Mirant MD Ash Management, LLC

Brandywine Fly Ash Facility

Report Addressing NPDES Condition 'M'
Chesapeake Bay 2000 Agreement

December 2009

Introduction

This is the second report submitted by Mirant MD Ash, LLC (Mirant Ash) addressing Condition 'M' of the current National Pollutant Discharge Elimination System (NPDES) Permit for the Brandywine Fly Ash Facility (02-DP-1389). Condition M requires that Mirant Ash report annually to the Department on progress towards meeting a specific goal of the Chesapeake Bay 2000 Agreement. That region-wide goal states:

> **Through continual improvement of pollution measures and other voluntary means, strive for zero release of chemical contaminants from point sources, ...Particular emphasis shall be placed on achieving, by 2010, elimination of mixing zones for persistent or bioaccumulative toxics."**

In last year's February 29, 2008 Baseline Report, Mirant Ash addressed this permit condition by examining the facility's permit compliance record as well as by describing various procedures put into place at the facility over the past several years to minimize point source discharges from the site. These procedures included installing a Geosynthetic Liner under the final phase of fill to more effectively move leachate to the treatment ponds and installing a low permeability "cap" over approximately 15 acres of fill. A storm water pollution prevention plan was also developed to help identify and minimize sources of pollution impacting storm water.

This first annual update will examine data from the quarterly monitoring reports and surface water sampling submitted to the Maryland Department of Environment (MDE) during 2008. In addition, the report contains a brief discussion of work that was contracted in 2008 and carried out in 2009 to evaluate the methodology currently in use to analyze selenium in the discharge. The study also looks at the speciation of that selenium in order to get a better sense of the environmental significance of the current selenium levels.

Site Description

The Brandywine Ash Site is located at 11700 North Keys Road in Southern Prince George's County. The 300(+) acre site lies within a rolling, partially wooded area west of the Patuxent River and east of Route 301. The site itself is bounded on the north by Mataponi Creek and on the east and west by unnamed tributaries of Mataponi Creek. Mataponi Creek flows in a northeasterly direction and drains into the Patuxent River, approximately six miles from the facility (**Figure 1**).

The adjoining property to the south is occupied by an active gravel mining operation. A forest buffer surrounds Mataponi Creek as it flows along the northwest edge of the property, but beyond this buffer, the adjoining property is a debris landfill. A power line right-of-way (ROW) bisects the property on the western end, and a switchyard is located just off of the property to the north. Contiguous woodland runs northward along this ROW. The adjoining property to the east is agricultural land.

Data Discussion

Appendix A is a listing of the monthly monitoring results for iron, total suspended solids (TSS) and acidity (pH), which are the only parameters for which the NPDES permit (during the past two permit cycles) imposes limits. During 2007, and as stated in the Baseline Report, for the past two permit cycles, there have been no exceedences of those limits (an elevated TSS in 2006 was the result of a two-year, 24-hour storm event and is not considered a violation per note in section IA(1) of the permit).

Appendix B contains loading calculations for the three NPDES outfalls at the site. This metric is a good way to address Condition M as it is most representative of the goals of the Chesapeake Bay 2000 agreement and the concept of total maximum daily limits (TMDL) in general. The parameters included are those for which the current NPDES permit as well as the prior permit has required monitoring (TSS, iron, copper, lead, selenium and zinc), regardless of whether any limit was imposed.

There are two noticeable trends in this data. First, although loadings

for iron appeared to increase steadily between 2002 and 2006 they are now on the decline. Second, reported selenium and copper loadings appeared to increase after 2005. Further investigation indicates that this apparent increase is an artifact of a change in the analytical method used to analyze the samples. The 2005 permit required either U.S. Environmental Protection Agency (EPA) method 200.7 or 200.8 to be used for metals reporting. From the time the permit was issued through the third quarter of 2005, method 200.7 was used for selenium and copper. All metals were switched to the 200.8 method during the last quarter of 2005 with the thought that it was a more sensitive method that would result in better quality data.

After switching to method 200.8 we began to take note of a growing body of literature that discussed the potential for serious interference in selenium analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS) (used by EPA 200.8) for samples with high ionic interferences (e.g., Mayer et. al, 2003). Based on the Mayer study, Mirant Ash had reason to believe that method 200.8 might be giving falsely high readings of selenium levels in the effluent, due to the presense of major ionic components (e.g., chloride and sulfate). Aside from selenium, none of the metals were present in the effluent at levels above the relevant hardness-adjusted in-stream water quality standards for protection of aquatic life from chronic effects. Selenium will be discussed in more detail in the next section, which describes new studies Mirant Ash commissioned in 2009.

Appendix C contains the surface water monitoring data from 2002-2008. Surface water is monitored in streams at three locations around the site. Station S-1 is on Mataponi Creek upstream of the treatment pond discharges and has been used in Mirant Ash reports over the years to represent background conditions. Station S-2 is downstream of the fill on Mataponi Creek, while station S-3 is farther down, just beyond the junction with a tributary that lies to the east of the site.

Mirant Ash's Baseline Report noted that cadmium had exceeded the chronic water quality limits both above and below the site since 2002. The more recent data collected in 2008 confirm a trend observed in the surface water monitoring results for the last two quarters of 2007, which showed that cadmium levels at all surface water sampling stations had decreased and were consistently below 0.0005 mg/l.

New Studies

Accurately measuring selenium concentrations in water that contains major ionic components, such as chloride, sulfate and magnesium, is an issue at many industrial sites. These and other ions are present in the effluent from the treatment ponds at Brandywine. Recognizing MDE's interest in controlling selenium from industrial discharges, Mirant Ash studied: 1) whether analytical results for selenium were overstating the concentration of selenium in effluent discharged from the Brandywine site; and 2) whether the selenium was biologically available.

To better understand these issues, Mirant Ash contracted Dr. Gerhardt Riedel with the Smithsonian Environmental Research Center (SERC) of Edgewater, Maryland. SERC sampled water from the ponds as well as the effluent streams at the site and compared concentrations with split samples taken by Mirant Ash's contract lab, using standard ICP-MS, ICP-MS with dynamic reaction cell, and a completely separate method referred to as hydride generation. The hydride generation method is able to essentially free the selenium from the aqueous matrix thereby avoiding ionic interferences in water. In addition, SERC speciated the selenium found in the effluent in order to get a better idea of impacts on biota.

Initial results indicate that the selenium has been overreported by our contract lab using standard EPA 200.8 analysis. The hydride generation method used by SERC was able to deliver more accurate results. Results of the speciation study also demonstrated that selenium in the effluent is present mostly in an organic form. Studies suggest that this form of selenium is less bio-available than the inorganic forms.

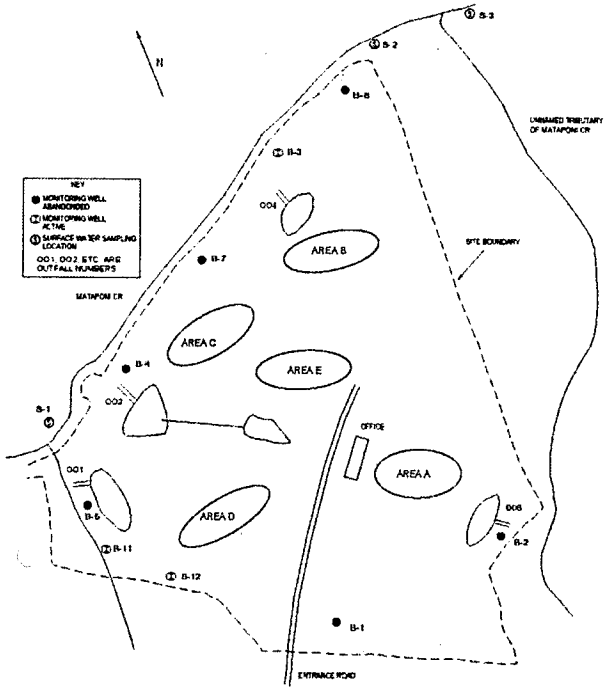
In late 2009, Mirant Ash also commissioned a study by William M. Porter and Co., to prepare an updated report on groundwater – specifically to update groundwater contour lines as requested by MDE's Solid Waste Division, which will be monitoring ash sites under Maryland's new ash regulations. While it is not yet finalized, this report will provide an addendum to several previous reports prepared by Porter and Co. for the site, the most recent of which was prepared in 2003. The 2003 report concluded that the ground and surface

water quality was fairly stable and there was no evidence of significant impacts from long-term releases to either ground or surface waters.

Conclusion

This document describes the ways in which the Brandywine Ash Site is addressing the goals of the Chesapeake Bay 2000 Agreement. We are continually assessing our ash management activities to minimize the threat of pollutant discharges to surface waters. We have done extensive monitoring of surface and groundwater on the site and periodically have that data independently reviewed to assess water quality trends. Above all, we can show that we consistently meet our NPDES permit limits for the measured parameters.

BRANDYWINE ASH STORAGE SITE
SITE DIAGRAM SHOWING MONITORING WELLS AND
SURFACE WATER SAMPLING LOCATIONS
NOT TO SCALE



MAP OF DIRT ROADS AND SEDIMENTATION PONDS ON SITE

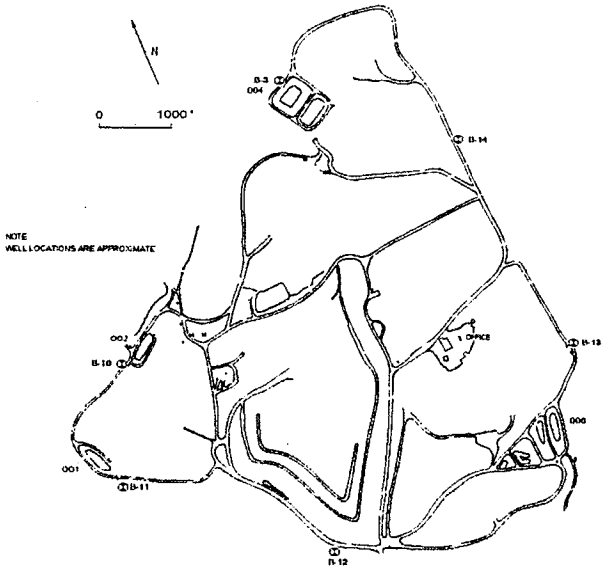


FIGURE 1

APPENDIX A
NPDES Permit Data Monitored with Limits

The parameters Iron, pH and TSS are measured with limits as part of Brandywine's NPDES Permit. There have been no exceedances over the past several permit cycles. Included in the following tables are the raw data for these three parameters.

