379	no
1/24/2011	CDM		0.013	1.51289	no		<0.001	0.03491	no	0.064	0.379	no
1/31/2011	CDM		0.015	1.51289	no		<0.001	0.03491	no	0.065	0.379	no
January 2011 Avg.			0.0133	0.16804	no		0.0005	NA	NA	0.065	0.382	no
February 2011												
2/7/2011	CDM		0.015	1.51289	no		<0.001	0.03491	no	0.065	0.379	no
2/14/2011	CDM		0.010	1.51289	no		<0.001	0.03491	no	0.067	0.379	no
2/21/2011	CDM		0.008	1.51289	no		<0.001	0.03491	no	<0.050	0.379	no
2/28/2011	CDM		0.007	1.09172	no		<0.001	0.01798	no	<0.050	0.274	no
February 2011 Avg.			0.0100	0.16804	no		0.0005	NA	NA	0.046	0.382	no
March 2011												
3/7/2011	CDM		0.007	0.99931	no		<0.001	0.01502	no	<0.050	0.250	no
3/14/2011	CDM		0.010	1.02684	no		<0.001	0.01588	no	0.061	0.257	no
3/21/2011	CDM		0.013	0.84166	no		<0.001	0.01060	no	0.103	0.211	no
3/28/2011	CDM		0.009	0.71525	no		<0.001	0.00761	no	<0.050	0.179	no
March 2011 Avg.			0.0098	0.09967	no		0.0005	NA	NA	0.054	0.227	no

April 2011

SUMMARY OF SURFACE WATER COMPLIANCE POINT SAMPLING

CP-001

		Dissolved Metals															
	Limit Type	Al	As	Cd			Cr (III)			Cr (VI)	Cu			Fe	Pb		
SD Surface Water Quality Standards	30-day	---	---		Cd standard based on hardness	Exceedence		Cr (III) standard based on hardness	Exceedence	---		Cu standard based on hardness	Exceedence	---		Pb standard based on hardness	Exceedence
	24-hour	---	---							---				---			
	Daily Max	---	---							---				---			
	Grab	---	---							---				---			
	General	---	---							---				---			
	Acute	---	0.340							0.016				---			
	Chronic	---	0.150							0.011				---			
	Admin Rule		74:51:01 App B	74:51:01 App B			74:51:01 App B			74:51:01 App B	74:51:01 App B				74:51:01 App B		
	ND Rule	ND = DL	ND = 1/2 DL	ND = 1/2 DL			ND = 1/2 DL			ND = 1/2 DL	ND = 1/2 DL			ND = DL	ND = 1/2 DL		
Date	Sampler																
4/4/2011	CDM			0.0010	0.00262	no		0.71079	na		0.00600	0.01733	no	0.097	<0.001	0.08654	no
4/11/2011	CDM			0.0007	0.00211	no		0.59299	na		0.00600	0.01407	no	0.150	<0.001	0.06810	no
4/18/2011	CDM			0.0006	0.00233	no		0.64341	na		<0.005	0.01546	no	0.071	<0.001	0.07588	no
4/25/2011	CDM			0.0007	0.00207	no		0.58372	na		<0.005	0.01382	no	0.061	<0.001	0.06669	no
April 2011 Avg.				0.00075	0.00027	Yes		0.0824	na		0.00425	0.01000	no	0.095	0.0005	0.00289	no
May 2011																	
5/2/2011	CDM			0.0007	0.00406	no		1.02980	na		<0.005	0.02655	no	<0.050	<0.001	0.14048	no
5/9/2011	CDM			0.0006	0.00403	no		1.02160	na		<0.005	0.02631	no	<0.050	<0.001	0.13903	no
5/16/2011	CDM			0.0009	0.00479	no		1.18295	na		<0.005	0.03114	no	<0.050	<0.001	0.16799	no
5/23/2011	CDM			0.0005	0.00147	no		0.43833	na		<0.005	0.00994	no	0.109	<0.001	0.04550	no
5/31/2011	CDM			0.0010	0.00343	no		0.89259	na		0.00600	0.02252	no	<0.050	<0.001	0.11666	no
May 2011 Avg.				0.00075	0.00037	Yes		0.1199	na		0.00338	0.01479	no	0.065	0.0005	0.00474	no
June 2011																	
6/6/2011	CDM			0.0007	0.00504	no		1.23433	na		<0.005	0.03270	no	<0.050	<0.001	0.17742	no
6/13/2011	CDM			0.0009	0.00674	no		1.57843	na		<0.005	0.04340	no	<0.050	<0.001	0.24260	no
6/20/2011	CDM			0.0010	0.00774	no		1.77330	na		<0.005	0.04962	no	<0.050	<0.001	0.28085	no
6/27/2011	CDM			0.0015	0.00730	no		1.68934	na		0.00600	0.04692	no	<0.050	<0.001	0.26427	no
June 2011 Avg.				0.00103	0.00064	Yes		0.2276	na		0.00338	0.02887	no	0.050	0.0005	0.01076	no
July 2011																	
7/5/2011	CDM			0.0006	0.00351	no		0.90946	na		<0.005	0.02302	no	<0.050	<0.001	0.11954	no
7/11/2011	CDM			0.0008	0.00774	no		1.77330	na		<0.005	0.04962	no	<0.050	<0.001	0.28085	no
7/18/2011	CDM			0.0011	0.00774	no		1.77330	na		<0.005	0.04962	no	<0.050	<0.001	0.28085	no
7/25/2011	CDM			0.0009	0.00774	no		1.77330	na		<0.005	0.04962	no	<0.050	<0.001	0.28085	no
July 2011 Avg.				0.00085	0.00064	Yes		0.2307	na		0.00250	0.02928	no	0.050	0.0005	0.01094	no
August 2011																	
8/1/2011	CDM			0.0009	0.00774	no		1.77330	na		0.00600	0.04962	no	<0.050	<0.001	0.28085	no
8/8/2011	CDM			0.0009	0.00774	no		1.77330	na		0.00500	0.04962	no	<0.050	<0.001	0.28085	no
8/15/2011	CDM			0.0008	0.00774	no		1.77330	na		<0.005	0.04962	no	<0.050	<0.001	0.28085	no
8/22/2011	CDM			0.0006	0.00774	no		1.77330	na		<0.005	0.04962	no	<0.050	<0.001	0.28085	no
8/29/2011	CDM			0.0008	0.00774	no		1.77330	na		<0.005	0.04962	no	<0.050	<0.001	0.28085	no
August 2011 Avg.				0.00078	0.00064	Yes		0.2307	na		0.00313	0.02928	no	0.050	0.0005	0.01094	no
September 2011																	
9/6/2011	CDM			0.0006	0.00774	no		1.77330	na		<0.005	0.04962	no	0.060	<0.001	0.28085	no
9/12/2011	CDM			0.0008	0.00774	no		1.77330	na		<0.005	0.04962	no	<0.050	<0.001	0.28085	no
9/12/2011 duplicate	CDM			0.0009	0.00774	no		1.77330	na		<0.005	0.04962	no	0.056	<0.001	0.28085	no
9/19/2011	CDM			0.0008	0.00774	no		1.77330	na		<0.005	0.04962	no	0.054	<0.001	0.28085	no
9/26/2011	CDM			0.0008	0.00774	no		1.77330	na		<0.005	0.04962	no	<0.050	<0.001	0.28085	no
September 2011 Avg.				0.00083	0.00064	Yes		0.2307	na		0.00250	0.02928	no	0.053	0.0005	0.01094	no
October 2011																	
10/3/2011	CDM			0.0007	0.00774	no		1.77330	na		<0.005	0.04962	no	<0.050	<0.001	0.28085	no
10/10/2011	CDM			0.0008	0.00774	no		1.77330	na		<0.005	0.04962	no	0.063	<0.001	0.28085	no
10/17/2011	CDM			0.0009	0.00774	no		1.77330	na		<0.005	0.04962	no	0.089	<0.001	0.28085	no
10/24/2011	CDM			0.0010	0.00774	no		1.77330	na		<0.005	0.04962	no	0.098	<0.001	0.28085	no

SUMMARY OF SURFACE WATER COMPLIANCE I

CP-001		Dissolved Metals										
	Limit Type	Hg	Ni			Se	Ag			Zn		
SD Surface Water Quality Standards	30-day	---		Ni standard based on hardness	Exceedence	---		Ag standard based on hardness	Exceedence		Zn standard based on hardness	Exceedence
	24-hour	---				---						
	Daily Max	---				---						
	Grab	---				---						
	General	---				---						
	Acute	0.00140				---						
	Chronic	0.00077				0.0046						
	Admin Rule	74:51:01 App B	74:51:01 App B			74:51:01 App B	74:51:01 App B			74:51:01 App B		
	ND Rule	ND = 1/2 DL	ND = 1/2 DL			ND = 1/2 DL	ND = 1/2 DL			ND = 1/2 DL		
Date	Sampler											
4/4/2011	CDM		0.008	0.58840	no		<0.001	0.00512	no	0.056	0.147	no
4/11/2011	CDM		0.005	0.48797	no		<0.001	0.00350	no	<0.050	0.122	no
4/18/2011	CDM		0.005	0.53088	no		<0.001	0.00415	no	<0.050	0.133	no
4/25/2011	CDM		0.005	0.48009	no		<0.001	0.00338	no	<0.050	0.120	no
April 2011 Avg.			0.0058	0.05800	no		0.0005	NA	NA	0.033	0.132	no
May 2011												
5/2/2011	CDM		<0.005	0.86297	no		<0.001	0.01115	no	<0.050	0.216	no
5/9/2011	CDM		<0.005	0.85588	no		<0.001	0.01096	no	<0.050	0.214	no
5/16/2011	CDM		0.006	0.99586	no		<0.001	0.01492	no	<0.050	0.250	no
5/23/2011	CDM		<0.005	0.35712	no		<0.001	0.00185	no	<0.050	0.089	no
5/31/2011	CDM		0.006	0.74448	no		<0.001	0.00826	no	<0.050	0.186	no
May 2011 Avg.			0.0043	0.08548	no		0.0005	NA	NA	0.025	0.194	no
June 2011												
6/6/2011	CDM		0.006	1.04056	no		<0.001	0.01631	no	<0.050	0.261	no
6/13/2011	CDM		0.007	1.34148	no		<0.001	0.02734	no	<0.050	0.336	no
6/20/2011	CDM		0.008	1.51289	no		<0.001	0.03491	no	<0.050	0.379	no
6/27/2011	CDM		0.011	1.43896	no		<0.001	0.03153	no	0.053	0.361	no
June 2011 Avg.			0.0080	0.16572	no		0.0005	NA	NA	0.032	0.377	no
July 2011												
7/5/2011	CDM		<0.005	0.75901	no		<0.001	0.00859	no	<0.050	0.190	no
7/11/2011	CDM		0.008	1.51289	no		<0.001	0.03491	no	<0.050	0.379	no
7/18/2011	CDM		0.008	1.51289	no		<0.001	0.03491	no	<0.050	0.379	no
7/25/2011	CDM		0.009	1.51289	no		<0.001	0.03491	no	<0.050	0.379	no
July 2011 Avg.			0.0069	0.16804	no		0.0005	NA	NA	0.025	0.382	no
August 2011												
8/1/2011	CDM		0.010	1.51289	no		<0.001	0.03491	no	<0.050	0.379	no
8/8/2011	CDM		0.011	1.51289	no		<0.001	0.03491	no	<0.050	0.379	no
8/15/2011	CDM		0.009	1.51289	no		<0.001	0.03491	no	<0.050	0.379	no
8/22/2011	CDM		0.011	1.51289	no		<0.001	0.03491	no	<0.050	0.379	no
8/29/2011	CDM		0.015	1.51289	no		<0.001	0.03491	no	<0.050	0.379	no
August 2011 Avg.			0.0115	0.16804	no		0.0005	NA	NA	0.025	0.382	no
September 2011												
9/6/2011	CDM		0.010	1.51289	no		<0.001	0.03491	no	<0.050	0.379	no
9/12/2011	CDM		0.009	1.51289	no		<0.001	0.03491	no	<0.050	0.379	no
9/12/2011 duplicate	CDM		0.010	1.51289	no		<0.001	0.03491	no	<0.050	0.379	no
9/19/2011	CDM		0.014	1.51289	no		<0.001	0.03491	no	<0.050	0.379	no
9/26/2011	CDM		0.015	1.51289	no		<0.001	0.03491	no	<0.050	0.379	no
September 2011 Avg.			0.0120	0.16804	no		0.0005	NA	NA	0.025	0.382	no
October 2011												
10/3/2011	CDM		0.016	1.51289	no		<0.001	0.03491	no	<0.050	0.379	no
10/10/2011	CDM		0.013	1.51289	no		<0.001	0.03491	no	<0.050	0.379	no
10/17/2011	CDM		0.018	1.51289	no		<0.001	0.03491	no	0.052	0.379	no
10/24/2011	CDM		0.008	1.51289	no		<0.001	0.03491	no	<0.050	0.379	no

