



SOUTH BUFFALO DEVELOPMENT, LLC

February 1, 2010

Mr. David Szymanski
New York Department of Environmental Conservation
Division of Environmental Remediation, Region 9
270 Michigan Avenue
Buffalo New York 14203-2999

Subject: **Periodic Review Report**
Buffalo Color Corporation – Area “D”
Site No. 915012

Dear Mr. Szymanski:

South Buffalo Development, LLC (SBD) and our consultant, MACTEC Engineering and Consulting, Inc. (MACTEC), have prepared this Periodic Review Report (PRR) for the Buffalo Color Area “D” Site in response to your letter dated December 16, 2009. The remainder of this document follows the outline presented in your December 16th letter. The completed Site Management Periodic Review Report (PRR) Notice - Institutional and Engineering controls Certification Form is provided herein as Attachment A. A report titled “2009 Post-Remedial Construction Annual Operations and Maintenance Report, Buffalo Color Corporation Area “D” (O&M Report), is included herein as Attachment B.

I. Introduction

A. Site Summary:

The remedial objectives of the remedy are to eliminate potential direct contact with soils containing contaminant concentrations exceeding New York State Department of Environmental Conservation (NYSDEC) standards and to eliminate the potential discharge of impacted groundwater to the Buffalo River. The key remedial actions for the Site included:

- stabilizing the shoreline along the Buffalo River and planting appropriate vegetation to enhance aquatic and upland habitat;
- consolidating contaminated soil on-site, regrading and capping of the soils;
- constructing a hydraulic barrier (i.e., slurry wall) along the perimeter of the site (Figure 1 in attached O&M report);

- Installation and operation of a groundwater extraction system (EW-1 through EW-4) and associated piping to convey extracted groundwater to the treatment system located on Area “A”.
- Installation of groundwater elevation monitoring well network to verify that an inward gradient is maintained across the hydraulic barrier. (These wells are referred to with the “OW” prefix on Figure 1 in the attached 2009 O&M report)

During 2009, the following routine Operations and Maintenance (O&M) activities have been completed in accordance with Post-Remedial Construction Operation and Maintenance Plan, prepared by Parson Engineers dated January 1999 (referred to hereafter as the O&M Plan):

- Quarterly site inspection
- Monthly Groundwater extraction system performance monitoring
- Annual reporting

- B. Effectiveness Monitoring: The cap system is intact with suitable vegetative cover. The groundwater extraction system is effectively maintaining a minimum 1 ft head differential between observations on the outside of the hydraulic barrier (near the Buffalo River) and their corresponding interior observation well. When the differential falls below 1 ft, the extraction system is operated and effectively lowers the water table within the boundaries of the hydraulic barrier.
- C. Compliance: No areas of non-compliance have been identified.
- D. Recommendations: No changes to the 1999 O&M Plan are currently warranted or recommended. Routine O&M will continue in 2010.

II. Site Overview

- A. Site Location: The site plan is illustrated on Figure 1 of the attached 2009 O&M report. The site is surrounded on the east, west and south by the Buffalo River. To the north is Buffalo Color Area “A” property. Prior to remediation, soils and groundwater containing contaminant concentrations exceeding relevant NYSDEC standards were identified on the site.

It was determined that impacted groundwater was discharging to the Buffalo River. The site remedy included construction of a hydraulic barrier (i.e., slurry wall) around the site as shown on Figure 1, construction of a groundwater extraction system and monitoring network to maintain an inward hydraulic gradient and; construction of a cap system to minimize potential direct contact with the impacted site soils and minimize ground water recharge from precipitation.

Extracted groundwater is conveyed to treatment system, located on Area “A”, where it is combined with groundwater from that area, treated and discharged to the Buffalo Sewer Authority (BSA) pursuant to a BSA discharge permit.

- B. Chronology: Remediation of the Site began on July 24, 1996. Planting of wetland and woody vegetation to enhance aquatic and upland habitat was completed during the spring of 1999. Replanting of trees in several areas and construction of the cap, hydraulic barrier and extraction system was completed by November 2000.

III. Evaluation of Remedy Performance, Effectiveness and Protectiveness

- A. The performance, effectiveness and protectiveness of the remedy is verified by ensuring that the cap system is intact as constructed and that an inward hydraulic gradient is maintained between the wells “outside” of the hydraulic barrier (i.e., closest to the Buffalo River- also referred to as exterior wells) and the wells “inside” the hydraulic barrier (interior wells). Specifically, a minimum of 1 ft hydraulic head differential is to be maintained. During 2009, the head differential was maintained except during late December. Therefore, the extraction well system was activated and will be kept operational until a minimum of 2 ft of head differential is established in accordance with the 1999 O&M Plan.

IV. IC/EC Plan Compliance Report – An IC/EC Plan was not required for this site. IC/EC compliance is addressed in the 1999 O&M Plan

- A. Monitoring Plan Compliance Report – A separate Monitoring Plan is not required for this site. Monitoring requirements are addressed in the 1999 O&M Plan.

V. Operations and Maintenance Plan Compliance Report

- A. Components of the O&M Plan: Requirements of the 1999 O& M Plan are:

- Monthly Groundwater Extraction System Maintenance – During this activity, the O&M contractor under contract to Honeywell (OMI) inspects the extraction and observation wells; records groundwater level measurements at each observation well; activates the extraction pumps for a few minutes to ensure that they are operational and to minimize potential for scale accumulation in the lines and; records flow totalizer readings from the extraction system. This information is reported to Honeywell monthly and summarized in the annual O&M report.
- Monthly Treatment Plant Monitoring: Groundwater from the Area “D” extraction system is conveyed to the Area “A” treatment system. The combined groundwater from Area “A” and Area “D” is treated and discharged to the BSA. Discharge samples are collected monthly in accordance with the Area “A” O&M plan and the data is submitted to the NYSDEC and BSA on a quarterly basis as specified in the BSA discharge permit.

- Quarterly Site Inspections: During each quarterly site inspection, OMI inspects the condition of the cap (e.g., vegetative cover, animal burrows, drainage, etc.); the gas vents to ensure that they are in good condition and not obstructed; and the shoreline to verify stability and suitable vegetative cover. Information from the quarterly inspections (including photographs) are included on Site Inspection Checklist forms which are included in the 2009 O&M Report (Attachment B).
- B. Summary of O&M Completed During 2009: Monthly system monitoring and quarterly inspections were completed in accordance with the O&M Plan during 2009. The following summarizes the observed conditions:
- In May of 2009 the pump in Extraction Well EW-4 was subjected to cleaning and rehabilitation due to scale build up. The pump worked satisfactorily until approximately November 2009, when it again became inoperable. Extraction Well EW-2 was inoperable throughout 2009 due either to fouling or improper pump placement relative to the water table. These wells will be further evaluated during 2010.
 - During the December 2009 monthly monitoring event, the head differential between certain interior and exterior observation wells fell below 1 ft. Therefore, the extraction pump system was activated and periodic pumping is presently occurring.
 - Between August and November 2009, the well heads at certain “WF” piezometers along the river were modified by adding protective casing and placement of concrete pads around the casing. This was documented in a separate submittal to NYSDEC.
 - On-going trapping of burrowing animals and filling of burrows.
- C. Evaluation of Remedial Systems: During 2009, the systems appear to be effectively achieving the objectives of the remedial action, as described in the attached 2009 O&M Report.
- D. O&M Deficiencies: No deficiencies in complying with the O&M Plan have been noted.
- E. Conclusions and Recommendations: Conclusions and recommendations from the attached 2009 O&M report are:
- The remedial goals are being met.
 - The groundwater extraction system will continue to be operated as necessary to maintain the necessary differential between interior and exterior wells.

- Extraction wells EW-2 and EW-4 should be further evaluated to determine why they are not functioning properly, with repairs made as appropriate.
- Routine O&M activities should continue during 2010.

VI. Overall PRR Conclusions

- A. Compliance: Activities completed during 2009 complied with the OM&M Plan.
- B. Performance and Effectiveness of the Remedy: The condition of the cap system and consistent inward gradient across the hydraulic barrier indicate that the remedy is performing effectively.
- C. Future PRR submittals: It is currently expected that the next PRR will be submitted on or about February 1, 2011.

Closing

Please contact Mr. John Yensan at (716) 856-3333 ext. 302 with any questions or comments on this submittal.

Respectfully,



John Yensan

Attachments

cc: E. Melnyk (NYSDEC Region 9)
R. Galloway (Honeywell)
J. Mojka (Honeywell)
J. Scrabis (MACTEC)

ATTACHMENT A

**PRR NOTICE
IC/EC CONTROLS CERTIFICATION FORM**



Enclosure 1
NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
Site Management Periodic Review Report Notice
Institutional and Engineering Controls Certification Form



Site Details

Box 1

Site No. 915012

Site Name Buffalo Color Area "D"

1337 S. Park Ave.

Site Address: ~~340 Elk Street~~ Zip Code: 14202

City/Town: Buffalo

County: Erie

Allowable Use(s) (if applicable, does not address local zoning):

Site Acreage: 19.0

Owner: South Buffalo Development, LLC

333 Ganson Street, Buffalo, NY 14203

Reporting Period: November 28, 2007 to November 18, 2009

Verification of Site Details

Box 2

YES NO

1. Is the information in Box 1 correct?

☐ ☒

If NO, are changes handwritten above or included on a separate sheet?