Iron Monthly Average - **3.5**; Daily Max - **7.0**

pH Minimum Concentration – **6.0**; Daily Max – **9.0**

TSS Monthly Average – **35.0**; Daily Max – **70.0**

Highlighted - In 2006 at Outfall 6 a TSS exceeded the Daily Max limit. This was not considered a permit exceedance as it was the result of a 2 year – 24 hour storm event as allowed in IA of the NPDES Permit.

IRON 2002	Outfall	Date	Result
	2		
		1/17/2002	1.1
		3/26/2002	0.48
		5/6/2002	<0.1
		11/21/2002	0.13
	4		
		2/12/2002	0.82
		5/22/2002	<0.1
		11/21/2002	0.18
		12/30/2002	0.2
	6		
		11/21/2002	0.37
IRON 2003			
	2		
		1/13/2003	0.29
		2/26/2003	2.1
		3/12/2003	0.72
		4/15/2003	0.33
		5/20/2003	0.15
		6/18/2003	<0.1
		7/16/2003	0.19
		9/2/2003	0.17
		9/16/2003	0.29
		10/23/2003	0.12
		11/19/2003	1.1
		12/22/2003	0.31
	4		
		1/16/2003	0.11
		3/3/2003	0.55
		4/1/2003	0.22
		5/15/2003	0.18
		6/3/2003	<0.1
		6/18/2003	0.14
		7/10/2003	0.19
		8/20/2003	0.18
		9/16/2003	0.2
		10/28/2003	0.53
		11/17/2003	0.25
		12/22/2003	0.34
	6		
		2/21/2003	0.5
		4/3/2003	0.75
		6/26/2003	0.85
		11/18/2003	0.53

IRON 2004	Outfall	Date	Result
	2		
		2/3/2004	1
		3/18/2004	0.83
		4/27/2004	0.49
		6/2/2004	0.25
		6/17/2004	0.41
		8/4/2004	0.78
		9/9/2004	0.95
		11/3/2004	1
		12/14/2004	2
	4		
		1/25/2004	0.46
		2/5/2004	0.81
		3/18/2004	0.32
		4/19/2004	0.49
		6/17/2004	0.26
		7/26/2004	0.84
		8/4/2004	0.42
		9/2/2004	0.19
		10/4/2004	0.17
		11/5/2004	0.4
		11/30/2004	0.33
	6		
		7/14/2004	1.5
IRON 2005			
	2		
		1/25/2005	1.4
		3/28/2005	1
		3/28/2005	1
		5/10/2005	0.86
		6/16/2005	0.5
		10/11/2005	1.1
		12/13/2005	2.4
	4		
		1/3/2005	0.69
		1/4/2005	0.69
		3/7/2005	0.3
		3/31/2005	0.7
		4/28/2005	0.69
		5/25/2005	0.46
		7/7/2005	0.26
		8/22/2005	0.16
		10/11/2005	0.31
		12/1/2005	0.68

IRON 2005 Cont.	Outfall	Date	Result
	6		
		1/20/2005	1.9
		3/24/2005	1.3
		3/31/2005	1.7
		4/28/2005	0.39
		5/26/2005	0.57
		11/1/2005	0.26
IRON 2006			
	2		
		1/26/2006	0.96
		3/16/2006	2.1
		6/26/2006	0.71
		11/15/2006	0.69
	4		
		1/4/2006	0.35
		2/16/2006	1.8
		5/4/2006	< 0.1
		6/26/2006	0.17
		8/1/2006	< 0.01
		9/5/2006	0.38
		11/3/2006	0.078
		12/7/2006	0.74
	6		
		1/17/2006	0.73
		2/16/2006	0.86
		6/26/2006	1.7
		7/10/2006	0.32
		9/5/2006	2.6
		9/25/2006	0.2
		11/3/2006	0.88
		12/7/2006	0.89
IRON 2007			
	2		
		1/4/2007	0.94
		3/1/2007	0.96
		4/19/2007	0.74
		11/1/2007	0.14
	4		
		1/4/2007	1.2
		2/20/2007	0.79
		3/21/2007	0.58
		4/19/2007	0.38
		6/7/2007	0.061
		9/5/2007	0.16
		11/1/2007	0.32
		12/14/2007	1.1

IRON 2007 Cont	Outfall	Date	Result
	6		
		1/4/2007	0.8
		2/20/2007	0.73
		3/21/2007	1.2
		4/19/2007	0.95
		7/3/2007	0.24
		9/5/2007	0.15
		11/1/2007	0.42
IRON 2008			
	2		
		1/7/2008	0.49
		3/13/2008	<1
		5/13/2008	0.69
		6/25/2008	0.18
		12/3/2008	0.23
	4		
		2/4/2008	1.1
		5/1/2008	<0.1
		6/26/2008	0.018
		8/12/2008	<0.005
		9/30/2008	<0.005
		11/5/2008	<0.005
		12/3/2008	0.25
	6		
		1/7/2008	0.14
		2/6/2008	0.16
		5/13/2008	0.49
		6/10/2008	0.12
		8/10/2008	0.077
		10/8/2008	0.19
		12/3/2008	0.2
PH 2002			
	2		
		1/17/2002	8.12
		3/26/2002	8.31
		5/6/2002	8.61
		11/21/2002	8.5
	4		
		2/12/2002	8.09
		5/22/2002	8.38
		11/21/2002	8.39
		12/30/2002	8.45
	6		
		11/21/2002	7.43

PH 2003	Outfall	Date	Result
	2		
		1/13/2003	7.6
		2/26/2003	7.08
		3/12/2003	7.64
		4/15/2003	8.1
		5/20/2003	8.3
		6/18/2003	7.9
		7/16/2003	7.8
		9/2/2003	7.96
		9/16/2003	8.22
		10/23/2003	8.4
		11/19/2003	7.7
		12/22/2003	7.7
	4		
		1/16/2003	8.58
		3/3/2003	7.25
		4/1/2003	8.1
		5/15/2003	8.08
		6/3/2003	8.06
		6/18/2003	7.68
		7/10/2003	8
		8/20/2003	8.1
		9/16/2003	7.98
		10/28/2003	8.1
		11/17/2003	7.8
		12/22/2003	7.9
PH 2003			
	6		
		2/21/2003	7.19
		4/3/2003	7.43
		6/26/2003	7.31
		11/18/2003	7.8
PH 2004			
	2		
		2/3/2004	7.9
		3/18/2004	8.1
		4/27/2004	7.9
		8/3/2004	7.6
		8/4/2004	7.6
		9/8/2004	7.4
		11/3/2004	7.3
		12/14/2004	7
	4		
		2/5/2004	7.6
		3/18/2004	7.8
		4/19/2004	8.1
		7/26/2004	7.4

PH 2004 Cont	Outfall	Date	Result
	4		
		8/3/2004	7.5
		8/4/2004	7.5
		9/2/2004	7.2
		10/4/2004	7.5
		11/5/2004	7.5
		11/30/2004	7
	6		
		7/14/2004	7.3
PH 2005			
	2		
		1/25/2005	7
		3/28/2005	7.1
		5/10/2005	7.5
		6/16/2005	7.5
		12/13/2005	7.1
	4		
		1/3/2005	7.2
		1/25/2005	7.2
		3/7/2005	7.4
		3/31/2005	7.1
		4/28/2005	7
		5/25/2005	7.1
		7/7/2005	7.1
		8/22/2005	7.3
		12/1/2005	7.1
	6		
		1/20/2005	7.3
		3/24/2005	7.2
		3/31/2005	7.1
		4/28/2005	7.3
		5/26/2005	7.4
		11/1/2005	7.4
PH 2006			
	2		
		1/26/2006	7.2
		3/16/2006	7.4
		6/26/2006	7.7
		11/15/2006	7.1
	4		
		1/4/2006	7.1
		2/16/2006	7.5
		5/4/2006	7.4
		6/26/2006	7.1
		8/1/2006	7.9
		9/5/2006	7.5
		11/3/2006	7.1