SUMMARY OF SURFACE WATER COMPLIANCE POINT SAMPLING

CP- 003 (Weekly samples when flow is present)

Units are mg/l unless otherwise noted

		General Constituents											
	Limit Type	Temperature (deg C)	Conductivity (umhos/cm)	pH (s.u.)	TDS	TSS	Alkalinity	Ammonia			Nitrate	Sulfate	WAD CN
SD Surface Water Quality Standards	30-day	---	2500	---	2500	---	750	Equation 3	Ammonia standard based on pH and Temp.	Exceedence	50	---	---
	24-hour	---	---	---	---	---	---	---			---	---	---
	Daily Max	---	4375	---	4375	---	1313	Equation 1			88	---	---
	Grab	---	---	---	---	---	---	---			---	---	---
	General	---	---	6.5-9.5	---	---	---	---			---	---	---
	Acute	---	---	---	---	---	---	---			---	---	0.022
	Chronic	---	---	---	---	---	---	---			---	---	0.0052
	Admin Rule		74:51:01:53	74:51:01:52	74:51:01:53		74:51:01:52	74:51:01:46			74:51:01:52		74:51:01 App B
	ND Rule	ND = No Val	ND = No Val	ND = No Val	ND = DL	ND = DL	ND = No Val	ND = 1/2 DL			ND = No Val	ND = No Val	ND = 1/2 DL
Date	Sampler												
April 2001 Averages	FHI			6.77		<10		<0.050	6.33	no	0.644		0.0050
May 2001 Averages	FHI			6.78		10		<0.050	6.31	no	0.641		0.0050
June 2001 Averages	FHI			6.74		15		<0.050	6.38	no	1.006		0.0050
July 2001 Averages	FHI			6.48		10			6.68	na			
October 2001 Averages	FHI			4.73		13		<0.050	7.08	no	9.800		0.0050
November 2001 Averages	FHI			4.53		<10		<0.050	7.08	no	6.170		0.0050
February 2002 Averages	FHI			4.41		<10		0.083	7.08	no	9.760		0.0050
March 2002 Averages	FHI			4.34		<10		0.139	7.08	no	5.270		0.0050
April 2002 Averages	FHI			4.77		<10		0.079	7.08	no	2.890		0.0050
May 2002 Averages	FHI			5.03		34		<0.050	7.07	no	0.800		0.0050
September 2002 Averages	CDM			5.88		11		0.064	6.98	no	2.750		0.0050
January 2003 Averages	CDM			4.22		<10		0.134	7.09	no	4.570		0.0050
February 2003 Averages	CDM			4.75		<12		0.082	7.08	no	3.210		0.0050
March 2003 Averages	CDM			6.12		<10		<0.050	6.90	no	1.481		0.0050
April 2003 Averages	CDM			5.80		<10		<0.050	7.00	no	0.896		0.0050
May 2003 Averages	CDM			6.92		46.25		<0.050	6.07	no	0.817		0.0050
June 2003 Averages	CDM			6.84		<10		<0.050	6.22	no	1.019		0.0050
July 2003 Averages	CDM			6.50		10		<0.050	6.66	no	0.610		0.0050
August 2003 Averages	CDM			6.32		<10		<0.050	6.80	no	2.040		0.0050
September 2003 Averages	CDM			6.18		<10		<0.050	6.88	no	1.680		0.0050
March 2004													
3/9/2004	CDM	0.8		6.45		<10		<0.050	33.20	no	2.010		<0.010
3/22/2004	CDM	1.6		6.79		<10		<0.050	28.23	no	1.240		<0.010
3/29/2004	CDM	3.1		6.94		<10			25.35	na			
March 2004 Avg's	CDM	1.8		6.73		10.0		0.025	6.40	no	1.625		0.0050
April 2004													
4/5/2004	CDM	5.0		6.88		<10		<0.050	26.54	no	0.436		<0.010
May 2004													
5/24/2004	CDM	8.0		6.85		37		<0.050	27.12	no	0.541		<0.010
5/31/2004	CDM	tba		6.86		10		<0.050	26.93	no	0.158		<0.010
March 2005													
3/28/2005	CDM	1.7		6.83		<10		<0.050	27.49	no	1.080		<0.010
April 2005													
4/24/2005	CDM	n/a		6.90		<10		<0.050	26.15	no	0.920		<0.010
May 2005													
5/9/2005	CDM	5.9		7.22		<10			19.28	na			
5/16/2005	CDM	6.3		7.14		<10		<0.050	21.06	no	0.768		<0.010
5/30/2005	CDM	6.8		6.98		<10		<0.050	24.52	no	0.076		<0.010
June 2005													
6/6/2005	CDM	8.7		7.34		<10		<0.050	16.63	no	<0.050		<0.010
6/13/2005	CDM	8.8		7.10		18		<0.050	21.94	no	0.728		<0.010
6/20/2005	CDM	11.0		7.22		<11			19.28	na			
6/27/2005	CDM	11.7		7.05		<10			23.03	na			
August 2005													
8/2/2005	CDM	17.5		6.70		<10		<0.050	29.76	no	<0.050		<0.010
March 2006													
3/3/2006	CDM	2.2		6.98		<10		<0.050	24.52	no	1.770		<0.010
3/6/2006	CDM	3.7		7.08		<10		<0.050	22.38	no	1.550		<0.010
3/8/2006	CDM	3.5		7.17		<10		<0.050	20.40	no	1.360		<0.010
April 2006													
4/10/2006	CDM	6.2		7.43		<10		<0.050	14.71	no	1.770		<0.010
4/24/2006	CDM	5.9		7.33		<10		<0.050	16.85	no	1.880		<0.010
May 2006													
5/1/2006	CDM	8.6		7.44		<10		<0.050	14.50	no	2.870		<0.010
5/8/2006	CDM	7.6		7.30		<10			17.51	na			
5/15/2006	CDM	7.3		7.21		<10		<0.050	19.50	no	1.230		<0.010
5/22/2006	CDM	17.0		7.36		<10			16.20	na			
5/30/2006	CDM	14.0		7.40		<10		<0.050	15.34	no	0.333		<0.010
May 2006 Avg's		10.9		7.34		10.0		0.025	4.90	no	1.478		0.0050
June 2006													
6/5/2006	CDM	18.0		7.17		<10		<0.050	20.40	no	0.333		<0.010
6/12/2006	CDM	16.0		7.13		<10			21.28	na			
September 2006													
9/25/2006	CDM	10.9		7.08		<10		<0.050	22.38	no	2.640		<0.010
October 2006													
10/3/2006	CDM	10.2		7.13		<10		<0.050	21.28	no	0.080		<0.010
10/30/2006	CDM	8.7		7.30		<10		<0.050	17.51	no	0.418		<0.010
March 2007													
3/12/2007	CDM	1.0		7.38		<10		<0.050	15.77	no	0.588		<0.010
3/19/2007	CDM	5.2		7.20		<10			19.73	na			
3/26/2007	CDM	3.8	110	7.34		<10			16.63	na			
April 2007													
4/3/2007	CDM	3.5		7.31		<10		<0.050	17.29	no	0.674		<0.010
4/9/2007	CDM	2.2		7.35		<10			16.41	na			
4/16/2007	CDM	4.4		7.28		<10		<0.050	17.95	no	0.420		<0.010
4/23/2007	CDM	4.0		7.24		<10			18.84	na			
4/30/2007	CDM	5.5		7.20		<10			19.73	na			
April 2007 Avg's	CDM	3.9		7.28		10.0		0.025	18.04	no	0.547		0.0050
May 2007													
5/7/2007	CDM	6.3		7.35		<10		<0.050	16.41	no	1.560		<0.010
5/14/2007	CDM	8.0		7.24		<10			18.84	na			
5/21/2007	CDM	9.6		7.24		<10		<0.050	18.84	no	0.177		<0.010
5/29/2007	CDM	8.3		7.29		<10			17.73	na			
May 2007 Avg's	CDM	8.1		7.28		10.0		0.025	17.95	no	0.869		0.0050
June 2007													
6/5/2007	CDM	8.4		6.60		10		<0.050	31.28	no	4.170		<0.010
6/11/2007	CDM	8.6		7.20		<10		<0.050	19.73	no	1.580		<0.010
6/18/2007	CDM	8.9		7.06		<10		<0.050	22.82	no	0.113		<0.010
March 2008													
3/4/2008	CDM	2.5		7.23		<10		<0.050	19.06	no	2.040		<0.010
3/10/2008	CDM	1.1		7.32		<10		<0.050	17.07	no	1.160		<0.010
3/31/2008	CDM	7.3		7.43		<10		<0.050	14.71	no	1.100		<0.010

April 2008

SUMMARY OF SURFACE WATER COMPLIANCE POINT SAMPLING

CP- 003 (Weekly samples when flow is present)