☒

2. Has some or all of the site property been sold, subdivided, merged, or undergone a tax map amendment during this Reporting Period?

☒ ☐

If YES, is documentation or evidence that documentation has been previously submitted included with this certification?

☒

3. Have any federal, state, and/or local permits (e.g., building, discharge) been issued for or at the property during this Reporting Period?

☐ ☒

If YES, is documentation (or evidence that documentation has been previously submitted) included with this certification?

☐

4. If use of the site is restricted, is the current use of the site consistent with those restrictions?

☒ ☐

If NO, is an explanation included with this certification?

☐

5. For non-significant-threat Brownfield Cleanup Program Sites subject to ECL 27-1415.7(c), has any new information revealed that assumptions made in the Qualitative Exposure Assessment regarding offsite contamination are no longer valid?

☐ ☒ ☐

If YES, is the new information or evidence that new information has been previously submitted included with this Certification?

☐

6. For non-significant-threat Brownfield Cleanup Program Sites subject to ECL 27-1415.7(c), are the assumptions in the Qualitative Exposure Assessment still valid (must be certified every five years)?

☐ ☒ ☐

If NO, are changes in the assessment included with this certification?

☐

SITE NO. 915012

Description of Institutional Controls

Parcel

Institutional Control

S_B_L Image: **122.160-1-10**

Landuse Restriction

Description of Engineering Controls

Parcel

Engineering Control

S_B_L Image: **122.160-1-10**

Fencing/Access Control

Attach documentation if IC/ECs cannot be certified or why IC/ECs are no longer applicable.
(See instructions)

Control Description for Site No. 915012

Parcel: 122.160-1-10

Buffalo Sewer Authority (BSA) Permit to discharge treated groundwater from groundwater treatment system.
Site is Class 2 Inactive Hazardous Waste Site.

Periodic Review Report (PRR) Certification Statements

1. I certify by checking "YES" below that:

- a) the Periodic Review report and all attachments were prepared under the direction of, and reviewed by, the party making the certification;
- b) to the best of my knowledge and belief, the work and conclusions described in this certification are in accordance with the requirements of the site remedial program, and generally accepted

YES NO

☒ ☐

2. If this site has an IC/EC Plan (or equivalent as required in the Decision Document), for each Institutional or Engineering control listed in Boxes 3 and/or 4, I certify by checking "YES" below that all of the following statements are true:

(a) the Institutional Control and/or Engineering Control(s) employed at this site is unchanged since the date that the Control was put in-place, or was last approved by the Department;

(b) nothing has occurred that would impair the ability of such Control, to protect public health and the environment;

(c) access to the site will continue to be provided to the Department, to evaluate the remedy, including access to evaluate the continued maintenance of this Control;

(d) nothing has occurred that would constitute a violation or failure to comply with the Site Management Plan for this Control; and

(e) if a financial assurance mechanism is required by the oversight document for the site, the mechanism remains valid and sufficient for its intended purpose established in the document.

YES NO

☒ ☐

3. If this site has an Operation and Maintenance (O&M) Plan (or equivalent as required in the Decision Document);

I certify by checking "YES" below that the O&M Plan Requirements (or equivalent as required in the Decision Document) are being met.

☒ ☐

4. If this site has a Monitoring Plan (or equivalent as required in the remedy selection document);

I certify by checking "YES" below that the requirements of the Monitoring Plan (or equivalent as required in the Decision Document) is being met.

YES NO

☒ ☐

IC CERTIFICATIONS
SITE NO. 915012

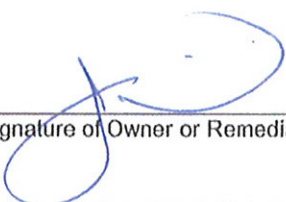
Box 6

SITE OWNER OR DESIGNATED REPRESENTATIVE SIGNATURE

I certify that all information and statements in Boxes 2 and/or 3 are true. I understand that a false statement made herein is punishable as a Class "A" misdemeanor, pursuant to Section 210.45 of the Penal Law.

I Jon M. Williams at 333 Ganson Street, Buffalo, NY 14203
print name print business address
am certifying as South Buffalo Development, LLC, By Its Manager SBD Holdings I, Inc.
Jon M. Williams, President (Owner or Remedial Party)
SBD Holdings I, Inc.

for the Site named in the Site Details Section of this form.


Signature of Owner or Remedial Party Rendering Certification

1/29/10
Date

IC/EC CERTIFICATIONS

Box 7

QUALIFIED ENVIRONMENTAL PROFESSIONAL (QEP) SIGNATURE

I certify that all information in Boxes 4 and 5 are true. I understand that a false statement made herein is punishable as a Class "A" misdemeanor, pursuant to Section 210.45 of the Penal Law.

I Mark Stelmack at 511 Congress St., Portland, ME 04104
print name print business address
am certifying as a Qualified Environmental Professional for the South Buffalo Development, LLC

(Owner or Remedial Party) for the Site named in the Site Details Section of this form.



Mark J. Stelmack
Signature of Qualified Environmental Professional, for
the Owner or Remedial Party, Rendering Certification

Stamp (if Required)

1/29/10
Date

ATTACHMENT B

**2009 POST-REMEDIAL CONSTRUCTION
ANNUAL OPERATIONS AND MAINTENANCE REPORT**

2009
**POST-REMEDIAL CONSTRUCTION ANNUAL
OPERATIONS AND MAINTENANCE REPORT**

BUFFALO COLOR CORPORATION AREA “D”

Buffalo, Erie County, New York

(NYSDEC Site No. 9-15-012)

SUBMITTED TO:



**The New York State Department
of Environmental Conservation
Division of Hazardous Waste Remediation**

SUBMITTED BY:

Honeywell

**101 Columbia Road
Morristown, NJ 07962**

PREPARED BY:

MACTEC Engineering and Consulting, Inc.

800 North Bell Avenue, Suite 200
Pittsburgh, Pennsylvania 15106
(412) 279-6661 Fax (412) 279-8567

January 2010

2009
**POST-REMEDIAL CONSTRUCTION ANNUAL
OPERATIONS AND MAINTENANCE REPORT**
BUFFALO COLOR CORPORATION AREA "D"
BUFFALO, NEW YORK

Prepared for:
HONEYWELL
Morristown, NJ 07962



Nicole Feczko
Project Scientist

John M. Scrabis
Senior Principal Engineer

MACTEC Engineering and Consulting, Inc.
Pittsburgh, Pennsylvania

January 2010
Project 3410070501

TABLE OF CONTENTS

1.0	INTRODUCTION	1-1
1.1	PROCEDURES	1-1
1.1.1	Treatment Plant.....	1-1
1.1.2	Observation Wells.....	1-2
1.1.3	Site Inspections	1-3
2.0	RESULTS	2-1
2.1	TREATMENT SYSTEM	2-1
2.1.1	Discharge	2-1
2.1.2	Influent/Effluent Sampling	2-1
2.1.3	Treatment Plant Performance and Maintenance	2-1
2.2	OBSERVATION WELLS	2-2
2.3	SITE INSPECTIONS	2-3
2.3.1	February 25, 2009 Inspection	2-3
2.3.2	March 19, 2009 Inspection	2-3
2.3.3	August 25, 2009 Inspection	2-4
2.3.4	November 25, 2009 Inspection	2-4
3.0	CONCLUSIONS AND RECOMMENDATIONS	3-1

TABLE

FIGURE

APPENDIX A: DISCHARGE MONITORING REPORTS

APPENDIX B: OBSERVATION WELL HYDROGRAPHS AND WATER LEVEL DATA

APPENDIX C: GROUNDWATER GRADIENT ACROSS CONTAINMENT WALL

APPENDIX D: SITE INSPECTIONS AND PHOTOGRAPHS

LIST OF TABLES

Table

- 1 Visual Site Evaluation Results

LIST OF FIGURES

Figure

- 1 Site Plan

1.0 INTRODUCTION

In accordance with the New York State Department of Environmental Conservation (NYSDEC) Order on Consent (Index No. B9-0014-84-01RD), Honeywell (formerly AlliedSignal Inc.), performed a remedial action and is providing long-term operations and maintenance (O&M) at the Buffalo Color Area “D” Site (Site). The activities described in this report were completed in accordance with the Post-Remedial Construction Operation and Maintenance Plan (Parsons Engineers, January 1999).

The primary remedial objectives at the Site are to eliminate the potential for direct contact with impacted soils and to eliminate the potential for impacted groundwater to discharge to the Buffalo River. The key remedial actions for the Site included stabilizing the River bank and planting appropriate vegetation to enhance aquatic and upland habitat; consolidating waste; regrading and capping of the soils within the Site; constructing a hydraulic barrier (i.e., slurry wall) around the perimeter of the site (Figure 1); collecting and treating non-aqueous phase liquid (NAPL) and groundwater, and; long-term groundwater monitoring.