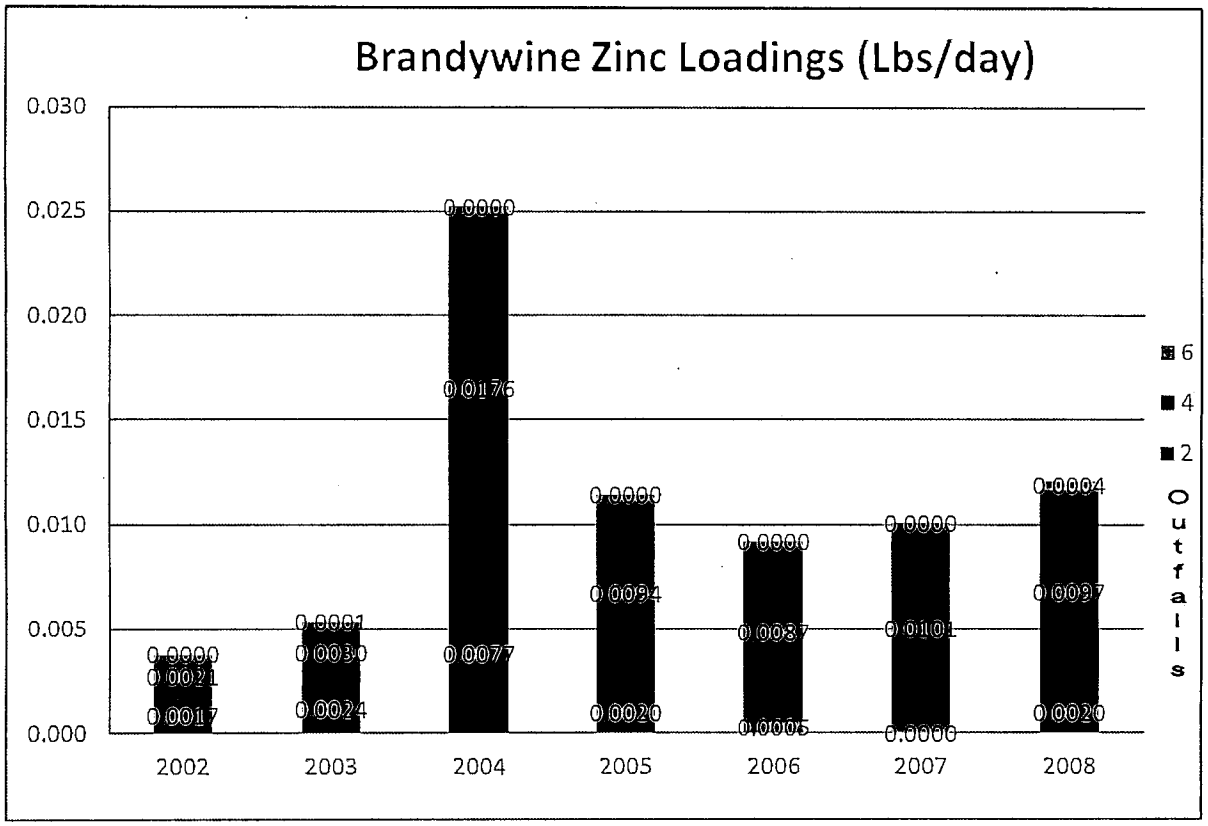
		12/7/2006	6.9
PH 2006	Outfall	Date	Result
	6		
		1/17/2006	7.3
		2/16/2006	7.2
		6/26/2006	6.9
		7/10/2006	6.9
		9/5/2006	6.8
		9/25/2006	7.3
		11/3/2006	6.7
		11/17/2006	6.6
		12/7/2006	6.9
PH 2007			
	2		
		1/4/2007	7.1
		3/1/2007	7.2
		11/1/2007	8
	4		
		1/4/2007	6.9
		2/20/2007	6.5
		3/21/2007	6.8
		9/5/2007	7.5
		11/1/2007	7.1
		12/14/2007	6.9
	6		
		1/4/2007	7
		2/20/2007	8.1
		3/21/2007	7.0
		7/3/2007	7.2
		9/5/2007	7.1
		11/1/2007	7.0
PH 2008			
	2		
		1/7/2008	7.6
		3/13/2008	7.7
		5/13/2008	7.8
		6/25/2008	7.7
		12/2/2008	7.2
	4		
		2/4/2008	6.7
		5/13/2008	7.0
		5/1/2008	6.8
		6/26/2008	7.6
		8/12/2008	8.2
		9/30/2008	7.3
		11/5/2008	7.1
		12/3/2008	6.8
	6		
		1/7/2008	7.8
		2/8/2008	7.5
		5/13/2008	7.4
PH 2008 Cont	Outfall	Date	Result
	6		
		6/26/2008	8.3
		8/8/2008	6.5
		12/3/2008	7.5
TSS 2002			
	2		
		1/17/2002	7
		3/26/2002	5.2
		5/6/2002	5.2
		11/21/2002	18
	4		
		2/12/2002	8.8
		5/22/2002	7.7
		11/21/2002	22
		12/30/2002	9.5
	6		
		11/21/2002	4
TSS 2003			
	2		
		1/13/2003	8
		2/26/2003	11
		3/12/2003	3.6
		4/15/2003	5.8
		5/20/2003	6.8
		6/18/2003	6.5
		7/16/2003	4.6
		9/2/2003	5.6
		9/16/2003	5.8
		10/23/2003	2.6
		11/19/2003	9
		12/22/2003	4.5
	4		
		1/16/2003	8
		3/3/2003	14
		4/1/2003	8
		5/15/2003	15
		6/3/2003	9
		6/18/2003	5.2
		7/10/2003	7
		8/20/2003	5.5
		9/16/2003	6.2
		10/28/2003	5.4
		11/17/2003	8
		12/22/2003	7
	6		
		2/21/2003	3.2
		4/3/2003	1.6
		6/26/2003	2.2

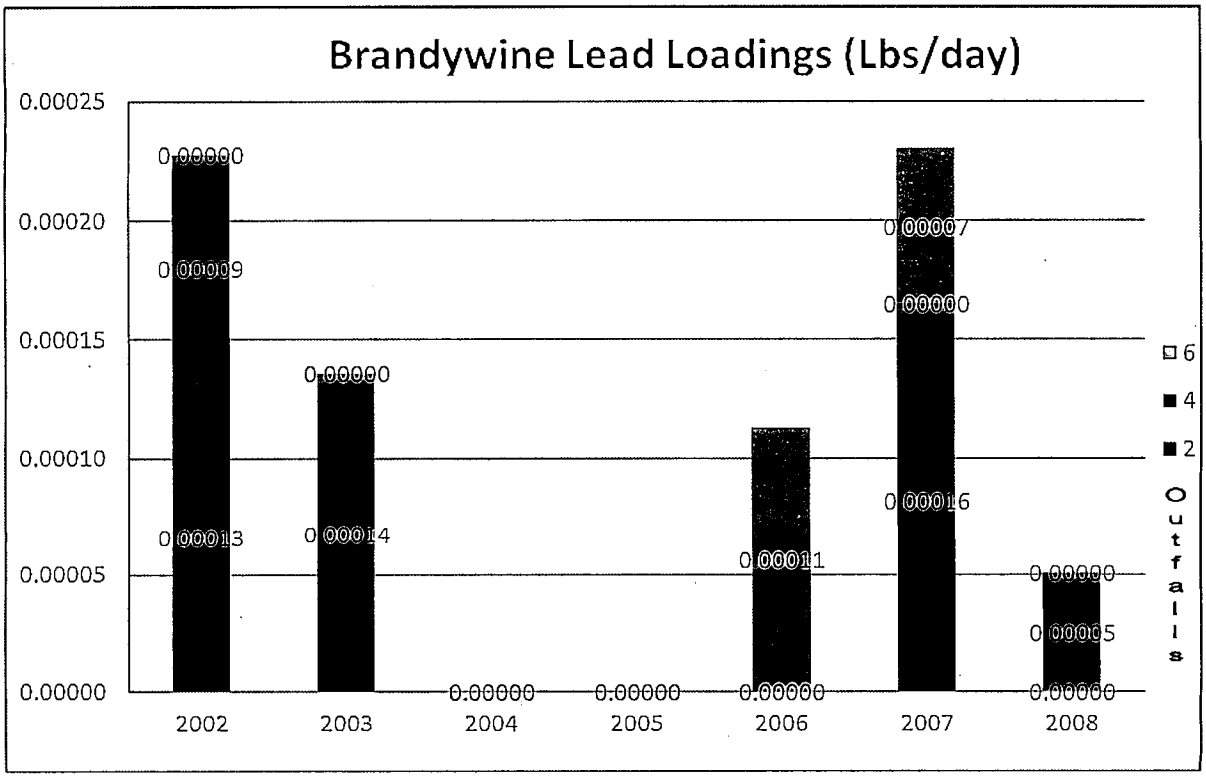
		11/18/2003	< 2.5
TSS 2004	Outfall	Date	Result
	2		
		2/3/2004	5
		3/18/2004	3.6
		4/27/2004	6
		6/2/2004	3.5
		6/17/2004	6
		8/4/2004	12
		9/9/2004	11
		11/3/2004	6.4
		12/14/2004	9
	4		
		1/25/2004	5
		2/5/2004	7
		3/18/2004	4.6
		4/19/2004	13
		6/17/2004	4.4
		7/26/2004	1.3
		8/4/2004	7
		9/2/2004	3.2
		10/4/2004	1
		11/5/2004	1.6
		11/30/2004	3
	6		
		7/14/2004	2.4
TSS 2005			
	2		
		1/25/2005	7
		3/28/2005	3
		5/10/2005	3.4
		6/16/2005	9.5
		10/11/2005	8
		12/13/2005	16
	4		
		1/3/2005	2.8
		1/4/2005	2.8
		3/7/2005	1.2
		3/31/2005	8.6
		4/28/2005	3
		5/25/2005	3
		7/7/2005	2.5
		8/22/2005	2.5
		10/11/2005	2.5
		12/1/2005	6.5
	6		
		1/20/2005	14
		3/24/2005	11
TSS 2005 Cont	Outfall	Date	Result
	6	3/31/2005	13
		4/28/2005	2.2
		5/26/2005	3.5
		11/1/2005	<2.5
TSS 2006			
	2		
		1/26/2006	<2.5
		3/16/2006	17
		6/26/2006	13
		11/15/2006	17
	4		
		1/4/2006	4.5
		2/16/2006	13
		5/4/2006	2.8
		6/26/2006	4.6
		8/1/2006	<2.5
		9/5/2006	13
		11/3/2006	1.4
		12/7/2006	5.4
	6		
		1/17/2006	4.4
		2/16/2006	3.5
		6/26/2006	70
		7/10/2006	6
		9/5/2006	37
		9/25/2006	2.2
		11/3/2006	4.8
		12/7/2006	7.8
TSS 2007			
	2		
		1/4/2007	6
		3/1/2007	5.3
		4/19/2007	5.2
		11/1/2007	11
	4		
		2/20/2007	2.5
		3/21/2007	4.6
		4/19/2007	4.4
		6/7/2007	2
		9/5/2007	2.4
		11/1/2007	4.6
		12/14/2007	5
	6		
		2/20/2007	3.6
		3/21/2007	19
		4/19/2007	13