Units are mg/l unless otherwise noted

		General Constituents											
	Limit Type	Temperature (deg C)	Conductivity (umhos/cm)	pH (s.u.)	TDS	TSS	Alkalinity	Ammonia			Nitrate	Sulfate	WAD CN
SD Surface Water Quality Standards	30-day	---	2500	---	2500	---	750	Equation 3	Ammonia standard based on pH and Temp.	Exceedence	50	---	---
	24-hour	---	---	---	---	---	---	---			---	---	---
	Daily Max	---	4375	---	4375	---	1313	Equation 1			88	---	---
	Grab	---	---	---	---	---	---	---			---	---	---
	General	---	---	6.5-9.5	---	---	---	---			---	---	---
	Acute	---	---	---	---	---	---	---			---	---	0.022
	Chronic	---	---	---	---	---	---	---			---	---	0.0052
	Admin Rule		74:51:01:53	74:51:01:52	74:51:01:53		74:51:01:52	74:51:01:46			74:51:01:52		74:51:01 App B
	ND Rule	ND = No Val	ND = No Val	ND = No Val	ND = DL	ND = DL	ND = No Val	ND = 1/2 DL			ND = No Val	ND = No Val	ND = 1/2 DL
Date	Sampler												
4/7/2008	CDM	0.5		7.45		<10		<0.050	14.30	no	0.963		<0.010
4/14/2008	CDM	4.8		7.43		<10		<0.050	14.71	no	1.180		<0.010
4/22/2008	CDM	6.7		6.50		10		<0.050	32.61	no	3.940		<0.010
4/28/2008	CDM	10.8		7.17		<10		<0.050	20.40	no	2.460		<0.010
April 2008 Avg's	CDM	5.7		7.14		10.0		0.025	5.54	no	2.136		0.0050
May 2008													
5/6/2008	CDM	5.2		7.47		<10		<0.050	13.89	no	0.526		<0.010
5/12/2008	CDM	7.0		5.42		20		<0.050	38.37	no	2.400		<0.010
5/19/2008	CDM	10.1		5.27		14		<0.050	38.55	no	2.520		<0.010
5/27/2008	CDM	8.4		5.77		29		<0.050	37.63	no	1.800		<0.010
May 2008 Avg's	CDM	7.7		5.98		18.3		0.025	6.95	no	1.812		0.0050
June 2008													
6/2/2008	CDM	10.4		6.83		<10		<0.050	27.49	no	1.010		<0.010
6/9/2008	CDM	8.1		4.77		13		<0.050	38.86	no	1.500		<0.010
6/16/2008	CDM	10.2		6.82		<10		<0.050	27.68	no	0.492		<0.010
6/23/2008	CDM	14.8		6.86		<10		<0.050	26.93	no	0.370		<0.010
6/30/2008	CDM	10.9		6.99		<10		<0.050	24.31	no	<0.050		<0.010
June 2008 Avg's	CDM	10.9		6.45		10.6		0.025	6.70	no	0.843		0.0050
July 2008													
7/7/2008	CDM	11.0		7.16		<10		<0.050	20.62	no	1.030		<0.010
7/21/2008	CDM	12.9		7.29		<10		<0.050	17.73	no	0.103		<0.010
7/28/2008	CDM	14.7		7.18		<10		<0.050	20.17	no	0.074		<0.010
July 2008 Avg's	CDM	12.9		7.21		10.0		0.025	5.33	no	0.402		0.0050
August 2008													
(no samples taken this month)													
September 2008													
(no samples taken this month)													
October 2008													
(no samples taken this month)													
November 2008													
11/17/2008	CDM	9.3		7.35		<10		<0.050	16.41	no	0.262		<0.010
11/24/2008	CDM	1.7		7.39		<10		<0.050	15.55	no	0.137		<0.010
December 2008													
(no samples taken this month)													
January 2009													
(no samples taken this month)													
February 2009													
(no samples taken this month)													
March 2009													
3/9/2009	CDM	1.9		7.31		<10		<0.050	17.29	no	0.522		<0.010
3/16/2009	CDM	1.1		7.48		11		<0.050	13.68	no	0.339		<0.010
3/23/2009	CDM	7.9		7.22		<10		<0.050	19.28	no	1.520		<0.010
March 2009 Avg's	CDM	3.6		7.34		10.3		0.025	4.92	no	0.794		0.0050
April 2009													
4/1/2009	CDM	2.5		7.33		<10		<0.050	16.85	no	<0.05		<0.010
4/6/2009	CDM	1.6		7.31		<10		<0.050	17.29	no	0.518		<0.010
4/14/2009	CDM	5.3		6.85		34		<0.050	27.12	no	1.180		<0.010
4/20/2009	CDM	8.3		6.40		<10		<0.050	33.74	no	1.560		<0.010
4/27/2009	CDM	4.9		6.99		<10		<0.050	24.31	no	1.070		<0.010
April 2009 Avg's	CDM	4.5		6.98		14.8		0.025	5.95	no	1.082		0.0050
May 2009													
5/4/2009	CDM	4.1		7.35		<10		<0.050	16.41	no	0.135		<0.010
5/11/2009	CDM	4.9		7.39		<10		<0.050	15.55	no	<0.050		<0.010
5/18/2009	CDM	7.7		7.27		<10		<0.050	18.17	no	<0.050		<0.010
5/26/2009	CDM	8.0		7.35		<10		<0.050	16.41	no	0.184		<0.010
May 2009 Avg's	CDM	6.2		7.34		10.0		0.025	4.91	no	0.160		0.0050
June 2009													
6/1/2009	CDM	11.5		7.34		<10		<0.050	16.63	no	<0.050		<0.010
6/8/2009	CDM	6.8		7.34		<10		<0.050	16.63	no	0.093		<0.010
6/15/2009	CDM	12.0	2600	7.41		<10		<0.050	15.13	no	0.051		<0.010
6/22/2009	CDM	10.8		7.37		<10		<0.050	15.98	no	<0.050		<0.010
6/29/2009	CDM	12.2		7.26		<10		<0.050	18.39	no	0.525		<0.010
June 2009 Avg's	CDM	10.7	2600	7.34		10.0		0.025	4.90	no	0.223		0.0050
July 2009													
7/7/2009 - No Sample									39.00	na			
7/13/2009	CDM	18.7		7.37		<10		<0.050	15.98	no	0.236		<0.010
7/20/2009	CDM	14.0		7.38		<10		<0.050	15.77	no	<0.050		<0.010
7/27/2009 - No Sample									39.00	na			
July 2009 Avg.		16.4		7.38		10.0		0.025	4.26	no	0.236		0.0050
August 2009													
(no samples taken this month)													
September 2009													
9/8/2009 No Sample													
9/14/2009	CDM	11.6		7.47		<10		<0.050	13.89	no	0.601		<0.010
October 2009													
10/19/2009	CDM	5.7		7.79		<10		<0.050	8.25	no	0.243		<0.010
10/23/2009	CDM	3.7		9.84		10		<0.050	0.36	no	0.358		<0.010
10/26/2009	CDM	12.7		8.48		<10		<0.050	2.22	no	0.392		<0.010
October 2009 Avg.		7.4		8.70		10.0		0.025	0.68	no	0.331		0.0050
November 2009													
11/2/2009	CDM	2.6		8.23		<10		<0.050	3.61	no	0.582		<0.010
11/9/2009	CDM	0.8		7.74		<10		<0.050	9.01	no	0.319		<0.010
11/16/2009	CDM	-0.1		7.71		12		<0.050	9.48	no	0.299		<0.010
11/23/2009	CDM	5.6		7.63		<10		<0.050	10.84	no	0.304		<0.010
November 2009 Avg.		2.2		7.83		10.5		0.025	3.01	no	0.376		0.0050
December 2009													
(no samples taken this month)													
January 2010													
(no samples taken this month)													
February 2010													
(no samples taken this month)													

SUMMARY OF SURFACE WATER COMPLIANCE POINT SAMPLING

CP- 003 (Weekly samples when flow is present)

Units are mg/l unless otherwise noted

		General Constituents											
	Limit Type	Temperature (deg C)	Conductivity (umhos/cm)	pH (s.u.)	TDS	TSS	Alkalinity	Ammonia			Nitrate	Sulfate	WAD CN
SD Surface Water Quality Standards	30-day	---	2500	---	2500	---	750	Equation 3	Ammonia standard based on pH and Temp.	Exceedence	50	---	---
	24-hour	---	---	---	---	---	---	---			---	---	---
	Daily Max	---	4375	---	4375	---	1313	Equation 1			88	---	---
	Grab	---	---	---	---	---	---	---			---	---	---
	General	---	---	6.5-9.5	---	---	---	---			---	---	---
	Acute	---	---	---	---	---	---	---			---	---	0.022
	Chronic	---	---	---	---	---	---	---			---	---	0.0052
	Admin Rule		74:51:01:53	74:51:01:52	74:51:01:53		74:51:01:52	74:51:01:46			74:51:01:52		74:51:01 App B
	ND Rule	ND = No Val	ND = No Val	ND = No Val	ND = DL	ND = DL	ND = No Val	ND = 1/2 DL			ND = No Val	ND = No Val	ND = 1/2 DL
Date	Sampler												
March 2010													
3/8/2010	CDM	5.7		11.20		<10		<0.050	0.28	no	0.545		<0.010
3/15/2010	CDM	1.4		9.15		<10		0.054	0.71	no	0.293		<0.010
3/22/2010	CDM	1.4		8.88		<10		0.052	1.07	no	0.463		<0.010
3/29/2010	CDM	2.9		8.71		<10		<0.050	1.45	no	1.070		<0.010
March 2009 Avg.		2.9		9.49		10.0		0.039	0.17	no	0.593		0.0050
April 2010													
4/5/2010	CDM	2.3		8.08		<10		<0.050	4.82	no	0.265		<0.010
4/12/2010	CDM	9.3		8.92		326		<0.050	1.01	no	0.233		<0.010
4/19/2010	CDM	7.1		7.82		<10		<0.050	7.82	no	0.103		<0.010
4/26/2010	CDM	1.9		9.03		<10		<0.050	0.84	no	0.173		<0.010
April 2009 Avg.		5.2		8.46		89.0		0.025	1.07	no	0.194		0.0050
May 2010													
5/3/2010	CDM	3.2		8.13		<10		<0.050	4.38	no	1.160		<0.010
5/10/2010	CDM	6.3		9.68		133		<0.050	0.40	no	0.346		<0.010
5/17/2010	CDM	7.9		7.64		<10		<0.050	10.66	no	0.772		<0.010
5/24/2010	CDM	9.3		8.91		<10		<0.050	1.02	no	0.235		<0.010
May 2009 Avg.		6.7		8.59		40.8		0.025	0.84	no	0.628		0.0050
June 2010													
6/1/2010	CDM	9.8		8.60		<10		<0.050	1.77	no	0.114		<0.010
6/7/2010	CDM	11.1		7.73		<10		<0.050	9.16	no	0.156		<0.010
6/14/2010	CDM	10.8		9.26		18		<0.050	0.61	no	0.407		<0.010
6/21/2010	CDM	15.5		9.31		<10		<0.050	0.58	no	0.230		<0.010
6/28/2010	CDM	9.3		8.91		<10		<0.050	1.02	no	0.235		<0.010
June 2009 Avg.		11.3		8.76		11.6		0.025	0.60	no	0.228		0.0050
July 2010													
7/6/2010	CDM	10.7		7.80		22		0.025	8.11	no	0.186		<0.010
7/12/2010	CDM	12.4		7.71		<10		0.025	9.48	no	0.088		<0.010
7/19/2010	CDM	17.7		8.13		31		0.052	4.38	no	5.110		<0.010
7-26-2010 - no sample													
July 2009 Avg.		13.6		7.88		21.0		0.034	2.81	no	1.795		0.0050
August 2010													
8/2/2010 - no sample													
8/9/2010	CDM	14.8		7.77		<10		<0.050	8.55	no	0.374		<0.010
8/16/2010	CDM	12.5		7.60		<10		<0.050	11.37	no	0.064		<0.010
8/23/2010 - no sample													
8/30/2010 - no sample													
August 2009 Avg.		13.7		7.69		10.0		0.025	3.58	no	0.219		0.0050
September 2010													
9/7/2010 - no sample													
9/13/2010 - no sample													
9/20/2010 - no sample													
9/270/2010 - no sample													
October 2010													
10/4/2010 - no sample													
10/11/2010	CDM	9.8		7.52		<10		<0.050	12.89	no	0.977		<0.010
November 2010													
11/01/2010 - no sample													
11/08/2010 - no sample													
11/15/2010 - no sample													
11/22/2010 - no sample													
11/30/2010 - no sample													
December 2010 - no samples taken													
January 2011													
1/17/2011	CDM	2.4		7.70		<10		<0.050	9.64	no	1.790		<0.010
February 2011													
2/14/2011	CDM	0.6		7.90		<10		<0.050	6.77	no	0.998		<0.010
2/21/2011	CDM	-0.2		8.65		<10		<0.050	1.61	no	0.773		<0.010
2-28-2011 - no sample													
February 2011 Avg.		0.2		8.28		10.0		0.025	1.50	no	0.886		0.0050
March 2011													
3-07-2011 - no sample													
3/14/2011	CDM	2.8		9.48		10		<0.050	0.48	no	0.638		<0.010
3/21/2011	CDM	1.7		8.46		<10		<0.050	2.31	no	0.441		<0.010
3/28/2011	CDM	1.0		7.91		<10		<0.050	6.64	no	0.478		<0.010
March 2011 Avg.		1.8		8.62		10.0		0.025	0.80	no	0.519		0.0050
April 2011													
4/4/2011	CDM	2.9		7.96		<10		<0.050	6.05	no	0.265		<0.010
4/11/2011	CDM	5.2		7.80		<10		<0.050	8.11	no	0.170		<0.010
4/18/2011	CDM	1.6		7.70		<10		<0.050	9.64	no	0.227		<0.010
4/25/2011	CDM	5.3		7.78		<10		<0.050	8.40	no	0.186		<0.010
April 2011 Avg.		3.8		7.81		10.0		0.025	3.08	no	0.212		0.0050
May 2011													
5/2/2011	CDM	3.9		7.68		<10		<0.050	9.98	no	0.082		<0.010
5/2/2011 - duplicate	CDM	3.9		7.68		<10		<0.050	9.98	no	0.070		<0.010
5/9/2011	CDM	7.1		7.70		<10		<0.050	9.64	no	0.058		<0.010
5/16/2011	CDM	4.6		7.74		<10		<0.050	9.01	no	0.116		<0.010
5/23/2011	CDM	7.7		7.53		<10		<0.050	12.69	no	0.304		<0.010
5/31/2011	CDM	7.1		7.66		<10		<0.050	10.31	no	0.114		<0.010
May 2011 Avg.		5.7		7.67		10.0		0.025	3.67	no	0.124		0.0050
June 2011													
6/6/2011	CDM	14.2		7.57		<10		<0.050	11.93	no	0.114		<0.010
6/13/2011	CDM	9.3		7.56		<10		<0.050	12.12	no	0.074		<0.010
6/20/2011	CDM	12.0		7.60		13		<0.050	11.37	no	0.060		<0.010
6/27/2011	CDM	10.7		8.01		<10		<0.050	5.51	no	0.206		<0.010
June 2011 Avg.		11.6		7.69		10.8		0.025	3.58	no	0.114		0.0050
July 2011													
7/5/2011	CDM	14.0		7.60		<10		<0.050	11.37	no	0.061		<0.010
7/11/2011	CDM	12.3		7.75		<10		<0.050	8.85	no	0.103		<0.010
7/18/2011	CDM	17.0		7.56		<10		<0.050	12.12	no	<0.050		<0.010
7/25/2011	CDM	15.1		7.69		<10		<0.050	9.81	no	<0.050		<0.010
July 2011 Avg.		14.6		7.65		10.0		0.025	3.71	no	0.082		0.0050
August 2011													
8/8/2011	CDM	15.3		7.67		<10		<0.050	10.14	no	0.108		<0.010

SUMMARY OF SURFACE WATER COMPLIANCE POINT SAMPLING

CP- 003 (Weekly samples when flow is present)