Remediation of the Site began on July 24, 1996. Planting of wetland and woody vegetation to enhance aquatic and upland habitat along the Buffalo River was completed during the spring of 1999. Replanting of trees in several areas was completed on November 2, 2000.

This annual report has been prepared by MACTEC Engineering and Consulting, Inc. (MACTEC) on behalf of Honeywell to summarize O&M activities completed from January 1, 2009 through December 31, 2009 for the site. The site plan is shown on Figure 1.

1.1 PROCEDURES

The following O&M activities occurred at the Site during 2009.

1.1.1 Treatment Plant

1.1.1.1 Treatment Plant Flow Rate

When the treatment plant is operated, the flow rate is measured with Foxboro magnetic flow transmitters. Influent and effluent flow rate and totals are cumulative and recoverable using the system Programmable

Logic Controller (PLC). The average influent and effluent flow rates are calculated, and the total volume (gallons) discharged from the treatment facility is recorded.

1.1.1.2 Sampling Procedure

No sampling was conducted for Area D specifically. Sampling is conducted monthly in accordance with the Buffalo Sewer Authority (BSA) Permit for the combined Area A/Area D groundwater discharge. The 2009 Discharge Monitoring Reports for the combined discharge are included in Appendix A.

1.1.1.3 System Maintenance

Maintenance activities were performed routinely by Honeywell's O&M contractor, OMI, for the Area D remediation system on a monthly basis or as needed throughout the year. During the reporting period, OMI visited the site for measurement of water levels, site inspection and routine maintenance approximately once per month. Relevant information from those visits is provided in the following sections.

1.1.2 Observation Wells

The water level in each of the twelve observation wells was measured by OMI approximately monthly. The water levels were measured with an electronic water level indicator, and reported as an elevation above mean sea level. Observation wells located inside the perimeter of the containment wall are labeled with an "I" (e.g. OW-2I), whereas those outside of the wall were labeled with an "E" (e.g. OW-2E), as shown on Figure 1.

The water level measurements were used to prepare the hydrographs provided in Appendix B. The table provided in Appendix C presents the measured groundwater levels across the containment wall. An adequate inward hydraulic gradient (i.e., greater than one foot difference between corresponding I and E wells) was measured during the majority of the 2009 monitoring events. The inward gradient measurements of less than one foot were recorded at the wells during December 2009. At no time did an outward gradient occur. The pumping system was activated when observed water level measurements fell below the one foot difference to mitigate any effects that external water level fluctuations may have on the gradient. The system operated until the gradient returned to acceptable levels.

Initially, when the pumps from Area D were activated, flow was confirmed from all pumps individually. Later, it was observed that several individual pumps did not pump water, but the remaining pumps continued to produce water consistently. The overall effect was a balanced decline of internal water levels at all six monitoring points.

1.1.3 Site Inspections

Quarterly inspections by OMI were completed on February 25, May 19, August 25, and November 25, 2009. The inspections were conducted in accordance with the Post-Remedial Construction Operation and Maintenance Plan, dated January 1999. The shoreline, wetlands, wells, drainage, gas vents, and cap were visually inspected during each event. Photographs were taken during the May and August 2009 events. The results of the inspections and the photo logs are included in Appendix D.

2.0 RESULTS

2.1 TREATMENT SYSTEM

2.1.1 Discharge

The Area D groundwater extraction system was operated intermittently during 2009 to maintain an inward gradient. Approximately 22,640 gallons of groundwater was pumped from Area D during the 2009 period, as discussed in Section 2.2.

2.1.2 Influent/Effluent Sampling

The pumped Area D groundwater is conveyed to the treatment system on Buffalo Color Area A, where it combines with the discharge from Area A extraction wells EW-1 and EW-2 and is pre-treated via carbon vessels. From there, the discharge is combined with the effluent from Area A extraction wells EW-3, EW-4, and EW-5 and discharged to the BSA sewer system. Monthly sampling of the effluent is completed as required by the BSA Permit and the results are provided in quarterly reports submitted to the BSA and copied to NYSDEC. Copies of the related discharge monitoring reports for the combined treatment discharge are included in Appendix A. No exceedances of the BSA Permit limits associated with the Area D effluent were observed during 2009.

2.1.3 Treatment Plant Performance and Maintenance

The treatment plant is operated continuously as part of the OM&M for Area A, an interim corrective measure that consists of the extraction and treatment of groundwater from Area A. Maintenance of the treatment plant includes activated carbon canister exchange, backwashing the multi-media filters, maintenance of the pH probe, and other maintenance as needed to maintain groundwater extraction from Area A. Additionally, the Area D pumps are operated as needed to maintain the required inward gradient between the outside and inside of the Area D containment wall. The Area D groundwater is treated at the treatment plant along with the groundwater originating from Area A extraction wells EW-1 and EW-2. Non-routine maintenance of Area D during the reporting period included repairs to piezometers identified as WF-2 through WF-6 on Figure 1. The discharge from the treatment plant to the BSA is currently conducted under a BSA permit that is for both Area A and Area D (i.e., the combined discharge).

2.2 OBSERVATION WELLS

As shown on the table below and the hydrographs in Appendix B, the water levels in the interior wells were generally between approximately 1 foot and 3.5 feet lower than the levels in the exterior wells during this reporting period except during December 2009, when the level difference fell below 1 foot but an inward gradient was still maintained. The data indicate that potentially impacted groundwater was not leaving the Site.

A total of approximately 22,640 gallons of groundwater was pumped from Area D during 2009 as indicated on the table below. In general, pumping occurs at each extraction well monthly as a maintenance procedure to minimize potential detrimental effects of scaling. The other reason for pumping to be initiated is if the head difference between the interior and corresponding exterior wells falls below 1 foot as directed by the 1999 O&M Plan.

The only time this situation occurred during 2009 was in December. Therefore, the pumping system was activated December 24, 2009 and periodic pumping will continue until an inward 2-foot head differential is observed at each observation well cluster in accordance with the O&M plan.

The following table shows the flow totalizer readings and the level difference between the exterior wells (River Wells) and interior wells (Landfill Wells) as measured during 2009:

Vault	EW-1	EW-2	EW-3	EW-4	Interim Flow (gallons)	Level Difference Between River Wells and Landfill Wells (ft)					
Date	Flow Totalizer Reading (gallons)					OW-1E & OW-1I	OW-2E & OW-2I	OW-3E & OW-3I	OW-4E & OW-4I	OW-5E & OW-5I	OW-6E & OW-6I
1/30/09	1566490	1637910	885360	1685720		1.4	1.09	1.24	1.42	1.33	1.13
2/11/09	1566530	1637910	885590	1685720	270	1.54	1.39	1.36	1.37	1.29	1.35
3/5/09	1566860	1637910	887730	1685720	2470	1.78	1.6	1.71	1.77	1.73	1.8
3/22/09	1567090	1637910	889290	1685720	1790	2.49	2.37	2.47	2.49	2.46	2.57
4/25/09	1567500	1637910	892100	1685720	3220	3.19	3.09	3.17	3.17	3.16	3.19
5/6/09	1567550	1637910	892480	1685720	430	2.92	2.79	2.84	2.79	2.76	2.79
6/4/09	1567820	1637910	894300	1686920	3290	2.76	2.64	2.68	2.67	2.65	2.69
7/13/09	1568000	1637910	895490	1687790	2240	3.42	3.17	3.29	3.37	3.35	3.42
8/17/09	1568070	1637910	895920	1688090	800	3.02	2.95	2.83	2.63	2.57	2.51
9/10/09	1568240	1637910	897090	1688090	1340	2.01	1.86	1.88	1.85	1.83	1.82
10/13/09	1568390	1637910	898260	1688090	1320	1.46	1.17	1.24	1.27	1.21	1.21
11/15/09	1568630	1637910	900070	1688090	2050	1.29	1.18	1.17	1.21	1.21	1.3
12/24/09	1569040	1637910	903080	1688090	3420	0.79	0.57	0.61	0.44	0.53	0.6

Total Gallons: 22,640

Prepared by: NCF
Checked by: JSM

2.3 SITE INSPECTIONS

Quarterly inspections by OMI were completed on February 25, May 19, August 25, and November 25, 2009. The inspections were conducted in accordance with the Post-Remedial Construction Operation and Maintenance Plan, dated January 1999. The shoreline, wetlands, wells, drainage, gas vents, and cap were visually inspected, and photographs were taken as appropriate. The completed inspection forms and the photo logs are included in Appendix D.

A representative of NYSDEC participated in the three of the quarterly inspections, but was unable to attend the November 25, 2009 inspection. These inspections indicated that the Site has a substantial vegetative cover, as shown in the photo log (Appendix D), and that the surface drainage system is in good condition. There is no evidence of sediment buildup, ponded water, or slope instability that would indicate that the drainage system is failing. The access road is in good condition. The condition of the gates, locks, and signs is sufficient to restrict access. The integrity of the groundwater monitoring wells and extraction wells was verified during the inspections. Table 1 summarizes the results of the Site inspections, and copies of the completed inspection checklists are provided in Appendix D.