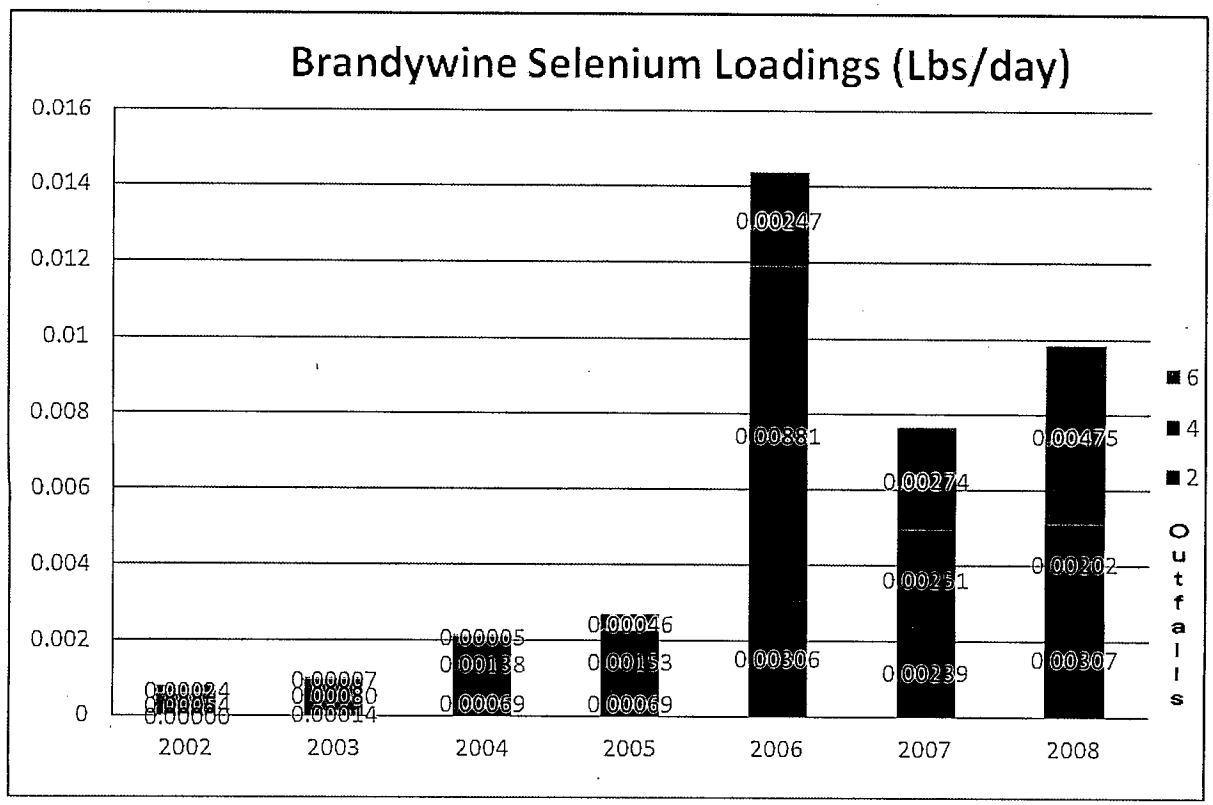
		7/3/2007	<5
TSS 2007	Outfall	Date	Result
Cont	**6**		
		9/5/2007	<10
		11/1/2007	4.8
TSS 2008			
	2		
		1/7/2008	7
		3/13/2008	12
		5/13/2008	11
		6/13/2008	16
		12/3/2008	14
	4		
		2/4/2008	9
		5/1/2008	5
		6/26/2008	<5
		8/12/2008	2.4
		9/30/2008	7
		11/5/2008	3
		12/3/2008	19
	6		
		1/7/2008	6.5
		2/6/2008	6.5
		5/13/2008	7
		6/10/2008	5.5
		8/5/2008	<5
		10/8/2008	<5
		12/3/2008	7.5

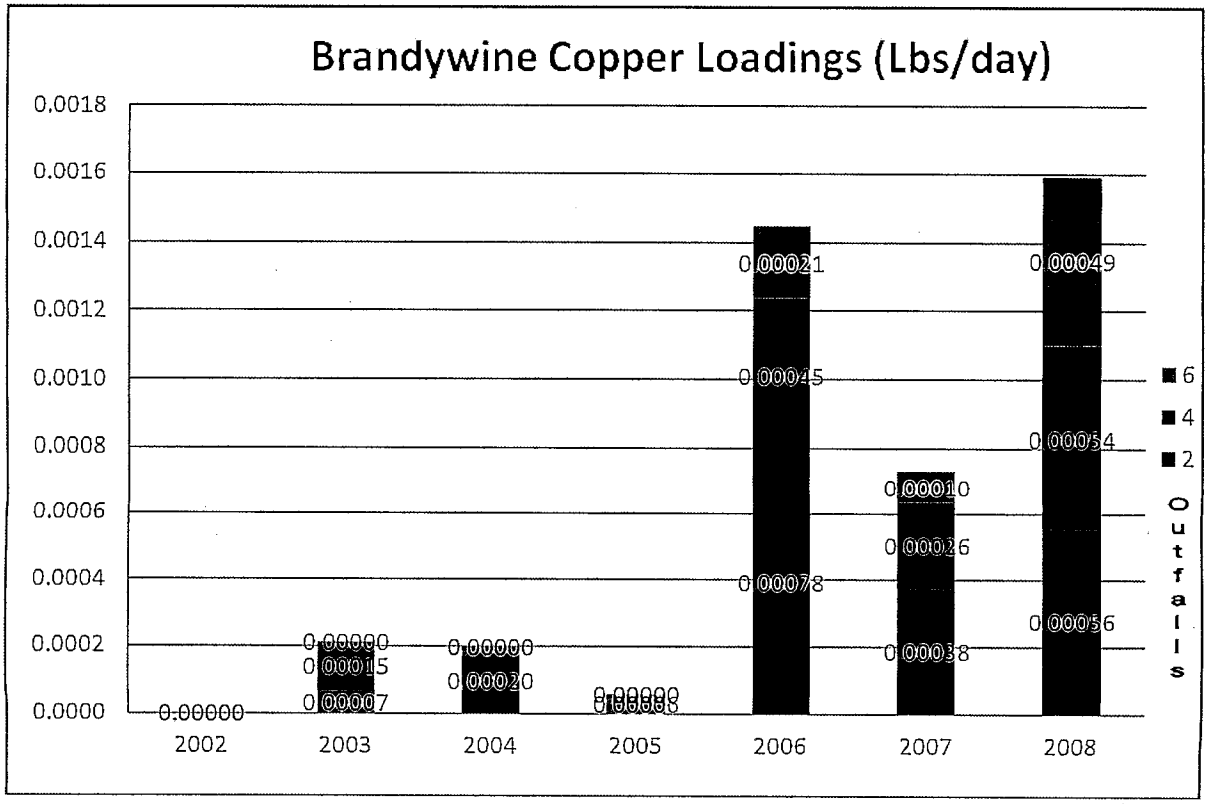
APPENDIX B

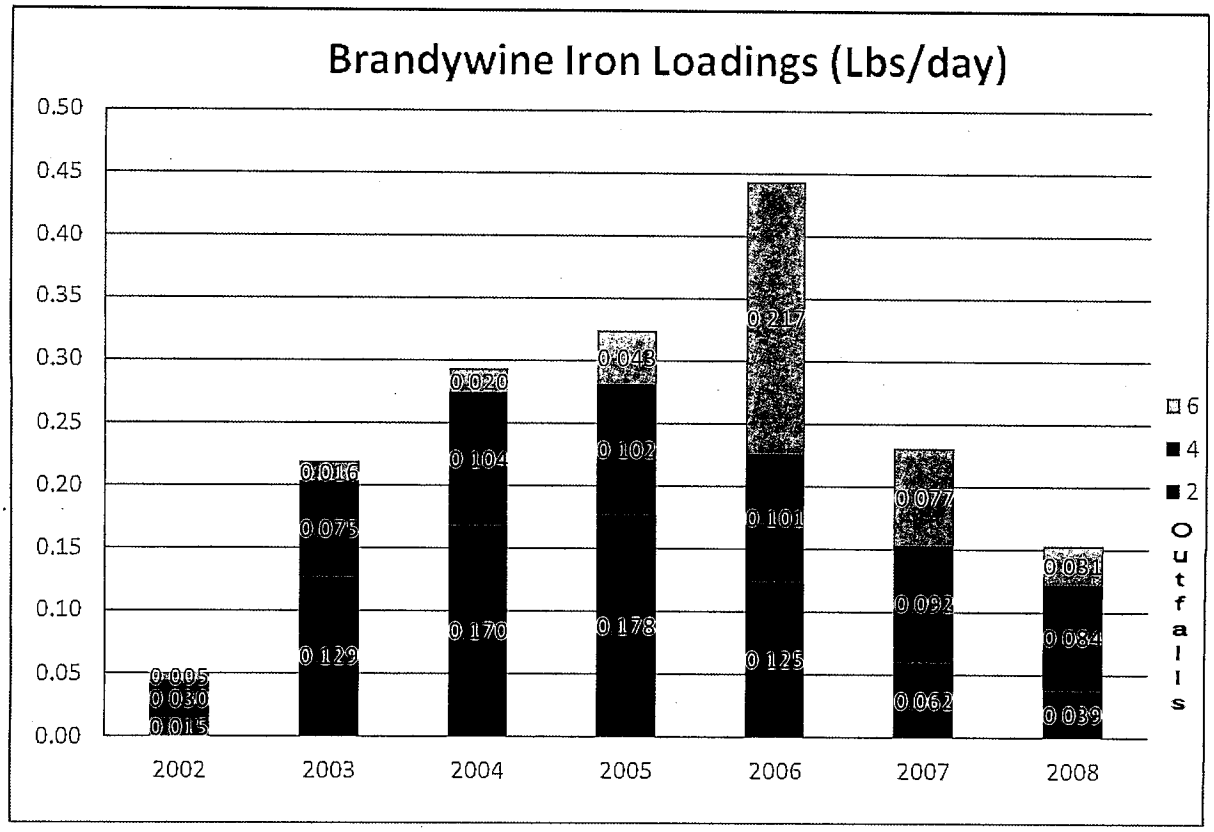
Brandywine Trending Data with Loadings 2002 - 2008