Units are mg/l unless otherwise noted

		General Constituents											
	Limit Type	Temperature (deg C)	Conductivity (umhos/cm)	pH (s.u.)	TDS	TSS	Alkalinity	Ammonia			Nitrate	Sulfate	WAD CN
SD Surface Water Quality Standards	30-day	---	2500	---	2500	---	750	Equation 3	Ammonia standard based on pH and Temp.	Exceedence	50	---	---
	24-hour	---	---	---	---	---	---	---			---	---	---
	Daily Max	---	4375	---	4375	---	1313	Equation 1			88	---	---
	Grab	---	---	---	---	---	---	---			---	---	---
	General	---	---	6.5-9.5	---	---	---	---			---	---	---
	Acute	---	---	---	---	---	---	---			---	---	0.022
	Chronic	---	---	---	---	---	---	---			---	---	0.0052
	Admin Rule		74:51:01:53	74:51:01:52	74:51:01:53		74:51:01:52	74:51:01:46			74:51:01:52		74:51:01 App B
	ND Rule	ND = No Val	ND = No Val	ND = No Val	ND = DL	ND = DL	ND = No Val	ND = 1/2 DL			ND = No Val	ND = No Val	ND = 1/2 DL
Date	Sampler												
September 2011													
9/26/2011 (slug test)	CDM	19.9		7.79		930		0.110	8.25	no	8.64		<0.010
October 2011													
10/3/2011	CDM	13.2		7.60		23		<0.050	11.37	no	10.0		<0.010
10/10/2011	CDM	8.4		7.48		<10		<0.050	13.68	no	4.9		<0.010

SUMMARY OF SURFACE WATER COMPLIANCE POINT SAMPLING

CP- 003 (Weekly samples when flow is present)

		Dissolved Metals															
	Limit Type	Al	As	Cd			Cr (III)			Cr (VI)	Cu			Fe	Pb		
SD Surface Water Quality Standards	30-day	---	---		Cd standard based on hardness	Exceedence		Cr (III) standard based on hardness	Exceedence	---		Cu standard based on hardness	Exceedence	---		Pb standard based on hardness	Exceedence
	24-hour	---	---							---				---			
	Daily Max	---	---							---				---			
	Grab	---	---							---				---			
	General	---	---							---				---			
	Acute	---	0.340							0.016				---			
	Chronic	---	0.150							0.011				---			
	Admin Rule		74:51:01 App B	74:51:01 App B			74:51:01 App B			74:51:01 App B	74:51:01 App B				74:51:01 App B		
	ND Rule	ND = DL	ND = 1/2 DL	ND = 1/2 DL			ND = 1/2 DL			ND = 1/2 DL	ND = 1/2 DL			ND = DL	ND = 1/2 DL		
Date	Sampler																
April 2001 Averages	FHI				0.00023	na		0.0697	na			0.00840	na			0.00232	na
May 2001 Averages	FHI	<0.050		0.00300	0.00041	Yes		0.1356	na		0.00800	0.01681	no	<0.050	<0.001	0.00556	no
June 2001 Averages	FHI				0.00064	na		0.2307	na			0.02928	na			0.01094	na
July 2001 Averages	FHI				0.00064	na		0.2307	na			0.02928	na			0.01094	na
October 2001 Averages	FHI				0.00064	na		0.2307	na			0.02928	na			0.01094	na
November 2001 Averages	FHI				0.00064	na		0.2307	na			0.02928	na			0.01094	na
February 2002 Averages	FHI				0.00064	na		0.2307	na			0.02928	na			0.01094	na
March 2002 Averages	FHI				0.00064	na		0.2307	na			0.02928	na			0.01094	na
April 2002 Averages	FHI				0.00064	na		0.2307	na			0.02928	na			0.01094	na
May 2002 Averages	FHI				0.00038	na		0.1237	na			0.01529	na			0.00494	na
September 2002 Averages	CDM				0.00059	na		0.2073	na			0.02619	na			0.00957	na
January 2003 Averages	CDM				0.00064	na		0.2307	na			0.02928	na			0.01094	na
February 2003 Averages	CDM				0.00064	na		0.2307	na			0.02928	na			0.01094	na
March 2003 Averages	CDM				0.00038	na		0.1239	na			0.01531	na			0.00495	na
April 2003 Averages	CDM				0.00034	na		0.1097	na			0.01349	na			0.00422	na
May 2003 Averages	CDM				0.00017	na		0.0480	na			0.00569	na			0.00141	na
June 2003 Averages	CDM				0.00025	na		0.0770	na			0.00931	na			0.00265	na
July 2003 Averages	CDM				0.00034	na		0.1095	na			0.01345	na			0.00421	na
August 2003 Averages	CDM				0.00057	na		0.2000	na			0.02523	na			0.00914	na
September 2003 Averages	CDM				0.00055	na		0.1926	na			0.02426	na			0.00872	na
March 2004																	
3/9/2004	CDM				0.00774	na		1.77330	na			0.04962	na			0.28085	na
3/22/2004	CDM				0.00143	na		0.42593	na			0.00962	na			0.04378	na
3/29/2004	CDM				0.00108	na		0.33770	na			0.00736	na			0.03201	na
March 2004 Avg's	CDM				0.00018	na		0.0497	na			0.00849	na			0.00148	na
April 2004																	
4/5/2004	CDM				0.00109	na		0.33875	na			0.00739	na			0.03215	na
						na											
May 2004						na											
5/24/2004	CDM				0.00132	na		0.39937	na			0.00893	na			0.04015	na
5/31/2004	CDM				0.00121	na		0.37139	na			0.00821	na			0.03640	na
March 2005																	
3/28/2005	CDM				0.00283	na		0.75931	na			0.01870	na			0.09440	na
April 2005																	
4/24/2005	CDM				0.00118	na		0.36368	na			0.00802	na			0.03539	na
May 2005																	
5/9/2005	CDM				0.00148	na		0.44080	na			0.01000	na			0.04584	na
5/16/2005	CDM				0.00071	na		0.23663	na			0.00489	na			0.01974	na
5/30/2005	CDM	0.094		<0.001	0.00074	no		0.24453	na		0.009	0.00508	Yes	0.051	<0.001	0.02064	no
June 2005																	
6/6/2005	CDM	0.073		<0.001	0.00076	no		0.25182	na		0.011	0.00525	Yes	<0.050	<0.001	0.02149	no
6/13/2005	CDM	0.065		<0.001	0.00093	no		0.29680	na		0.015	0.00635	Yes	0.066	<0.001	0.02687	no
6/20/2005	CDM				0.00077	na		0.25349	na			0.00529	na			0.02168	na
6/27/2005	CDM				0.00104	na		0.32613	na			0.00707	na			0.03054	na
August 2005																	
8/2/2005	CDM	0.029		0.005	0.00774	no		1.77330	na		0.016	0.04962	no	<0.050	<0.001	0.28085	no
March 2006																	
3/3/2006	CDM	0.020		<0.001	0.00219	no		0.61143	na		0.005	0.01458	no	<0.050	<0.001	0.07093	no
3/6/2006	CDM	0.013		<0.001	0.00260	no		0.70634	na		<0.005	0.01721	no	<0.050	<0.001	0.08583	no
3/8/2006	CDM	0.026		<0.001	0.00333	no		0.87141	na		<0.005	0.02191	no	<0.050	<0.001	0.11306	no
April 2006																	
4/10/2006	CDM	0.025		0.001	0.00374	no		0.95966	na		0.005	0.02448	no	<0.050	<0.001	0.12820	no
4/24/2006	CDM	0.034		0.002	0.00353	no		0.91367	na		0.010	0.02314	no	<0.050	0.001	0.12026	no
May 2006																	
5/1/2006	CDM	0.081		0.011	0.00651	Yes		1.53358	na		0.081	0.04198	Yes	<0.050	<0.001	0.23392	no
5/8/2006	CDM				0.00199	na		0.56369	na			0.01327	na			0.06367	na
5/15/2006	CDM	0.047		0.003	0.00328	no		0.85865	na		0.023	0.02154	Yes	<0.050	<0.001	0.11090	no
5/22/2006	CDM				0.00120	na		0.36882	na			0.00815	na			0.03606	na
5/30/2006	CDM	0.023		<0.001	0.00142	no		0.42493	na		0.011	0.00959	Yes	<0.050	<0.001	0.04364	no
May 2006 Avg's		0.050		0.00483	0.00032	Yes		0.1007	na		0.03833	0.01234	Yes	<0.050	0.00050	0.00378	no

SUMMARY OF SURFACE WATER COMPLIA

CP- 003 (Weekly samples when flow is present)

		Dissolved Metals										
SD Surface Water Quality Standards	Limit Type	Hg	Ni			Se	Ag			Zn		
	30-day	---		Ni standard based on hardness	Exceedence	---		Ag standard based on hardness	Exceedence		Zn standard based on hardness	Exceedence
	24-hour	---				---						
	Daily Max	---				---						
	Grab	---				---						
	General	---				---						
	Acute	0.00140				---						
	Chronic	0.00077				0.0046						
	Admin Rule	74:51:01 App B	74:51:01 App B			74:51:01 App B	74:51:01 App B			74:51:01 App B		
	ND Rule	ND = 1/2 DL	ND = 1/2 DL			ND = 1/2 DL	ND = 1/2 DL			ND = 1/2 DL		
Date	Sampler											
April 2001 Averages	FHI			0.04882	na			NA	NA		0.11089	na
May 2001 Averages	FHI			0.09703	na			NA	NA	0.280	0.22062	Yes
June 2001 Averages	FHI			0.16804	na			NA	NA		0.38240	na
July 2001 Averages	FHI			0.16804	na			NA	NA		0.38240	na
October 2001 Averages	FHI			0.16804	na			NA	NA		0.38240	na
November 2001 Averages	FHI			0.16804	na			NA	NA		0.38240	na
February 2002 Averages	FHI			0.16804	na			NA	NA		0.38240	na
March 2002 Averages	FHI			0.16804	na			NA	NA		0.38240	na
April 2002 Averages	FHI			0.16804	na			NA	NA		0.38240	na
May 2002 Averages	FHI			0.08832	na			NA	NA		0.20078	na
September 2002 Averages	CDM			0.15045	na			NA	NA		0.34232	na
January 2003 Averages	CDM			0.16804	na			NA	NA		0.38240	na
February 2003 Averages	CDM			0.16804	na			NA	NA		0.38240	na
March 2003 Averages	CDM			0.08845	na			NA	NA		0.20108	na
April 2003 Averages	CDM			0.07801	na			NA	NA		0.17733	na
May 2003 Averages	CDM			0.03321	na			NA	NA		0.07539	na
June 2003 Averages	CDM			0.05407	na			NA	NA		0.12283	na
July 2003 Averages	CDM			0.07781	na			NA	NA		0.17686	na
August 2003 Averages	CDM			0.14499	na			NA	NA		0.32988	na
September 2003 Averages	CDM			0.13950	na			NA	NA		0.31736	na
March 2004												
3/9/2004	CDM			1.51289	na			0.03491	na		0.37930	na
3/22/2004	CDM			0.34669	na			0.00175	na		0.08672	na
3/29/2004	CDM			0.27278	na			0.00107	na		0.06821	na
March 2004 Avg's	CDM			0.03445	na			NA	NA		0.07820	na
April 2004												
4/5/2004	CDM			0.27365	na			0.00108	na		0.06843	na
				#NUM!	na							
May 2004				#NUM!	na							
5/24/2004	CDM			0.32438	na			0.00153	na		0.08113	na
5/31/2004	CDM			0.30093	na			0.00131	na		0.07526	na
March 2005												
3/28/2005	CDM			0.62994	na			0.00588	na		0.15772	na
April 2005												
4/24/2005	CDM			0.29448	na			0.00125	na		0.07364	na
May 2005												
5/9/2005	CDM			0.35920	na			0.00188	na		0.08986	na
5/16/2005	CDM			0.18891	na			0.00051	na		0.04721	na
5/30/2005	CDM			0.19543	na			0.00054	na	<0.050	0.04884	no
June 2005												
6/6/2005	CDM			0.20145	na			0.00058	na	<0.050	0.05035	no
6/13/2005	CDM			0.23873	na			0.00082	na	<0.050	0.05968	no
6/20/2005	CDM			0.20284	na			0.00059	na		0.05070	na
6/27/2005	CDM			0.26313	na			0.00100	na		0.06579	na
August 2005												
8/2/2005	CDM			1.51289	na			0.03491	na	<0.050	0.37930	no
March 2006												
3/3/2006	CDM			0.50365	na			0.00373	na	<0.050	0.12606	no
3/6/2006	CDM			0.58460	na			0.00505	na	<0.050	0.14635	no
3/8/2006	CDM			0.72623	na			0.00785	na	<0.050	0.18187	no
April 2006												
4/10/2006	CDM			0.80233	na			0.00961	na	<0.050	0.20096	no
4/24/2006	CDM			0.76264	na			0.00867	na	0.068	0.19100	no
May 2006												
5/1/2006	CDM			1.30212	na			0.02573	na	0.295	0.32638	no
5/8/2006	CDM			0.46308	na			0.00315	na		0.11589	na
5/15/2006	CDM			0.71525	na			0.00761	na	0.117	0.17911	no
5/22/2006	CDM			0.29878	na			0.00129	na		0.07472	na
5/30/2006	CDM			0.34585	na			0.00174	na	<0.050	0.08651	no
May 2006 Avg's				0.07142	na					0.146	0.16231	no