2.3.1 February 25, 2009 Inspection

The integrity of the cap was acceptable during the inspection. There was no evidence of litter or unauthorized dumping by trespassers. The gas venting system and erosion control riprap were in acceptable condition. OMI reported that the pumps in wells EW-2 and EW-4 were not operational, but that the NYSDEC representative, David Szymanski, indicated that if the remaining pumps are working sufficiently to maintain proper water levels, then the two that are not working are not an issue. On May 12, 2009, the line and check valve for well EW-4 were cleaned and scale was removed. Because of snow cover, OMI was unable to inspect the shoreline during the February 2009 inspection. The shoreline was inspected during subsequent inspections.

2.3.2 March 19, 2009 Inspection

The integrity of the cap was acceptable during the inspection. The gas venting system and erosion control riprap were in acceptable condition. There was no evidence of litter or unauthorized dumping

by trespassers. Some animal burrows were noted inside the capped area of the landfill. Ongoing maintenance activities at Area D include the continuous trapping and removal of animals and filling of animal burrows. It was noted that some "WF" piezometers needed protective casings and one piezometer needed repair. In August 2009, protective concrete collars and slip caps were installed on three of the "WF" piezometers, and in November 2009, a protective concrete collar was installed on a fourth piezometer. Some small bare spots were observed near wells EW-2 and EW-1. During the August 2009 inspection, the NYSDEC representative, David Szymanski, indicated that there was adequate vegetation on the cap.

2.3.3 August 25, 2009 Inspection

The integrity of the cap was acceptable during the inspection. The gas venting system and erosion control riprap were in acceptable condition. There was no evidence of litter or unauthorized dumping by trespassers. It was observed that mowing needed done, which was completed on September 5, 2009. As discussed previously, the NYSDEC representative indicated that there was adequate vegetation on the cap.

2.3.4 November 25, 2009 Inspection

The integrity of the cap was acceptable during the inspection. There was no evidence of litter or unauthorized dumping by trespassers. The gas venting system and erosion control riprap were in acceptable condition. OMI reported that the pumps in wells EW-2 and EW-4 were not operational, but that the remaining pumps were working sufficiently to maintain proper water levels. These pumps will be evaluated and repaired as necessary by the end of the 2nd quarter 2010. OMI cemented around a fourth piezometer, but was not able to cement around the fifth piezometer because it could not be located. An attempt will be made to locate the fifth piezometer in early 2010 after snow cover has melted; if it is determined that the missing piezometer has been destroyed, it will be deleted from any future monitoring program.

3.0 CONCLUSIONS AND RECOMMENDATIONS

The performance of the treatment system was evaluated based maintaining an inward hydraulic gradient across the containment wall. This performance factor has been met over the period of this report (January 1, 2009 through December 31, 2009). The following conclusions and recommendations were developed based on the data collected during this period:

- South Buffalo Development LLC (SBD) purchased the land associated with Area D along with the parcels associated with former Buffalo Color Areas A, B, C, and E in October 2008. Honeywell and SBD intend to negotiate an agreement regarding future O&M responsibilities for Area D. NYSDEC will be notified of any agreement reached between SBD and Honeywell on this matter. Until such time Honeywell will continue to provide the required O&M for Area "D".
- The cap and extraction systems are meeting the remedial goals.
- The groundwater extraction system will continue to be operated to maintain the required inward head differential.
- The pumps in extraction wells EW-2 and EW-4 will be further evaluated to determine why they are not functioning properly, and repaired as necessary by the end of the 2nd quarter 2010.
- Routine O&M activities should continue during 2010, with an Annual report and PRR submittal made by February 2011.

TABLE

Table 1

**Visual Site Evaluation Results – Buffalo Color Area D
2009**

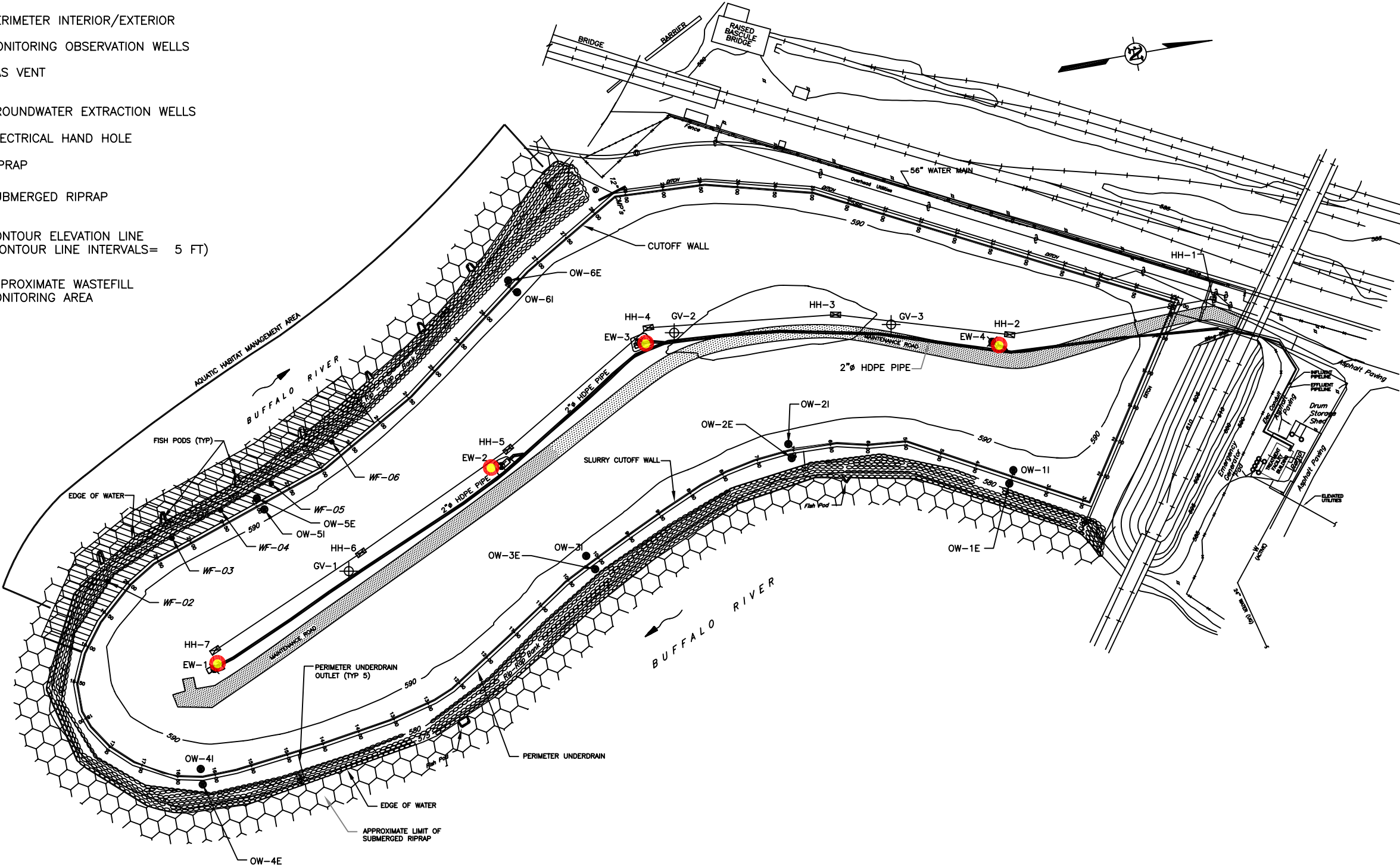
Visual Evaluation Item	Acceptable	Not Acceptable	Comments
Vegetative Cover	X		Cover was in good condition.
Integrity of Drainage System	X		System was in good condition.
Condition of Roads	X		Roads were in good condition.
Integrity of Wells	X		Pumps in wells EW-2 and EW-4 to be evaluated and repaired or replaced in 2010.
Integrity of the Cap	X		Noted animal burrows. Holes were filled and animals were trapped.
Gas Venting System	X		System was in good condition.
Erosion Control Structures	X		The erosion control structures were in good condition.