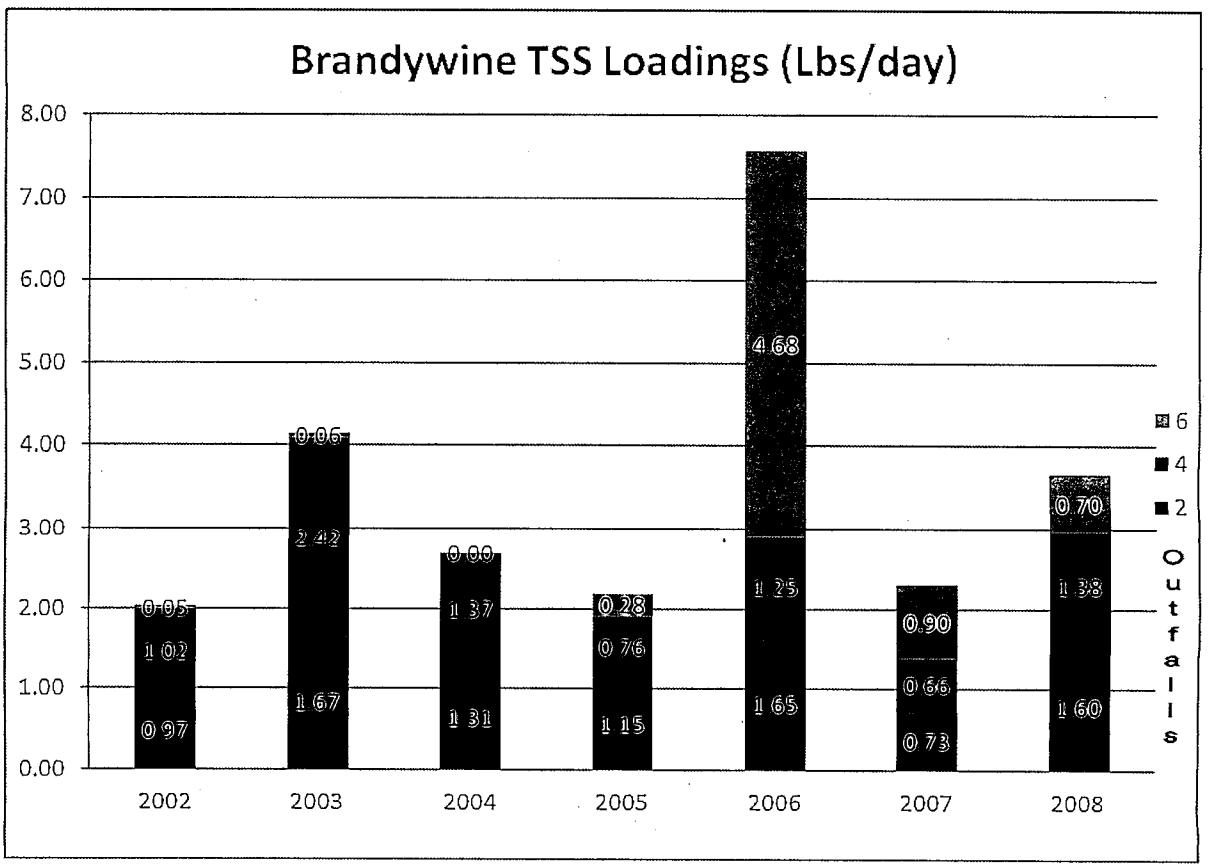

Brandywine Zinc Loadings (Lbs/day)
0.030
0.025
0.020
0.015
0.010
0.005
0.000
2002
2003
2004
2005
2006
2007
2008
6
4
2
Outfalls

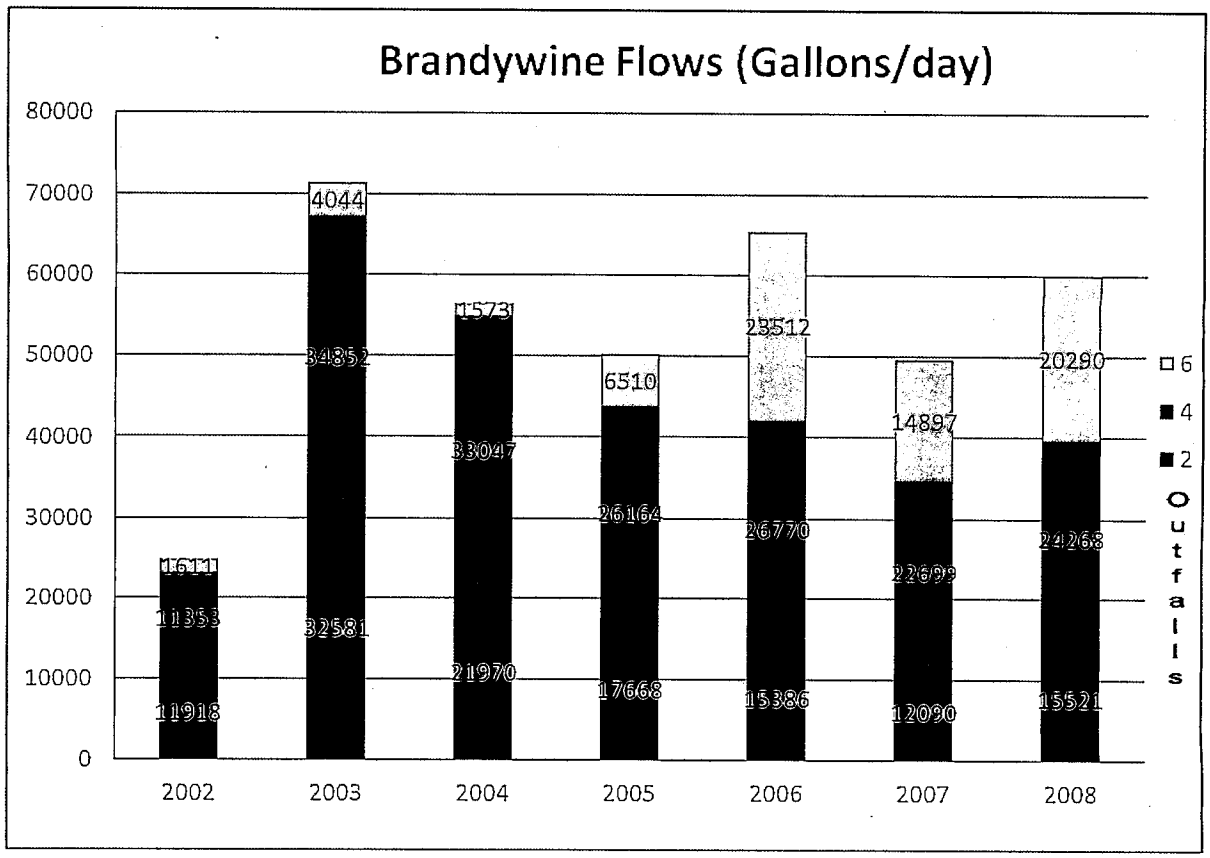

Brandywine Lead Loadings (Lbs/day)
0.00025
0.00020
0.00015
0.00010
0.00005
0.00000
2002
2003
2004
2005
2006
2007
2008
6
4
2
Outfalls

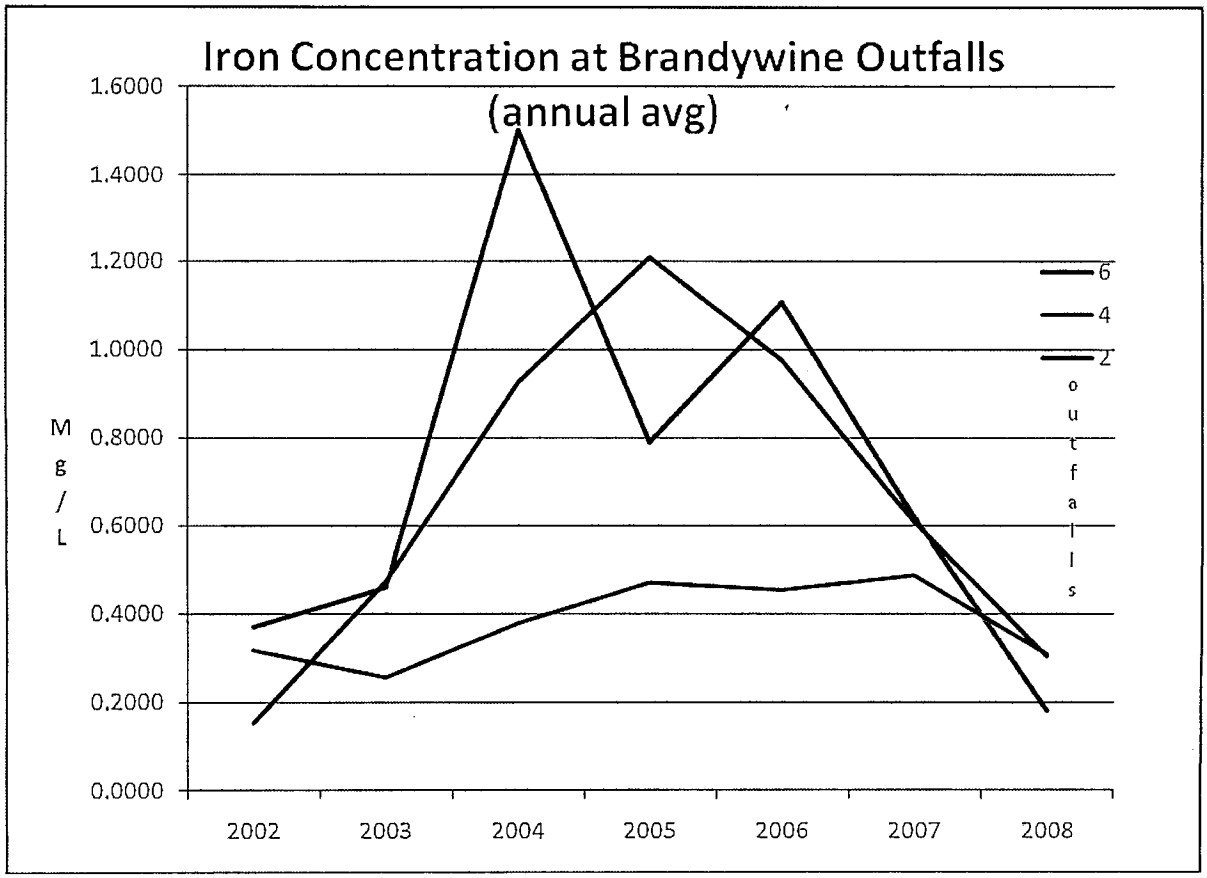

Brandywine Selenium Loadings (Lbs/day)
0.016
0.014
0.012
0.01
0.008
0.006
0.004
0.002
0
2002
2003
2004
2005
2006
2007
2008
0.00247
0.00381
0.00306
0.00274
0.00251
0.00239
0.00475
0.00202
0.00307
0.00005
0.00138
0.00069
0.00046
0.00153
0.00069
0.00007
0.00080
0.00014
0.00000
6
4
2
Outfalls