SUMMARY OF SURFACE WATER COMPLIANCE POINT SAMPLING

CP- 003 (Weekly samples when flow is present)

		Dissolved Metals															
	Limit Type	Al	As	Cd			Cr (III)			Cr (VI)	Cu			Fe	Pb		
SD Surface Water Quality Standards	30-day	---	---		Cd standard based on hardness	Exceedence		Cr (III) standard based on hardness	Exceedence	---		Cu standard based on hardness	Exceedence	---		Pb standard based on hardness	Exceedence
	24-hour	---	---							---				---			
	Daily Max	---	---							---				---			
	Grab	---	---							---				---			
	General	---	---							---				---			
	Acute	---	0.340							0.016				---			
	Chronic	---	0.150							0.011				---			
	Admin Rule		74:51:01 App B	74:51:01 App B			74:51:01 App B			74:51:01 App B	74:51:01 App B				74:51:01 App B		
	ND Rule	ND = DL	ND = 1/2 DL	ND = 1/2 DL			ND = 1/2 DL			ND = 1/2 DL	ND = 1/2 DL			ND = DL	ND = 1/2 DL		
Date	Sampler																
June 2006																	
6/5/2006	CDM	0.061		0.002	0.00122	Yes		0.37395	na		0.066	0.00828	Yes	<0.050	0.003	0.03674	no
6/12/2006	CDM				0.00121	na		0.37036	na			0.00819	na			0.03627	na
September 2006																	
9/25/2006	CDM	0.092		0.010	0.00744	Yes		1.71499	na		0.070	0.04774	Yes	<0.050	<0.001	0.26932	no
October 2006																	
10/3/2006	CDM	0.029		<0.001	0.00179	no		0.51551	na		0.011	0.01198	no	<0.050	<0.001	0.05652	no
10/30/2006	CDM	0.028		<0.001	0.00182	no		0.52314	na		0.006	0.01218	no	<0.050	<0.001	0.05764	no
March 2007																	
3/12/2007	CDM	0.042		<00.001	0.00095	no		0.30272	na		0.013	0.00649	Yes	<0.050	<0.001	0.02760	no
3/19/2007	CDM				0.00129	na		0.39077	na			0.00871	na			0.03899	na
3/26/2007	CDM				#NUM!	na		#NUM!	na			#NUM!	na			#NUM!	na
April 2007																	
4/3/2007	CDM	0.022		<0.001	0.00110	no		0.34241	na		0.007	0.00748	no	<0.050	<0.001	0.03262	no
4/9/2007	CDM				0.00074	na		0.24565	na			0.00511	na			0.02077	na
4/16/2007	CDM	0.035		<0.001	0.00109	no		0.34032	na		0.015	0.00743	Yes	<0.050	<0.001	0.03235	no
4/23/2007	CDM				0.00070	na		0.23549	na			0.00486	na			0.01961	na
4/30/2007	CDM				0.00083	na		0.27122	na			0.00572	na			0.02377	na
April 2007 Avg's	CDM	0.029		0.00050	0.00014	Yes		0.0374	na		0.01100	0.00439	Yes	<0.050	0.00050	0.00100	no
May 2007																	
5/7/2007	CDM	0.056		0.001	0.00339	no		0.88413	na		0.011	0.02228	no	<0.050	<0.001	0.11522	no
5/14/2007	CDM				0.00194	na		0.55291	na			0.01298	na			0.06205	na
5/21/2007	CDM	0.041		<0.001	0.00157	no		0.46193	na		0.010	0.01056	no	<0.050	<0.001	0.04881	no
5/29/2007	CDM				0.00181	na		0.52171	na			0.01214	na			0.05743	na
May 2007 Avg's	CDM	0.049		0.00075	0.00026	Yes		0.0793	na		0.01050	0.00961	Yes	<0.050	0.00050		
June 2007																	
6/5/2007	CDM	0.219		0.020	0.00774	Yes		1.77330	na		0.208	0.04962	Yes	<0.050	<0.001	0.28085	no
6/11/2007	CDM	0.059		0.0040	0.00312	Yes		0.82440	na		0.034	0.02056	Yes	<0.050	<0.001	0.10515	no
6/18/2007	CDM	0.035		<0.001	0.00147	no		0.43833	na		0.015	0.00994	Yes	<0.050	<0.001	0.04550	no
March 2008																	
3/4/2008	CDM	0.016		<0.0010	0.00264	no		0.71523	na		0.006	0.01746	no	<0.050	<0.001	0.08726	no
3/10/2008	CDM	0.017		<0.0010	0.00185	no		0.52931	na		0.006	0.01235	no	<0.050	<0.001	0.05855	no
3/31/2008	CDM	0.021		<0.0010	0.00159	no		0.46681	na		<0.005	0.01069	no	<0.050	<0.001	0.04950	no
April 2008																	
4/7/2008	CDM	0.021		<0.0010	0.00135	no		0.40592	na		0.006	0.00910	no	<0.050	<0.001	0.04103	no
4/14/2008	CDM	0.021		<0.0010	0.00111	no		0.34554	na		0.006	0.00756	no	<0.050	<0.001	0.03302	no
4/22/2008	CDM	0.282		0.0210	0.00774	Yes		1.77330	na		0.204	0.04962	Yes	<0.050	<0.001	0.28085	no
4/28/2008	CDM	0.060		0.0070	0.00534	Yes		1.29692	na		0.044	0.03462	Yes	<0.050	<0.001	0.18902	no
April 2008 Avg's	CDM	0.096		0.00725	0.00040	Yes		0.1320	na		0.06500	0.01636	Yes	<0.050	0.00050	0.00537	no
May 2008																	
5/6/2008	CDM	0.088		<0.0010	0.00114	no		0.35385	na		0.011	0.00777	Yes	0.055	<0.001	0.03410	no
5/12/2008	CDM	1.550		0.024	0.00646	Yes		1.52232	na		0.581	0.04163	Yes	<0.050	<0.001	0.23175	no
5/19/2008	CDM	1.850		0.027	0.00698	Yes		1.62670	na		0.521	0.04493	Yes	0.074	0.003	0.25200	no
5/27/2008	CDM	0.926		0.022	0.00530	Yes		1.28913	na		0.455	0.03438	Yes	<0.050	<0.001	0.18757	no
May 2008 Avg's	CDM	1.104		0.01838	0.00047	Yes		0.1594	na		0.39200	0.01991	Yes	0.065	0.00113	0.00685	no
June 2008																	
6/2/2008	CDM	0.101		0.012	0.00349	Yes		0.90525	na		0.108	0.02289	Yes	<0.050	<0.001	0.11882	no
6/9/2008	CDM	7.930		0.034	0.00704	Yes		1.63779	na		1.110	0.04528	Yes	<0.0.50	<0.001	0.25416	no
6/16/2008	CDM	0.075		0.003	0.00312	no		0.82440	na		0.025	0.02056	Yes	<0.050	<0.001	0.10515	no
6/23/2008	CDM	0.045		0.002	0.00250	no		0.68401	na		0.014	0.01658	no	<0.050	<0.001	0.08227	no
6/30/2008	CDM	0.064		<0.001	0.00188	no		0.53689	na		0.014	0.01255	Yes	<0.050	<0.001	0.05967	no
June 2008 Avg's	CDM	1.643		0.01030	0.00037	Yes		0.1215	na		0.25420	0.01500	Yes	<0.050	0.00050	0.00482	no
July 2008																	
7/7/2008	CDM	0.047		0.003	0.00318	no		0.83728	na		0.015	0.02093	no	<0.050	<0.001	0.10731	no
7/21/2008	CDM	0.033		<0.001	0.00197	no		0.55995	na		0.011	0.01317	no	<0.050	<0.001	0.06311	no
7/28/2008	CDM	0.020		<0.001	0.00270	no		0.72851	na		0.010	0.01783	no	<0.050	<0.001	0.08940	no
July 2008 Avg's	CDM	0.033		0.00133	0.00030	Yes		0.0924	na		0.01200	0.01128	Yes	<0.050	0.00050	0.00337	no

SUMMARY OF SURFACE WATER COMPLIA

CP- 003 (Weekly samples when flow is present)

		Dissolved Metals										
	Limit Type	Hg	Ni			Se	Ag			Zn		
SD Surface Water Quality Standards	30-day	---		Ni standard based on hardness	Exceedence	---		Ag standard based on hardness	Exceedence		Zn standard based on hardness	Exceedence
	24-hour	---				---						
	Daily Max	---				---						
	Grab	---				---						
	General	---				---						
	Acute	0.00140				---						
	Chronic	0.00077				0.0046						
	Admin Rule	74:51:01 App B	74:51:01 App B			74:51:01 App B	74:51:01 App B			74:51:01 App B		
	ND Rule	ND = 1/2 DL	ND = 1/2 DL			ND = 1/2 DL	ND = 1/2 DL			ND = 1/2 DL		
Date	Sampler											
June 2006												
6/5/2006	CDM			0.30308	na			0.00133	na	0.136	0.07580	Yes
6/12/2006	CDM			0.30007	na			0.00130	na		0.07504	na
September 2006												
9/25/2006	CDM			1.46153	na			0.03254	na	0.273	0.36640	no
October 2006												
10/3/2006	CDM			0.42226	na			0.00261	na	<0.050	0.10566	no
10/30/2006	CDM			0.42871	na			0.00269	na	<0.050	0.10727	no
March 2007												
3/12/2007	CDM		<0.005	0.24364	no		<0.001	0.00085	no	<0.050	0.06091	no
3/19/2007	CDM		<0.005	0.31717	no		<0.001	0.00146	no		0.07933	na
3/26/2007	CDM		<0.005	#NUM!	no		<0.001	#NUM!	no		#NUM!	na
April 2007												
4/3/2007	CDM		<0.005	0.27671	no		<0.001	0.00110	no	<0.050	0.06919	no
4/9/2007	CDM		<0.005	0.19636	no		<0.001	0.00055	no		0.04907	na
4/16/2007	CDM		<0.005	0.27496	no		<0.001	0.00109	no	<0.050	0.06876	no
4/23/2007	CDM		<0.005	0.18797	no		<0.001	0.00050	no		0.04698	na
4/30/2007	CDM		<0.005	0.21750	no		<0.001	0.00068	no		0.05437	na
April 2007 Avg's	CDM		0.0025	0.02569	no		0.0005	NA	NA	0.025	0.05829	no
May 2007												
5/7/2007	CDM		<0.005	0.73719	no		<0.001	0.00809	no	<0.050	0.18462	no
5/14/2007	CDM		<0.005	0.45394	no		<0.001	0.00302	no		0.11360	na
5/21/2007	CDM		<0.005	0.37700	no		<0.001	0.00207	no	<0.050	0.09432	no
5/29/2007	CDM		<0.005	0.42750	no		<0.001	0.00267	no		0.10697	na
May 2007 Avg's	CDM		0.0025	0.05579	no		0.0005	NA	NA	0.025	0.12674	no
June 2007												
6/5/2007	CDM		0.037	1.51289	no		<0.001	0.03491	no	0.526	0.37930	Yes
6/11/2007	CDM		0.011	0.68580	no		<0.001	0.00699	no	0.112	0.17173	no
6/18/2007	CDM		<0.005	0.35712	no		<0.001	0.00185	no	<0.050	0.08934	no
March 2008												
3/4/2008	CDM		<0.005	0.59220	no		<0.001	0.00519	no	<0.050	0.14826	no
3/10/2008	CDM		<0.005	0.43394	no		<0.001	0.00276	no	<0.050	0.10858	no
3/31/2008	CDM		<0.005	0.38111	no		<0.001	0.00212	no	<0.050	0.09535	no
April 2008												
4/7/2008	CDM		<0.005	0.32988	no		<0.001	0.00158	no	<0.050	0.08251	no
4/14/2008	CDM		<0.005	0.27932	no		<0.001	0.00113	no	<0.050	0.06985	no
4/22/2008	CDM		0.040	1.51289	no		<0.001	0.03491	no	0.515	0.37930	Yes
4/28/2008	CDM		0.0180	1.09511	no		<0.001	0.01810	no	0.176	0.27442	no
April 2008 Avg's	CDM		0.0158	0.09441	no		0.0005	NA	NA	0.185	0.21466	no
May 2008												
5/6/2008	CDM		<0.005	0.28627	no		<0.001	0.00118	no	<0.050	0.07159	no
5/12/2008	CDM		0.048	1.29225	no		<0.001	0.02534	no	0.618	0.32390	Yes
5/19/2008	CDM		0.050	1.38387	no		<0.001	0.02912	no	0.645	0.34690	Yes
5/27/2008	CDM		0.045	1.08832	no		<0.001	0.01787	no	0.526	0.27272	Yes
May 2008 Avg's	CDM		0.0364	0.11471	no		0.0005	NA	NA	0.454	0.26089	Yes
June 2008												
6/2/2008	CDM		0.025	0.75538	no		<0.001	0.00851	no	0.278	0.18918	Yes
6/9/2008	CDM		0.065	1.39362	no		<0.001	0.02954	no	0.878	0.34935	Yes
6/16/2008	CDM		0.011	0.68580	no		<0.001	0.00699	no	0.124	0.17173	no
6/23/2008	CDM		0.006	0.56552	no		<0.001	0.00472	no	0.063	0.14157	no
6/30/2008	CDM		<0.005	0.44035	no		<0.001	0.00284	no	<0.050	0.11019	no
June 2008 Avg's	CDM		0.0219	0.08663	no		0.0005	NA	NA	0.274	0.19695	Yes
July 2008												
7/7/2008	CDM		0.013	0.69687	no		<0.001	0.00722	no	0.084	0.17450	no
7/21/2008	CDM		<0.005	0.45990	no		<0.001	0.00310	no	<0.050	0.11509	no
7/28/2008	CDM		<0.005	0.60357	no		<0.001	0.00539	no	<0.050	0.15111	no
July 2008 Avg's	CDM		0.0060	0.06534	no		0.0005	NA	NA	0.045	0.14848	no