**Created by: NF
Checked by: JS**

FIGURE

LEGEND

- SUBSURFACE GW COLLECTION PIPE
- SLURRY CUTOFF WALL
- OW-6E PERIMETER INTERIOR/EXTERIOR
- OW-61 MONITORING OBSERVATION WELLS
- GV-2 GAS VENT
- EW-1 GROUNDWATER EXTRACTION WELLS
- ELECTRICAL HAND HOLE
- RIPRAP
- SUBMERGED RIPRAP
- 580 CONTOUR ELEVATION LINE (CONTOUR LINE INTERVALS= 5 FT)
- APPROXIMATE WASTEFILL MONITORING AREA



ORIGINAL FROM PARSONS INFRASTRUCTURE & TECHNOLOGY GROUP	PROJECT NUMBER:	3410050346	MACTEC Engineering & Consulting Inc. 700 North Bell Avenue Suite 200 Pittsburgh, PA 15106	SITE MAP HONEYWELL BUFFALO COLOR AREA "D" BUFFALO, NEW YORK	FIGURE 1
	DRAWING NUMBER:	B(01).dwg			
	DATE:	7/12/06			
	DRAWN BY:	ESW			
FILE: P:\PROJECTS\Honeywell\BuffaloNY\BuffaloColorAreaD\B(01).dwg	APPROVED BY:				

APPENDIX A
DISCHARGE MONITORING REPORTS

Compliance Confirmation

Discharge Monitoring Report for January 2009

BSA Permit No. 06-06-BU109
 Sample Date: 01/09/09
 Sample Location: Onsite Pump Station to BSA

Prepared by: BBL
 Date: 2/11/2009
 Checked by: RTB
 Date: 3/31/2009

BSA Permit Parameter	Input Analytical Results			Converted Analytical Results			BSA Daily Max Discharge Limit		Permit Compliance	MAID mg/L	Quantity mg/L	Permit Compliance
	Quantity	Reporting Limit	Unit	Quantity	Unit	Unit	Quantity	Unit				
pH	9.57	NA	SU	9.57	SU		5.0 - 12.0	SU	Yes			
BOD5	26.4	2.0	mg/L	26.4	mg/L	250		mg/L	Yes			
Total Phenol	0.118	0.01	mg/L	0.015	lbs/day	1.67		lbs/day	Yes	20	0.118	Yes
Total Chromium	0.0109	0.004	mg/L	0.001	lbs/day	0.83		lbs/day	Yes	40	0.0109	Yes
Total Copper	0.0156	0.01	mg/L	0.002	lbs/day	0.67		lbs/day	Yes	16	0.0156	Yes
Lead	0.00623	0.006	mg/L	0.001	lbs/day	0.541		lbs/day	Yes	65	0.00623	Yes
Total Mercury	ND	0.0002	mg/L	ND	lbs/day	0.00033		lbs/day	Yes			
Total Nickel	ND	0.01	mg/L	ND	lbs/day	1.17		lbs/day	Yes	14	ND	Yes
Zinc	0.0346	0.01	mg/L	0.005	lbs/day	2.046		lbs/day	Yes	25	0.0346	Yes
Amendable Cyanide	0.0792	0.01	mg/L	0.01	lbs/day	2.59		lbs/day	Yes	6.2	0.0792	Yes
Total PCB	ND	0.06	ug/L	ND	lbs/day	0.0001		lbs/day	Yes	0.002	ND	Yes
Aniline or Aniline Derivative	15000	5100	ug/L	15	mg/L	*		mg/L	Yes			
Max Individual Purgeables	66	50	ug/L	0.066	mg/L	*		mg/L	Yes			
Total Suspended Solids	159	4	mg/L	159	mg/L	250		mg/L	Yes			
Total Phosphate**	1.04	0.02	mg/L	1.04	mg/L	15.35		mg/L	Yes			
Total Flow (average)	10.83		gpm	15,590	gpd	50,000		gpd	Yes			

*Permit requires reporting of Aniline or Aniline Derivative and Max Individual Purgeables concentrations in excess of 0.01 mg/L.

**Analyzed by total phosphorus method SM 4500-P E

MAID - Maximum Allowable Instantaneous Discharge

Flow Calculations					
	EW-1	EW-2	EW-3	EW-4	EW-5
Initial Reading	3,459,044	1,480,176	1,661,179	2,109,966	640,086
Final Reading	3,539,553	1,536,644	1,709,176	2,124,299	659,043
Total Days in Period	14				
Total Flow for Period	218,264				
Average Flow for Period	10.83		gallons gpm		

Compliance Confirmation

Discharge Monitoring Report for February 2009

BSA Permit No. 08-06-BU109
 Sample Date: 02/06/09
 Sample Location: Onsite Pump Station to BSA

Prepared by: BBL
 Date: 3/9/2009
 Checked by: RTB
 Date: 4/1/2009

BSA Permit Parameter	Input Analytical Results			Converted Analytical Results			BSA Daily Max Discharge Limit		Permit Compliance	MAID mg/L	Quantity mg/L	Permit Compliance
	Quantity	Reporting Limit	Unit	Quantity	Unit	Unit	Quantity	Unit				
pH	9.46	0.50	SU	9.46	SU	SU	5.0 - 12.0	SU	Yes			
BOD5	27.8	2	mg/L	27.8	mg/L	mg/L	250	mg/L	Yes			
Total Phenol	0.0549	0.01	mg/L	0.007	lbs/day	lbs/day	1.67	lbs/day	Yes		0.0549	Yes
Total Chromium	0.0123	0.004	mg/L	0.002	lbs/day	lbs/day	0.83	lbs/day	Yes		0.0123	Yes
Total Copper	0.0153	0.01	mg/L	0.002	lbs/day	lbs/day	0.67	lbs/day	Yes		0.0153	Yes
Lead	ND	0.006	mg/L	ND	lbs/day	lbs/day	0.541	lbs/day	Yes		ND	Yes
Total Mercury	ND	0.0002	mg/L	ND	lbs/day	lbs/day	0.00033	lbs/day	Yes		ND	Yes
Total Nickel	0.0115	0.01	mg/L	0.0014	lbs/day	lbs/day	1.17	lbs/day	Yes		0.0115	Yes
Zinc	0.0373	0.01	mg/L	0.005	lbs/day	lbs/day	2.046	lbs/day	Yes		0.0373	Yes
Amendable Cyanide	0.0368	0.01	mg/L	0.005	lbs/day	lbs/day	2.59	lbs/day	Yes		6.2	Yes
Total PCB	ND	0.06	ug/L	ND	lbs/day	lbs/day	0.0001	lbs/day	Yes		0.002	Yes
Aniline or Aniline Derivative	6000	1900	ug/L	6	mg/L	mg/L	*	mg/L	Yes			
Max Individual Purgeables	43	50	ug/L	0.043	mg/L	mg/L	*	mg/L	Yes			
Total Suspended Solids	31.2	4	mg/L	31.2	mg/L	mg/L	250	mg/L	Yes			
Total Phosphate**	1	0.02	mg/L	1	mg/L	mg/L	15.35	mg/L	Yes			
Total Flow (average)	10.19		gpm	14.668	gpd	gpd	50,000	gpd	Yes			

*Permit requires reporting of Aniline or Aniline Derivative and Max Individual Purgeables concentrations in excess of 0.01 mg/L.

**Analyzed by total phosphorus method SM 4500-P E

MAID - Maximum Allowable Instantaneous Discharge

Flow Calculations					
	EW-1	EW-2	EW-3	EW-4	EW-5
Initial Reading	3,539,553	1,536,644	1,709,176	2,124,299	659,043
Final Reading	3,705,116	1,639,228	1,781,885	2,162,848	690,348
Total Days in Period	28				
Total Flow for Period	410,710	gallons			
Average Flow for Period	10.19	gpm			

Compliance Confirmation

Discharge Monitoring Report for March 2009

BSA Permit No. 06-06-BU109
 Sample Date: 03/04/09
 Sample Location: Onsite Pump Station to BSA

Prepared by: BBL
 Date: 3/26/2009
 Checked by: RTB
 Date: 4/1/2009

BSA Permit Parameter	Input Analytical Results			Converted Analytical Results			BSA Daily Max Discharge Limit		Permit Compliance	MAID mg/L	Quantity mg/L	Permit Compliance
	Quantity	Reporting Limit	Unit	Quantity	Unit	Unit	Quantity	Unit				
pH	9.52	NA	SU	9.52	SU		5.0 - 12.0	SU	Yes			
BOD5	40	2	mg/L	40.0	mg/L		250	mg/L	Yes			
Total Phenol	0.09	0.01	mg/L	0.014	lbs/day		1.67	lbs/day	Yes	20	0.090	Yes
Total Chromium	0.011	0.004	mg/L	0.002	lbs/day		0.83	lbs/day	Yes	40	0.011	Yes
Total Copper	0.011	0.01	mg/L	0.002	lbs/day		0.67	lbs/day	Yes	16	0.011	Yes
Lead	ND	0.006	mg/L	ND	lbs/day		0.541	lbs/day	Yes	65	ND	Yes
Total Mercury	ND	0.0002	mg/L	ND	lbs/day		0.00033	lbs/day	Yes			
Total Nickel	0.012	0.01	mg/L	0.0019	lbs/day		1.17	lbs/day	Yes	14	0.012	Yes
Zinc	0.039	0.01	mg/L	0.006	lbs/day		2.046	lbs/day	Yes	25	0.039	Yes
Amendable Cyanide	0.071	0.01	mg/L	0.011	lbs/day		2.59	lbs/day	Yes	6.2	0.071	Yes
Total PCB	ND	0.58	ug/L	ND	lbs/day		0.0001	lbs/day	Yes	0.002	ND	Yes
Aniline or Aniline Derivative	11000	6900	ug/L	11	mg/L		*	mg/L	Yes			
Max Individual Purgeables	65	50	ug/L	0.065	mg/L		*	mg/L	Yes			
Total Suspended Solids	64	4	mg/L	64	mg/L		250	mg/L	Yes			
Total Phosphate**	1.3	0.02	mg/L	1.3	mg/L		15.35	mg/L	Yes			
Total Flow (average)	13.10		gpm	18,861	gpd		50,000	gpd	Yes			

*Permit requires reporting of Aniline or Aniline Derivative and Max Individual Purgeables concentrations in excess of 0.01 mg/L.