Brandywine Copper Loadings (Lbs/day)
0.0018
0.0016
0.0014
0.0012
0.0010
0.0008
0.0006
0.0004
0.0002
0.0000
2002
2003
2004
2005
2006
2007
2008
0.00000
0.00000
0.00015
0.00007
0.00000
0.00020
0.00000
0.00021
0.00045
0.00078
0.00010
0.00026
0.00038
0.00049
0.00054
0.00056
6
4
2
Outfalls


Brandywine Iron Loadings (Lbs/day)
0.50
0.45
0.40
0.35
0.30
0.25
0.20
0.15
0.10
0.05
0.00
0.005
0.030
0.015
0.016
0.075
0.129
0.020
0.104
0.170
0.043
0.102
0.178
0.217
0.101
0.125
0.077
0.092
0.062
0.031
0.084
0.039
2002
2003
2004
2005
2006
2007
2008
6
4
2
Outfalls


Brandywine TSS Loadings (Lbs/day)
8.00
7.00
6.00
5.00
4.00
3.00
2.00
1.00
0.00
0.05
1.02
0.97
0.06
2.42
1.67
0.00
1.37
1.31
0.28
0.76
1.15
4.68
1.25
1.65
0.90
0.66
0.73
0.70
1.38
1.60
2002
2003
2004
2005
2006
2007
2008
6
4
2
Outfalls


Brandywine Flows (Gallons/day)
80000
70000
60000
50000
40000
30000
20000
10000
0
2002
2003
2004
2005
2006
2007
2008
1611
11353
11918
4044
34852
32581
1573
33047
21970
6510
26164
17668
23512
26770
15386
14897
22699
12090
20290
24268
15521
6
4
2
Outfalls


Iron Concentration at Brandywine Outfalls
(annual avg)
1.6000
1.4000
1.2000
1.0000
0.8000
0.6000
0.4000
0.2000
0.0000
Mg/L
2002
2003
2004
2005
2006
2007
2008
6
4
2
outfalls

APPENDIX C

Stream Monitoring Data
2002 - 2008

S-1

2002 Q1	Parameter	Concentration (mg/l)
	CADMIUM	0.0026
	CHLORIDE	55
	COND	461
	COPPER	<0.005
	HARDNESS	120
	IRON	1.3
	LEAD	<0.005
	PH	5.6
	SULFATE	150
	TEMP	6.7
	ZINC	0.079

2003 Q1	Parameter	Concentration (mg/l)
	CADMIUM	0.0032
	CHLORIDE	41
	COND	368
	COPPER	0.003
	HARDNESS	98
	IRON	0.97
	LEAD	<0.005
	PH	5.1
	SULFATE	120
	TEMP	2.3
	ZINC	0.077

2002 Q2	Parameter	Concentration (mg/l)
	CADMIUM	0.0025
	CHLORIDE	69
	COND	588
	COPPER	< 0.005
	HARDNESS	140
	IRON	1.2
	LEAD	<0.005
	PH	4.8
	SULFATE	180
	TEMP	17
	ZINC	0.068

2003 Q2	Parameter	Concentration (mg/l)
	CADMIUM	0.0021
	CHLORIDE	38
	COND	327
	COPPER	<0.005
	HARDNESS	84
	IRON	1
	LEAD	<0.005
	PH	5.5
	SULFATE	110
	TEMP	17.1
	ZINC	0.055

2002 Q3	Parameter	Concentration (mg/l)
	CADMIUM	<0.0005
	CHLORIDE	9.4
	COND	93
	COPPER	0.004
	HARDNESS	20
	IRON	2.4
	LEAD	<0.005
	PH	6.2
	SULFATE	18
	TEMP	25
	ZINC	0.037

2003 Q3	Parameter	Concentration (mg/l)
	CADMIUM	0.00068
	CHLORIDE	22
	COND	251
	COPPER	<0.005
	HARDNESS	65
	IRON	5.3
	LEAD	<0.005
	PH	6.2
	SULFATE	110
	TEMP	21.9
	ZINC	0.033

2002 Q4	Parameter	Concentration (mg/l)
	CADMIUM	0.00096
	CHLORIDE	32
	COND	326
	COPPER	<0.005
	HARDNESS	76
	IRON	0.51
	LEAD	<0.005
	PH	6.9
	SULFATE	87
	TEMP	22
	ZINC	0.046

2003 Q4	Parameter	Concentration (mg/l)
	CADMIUM	0.0006
	CHLORIDE	20
	COND	255
	COPPER	<0.005
	HARDNESS	50
	IRON	3.4
	LEAD	<0.005
	PH	5.8
	SULFATE	90
	TEMP	18
	ZINC	0.03

S1 cont.

2004 Q1	Parameter	Concentration (mg/l)
	CADMIUM	0.0028
	CHLORIDE	30
	COND	290
	COPPER	<0.005
	HARDNESS	190
	IRON	16
	LEAD	0.006
	PH	5.6
	SULFATE	150
	TEMP	9.4
	ZINC	0.096

2004 Q2	Parameter	Concentration (mg/l)
	CADMIUM	0.00071
	CHLORIDE	30
	COND	313
	COPPER	0.004
	HARDNESS	82
	IRON	3.5
	LEAD	<0.005
	PH	6.6
	SULFATE	88
	TEMP	9
	ZINC	0.023

2004 Q3	Parameter	Concentration (mg/l)
	CADMIUM	0.0004
	CHLORIDE	55
	COND	236
	COPPER	<0.005
	HARDNESS	65
	IRON	4.3
	LEAD	<0.005
	PH	6.3
	SULFATE	71
	TEMP	25
	ZINC	0.021

2004 Q4	Parameter	Concentration (mg/l)
	CADMIUM	<0.0005
	CHLORIDE	25
	COND	170
	COPPER	<0.005
	HARDNESS	46
	IRON	2.4
	LEAD	<0.005
	PH	6.2
	SULFATE	62
	TEMP	14
	ZINC	<0.02

2005 Q1	Parameter	Concentration (mg/l)
	CADMIUM	0.001
	CHLORIDE	43
	COND	508
	COPPER	<0.005
	HARDNESS	
	IRON	3.6
	LEAD	<0.005
	PH	5.9
	SULFATE	130
	TEMP	3.5
	ZINC	0.045

2005 Q2	Parameter	Concentration (mg/l)
	CADMIUM	0.00099
	CHLORIDE	26
	COND	282
	COPPER	<0.005
	HARDNESS	75
	IRON	3.3
	LEAD	<0.005
	PH	6
	SULFATE	75
	TEMP	12
	ZINC	0.037

2005 Q3	Parameter	Concentration (mg/l)
	CADMIUM	0.001
	CHLORIDE	30
	COND	297
	COPPER	0.004
	HARDNESS	71
	IRON	16
	LEAD	0.005
	PH	6.5
	SULFATE	93
	TEMP	28
	ZINC	0.24

2005 Q4	Parameter	Concentration (mg/l)
	CADMIUM	0.0011
	CHLORIDE	8.5
	COND	300
	COPPER	<0.005
	HARDNESS	58
	IRON	1.9
	LEAD	<0.005
	PH	6.4
	SULFATE	42
	TEMP	18
	ZINC	0.046

S1 cont.

2006 Q1	Parameter	Concentration (mg/l)
	CADMIUM	0.001
	CHLORIDE	46
	COND	473
	COPPER	<0.002
	HARDNESS	110
	IRON	1.7
	LEAD	<0.002
	PH	5.6
	SULFATE	120
	TEMP	8.3
	ZINC	0.045

2006 Q2	Parameter	Concentration (mg/l)
	CADMIUM	0.00076
	CHLORIDE	39
	COND	420
	COPPER	0.002
	HARDNESS	100
	IRON	2.4
	LEAD	<0.002
	PH	6
	SULFATE	140
	TEMP	18
	ZINC	0.037

2006 Q3	Parameter	Concentration (mg/l)
	CADMIUM	0.0005
	CHLORIDE	20
	COND	314
	COPPER	0.003
	HARDNESS	76
	IRON	2.3
	LEAD	0.0038
	PH	7
	SULFATE	100
	TEMP	24
	ZINC	0.025

2006 Q4	Parameter	Concentration (mg/l)
	CADMIUM	0.0004
	CHLORIDE	30
	COND	333
	COPPER	<0.002
	HARDNESS	
	IRON	2.6
	LEAD	0.0057
	PH	6.6
	SULFATE	70
	TEMP	19
	ZINC	0.038

2007 Q1	Parameter	Concentration (mg/l)
	CADMIUM	0.0015
	CHLORIDE	17
	COND	253
	COPPER	<0.002
	HARDNESS	69
	IRON	4.2
	LEAD	0.0029
	PH	6.6
	SULFATE	90
	TEMP	6.3
	ZINC	[redacted]

2007 Q2	Parameter	Concentration (mg/l)
	CADMIUM	<0.0005
	CHLORIDE	19
	COND	261
	COPPER	<0.002
	HARDNESS	65
	IRON	3.5
	LEAD	<0.002
	PH	6.6
	SULFATE	98
	TEMP	9.7
	ZINC	<0.02

2007 Q3	Parameter	Concentration (mg/l)
	CADMIUM	<0.0005
	CHLORIDE	20
	COND	450
	COPPER	<0.002
	HARDNESS	75
	IRON	7
	LEAD	<0.002
	PH	7.3
	SULFATE	39
	TEMP	25
	ZINC	<0.02

2007 Q4	Parameter	Concentration (mg/l)
	CADMIUM	<0.0005
	CHLORIDE	18
	COND	1020
	COPPER	0.0021
	HARDNESS	81
	IRON	6.8
	LEAD	<0.002
	PH	7.3
	SULFATE	100
	TEMP	18
	ZINC	<0.02

S-1 cont.