SUMMARY OF SURFACE WATER COMPLIANCE POINT SAMPLING

CP- 003 (Weekly samples when flow is present)

		Dissolved Metals															
	Limit Type	Al	As	Cd			Cr (III)			Cr (VI)	Cu			Fe	Pb		
SD Surface Water Quality Standards	30-day	---	---		Cd standard based on hardness	Exceedence		Cr (III) standard based on hardness	Exceedence	---		Cu standard based on hardness	Exceedence	---		Pb standard based on hardness	Exceedence
	24-hour	---	---							---				---			
	Daily Max	---	---							---				---			
	Grab	---	---							---				---			
	General	---	---							---				---			
	Acute	---	0.340							0.016				---			
	Chronic	---	0.150							0.011				---			
	Admin Rule		74:51:01 App B	74:51:01 App B			74:51:01 App B			74:51:01 App B	74:51:01 App B				74:51:01 App B		
	ND Rule	ND = DL	ND = 1/2 DL	ND = 1/2 DL			ND = 1/2 DL			ND = 1/2 DL	ND = 1/2 DL			ND = DL	ND = 1/2 DL		
Date	Sampler																
August 2008 (no samples taken this month)																	
September 2008 (no samples taken this month)																	
October 2008 (no samples taken this month)																	
November 2008																	
11/17/2008	CDM	0.153		0.001	0.00100	no		0.31660	na		0.012	0.00684	Yes	0.069	<0.001	0.02933	no
11/24/2008	CDM	0.035		<0.001	0.00094	no		0.30003	na		0.010	0.00643	Yes	<0.05	<0.001	0.02727	no
December 2008 (no samples taken this month)																	
January 2009 (no samples taken this month)																	
February 2009 (no samples taken this month)																	
March 2009																	
3/9/2009	CDM	0.027		<0.001	0.00151	no		0.44623	na		0.007	0.01015	no	<0.050	<0.001	0.04660	no
3/16/2009	CDM	0.026		<0.001	0.00091	no		0.29302	na		0.007	0.00625	Yes	<0.050	<0.001	0.02641	no
3/23/2009	CDM	0.080		0.008	0.00366	Yes		0.94299	na		0.059	0.02399	Yes	<0.050	<0.001	0.12531	no
March 2009 Avg's	CDM	0.044		0.00300	0.00025	Yes		0.0748	na		0.02433	0.00905	Yes	<0.050	0.00050	0.00255	no
April 2009																	
4/1/2009	CDM	0.043		0.002	0.00173	Yes		0.50020	na		0.017	0.01157	Yes	<0.050	<0.001	0.05429	no
4/6/2009	CDM	0.040		<0.001	0.00147	no		0.43734	na		0.012	0.00991	Yes	<0.050	<0.001	0.04536	no
4/14/2009	CDM	0.175		0.011	0.00301	Yes		0.79850	na		0.161	0.01982	Yes	<0.050	<0.001	0.10085	no
4/20/2009	CDM	0.264		0.015	0.00414	Yes		1.04615	na		0.263	0.02704	Yes	<0.050	<0.001	0.14337	no
4/27/2009	CDM	0.070		0.009	0.00389	Yes		0.99280	na		0.064	0.02546	Yes	<0.050	<0.001	0.13397	no
April 2009 Avg's	CDM	0.118		0.00746	0.00032	Yes		0.0994	na		0.10334	0.01217	Yes	<0.050	0.00050	0.00371	no
May 2009																	
5/4/2009	CDM	0.055		<0.001	0.00078	no		0.25517	na		0.015	0.00533	Yes	<0.050	<0.001	0.02188	no
5/11/2009	CDM	0.046		<0.001	0.00082	no		0.26792	na		0.014	0.00564	Yes	<0.050	<0.001	0.02338	no
5/18/2009	CDM	0.045		<0.001	0.00081	no		0.26516	na		0.014	0.00557	Yes	<0.050	<0.001	0.02305	no
5/26/2009	CDM	0.065		<0.001	0.00112	no		0.34762	na		0.013	0.00761	Yes	<0.050	<0.001	0.03329	no
May 2009 Avg's	CDM	0.053		0.00050	0.00014	Yes		0.0370	na		0.01400	0.00434	Yes	<0.050	0.00050	0.00099	no
June 2009																	
6/1/2009	CDM	0.047		<0.001	0.00105	no		0.32824	na		0.014	0.00713	Yes	<0.050	<0.001	0.03081	no
6/8/2009	CDM	0.025		<0.001	0.00136	no		0.40944	na		0.010	0.00919	Yes	<0.050	<0.001	0.04151	no
6/15/2009	CDM	0.030		<0.001	0.00089	no		0.28652	na		0.011	0.00609	Yes	0.062	<0.001	0.02562	no
6/22/2009	CDM	0.026		<0.001	0.00091	no		0.29194	na		0.011	0.00623	Yes	<0.050	<0.001	0.02628	no
6/29/2009	CDM	0.023		<0.001	0.00536	no		1.30081	na		0.008	0.03474	no	<0.050	<0.001	0.18974	no
June 2009 Avg's	CDM	0.030		0.00050	0.00024	Yes		0.0716	na		0.01080	0.00864	Yes	0.062	0.00050	0.00240	no
July 2009																	
7/7/2009 - No Sample					0.00774	na		1.77330	na			0.04962	na			0.28085	na
7/13/2009	CDM	0.021		0.0005	0.00287	no		0.76806	na		0.009	0.01895	no	<0.050	<0.001	0.09583	no
7/20/2009	CDM	0.022		0.0005	0.00217	no		0.60683	na		0.009	0.01445	no	<0.050	<0.001	0.07022	no
7/27/2009 - No Sample					0.00774	na		1.77330	na			0.04962	na			0.28085	na
July 2009 Avg.		0.022		0.00050	0.00029	Yes		0.0896	na		0.00900	0.01091	no	<0.050	0.00050	0.00323	no
August 2009 (no samples taken this month)																	
September 2009																	
9/8/2009 No Sample																	
9/14/2009	CDM	0.037		0.0003	0.00268	no		0.72409	na		0.012	0.01771	no	<0.050	<0.001	0.08868	no
October 2009																	
10/19/2009	CDM	<0.010		0.0005	0.00492	no		1.21067	na		0.011	0.03198	no	<0.050	<0.001	0.17307	no
10/23/2009	CDM	0.020		0.0002	0.00445	no		1.11099	na		0.021	0.02897	no	<0.050	<0.001	0.15495	no
10/26/2009	CDM	<0.01		0.0002	0.00351	no		0.90946	na		0.014	0.02302	no	<0.050	<0.001	0.11954	no
October 2009 Avg.		0.013		0.00027	0.00042	no		0.1403	na		0.01533	0.01743	no	<0.050	0.00050	0.00581	no

SUMMARY OF SURFACE WATER COMPLIA

CP- 003 (Weekly samples when flow is present)

		Dissolved Metals										
	Limit Type	Hg	Ni			Se	Ag			Zn		
SD Surface Water Quality Standards	30-day	---		Ni standard based on hardness	Exceedence	---		Ag standard based on hardness	Exceedence		Zn standard based on hardness	Exceedence
	24-hour	---				---						
	Daily Max	---				---						
	Grab	---				---						
	General	---				---						
	Acute	0.00140				---						
	Chronic	0.00077				0.0046						
	Admin Rule	74:51:01 App B	74:51:01 App B			74:51:01 App B	74:51:01 App B			74:51:01 App B		
	ND Rule	ND = 1/2 DL	ND = 1/2 DL			ND = 1/2 DL	ND = 1/2 DL			ND = 1/2 DL		
Date	Sampler											
August 2008												
(no samples taken this month)												
September 2008												
(no samples taken this month)												
October 2008												
(no samples taken this month)												
November 2008												
11/17/2008	CDM		<0.005	0.25519	no		<0.001	0.00094	no	<0.050	0.06380	no
11/24/2008	CDM		<0.005	0.24141	no		<0.001	0.00084	no	<0.050	0.06035	no
December 2008												
(no samples taken this month)												
January 2009												
(no samples taken this month)												
February 2009												
(no samples taken this month)												
March 2009												
3/9/2009	CDM		<0.005	0.36377	no		<0.001	0.00193	no	<0.050	0.09100	no
3/16/2009	CDM		<0.005	0.23559	no		<0.001	0.00080	no	<0.050	0.05890	no
3/23/2009	CDM		0.020	0.78794	no		<0.001	0.00927	no	0.199	0.19735	Yes
March 2009 Avg's	CDM		0.0083	0.05253	no		0.0005	NA	NA	0.083	0.11934	no
April 2009												
4/1/2009	CDM		0.0065	0.40931	no		<0.001	0.00245	no	<0.050	0.10241	no
4/6/2009	CDM		<0.005	0.35629	no		<0.001	0.00185	no	<0.050	0.08913	no
4/14/2009	CDM		0.0250	0.66356	no		<0.001	0.00654	no	0.285	0.16615	Yes
4/20/2009	CDM		0.0290	0.87713	no		<0.001	0.01152	no	0.381	0.21972	Yes
4/27/2009	CDM		0.0210	0.83097	no		<0.001	0.01033	no	0.217	0.20814	Yes
April 2009 Avg's	CDM		0.0168	0.07044	no		0.0005	NA	NA	0.187	0.16009	Yes
May 2009												
5/4/2009	CDM		<0.005	0.20422	no		<0.001	0.00060	no	<0.050	0.05104	no
5/11/2009	CDM		<0.005	0.21477	no		<0.001	0.00066	no	<0.050	0.05368	no
5/18/2009	CDM		<0.005	0.21248	no		<0.001	0.00065	no	<0.050	0.05311	no
5/26/2009	CDM		<0.005	0.28106	no		<0.001	0.00114	no	<0.050	0.07028	no
May 2009 Avg's	CDM		0.0025	0.02538	no		0.0005	NA	NA	0.025	0.05759	no
June 2009												
6/1/2009	CDM		<0.005	0.26489	no		<0.001	0.00101	no	<0.050	0.06623	no
6/8/2009	CDM		<0.005	0.33283	no		<0.001	0.00161	no	<0.050	0.08325	no
6/15/2009	CDM		<0.005	0.23019	no		<0.001	0.00076	no	<0.050	0.05754	no
6/22/2009	CDM		<0.005	0.23469	no		<0.001	0.00079	no	<0.050	0.05867	no
6/29/2009	CDM		<0.005	1.09850	no		<0.001	0.01821	no	<0.050	0.27527	no
June 2009 Avg's	CDM		0.0025	0.05017	no		0.0005	NA	NA	0.025	0.11396	no
July 2009												
7/7/2009 - No Sample				1.51289	na			0.03491	na		0.37930	na
7/13/2009	CDM		<0.005	0.63744	no		<0.001	0.00602	no	<0.050	0.15960	no
7/20/2009	CDM		<0.005	0.49974	no		<0.001	0.00367	no	<0.050	0.12508	no
7/27/2009 - No Sample				1.51289	na			0.03491	na		0.37930	na
July 2009 Avg.			0.0025	0.06324	no		0.0005	NA	NA	0.025	0.14369	no
August 2009												
(no samples taken this month)												
September 2009												
9/8/2009 No Sample												
9/14/2009	CDM		<0.005	0.59978	no		<0.001	0.00532	no	<0.050	0.15016	no
October 2009												
10/19/2009	CDM		<0.005	1.01997	no		<0.001	0.01566	no	<0.050	0.25556	no
10/23/2009	CDM		<0.005	0.93334	no		<0.001	0.01308	no	<0.050	0.23383	no
10/26/2009	CDM		<0.005	0.75901	no		<0.001	0.00859	no	<0.050	0.19009	no
October 2009 Avg.			0.0025	0.10055	no		0.0005	NA	NA	0.025	0.22865	no