**Analyzed by total phosphorus method SM 4500-P E

MAID - Maximum Allowable Instantaneous Discharge

Flow Calculations					
	EW-1	EW-2	EW-3	EW-4	EW-5
Initial Reading	3,705,116	1,639,228	1,781,885	2,162,848	690,348
Final Reading	3,869,621	1,738,320	1,852,113	2,288,642	721,115
Total Days in Period	26				
					2/6/2009
					3/4/2009
Total Flow for Period	490,386		gallons		
Average Flow for Period	13.10		gpm		

Compliance Confirmation

Discharge Monitoring Report for April 2009

BSA Permit No. 06-06-BU109
Sample Date: 04/11/09
Sample Location: Onsite Pump Station to BSA

Prepared by: BBL
Date: 5/5/2009
Checked by: RTB
Date: 5/18/2009

BSA Permit Parameter	Input		Unit	Converted		BSA Daily Max Discharge Limit	Permit Compliance	MAID mg/L	Quantity mg/L	Permit Compliance
	Quantity	Reporting Limit		Quantity	Unit					
pH	9.38	-	SU	9.38	SU	5.0 - 12.0	Yes			
BOD5	33.5	2	mg/L	33.5	mg/L	250	Yes			
Total Phenol	0.0443	0.01	mg/L	0.0064	lbs/day	1.67	Yes	20	0.0443	Yes
Total Chromium	0.0132	0.004	mg/L	0.0019	lbs/day	0.83	Yes	40	0.0132	Yes
Total Copper	ND	0.01	mg/L	ND	lbs/day	0.67	Yes	16	ND	Yes
Lead	ND	0.006	mg/L	ND	lbs/day	0.541	Yes	65	ND	Yes
Total Mercury	ND	0.0002	mg/L	ND	lbs/day	0.00033	Yes			
Total Nickel	ND	0.01	mg/L	ND	lbs/day	1.17	Yes	14	ND	Yes
Zinc	0.0146	0.01	mg/L	0.0021	lbs/day	2.046	Yes	25	0.0146	Yes
Amendable Cyanide	0.117	0.01	mg/L	0.017	lbs/day	2.59	Yes	6.2	0.1170	Yes
Total PCB	ND	0.059	ug/L	ND	lbs/day	0.0001	Yes	0.002	ND	Yes
Aniline or Aniline Derivative	8800	1900	ug/L	8.8	mg/L	*	Yes			
Max Individual Purgeables	70	50	ug/L	0.070	mg/L	*	Yes			
Total Suspended Solids	54.8	4	mg/L	54.8	mg/L	250	Yes			
Total Phosphate**	1.28	0.02	mg/L	1.2800	mg/L	15.35	Yes			
Total Flow (average)	12.12		gpm	17.446	gpd	50,000	Yes			

*Permit requires reporting of Aniline or Aniline Derivative and Max Individual Purgeables concentrations in excess of 0.01 mg/L.

**Analyzed by total phosphorus method SM 4500-P E

MAID - Maximum Allowable Instantaneous Discharge

Flow Calculations					
	EW-1	EW-2	EW-3	EW-4	EW-5
Initial Reading	3,869,621	1,738,320	1,852,113	2,288,642	721,115
Final Reading	4,099,190	1,888,736	1,963,549	2,410,982	770,314
Total Days in Period	38				4/11/2009
Total Flow for Period	662,960		gallons		
Average Flow for Period	12.12		gpm		

Compliance Confirmation

Discharge Monitoring Report for May 2009

BSA Permit No.	06-06-BU109
Sample Date:	05/04/09
Sample Location:	Onsite Pump Station to BSA

Prepared by: BBL
Date: 5/14/2009
Checked by: RTB
Date: 5/18/2009

BSA Permit Parameter	Input Analytical Results		Converted Analytical Results		BSA Daily Max Discharge Limit		Permit Compliance	MAID mg/L	Quantity mg/L	Permit Compliance
	Quantity	Reporting Limit	Unit	Quantity	Unit	Quantity				
pH	9.32	-	SU	9.32	SU	5.0 - 12.0	Yes			
BOD5	39.7	20.0	mg/L	39.7	mg/L	250	Yes	20	0.0493	Yes
Total Phenol	0.0493	0.01	mg/L	0.007	lbs/day	1.67	Yes	20	0.0493	Yes
Total Chromium	0.0115	0.004	mg/L	0.0016	lbs/day	0.83	Yes	40	0.0115	Yes
Total Copper	ND	0.010	mg/L	ND	lbs/day	0.67	Yes	16	ND	Yes
Lead	ND	0.006	mg/L	ND	lbs/day	0.541	Yes	65	ND	Yes
Total Mercury	ND	0.0002	mg/L	ND	lbs/day	0.00033	Yes			
Total Nickel	ND	0.010	mg/L	ND	lbs/day	1.17	Yes	14	ND	Yes
Zinc	0.0251	0.010	mg/L	0.0036	lbs/day	2.046	Yes	25	0.0251	Yes
Amendable Cyanide	ND	0.010	mg/L	ND	lbs/day	2.59	Yes	6.2	ND	Yes
Total PCB	ND	0.059	ug/L	ND	lbs/day	0.0001	Yes	0.002	ND	Yes
Aniline or Aniline Derivative	11000	2000	ug/L	11	mg/L	*	Yes			
Max Individual Purgeables	62	50	ug/L	0.062	mg/L	*	Yes			
Total Suspended Solids	58	4.0	mg/L	58	mg/L	250	Yes			
Total Phosphate**	0.943	0.05	mg/L	0.943	mg/L	15.35	Yes			
Total Flow (average)	11.82		gpm	17.026	gpd	50,000	Yes			

*Permit requires reporting of Aniline or Aniline Derivative and Max Individual Purgeables concentrations in excess of 0.01 mg/L.

**Analyzed by total phosphorus method SM 4500-P E

MAID - Maximum Allowable Instantaneous Discharge

Flow Calculations					
	EW-1	EW-2	EW-3	EW-4	EW-5
Initial Reading	4,099,190	1,888,736	1,963,549	2,410,982	770,314
Final Reading	4,239,036	1,974,555	2,028,052	2,483,886	798,845
Total Days in Period	23				5/4/2009
Total Flow for Period	391,603		gallons		
Average Flow for Period	11.82		gpm		

Compliance Confirmation

Discharge Monitoring Report for June 2009

BSA Permit No. 06-06-BU109
 Sample Date: 06/08/09
 Sample Location: Onsite Pump Station to BSA

Prepared by: BBL
 Date: 6/25/2009
 Checked by: RTB
 Date: 7/8/2009

BSA Permit Parameter	Input Analytical Results		Unit	Converted Analytical Results		Unit	BSA Daily Max Discharge Limit		Permit Compliance	MAID mg/L	Quantity mg/L	Permit Compliance
	Quantity	Reporting Limit		Quantity	Unit		Quantity	Unit				
pH	9.43	0.50	SU	9.43	SU	5.0 - 12.0		SU	Yes			
BOD5	29.0	2.0	mg/L	29.0000	mg/L	250	1.67	mg/L	Yes			
Total Phenol	0.0969	0.005	mg/L	0.0132	lbs/day	1.67	0.83	lbs/day	Yes	20	0.0969	Yes
Total Chromium	0.0137	0.0040	mg/L	0.0019	lbs/day	0.83	0.67	lbs/day	Yes	40	0.0137	Yes
Total Copper	0.0127	0.010	mg/L	0.0017	lbs/day	0.67	0.541	lbs/day	Yes	16	0.0127	Yes
Lead	0.0041	0.0050	mg/L	0.0006	lbs/day	0.541	0.00033	lbs/day	Yes	65	0.0041	Yes
Total Mercury	ND	0.00020	mg/L	ND	lbs/day	1.17	2.046	lbs/day	Yes	14	0.007	Yes
Total Nickel	0.0068	0.010	mg/L	0.0036	lbs/day	2.046	0.0056	lbs/day	Yes	25	0.0265	Yes
Zinc	0.0265	0.010	mg/L	0.0056	lbs/day	0.0001	0.0001	lbs/day	Yes	6.2	0.0409	Yes
Amendable Cyanide	0.0409	0.057	ug/L	ND	mg/L	*		mg/L	Yes			
Total PCB	ND	1900	ug/L	8.3000	mg/L	*		mg/L	Yes			
Aniline or Aniline Derivative	8300	20	ug/L	0.190	mg/L	*		mg/L	Yes			
Max Individual Purgeables	190	4.0	mg/L	34.0000	mg/L	250		mg/L	Yes			
Total Suspended Solids	34.0	0.050	mg/L	0.9640	mg/L	15.35		mg/L	Yes			
Total Phosphate**	0.964		gpm	16.351	gpd	50.000		gpd	Yes			
Total Flow (average)	11.35		gpm									

*Permit requires reporting of Aniline or Aniline Derivative and Max Individual Purgeables concentrations in excess of 0.01 mg/L.