2008 Q1	Parameter	Concentration (mg/l)
	CADMIUM	0.001
	CHLORIDE	46
	COND	530
	COPPER	<0.002
	HARDNESS	130
	IRON	1.9
	LEAD	<0.002
	PH	6.8
	SULFATE	130
	TEMP	4
	ZINC	0.036
2008 Q2	**Parameter**	**Concentration (mg/l)**
	CADMIUM	<0.0005
	CHLORIDE	28
	COND	361
	COPPER	<0.002
	HARDNESS	94
	IRON	2.1
	LEAD	<0.002
	PH	6.6
	SULFATE	130
	TEMP	12
	ZINC	0.021
2008 Q3	**Parameter**	**Concentration (mg/l)**
	CADMIUM	<0.0005
	CHLORIDE	15
	COND	208
	COPPER	<0.002
	HARDNESS	94
	IRON	3.8
	LEAD	<0.002
	PH	6.7
	SULFATE	54
	TEMP	25.1
	ZINC	<0.005
2008 Q4	**Parameter**	**Concentration (mg/l)**
	CADMIUM	<0.0005
	CHLORIDE	28
	COND	280
	COPPER	<0.002
	HARDNESS	65
	IRON	2.8
	LEAD	<0.002
	PH	6.4
	SULFATE	38
	TEMP	18.6
	ZINC	0.0063

S-2

2002 Q1	Parameter	Concentration (mg/l)
	CADMIUM	0.0012
	CHLORIDE	77
	COND	551
	COPPER	<0.005
	HARDNESS	130
	IRON	1.9
	LEAD	<0.005
	PH	6.6
	SULFATE	95
	TEMP	4.1
	ZINC	0.042

2003 Q1	Parameter	Concentration (mg/l)
	CADMIUM	0.0016
	CHLORIDE	67
	COND	981
	COPPER	<0.005
	HARDNESS	250
	IRON	0.76
	LEAD	<0.005
	PH	7.2
	SULFATE	270
	TEMP	2.1
	ZINC	0.048

2002 Q2	Parameter	Concentration (mg/l)
	CADMIUM	0.0011
	CHLORIDE	63
	COND	421
	COPPER	<0.005
	HARDNESS	100
	IRON	2
	LEAD	<0.005
	PH	7
	SULFATE	77
	TEMP	17
	ZINC	0.028

2003 Q2	Parameter	Concentration (mg/l)
	CADMIUM	0.002
	CHLORIDE	43
	COND	298
	COPPER	<0.005
	HARDNESS	84
	IRON	1
	LEAD	<0.005
	PH	7
	SULFATE	45
	TEMP	14.4
	ZINC	0.053

2002 Q3	Parameter	Concentration (mg/l)
	CADMIUM	0.00053
	CHLORIDE	54
	COND	423
	COPPER	<0.005
	HARDNESS	88
	IRON	1.1
	LEAD	<0.005
	PH	6.3
	SULFATE	78
	TEMP	24
	ZINC	0.027

2003 Q3	Parameter	Concentration (mg/l)
	CADMIUM	0.00055
	CHLORIDE	60
	COND	784
	COPPER	<0.005
	HARDNESS	210
	IRON	3.1
	LEAD	<0.005
	PH	7.2
	SULFATE	250
	TEMP	23.5
	ZINC	0.021

2002 Q4	Parameter	Concentration (mg/l)
	CADMIUM	0.003
	CHLORIDE	220
	COND	1470
	COPPER	<0.005
	HARDNESS	380
	IRON	0.73
	LEAD	<0.005
	PH	5.9
	SULFATE	320
	TEMP	21
	ZINC	0.066

2003 Q4	Parameter	Concentration (mg/l)
	CADMIUM	<0.0005
	CHLORIDE	48
	COND	357
	COPPER	<0.005
	HARDNESS	77
	IRON	2.4
	LEAD	<0.005
	PH	6.6
	SULFATE	54
	TEMP	14
	ZINC	<0.02

S2 cont.

2004 Q1	Parameter	Concentration (mg/l)
	CADMIUM	0.0011
	CHLORIDE	36
	COND	280
	COPPER	<0.005
	HARDNESS	79
	IRON	2.6
	LEAD	<0.005
	PH	6.6
	SULFATE	28
	TEMP	9.3
	ZINC	0.029

2004 Q2	Parameter	Concentration (mg/l)
	CADMIUM	0.0011
	CHLORIDE	51
	COND	389
	COPPER	<0.005
	HARDNESS	88
	IRON	1.9
	LEAD	<0.005
	PH	7.1
	SULFATE	49
	TEMP	5.6
	ZINC	0.028

2004 Q3	Parameter	Concentration (mg/l)
	CADMIUM	0.00053
	CHLORIDE	180
	COND	1280
	COPPER	<0.005
	HARDNESS	330
	IRON	3
	LEAD	<0.005
	PH	6.9
	SULFATE	320
	TEMP	25
	ZINC	0.02

2004 Q4	Parameter	Concentration (mg/l)
	CADMIUM	<0.0005
	CHLORIDE	69
	COND	390
	COPPER	<0.005
	HARDNESS	95
	IRON	1.6
	LEAD	<0.005
	PH	7
	SULFATE	76
	TEMP	14
	ZINC	<0.02

2005 Q1	Parameter	Concentration (mg/l)
	CADMIUM	0.001
	CHLORIDE	47
	COND	399
	COPPER	<0.005
	HARDNESS	
	IRON	1.7
	LEAD	<0.005
	PH	7
	SULFATE	49
	TEMP	4.1
	ZINC	0.033

2005 Q2	Parameter	Concentration (mg/l)
	CADMIUM	0.0011
	CHLORIDE	31
	COND	236
	COPPER	<0.005
	HARDNESS	54
	IRON	2
	LEAD	<0.005
	PH	6.8
	SULFATE	41
	TEMP	12
	ZINC	0.031

2005 Q3	Parameter	Concentration (mg/l)
	CADMIUM	0.0004
	CHLORIDE	69
	COND	512
	COPPER	<0.005
	HARDNESS	110
	IRON	3
	LEAD	<0.005
	PH	6.6
	SULFATE	92
	TEMP	26
	ZINC	<0.02

2005 Q4	Parameter	Concentration (mg/l)
	CADMIUM	0.0013
	CHLORIDE	350
	COND	2440
	COPPER	<0.005
	HARDNESS	740
	IRON	2
	LEAD	<0.005
	PH	7.4
	SULFATE	310
	TEMP	18
	ZINC	0.039

S2 cont.

2006 Q1	Parameter	Concentration (mg/l)
	CADMIUM	0.00066
	CHLORIDE	57
	COND	433
	COPPER	<0.002
	HARDNESS	94
	IRON	1.1
	LEAD	<0.002
	PH	7
	SULFATE	40
	TEMP	8.1
	ZINC	0.032

2007 Q1	Parameter	Concentration (mg/l)
	CADMIUM	0.0015
	CHLORIDE	39
	COND	330
	COPPER	<0.002
	HARDNESS	83
	IRON	1.7
	LEAD	0.0022
	PH	7.2
	SULFATE	61
	TEMP	5
	ZINC	<0.02

2006 Q2	Parameter	Concentration (mg/l)
	CADMIUM	0.00061
	CHLORIDE	52
	COND	433
	COPPER	<0.002
	HARDNESS	100
	IRON	2.5
	LEAD	0.001
	PH	7
	SULFATE	93
	TEMP	18
	ZINC	0.022

2007 Q2	Parameter	Concentration (mg/l)
	CADMIUM	0.00067
	CHLORIDE	32
	COND	296
	COPPER	<0.002
	HARDNESS	65
	IRON	1.6
	LEAD	<0.002
	PH	7
	SULFATE	48
	TEMP	9.6
	ZINC	<0.02

2006 Q3	Parameter	Concentration (mg/l)
	CADMIUM	<0.0005
	CHLORIDE	54
	COND	512
	COPPER	0.0021
	HARDNESS	120
	IRON	2.9
	LEAD	0.002
	PH	7.4
	SULFATE	51
	TEMP	28
	ZINC	0.02

2007 Q3	Parameter	Concentration (mg/l)
	CADMIUM	<0.0005
	CHLORIDE	150
	COND	1300
	COPPER	<0.002
	HARDNESS	330
	IRON	0.96
	LEAD	<0.002
	PH	6.7
	SULFATE	220
	TEMP	24
	ZINC	<0.02

2006 Q4	Parameter	Concentration (mg/l)
	CADMIUM	<0.0005
	CHLORIDE	52
	COND	467
	COPPER	0.0025
	HARDNESS	
	IRON	1.5
	LEAD	0.0058
	PH	7.2
	SULFATE	70
	TEMP	18
	ZINC	0.025

2007 Q4	Parameter	Concentration (mg/l)
	CADMIUM	<0.0005
	CHLORIDE	38
	COND	2560
	COPPER	<0.002
	HARDNESS	710
	IRON	0.26
	LEAD	<0.002
	PH	6.8
	SULFATE	970
	TEMP	17
	ZINC	<0.02

S2 cont.