SUMMARY OF SURFACE WATER COMPLIANCE POINT SAMPLING

CP- 003 (Weekly samples when flow is present)

		Dissolved Metals															
	Limit Type	Al	As	Cd			Cr (III)			Cr (VI)	Cu			Fe	Pb		
SD Surface Water Quality Standards	30-day	---	---		Cd standard based on hardness	Exceedence		Cr (III) standard based on hardness	Exceedence	---		Cu standard based on hardness	Exceedence	---		Pb standard based on hardness	Exceedence
	24-hour	---	---							---				---			
	Daily Max	---	---							---				---			
	Grab	---	---							---				---			
	General	---	---							---				---			
	Acute	---	0.340							0.016				---			
	Chronic	---	0.150							0.011				---			
	Admin Rule		74:51:01 App B	74:51:01 App B			74:51:01 App B			74:51:01 App B	74:51:01 App B				74:51:01 App B		
	ND Rule	ND = DL	ND = 1/2 DL	ND = 1/2 DL			ND = 1/2 DL			ND = 1/2 DL	ND = 1/2 DL			ND = DL	ND = 1/2 DL		
Date	Sampler																
November 2009																	
11/2/2009	CDM	0.029		0.0002	0.00262	no		0.71079	na		0.012	0.01733	no	<0.050	<0.001	0.08654	no
11/9/2009	CDM	0.049		0.0003	0.00215	no		0.60223	na		0.010	0.01432	no	<0.050	<0.001	0.06951	no
11/16/2009	CDM	0.023		0.0002	0.00254	no		0.69296	na		0.008	0.01683	no	<0.050	<0.001	0.08369	no
11/23/2009	CDM	0.024		0.0002	0.00254	no		0.69296	na		0.008	0.01683	no	<0.050	<0.001	0.08369	no
November 2009 Avg.		0.031		0.00019	0.00028	no		0.0878	na		0.00950	0.01069	no	<0.050	0.00050	0.00315	no
December 2009																	
(no samples taken this month)																	
January 2010																	
(no samples taken this month)																	
February 2010																	
(no samples taken this month)																	
March 2010																	
3/8/2010	CDM	0.468		0.00015	0.00176	no		0.50787	na		0.019	0.01177	Yes	<0.050	<0.001	0.05541	no
3/15/2010	CDM	0.150		0.00015	0.00156	no		0.45948	na		0.019	0.01049	Yes	0.074	<0.001	0.04846	no
3/22/2010	CDM	0.099		0.00040	0.00181	no		0.52076	na		0.018	0.01212	Yes	<0.050	<0.001	0.05729	no
3/29/2010	CDM	0.136		0.0007	0.00347	no		0.90104	na		0.015	0.02277	no	<0.050	<0.001	0.11810	no
March 2009 Avg.		0.213		0.00035	0.00026	Yes		0.0784	na		0.01775	0.00950	Yes	0.074	0.00050	0.00271	no
April 2010																	
4/5/2010	CDM	0.088		0.00040	0.00131	no		0.39735	na		0.012	0.00888	Yes	0.077	<0.001	0.03987	no
4/12/2010	CDM	0.075		0.00015	0.00213	no		0.59761	na		0.006	0.01420	no	<0.050	<0.001	0.06881	no
4/19/2010	CDM	0.216		0.00015	0.00089	no		0.28543	na		0.011	0.00607	Yes	0.136	<0.001	0.02548	no
4/26/2010	CDM	0.229		0.0002	0.00105	no		0.32982	na		0.011	0.00717	Yes	0.165	0.0020	0.03101	no
April 2009 Avg.		0.152		0.00021	0.00018	Yes		0.0529	na		0.01000	0.00629	Yes	0.126	0.00088	0.00160	no
May 2010																	
5/3/2010	CDM	0.152		0.00160	0.00374	no		0.95966	na		0.018	0.02448	no	0.216	<0.001	0.12820	no
5/10/2010	CDM	0.064		0.00015	0.00143	no		0.42593	na		0.003	0.00962	no	<0.050	<0.001	0.04378	no
5/17/2010	CDM	0.148		0.00330	0.00283	Yes		0.75931	na		0.028	0.01870	Yes	<0.050	<0.001	0.09440	no
5/24/2010	CDM	0.150		0.00015	0.00137	no		0.41245	na		0.010	0.00927	Yes	0.078	<0.001	0.04192	no
May 2009 Avg.		0.129		0.00130	0.00027	Yes		0.0844	na		0.01463	0.01025	Yes	0.147	0.00050	0.00299	no
June 2010																	
6/1/2010	CDM	0.093		0.00015	0.00128	no		0.38874	na		0.010	0.00866	Yes	<0.050	<0.001	0.03871	no
6/7/2010	CDM	0.048		0.00015	0.00144	no		0.43040	na		0.012	0.00973	Yes	<0.050	<0.001	0.04439	no
6/14/2010	CDM	0.077		0.00015	0.00176	no		0.50787	na		0.003	0.01177	no	0.053	<0.001	0.05541	no
6/21/2010	CDM	0.075		0.00015	0.00142	no		0.42444	na		0.008	0.00958	no	<0.050	<0.001	0.04357	no
6/28/2010	CDM	0.150		0.00015	0.00137	no		0.41245	na		0.010	0.00927	Yes	0.078	<0.001	0.04192	no
June 2009 Avg.		0.089		0.00015	0.00019	no		0.0563	na		0.00850	0.00673	Yes	0.066	0.00050	0.00175	no
July 2010																	
7/6/2010	CDM	0.328		<0.0003	0.00258	no		0.70189	na		0.009	0.01708	no	<0.050	<0.001	0.08512	no
7/12/2010	CDM	0.033		<0.0003	0.00281	no		0.75493	na		0.009	0.01858	no	<0.050	<0.001	0.09368	no
7/19/2010	CDM	0.854		0.00090	0.00774	no		1.77330	na		0.009	0.04962	no	<0.050	<0.001	0.28085	no
7-26-2010 - no sample																	
July 2009 Avg.		0.405		0.00040	0.00064	no		0.2307	na		0.00900	0.02928	no	#DIV/0!	0.00050	0.01094	no
August 2010																	
8/2/2010 - no sample																	
8/9/2010	CDM	0.087		0.00050	0.00403	no		1.02160	na		0.010	0.02631	no	0.061	<0.001	0.13903	no
8/16/2010	CDM	0.024		0.00040	0.00401	no		1.01750	na		0.009	0.02619	no	<0.050	<0.001	0.13831	no
8/23/2010 - no sample																	
8/30/2010 - no sample																	
August 2009 Avg.		0.056		0.00045	0.00040	Yes		0.1326	na		0.00950	0.01644	no	0.061	0.00050	0.00540	no
September 2010																	
9/7/2010 - no sample																	
9/13/2010 - no sample																	
9/20/2010 - no sample																	
9/270/2010 - no sample																	
October 2010																	
10/4/2010 - no sample																	
10/11/2010	CDM	0.023		0.00040	0.00380	no		0.97212	na		0.010	0.02485	no	<0.050	<0.001	0.13036	no

SUMMARY OF SURFACE WATER COMPLIA

CP- 003 (Weekly samples when flow is present)

		Dissolved Metals										
	Limit Type	Hg	Ni			Se	Ag			Zn		
SD Surface Water Quality Standards	30-day	---		Ni standard based on hardness	Exceedence	---		Ag standard based on hardness	Exceedence		Zn standard based on hardness	Exceedence
	24-hour	---				---						
	Daily Max	---				---						
	Grab	---				---						
	General	---				---						
	Acute	0.00140				---						
	Chronic	0.00077				0.0046						
	Admin Rule	74:51:01 App B	74:51:01 App B			74:51:01 App B	74:51:01 App B			74:51:01 App B		
	ND Rule	ND = 1/2 DL	ND = 1/2 DL			ND = 1/2 DL	ND = 1/2 DL			ND = 1/2 DL		
Date	Sampler											
November 2009												
11/2/2009	CDM		<0.005	0.58840	no		<0.001	0.00512	no	<0.050	0.14731	no
11/9/2009	CDM		<0.005	0.49582	no		<0.001	0.00361	no	<0.050	0.12409	no
11/16/2009	CDM		<0.005	0.57317	no		<0.001	0.00485	no	<0.050	0.14349	no
11/23/2009	CDM		<0.005	0.57317	no		<0.001	0.00485	no	<0.050	0.14349	no
November 2009 Avg.			0.0025	0.06196	no		0.0005	NA	NA	0.025	0.14079	no
December 2009												
(no samples taken this month)												
January 2010												
(no samples taken this month)												
February 2010												
(no samples taken this month)												
March 2010												
3/8/2010	CDM		<0.005	0.41579	no		<0.001	0.00253	no	<0.050	0.10404	no
3/15/2010	CDM		<0.005	0.37494	no		<0.001	0.00205	no	<0.050	0.09380	no
3/22/2010	CDM		<0.005	0.42669	no		<0.001	0.00266	no	<0.050	0.10677	no
3/29/2010	CDM		<0.005	0.75175	no		<0.001	0.00842	no	<0.050	0.18827	no
March 2009 Avg.			0.0025	0.05511	no		0.0005	NA	NA	0.025	0.12521	no
April 2010												
4/5/2010	CDM		<0.005	0.32269	no		<0.001	0.00151	no	<0.050	0.08071	no
4/12/2010	CDM		<0.005	0.49190	no		<0.001	0.00356	no	<0.050	0.12311	no
4/19/2010	CDM		<0.005	0.22929	no		<0.001	0.00075	no	<0.050	0.05732	no
4/26/2010	CDM		<0.005	0.26621	no		<0.001	0.00102	no	<0.050	0.06656	no
April 2009 Avg.			0.0025	0.03667	no		0.0005	NA	NA	0.025	0.08327	no
May 2010												
5/3/2010	CDM		0.0090	0.80233	no		<0.001	0.00961	no	<0.050	0.20096	no
5/10/2010	CDM		<0.005	0.34669	no		<0.001	0.00175	no	<0.050	0.08672	no
5/17/2010	CDM		0.0090	0.62994	no		<0.001	0.00588	no	0.063	0.15772	no
5/24/2010	CDM		<0.005	0.33536	no		<0.001	0.00163	no	<0.050	0.08388	no
May 2009 Avg.			0.0058	0.05945	no		0.0005	NA	NA	0.035	0.13507	no
June 2010												
6/1/2010	CDM		<0.005	0.31547	no		<0.001	0.00144	no	<0.050	0.07890	no
6/7/2010	CDM		<0.005	0.35045	no		<0.001	0.00178	no	<0.050	0.08767	no
6/14/2010	CDM		<0.005	0.41579	no		<0.001	0.00253	no	<0.050	0.10404	no
6/21/2010	CDM		<0.005	0.34543	no		<0.001	0.00173	no	<0.050	0.08641	no
6/28/2010	CDM		<0.005	0.33536	no		<0.001	0.00163	no	<0.050	0.08388	no
June 2009 Avg.			0.0025	0.03918	no		0.0005	NA	NA	0.025	0.08897	no
July 2010												
7/6/2010	CDM		<0.005	0.58080	no		<0.001	0.00498	no	<0.050	0.14540	no
7/12/2010	CDM		<0.005	0.62619	no		<0.001	0.00581	no	<0.050	0.15678	no
7/19/2010	CDM		0.0080	1.51289	no		<0.001	0.03491	no	<0.050	0.37930	no
7-26-2010 - no sample												
July 2009 Avg.			0.0043	0.16804	no		0.0005	NA	NA	0.025	0.38240	no
August 2010												
8/2/2010 - no sample												
8/9/2010	CDM		0.0300	0.85588	no		<0.001	0.01096	no	<0.050	0.21439	no
8/16/2010	CDM		<0.005	0.85233	no		<0.001	0.01087	no	<0.050	0.21350	no
8/23/2010 - no sample												
8/30/2010 - no sample												
August 2009 Avg.			0.0163	0.09486	no		0.0005	NA	NA	0.025	0.21569	no
September 2010												
9/7/2010 - no sample												
9/13/2010 - no sample												
9/20/2010 - no sample												
9/270/2010 - no sample												
October 2010												
10/4/2010 - no sample												
10/11/2010	CDM		<0.005	0.81309	no		<0.001	0.00988	no	<0.050	0.20366	no