**Analyzed by total phosphorus method SM 4500-P E

MAID - Maximum Allowable Instantaneous Discharge

Flow Calculations					
	EW-1	EW-2	EW-3	EW-4	EW-5
Initial Reading	4,239,036	1,974,555	2,028,052	2,483,886	798,845
Final Reading	4,441,560	2,075,285	2,121,318	2,616,828	841,660
Total Days in Period	35				
Total Flow for Period	572,277				
Average Flow for Period	11.35				

gallons
gpm

Compliance Confirmation

Discharge Monitoring Report for July 2009

BSA Permit No. 09-06-BU109
 Sample Date: 07/07/09
 Sample Location: Onsite Pump Station to BSA

Prepared by: BBL
 Date: 8/24/2009
 Checked by: RTB
 Date: 9/8/2009

BSA Permit Parameter	Input Analytical Results			Converted Analytical Results			BSA Daily Max Discharge Limit		Permit Compliance	MAID mg/L	Quantity mg/L	Permit Compliance
	Quantity	Reporting Limit	Unit	Quantity	Unit	Unit	Quantity	Unit				
pH	9.30	NA	SU	9.30	SU		5.0 - 12.0	SU	Yes			
BOD5	27.8	20.0	mg/L	27.8	mg/L		250	mg/L	Yes			
Total Phenol	0.0261	0.01	mg/L	0.0033	lbs/day		1.67	lbs/day	Yes	20	0.0261	Yes
Total Chromium	0.0134	0.004	mg/L	0.0017	lbs/day		0.83	lbs/day	Yes	40	0.0134	Yes
Total Copper	0.0382	0.01	mg/L	0.0048	lbs/day		0.67	lbs/day	Yes	16	0.0382	Yes
Lead	0.0074	0.006	mg/L	0.0009	lbs/day		0.541	lbs/day	Yes	65	0.0074	Yes
Total Mercury	ND	0.0002	mg/L	ND	lbs/day		0.00033	lbs/day	Yes			
Total Nickel	0.0102	0.01	mg/L	0.0013	lbs/day		1.17	lbs/day	Yes	14	0.010	Yes
Zinc	0.0624	0.01	mg/L	0.008	lbs/day		2.046	lbs/day	Yes	25	0.0624	Yes
Amendable Cyanide	0.0412	0.01	mg/L	0.0052	lbs/day		2.59	lbs/day	Yes	6.2	0.0412	Yes
Total PCB	ND	0.057	ug/L	ND	lbs/day		0.0001	lbs/day	Yes	0.002	ND	Yes
Aniline or Aniline Derivative	5900	1900	ug/L	5.9	mg/L		*	mg/L	Yes			
Max Individual Purgeables	85	20	ug/L	0.085	mg/L			mg/L	Yes			
Total Suspended Solids	23.6	4	mg/L	23.6	mg/L		250	mg/L	Yes			
Total Phosphate**	1.0	0.020	mg/L	1.0	mg/L		15.35	mg/L	Yes			
Total Flow (average)	10.41		gpm	14,994	gpd		50,000	gpd	Yes			

*Permit requires reporting of Aniline or Aniline Derivative and Max Individual Purgeables concentrations in excess of 0.01 mg/L.

**Analyzed by total phosphorus method SM 4500-P E

MAID - Maximum Allowable Instantaneous Discharge

Flow Calculations					
	EW-1	EW-2	EW-3	EW-4	EW-5
Initial Reading	4,441,560	2,075,285	2,121,318	2,616,828	841,660
Final Reading	4,600,098	2,165,283	2,192,637	2,697,612	875,837
Total Days in Period	29				
Total Flow for Period	434,816				
Average Flow for Period	10.41				
			gallons		
			gpm		

Compliance Confirmation

Discharge Monitoring Report for August 2009

BSA Permit No. 09-06-BU109
 Sample Date: 08/16/09
 Sample Location: Onsite Pump Station to BSA

Prepared by: BBL
 Date: 9/1/2009
 Checked by: RTB
 Date: 9/8/2009

BSA Permit Parameter	Input Analytical Results			Converted Analytical Results			BSA Daily Max Discharge Limit		Permit Compliance	MAID mg/L	Quantity mg/L	Permit Compliance
	Quantity	Reporting Limit	Unit	Quantity	Unit	Quantity	Unit	Unit				
pH	9.39	NA	SU	9.39	SU	5.0 - 12.0	SU		Yes			
BOD5	18.8	2.0	mg/L	18.8	mg/L	250	mg/L		Yes	20	0.0636	Yes
Total Phenol	0.0636	0.010	mg/L	0.006	lbs/day	1.67	lbs/day		Yes	40	0.0159	Yes
Total Chromium	0.0159	0.0040	mg/L	0.002	lbs/day	0.83	lbs/day		Yes	16	0.0606	Yes
Total Copper	0.0606	0.010	mg/L	0.006	lbs/day	0.67	lbs/day		Yes	65	0.0437	Yes
Lead	0.0437	0.006	mg/L	0.004	lbs/day	0.541	lbs/day		Yes			
Total Mercury	ND	0.00020	mg/L	ND	lbs/day	0.00033	lbs/day		Yes			
Total Nickel	0.0150	0.010	mg/L	0.00146590	lbs/day	1.17	lbs/day		Yes	14	0.015	Yes
Zinc	0.0588	0.010	mg/L	0.006	lbs/day	2.046	lbs/day		Yes	25	0.0588	Yes
Amendable Cyanide	0.0271	0.010	mg/L	0.003	lbs/day	2.59	lbs/day		Yes	6.2	0.0271	Yes
Total PCB	ND	0.059	ug/L	ND	lbs/day	0.0001	lbs/day		Yes	0.002	ND	Yes
Aniline or Aniline Derivative	9200	2000	ug/L	9	mg/L	*	mg/L		Yes			
Max Individual Purgeables	87	100	ug/L	0.087	mg/L	*	mg/L		Yes			
Total Suspended Solids	30.4	4.0	mg/L	30.4	mg/L	250	mg/L		Yes			
Total Phosphate**	1.43	0.05	mg/L	1.4	mg/L	15.35	mg/L		Yes			
Total Flow (average)	8.13		gpm	11,711	gpd	50,000	gpd		Yes			

* Permit requires reporting of Aniline or Aniline Derivative and Max Individual Purgeables concentrations in excess of 0.01 mg/L.

** Analyzed by total phosphorus method SM 4500-P E

MAID - Maximum Allowable Instantaneous Discharge

Flow Calculations					
	EW-1	EW-2	EW-3	EW-4	EW-5
Initial Reading	4,600,098	2,165,283	2,192,637	2,697,612	875,837
Final Reading	4,794,807	2,265,437	2,278,841	2,754,299	906,515
Total Days in Period	40				8/16/2009
Total Flow for Period	468,432				
Average Flow for Period	8.13				

gallons
gpm

Compliance Confirmation

Discharge Monitoring Report for September 2009

BSA Permit No. 09-06-BU109
 Sample Date: 09/16/09
 Sample Location: Onsite Pump Station to BSA

Prepared by: BBL
 Date: 9/29/2009
 Checked by: RTB
 Date: 10/1/2009

BSA Permit Parameter	Input Analytical Results			Converted Analytical Results			BSA Daily Max Discharge Limit		Permit Compliance	MAID mg/L	Quantity mg/L	Permit Compliance
	Quantity	Reporting Limit	Unit	Quantity	Unit	Quantity	Unit	Unit				
pH	9.31	NA	SU	9.3	SU	5.0 - 12.0	SU		Yes			
BOD5	23.1	2.0	mg/L	23.1	mg/L	250	mg/L		Yes			
Total Phenol	0.0827	0.010	mg/L	0.008	lbs/day	1.67	lbs/day		Yes	20	0.0827	Yes
Total Chromium	0.0120	0.0040	mg/L	0.001	lbs/day	0.83	lbs/day		Yes	40	0.0120	Yes
Total Copper	0.0505	0.010	mg/L	0.005	lbs/day	0.67	lbs/day		Yes	16	0.0505	Yes
Lead	0.0130	0.0050	mg/L	0.0013	lbs/day	0.541	lbs/day		Yes	65	0.0130	Yes
Total Mercury	ND	0.00020	mg/L	ND	lbs/day	0.00033	lbs/day		Yes			
Total Nickel	0.0158	0.010	mg/L	0.00160002	lbs/day	1.17	lbs/day		Yes	14	0.016	Yes
Zinc	0.0334	0.010	mg/L	0.003	lbs/day	2.046	lbs/day		Yes	25	0.0334	Yes
Amendable Cyanide	ND	0.010	mg/L	ND	lbs/day	2.59	lbs/day		Yes	6.2	ND	Yes
Total PCB	ND	0.058	ug/L	ND	lbs/day	0.0001	lbs/day		Yes	0.002	ND	Yes
Aniline or Aniline Derivative	8500	1900	ug/L	8.5	mg/L	*	mg/L		Yes			
Max Individual Purgeables	71	50	ug/L	0.07	mg/L	*	mg/L		Yes			
Total Suspended Solids	122	4.0	mg/L	122.0	mg/L	250	mg/L		Yes			
Total Phosphate**	0.816	0.010	mg/L	0.8	mg/L	15.35	mg/L		Yes			
Total Flow (average)	8.43		gpm	12.135	gpd	50,000	gpd		Yes			

*Permit requires reporting of Aniline or Aniline Derivative and Max Individual Purgeables concentrations in excess of 0.01 mg/L.