2008 Q1	Parameter	Concentration (mg/l)
	CADMIUM	0.00075
	CHLORIDE	67
	COND	568
	COPPER	<0.002
	HARDNESS	130
	IRON	1.2
	LEAD	<0.002
	PH	6.7
	SULFATE	81
	TEMP	3.2
	ZINC	0.032

2008 Q2	Parameter	Concentration (mg/l)
	CADMIUM	<0.0005
	CHLORIDE	48
	COND	408
	COPPER	<0.002
	HARDNESS	92
	IRON	2.0
	LEAD	0.0023
	PH	7
	SULFATE	50
	TEMP	12
	ZINC	<0.02

2008 Q3	Parameter	Concentration (mg/l)
	CADMIUM	<0.0005
	CHLORIDE	63
	COND	493
	COPPER	<0.002
	HARDNESS	
	IRON	2.3
	LEAD	<0.002
	PH	7.4
	SULFATE	60
	TEMP	22.9
	ZINC	<0.005

2008 Q4	Parameter	Concentration (mg/l)
	CADMIUM	<0.0005
	CHLORIDE	48
	COND	408
	COPPER	<0.002
	HARDNESS	92
	IRON	2.0
	LEAD	0.0023
	PH	7
	SULFATE	50
	TEMP	12
	ZINC	<0.02

S-3

2002 Q1	Parameter	Concentration (mg/l)
	CADMIUM	0.0012
	CHLORIDE	70
	COND	506
	COPPER	<0.005
	HARDNESS	120
	IRON	3.4
	LEAD	<0.005
	PH	6.8
	SULFATE	100
	TEMP	5.8
	ZINC	0.048

2002 Q2	Parameter	Concentration (mg/l)
	CADMIUM	0.00096
	CHLORIDE	59
	COND	384
	COPPER	<0.005
	HARDNESS	95
	IRON	1.2
	LEAD	<0.005
	PH	6.8
	SULFATE	72
	TEMP	19
	ZINC	0.029

2002 Q3	Parameter	Concentration (mg/l)
	CADMIUM	<0.0005
	CHLORIDE	77
	COND	610
	COPPER	<0.005
	HARDNESS	130
	IRON	1.2
	LEAD	<0.005
	PH	6.9
	SULFATE	93
	TEMP	27
	ZINC	0.065

2002 Q4	Parameter	Concentration (mg/l)
	CADMIUM	0.00085
	CHLORIDE	150
	COND	1080
	COPPER	<0.005
	HARDNESS	280
	IRON	0.56
	LEAD	<0.005
	PH	6.8
	SULFATE	280
	TEMP	24
	ZINC	0.039

2003 Q1	Parameter	Concentration (mg/l)
	CADMIUM	0.0017
	CHLORIDE	64
	COND	521
	COPPER	<0.005
	HARDNESS	220
	IRON	1.2
	LEAD	<0.005
	PH	6.8
	SULFATE	450
	TEMP	2.5
	ZINC	0.037

2003 Q2	Parameter	Concentration (mg/l)
	CADMIUM	0.002
	CHLORIDE	41
	COND	302
	COPPER	<0.005
	HARDNESS	74
	IRON	0.81
	LEAD	<0.005
	PH	6.7
	SULFATE	46
	TEMP	17.2
	ZINC	0.051

2003 Q3	Parameter	Concentration (mg/l)
	CADMIUM	0.0006
	CHLORIDE	56
	COND	656
	COPPER	<0.005
	HARDNESS	170
	IRON	2.9
	LEAD	<0.005
	PH	7.1
	SULFATE	230
	TEMP	23.7
	ZINC	0.021

2003 Q4	Parameter	Concentration (mg/l)
	CADMIUM	<0.0005
	CHLORIDE	45
	COND	324
	COPPER	<0.005
	HARDNESS	72
	IRON	2
	LEAD	<0.005
	PH	6.7
	SULFATE	44
	TEMP	17
	ZINC	<0.02

S3 cont.

2004 Q1	Parameter	Concentration (mg/l)
	CADMIUM	0.0012
	CHLORIDE	33
	COND	270
	COPPER	<0.005
	HARDNESS	71
	IRON	2.4
	LEAD	<0.005
	PH	6.6
	SULFATE	59
	TEMP	9.4
	ZINC	0.025

2005 Q1	Parameter	Concentration (mg/l)
	CADMIUM	0.00094
	CHLORIDE	42
	COND	350
	COPPER	<0.005
	HARDNESS	
	IRON	1.6
	LEAD	<0.005
	PH	7
	SULFATE	59
	TEMP	4.2
	ZINC	0.031

2004 Q2	Parameter	Concentration (mg/l)
	CADMIUM	0.0011
	CHLORIDE	50
	COND	358
	COPPER	<0.005
	HARDNESS	84
	IRON	1.6
	LEAD	<0.005
	PH	6.8
	SULFATE	66
	TEMP	8.2
	ZINC	<0.02

2005 Q2	Parameter	Concentration (mg/l)
	CADMIUM	0.001
	CHLORIDE	27
	COND	220
	COPPER	<0.005
	HARDNESS	54
	IRON	1.8
	LEAD	<0.005
	PH	6.6
	SULFATE	39
	TEMP	12
	ZINC	0.027

2004 Q3	Parameter	Concentration (mg/l)
	CADMIUM	0.00057
	CHLORIDE	150
	COND	1040
	COPPER	<0.005
	HARDNESS	270
	IRON	2.7
	LEAD	<0.005
	PH	6.9
	SULFATE	290
	TEMP	25
	ZINC	0.02

2005 Q3	Parameter	Concentration (mg/l)
	CADMIUM	0.0003
	CHLORIDE	60
	COND	466
	COPPER	<0.005
	HARDNESS	92
	IRON	2.4
	LEAD	<0.005
	PH	6.5
	SULFATE	76
	TEMP	26
	ZINC	0.034

2004 Q4	Parameter	Concentration (mg/l)
	CADMIUM	<0.0005
	CHLORIDE	72
	COND	370
	COPPER	<0.005
	HARDNESS	94
	IRON	1.4
	LEAD	<0.005
	PH	7
	SULFATE	90
	TEMP	13
	ZINC	<0.02

2005 Q4	Parameter	Concentration (mg/l)
	CADMIUM	0.0019
	CHLORIDE	140
	COND	1440
	COPPER	<0.005
	HARDNESS	400
	IRON	1.6
	LEAD	<0.005
	PH	7.2
	SULFATE	280
	TEMP	18
	ZINC	0.048

S3 cont.

2006 Q1	Parameter	Concentration (mg/l)
	CADMIUM	0.00077
	CHLORIDE	50
	COND	403
	COPPER	<0.002
	HARDNESS	92
	IRON	0.88
	LEAD	<0.002
	PH	7
	SULFATE	54
	TEMP	8.4
	ZINC	0.032

2006 Q2	Parameter	Concentration (mg/l)
	CADMIUM	0.00063
	CHLORIDE	45
	COND	391
	COPPER	<0.002
	HARDNESS	95
	IRON	1.9
	LEAD	<0.002
	PH	7
	SULFATE	94
	TEMP	17
	ZINC	0.022

2006 Q3	Parameter	Concentration (mg/l)
	CADMIUM	<0.0005
	CHLORIDE	50
	COND	452
	COPPER	<0.002
	HARDNESS	110
	IRON	3.1
	LEAD	<0.002
	PH	7.3
	SULFATE	68
	TEMP	29
	ZINC	<0.02

2006 Q4	Parameter	Concentration (mg/l)
	CADMIUM	0.0005
	CHLORIDE	53
	COND	417
	COPPER	<0.002
	HARDNESS	
	IRON	1.4
	LEAD	0.0033
	PH	7.1
	SULFATE	70
	TEMP	18
	ZINC	0.021

2007 Q1	Parameter	Concentration (mg/l)
	CADMIUM	0.0016
	CHLORIDE	31
	COND	308
	COPPER	<0.002
	HARDNESS	77
	IRON	1.6
	LEAD	0.0023
	PH	7.1
	SULFATE	61
	TEMP	5
	ZINC	<0.02

2007 Q2	Parameter	Concentration (mg/l)
	CADMIUM	0.00071
	CHLORIDE	30
	COND	272
	COPPER	<0.002
	HARDNESS	61
	IRON	1.3
	LEAD	<0.002
	PH	6.9
	SULFATE	48
	TEMP	9.5
	ZINC	<0.02

2007 Q3	Parameter	Concentration (mg/l)
	CADMIUM	<0.0005
	CHLORIDE	95
	COND	730
	COPPER	<0.002
	HARDNESS	160
	IRON	2.1
	LEAD	<0.002
	PH	6.9
	SULFATE	140
	TEMP	28
	ZINC	<0.02

2007 Q4	Parameter	Concentration (mg/l)
	CADMIUM	<0.0005
	CHLORIDE	30
	COND	2400
	COPPER	<0.002
	HARDNESS	770
	IRON	1
	LEAD	<0.002
	PH	6.8
	SULFATE	940
	TEMP	18
	ZINC	<0.02

S3 cont.

2008 Q1	Parameter	Concentration (mg/l)
	CADMIUM	0.00082
	CHLORIDE	74
	COND	601
	COPPER	<0.002
	HARDNESS	140
	IRON	0.79
	LEAD	<0.002
	PH	7.2
	SULFATE	64
	TEMP	4.3
	ZINC	0.029

2008 Q2	Parameter	Concentration (mg/l)
	CADMIUM	<0.0005
	CHLORIDE	22
	COND	390
	COPPER	<0.002
	HARDNESS	93
	IRON	1.7
	LEAD	<0.002
	PH	7.1
	SULFATE	88
	TEMP	12
	ZINC	<0.02

2008 Q3	Parameter	Concentration (mg/l)
	CADMIUM	<0.0005
	CHLORIDE	58
	COND	455
	COPPER	<0.002
	HARDNESS	100
	IRON	2.4
	LEAD	<0.002
	PH	7.4
	SULFATE	89
	TEMP	26.1
	ZINC	<0.005

2008 Q4	Parameter	Concentration (mg/l)
	CADMIUM	<0.0005
	CHLORIDE	98
	COND	880
	COPPER	<0.002
	HARDNESS	180
	IRON	0.66
	LEAD	<0.002
	PH	7.3
	SULFATE	170
	TEMP	18.7
	ZINC	0.019