SUMMARY OF SURFACE WATER COMPLIANCE POINT SAMPLING

CP- 003 (Weekly samples when flow is present)

		Dissolved Metals															
	Limit Type	Al	As	Cd			Cr (III)			Cr (VI)	Cu			Fe	Pb		
SD Surface Water Quality Standards	30-day	---	---		Cd standard based on hardness	Exceedence		Cr (III) standard based on hardness	Exceedence	---		Cu standard based on hardness	Exceedence	---		Pb standard based on hardness	Exceedence
	24-hour	---	---							---				---			
	Daily Max	---	---							---				---			
	Grab	---	---							---				---			
	General	---	---							---				---			
	Acute	---	0.340							0.016				---			
	Chronic	---	0.150							0.011				---			
	Admin Rule		74:51:01 App B	74:51:01 App B			74:51:01 App B			74:51:01 App B	74:51:01 App B				74:51:01 App B		
	ND Rule	ND = DL	ND = 1/2 DL	ND = 1/2 DL			ND = 1/2 DL			ND = 1/2 DL	ND = 1/2 DL			ND = DL	ND = 1/2 DL		
Date	Sampler																
November 2010																	
11/01/2010 - no sample																	
11/08/2010 - no sample																	
11/15/2010 - no sample																	
11/22/2010 - no sample																	
11/30/2010 - no sample																	
December 2010 - no samples taken																	
January 2011																	
1/17/2011	CDM	0.044		<0.0003	0.00349	no		0.90525	na		0.007	0.02289	no	<0.050	<0.001	0.11882	no
February 2011																	
2/14/2011	CDM			<0.0003	0.00161	no		0.47217	na		0.006	0.01083	no	<0.050	<0.001	0.05026	no
2/21/2011	CDM			<0.0003	0.00142	no		0.42543	na		0.006	0.00960	no	<0.050	<0.001	0.04371	no
2-28-2011 - no sample																	
February 2011 Avg.				0.00015	0.00020	no		0.0584	na		0.00600	0.00698	no	#DIV/0!	0.00050	0.00183	no
March 2011																	
3-07-2011 - no sample																	
3/14/2011	CDM			<0.0003	0.00138	no		0.41495	na		0.006	0.00933	no	0.114	<0.001	0.04227	no
3/21/2011	CDM			<0.0003	0.00153	no		0.45164	na		0.006	0.01029	no	<0.050	<0.001	0.04736	no
3/28/2011	CDM			<0.0003	0.00157	no		0.46242	na		0.007	0.01057	no	<0.050	<0.001	0.04888	no
March 2011 Avg.				0.00015	0.00020	no		0.0576	na		0.00633	0.00689	no	0.114	0.00050	0.00180	no
April 2011																	
4/4/2011	CDM			<0.0003	0.00125	no		0.38008	na		0.006	0.00844	no	0.117	<0.001	0.03756	no
4/11/2011	CDM			<0.0003	0.00105	no		0.32824	na		0.007	0.00713	no	0.143	<0.001	0.03081	no
4/18/2011	CDM			<0.0003	0.00126	no		0.38467	na		0.007	0.00855	no	0.078	<0.001	0.03817	no
4/25/2011	CDM			<0.0003	0.00102	no		0.32084	na		0.006	0.00694	no	0.080	<0.001	0.02987	no
April 2011 Avg.				0.00015	0.00016	no		0.0460	na		0.00650	0.00545	Yes	0.105	0.00050	0.00133	no
May 2011																	
5/2/2011	CDM			<0.0003	0.00093	no		0.29626	na		0.007	0.00633	Yes	0.132	<0.001	0.02681	no
5/2/2011 - duplicate	CDM			<0.0003	0.00083	no		0.27012	na		0.007	0.00569	Yes	0.131	<0.001	0.02364	no
5/9/2011	CDM			<0.0003	0.00104	no		0.32666	na		0.008	0.00709	Yes	0.067	<0.001	0.03060	no
5/16/2011	CDM			<0.0003	0.00090	no		0.28815	na		0.008	0.00613	Yes	0.071	<0.001	0.02581	no
5/23/2011	CDM			0.00030	0.00120	no		0.36728	na		0.011	0.00811	Yes	0.131	<0.001	0.03586	no
5/31/2011	CDM			<0.0003	0.00083	no		0.27122	na		0.006	0.00572	Yes	0.106	<0.001	0.02377	no
May 2011 Avg.				0.00018	0.00014	Yes		0.0395	na		0.00800	0.00465	Yes	0.106	0.00050	0.00108	no
June 2011																	
6/6/2011	CDM			<0.0003	0.00132	no		0.39836	na		0.008	0.00890	no	<0.050	<0.001	0.04001	no
6/13/2011	CDM			<0.0003	0.00152	no		0.44967	na		0.009	0.01024	no	<0.050	<0.001	0.04708	no
6/20/2011	CDM			<0.0003	0.00147	no		0.43833	na		0.008	0.00994	no	<0.050	<0.001	0.04550	no
6/27/2011	CDM			<0.0003	0.00193	no		0.55056	na		<0.005	0.01292	no	<0.050	<0.001	0.06170	no
June 2011 Avg.				0.00015	0.00021	no		0.0598	na		0.00688	0.00716	no	#DIV/0!	0.00050	0.00189	no
July 2011																	
7/5/2011	CDM			<0.0003	0.00131	no		0.39785	na		0.007	0.00889	no	<0.050	0.0080	0.03994	no
7/11/2011	CDM			<0.0003	0.00175	no		0.50691	na		0.007	0.01175	no	<0.050	<0.001	0.05527	no
7/18/2011	CDM			<0.0003	0.00177	no		0.51170	na		0.007	0.01188	no	<0.050	<0.001	0.05597	no
7/25/2011	CDM			<0.0003	0.00211	no		0.59299	na		0.007	0.01407	no	<0.050	<0.001	0.06810	no
July 2011 Avg.				0.00015	0.00022	no		0.0655	na		0.00700	0.00787	no	#DIV/0!	0.00238	0.00213	Yes
August 2011																	
8/8/2011	CDM			<0.0003	0.00264	no		0.71523	na		0.008	0.01746	no	<0.050	<0.001	0.08726	no
September 2011																	
9/26/2011 (slug test)	CDM			<0.0003	0.00774	no		1.77330	na		0.006	0.04962	no	0.060	<0.001	0.28085	no
October 2011																	
10/3/2011	CDM			0.00050	0.00774	no		1.77330	na		<0.005	0.04962	no	<0.050	<0.001	0.28085	no
10/10/2011	CDM			0.00120	0.00774	no		1.77330	na		0.006	0.04962	no	<0.050	<0.001	0.28085	no

SUMMARY OF SURFACE WATER COMPLIA

CP- 003 (Weekly samples when flow is present)

		Dissolved Metals										
	Limit Type	Hg	Ni			Se	Ag			Zn		
SD Surface Water Quality Standards	30-day	---		Ni standard based on hardness	Exceedence	---		Ag standard based on hardness	Exceedence		Zn standard based on hardness	Exceedence
	24-hour	---				---						
	Daily Max	---				---						
	Grab	---				---						
	General	---				---						
	Acute	0.00140				---						
	Chronic	0.00077				0.0046						
	Admin Rule	74:51:01 App B	74:51:01 App B			74:51:01 App B	74:51:01 App B			74:51:01 App B		
	ND Rule	ND = 1/2 DL	ND = 1/2 DL			ND = 1/2 DL	ND = 1/2 DL			ND = 1/2 DL		
Date	Sampler											
November 2010												
11/01/2010 - no sample												
11/08/2010 - no sample												
11/15/2010 - no sample												
11/22/2010 - no sample												
11/30/2010 - no sample												
December 2010 - no samples taken												
January 2011												
1/17/2011	CDM		<0.005	0.75538	no		<0.001	0.00851	no	<0.050	0.18918	no
February 2011												
2/14/2011	CDM		<0.005	0.38563	no		<0.001	0.00217	no	<0.050	0.09648	no
2/21/2011	CDM		<0.005	0.34627	no		<0.001	0.00174	no	<0.050	0.08662	no
2-28-2011 - no sample												
February 2011 Avg.			0.0025	0.04066	no		0.0005	NA	NA	0.025	0.09232	no
March 2011												
3-07-2011 - no sample												
3/14/2011	CDM		<0.005	0.33746	no		<0.001	0.00165	no	<0.050	0.08441	no
3/21/2011	CDM		<0.005	0.36833	no		<0.001	0.00197	no	<0.050	0.09214	no
3/28/2011	CDM		<0.005	0.37741	no		<0.001	0.00207	no	<0.050	0.09442	no
March 2011 Avg.			0.0025	0.04011	no		0.0005	NA	NA	0.025	0.09108	no
April 2011												
4/4/2011	CDM		<0.005	0.30821	no		<0.001	0.00137	no	<0.050	0.07708	no
4/11/2011	CDM		<0.005	0.26489	no		<0.001	0.00101	no	<0.050	0.06623	no
4/18/2011	CDM		<0.005	0.31206	no		<0.001	0.00141	no	<0.050	0.07805	no
4/25/2011	CDM		<0.005	0.25873	no		<0.001	0.00096	no	<0.050	0.06469	no
April 2011 Avg.			0.0025	0.03178	no		0.0005	NA	NA	0.025	0.07215	no
May 2011												
5/2/2011	CDM		<0.005	0.23828	no		<0.001	0.00081	no	<0.050	0.05957	no
5/2/2011 - duplicate	CDM		<0.005	0.21659	no		<0.001	0.00067	no	<0.050	0.05414	no
5/9/2011	CDM		<0.005	0.26357	no		<0.001	0.00100	no	<0.050	0.06590	no
5/16/2011	CDM		<0.005	0.23154	no		<0.001	0.00077	no	<0.050	0.05788	no
5/23/2011	CDM		<0.005	0.29749	no		<0.001	0.00128	no	<0.050	0.07440	no
5/31/2011	CDM		<0.005	0.21750	no		<0.001	0.00068	no	<0.050	0.05437	no
May 2011 Avg.			0.0025	0.02715	no		0.0005	NA	NA	0.025	0.06162	no
June 2011												
6/6/2011	CDM		<0.005	0.32354	no		<0.001	0.00152	no	<0.050	0.08092	no
6/13/2011	CDM		<0.005	0.36667	no		<0.001	0.00196	no	<0.050	0.09173	no
6/20/2011	CDM		<0.005	0.35712	no		<0.001	0.00185	no	<0.050	0.08934	no
6/27/2011	CDM		<0.005	0.45194	no		<0.001	0.00299	no	<0.050	0.11310	no
June 2011 Avg.			0.0025	0.04169	no		0.0005	NA	NA	0.025	0.09467	no
July 2011												
7/5/2011	CDM		<0.005	0.32311	no		<0.001	0.00151	no	<0.050	0.08082	no
7/11/2011	CDM		<0.005	0.41498	no		<0.001	0.00252	no	<0.050	0.10383	no
7/18/2011	CDM		<0.005	0.41903	no		<0.001	0.00257	no	<0.050	0.10485	no
7/25/2011	CDM		<0.005	0.48797	no		<0.001	0.00350	no	<0.050	0.12213	no
July 2011 Avg.			0.0025	0.04577	no		0.0005	NA	NA	0.025	0.10394	no
August 2011												
8/8/2011	CDM		<0.005	0.59220	no		<0.001	0.00519	no	<0.050	0.14826	no
September 2011												
9/26/2011 (slug test)	CDM		0.0190	1.51289	no		<0.001	0.03491	no	<0.050	0.37930	no
October 2011												
10/3/2011	CDM		0.0160	1.51289	no		<0.001	0.03491	no	<0.050	0.37930	no
10/10/2011	CDM		0.0110	1.51289	no		<0.001	0.03491	no	<0.050	0.37930	no