** Analyzed by total phosphorus method SM 4500-P E

MAID - Maximum Allowable Instantaneous Discharge

Flow Calculations					
	EW-1	EW-2	EW-3	EW-4	EW-5
Initial Reading	4,794,807	2,265,437	2,278,841	2,754,299	906,515
Final Reading	4,963,612	2,284,667	2,343,507	2,842,117	942,184
Total Days in Period	31				
Total Flow for Period	376,188		gallons		
Average Flow for Period	8.43		gpm		

Compliance Confirmation

Discharge Monitoring Report for
October 2009

BSA Permit No. 09-06-BU109
 Sample Date: 10/14/09
 Sample Location: Onsite Pump Station to BSA

Prepared by: BBL
 Date: 11/10/2009
 Checked by: RTB
 Date: 1/6/2010

BSA Permit Parameter	Input Analytical Results			Converted Analytical Results			BSA Daily Max Discharge Limit		Permit Compliance	MAID mg/L	Quantity mg/L	Permit Compliance
	Quantity	Reporting Limit	Unit	Quantity	Unit	Unit	Quantity	Unit				
pH	9.12	NA	SU	9.12	SU		5.0 - 12.0	SU	Yes			
BOD5	22.5	2.0	mg/L	22.5	mg/L	250	1.67	mg/L	Yes			
Total Phenol	0.0498	0.0100	mg/L	0.0050	lbs/day		1.67	lbs/day	Yes	20	0.0498	Yes
Total Chromium	0.0069	0.0040	mg/L	0.0007	lbs/day		0.83	lbs/day	Yes	40	0.0069	Yes
Total Copper	0.0302	0.0100	mg/L	0.0031	lbs/day		0.67	lbs/day	Yes	16	0.0302	Yes
Lead	0.0083	0.0050	mg/L	0.0008	lbs/day		0.541	lbs/day	Yes	65	0.0083	Yes
Total Mercury	ND	0.0002	mg/L	ND	lbs/day		0.00033	lbs/day	Yes			
Total Nickel	0.0206	0.0100	mg/L	0.0021	lbs/day		1.17	lbs/day	Yes	14	0.021	Yes
Zinc	0.0390	0.0100	mg/L	0.004	lbs/day		2.46	lbs/day	Yes	25	0.0390	Yes
Amendable Cyanide	0.0309	0.0100	mg/L	0.0031	lbs/day		2.59	lbs/day	Yes	6.2	0.0309	Yes
Total PCB	ND	0.057	ug/L	ND	lbs/day		0.0001	lbs/day	Yes	0.002	ND	Yes
Aniline or Aniline Derivative	6800	940	ug/L	6.8	mg/L		*	mg/L	Yes			
Max Individual Purgeables	54	25	ug/L	0.054	mg/L		*	mg/L	Yes			
Total Suspended Solids	52.0	4.0	mg/L	52.0	mg/L		250	mg/L	Yes			
Total Phosphate**	0.686	0.0100	mg/L	0.7	mg/L		15.35	mg/L	Yes			
Total Flow (average)	8.44		gpm	12,151	gpd		50,000	gpd	Yes			

*Permit requires reporting of Aniline or Aniline Derivative and Max Individual Purgeables concentrations in excess of 0.01 mg/L.

**Analyzed by total phosphorus method SM 4500-P E
 MAID - Maximum Allowable Instantaneous Discharge

Flow Calculations

	EW-1	EW-2	EW-3	EW-4	EW-5	
Initial Reading	4,963,612	2,284,667	2,343,507	2,842,117	942,184	9/16/2009
Final Reading	5,100,487	2,341,019	2,397,309	2,904,925	972,569	10/14/2009
Total Days in Period	28					
Total Flow for Period	340,222					gallons
Average Flow for Period	8.44					gpm

Compliance Confirmation
Discharge Monitoring Report for
November 2009

BSA Permit No. 09-06-BU109
 Sample Date: 11/10/09
 Sample Location: Onsite Pump Station to BSA

Prepared by: BBL
 Date: 11/20/2009
 Checked by: RTB
 Date: 1/6/2010

BSA Permit Parameter	Input Analytical Results			Converted Analytical Results			BSA Daily Max Discharge Limit		Permit Compliance	MAID mg/L	Quantity mg/L	Permit Compliance
	Quantity	Reporting Limit	Unit	Quantity	Unit	Unit	Quantity	Unit				
pH	9.47	NA	SU	9.47	SU		5.0 - 12.0	SU	Yes			
BOD5	14.2	2.0	mg/L	14.2	mg/L	250	mg/L	mg/L	Yes			
Total Phenol	0.0812	0.0100	mg/L	0.008	lbs/day	1.67	lbs/day	lbs/day	Yes	20	0.0812	Yes
Total Chromium	0.0126	0.0040	mg/L	0.001	lbs/day	0.83	lbs/day	lbs/day	Yes	40	0.0126	Yes
Total Copper	0.0762	0.0100	mg/L	0.007	lbs/day	0.67	lbs/day	lbs/day	Yes	16	0.0762	Yes
Lead	0.0058	0.0050	mg/L	0.001	lbs/day	0.541	lbs/day	lbs/day	Yes	65	0.0058	Yes
Total Mercury	ND	0.0002	mg/L	ND	lbs/day	0.00033	lbs/day	lbs/day	Yes			
Total Nickel	0.0226	0.0100	mg/L	0.00218360	lbs/day	1.17	lbs/day	lbs/day	Yes	14	0.023	Yes
Zinc	0.0296	0.0100	mg/L	0.003	lbs/day	2.046	lbs/day	lbs/day	Yes	25	0.0296	Yes
Amendable Cyanide	0.0820	0.0100	mg/L	0.008	lbs/day	2.59	lbs/day	lbs/day	Yes	6.2	0.0820	Yes
Total PCB	ND	0.12	ug/L	ND	lbs/day	0.0001	lbs/day	lbs/day	Yes	0.002	ND	Yes
Aniline or Aniline Derivative	0.86	9.4	ug/L	0	mg/L	*	mg/L	mg/L	Yes			
Max Individual Purgeables	60	100	ug/L	0.060	mg/L	*	mg/L	mg/L	Yes			
Total Suspended Solids	67.6	4.0	mg/L	67.6	mg/L	250	mg/L	mg/L	Yes			
Total Phosphate**	0.822	0.0100	mg/L	0.8	mg/L	15.35	mg/L	mg/L	Yes			
Total Flow (average)	8.04		gpm	11,578	gpd	50,000	gpd	gpd	Yes			

*Permit requires reporting of Aniline or Aniline Derivative and Max Individual Purgeables concentrations in excess of 0.01 mg/L.

**Analyzed by total phosphorus method SM 4500-P E

MAID - Maximum Allowable Instantaneous Discharge

Flow Calculations					
	EW-1	EW-2	EW-3	EW-4	EW-5
Initial Reading	5,100.487	2,341.019	2,397.309	2,904.925	972.569
Final Reading	5,228.041	2,414.978	2,443.522	2,941.995	1,000.383
Total Days in Period	27				
Total Flow for Period	312,610				
Average Flow for Period	8.04				
			gallons		
			gpm		

Compliance Confirmation
Discharge Monitoring Report for
December 2009

BSA Permit No. 09-06-BU109
 Sample Date: 12/17/09
 Sample Location: Onsite Pump Station to BSA

Prepared by: BBL
 Date: 12/29/2009
 Checked by: RTB
 Date: 1/6/2010

BSA Permit Parameter	Input Analytical Results			Converted Analytical Results			BSA Daily Max Discharge Limit		Permit Compliance	MAID mg/L	Quantity mg/L	Permit Compliance
	Quantity	Reporting Limit	Unit	Quantity	Unit	Unit	Quantity	Unit				
pH	9.06	NA	SU	9.1	SU	5.0 - 12.0		SU	Yes			
BOD5	24.1	8.0	mg/L	24.1	mg/L	250	1.67	mg/L	Yes			
Total Phenol	0.0268	0.0100	mg/L	0.003	lbs/day	0.83	0.67	lbs/day	Yes	20	0.0268	Yes
Total Chromium	0.0095	0.0040	mg/L	0.001	lbs/day	0.67	0.67	lbs/day	Yes	40	0.0095	Yes
Total Copper	0.313	0.0100	mg/L	0.035	lbs/day	0.541	0.541	lbs/day	Yes	16	0.3130	Yes
Lead	0.0187	0.0050	mg/L	0.0021	lbs/day	0.00033		lbs/day	Yes	65	0.0187	Yes
Total Mercury	ND	0.0002	mg/L	ND	lbs/day			lbs/day	Yes			
Total Nickel	0.0466	0.0100	mg/L	0.00520821	lbs/day	1.17	1.17	lbs/day	Yes	14	0.047	Yes
Zinc	0.218	0.0100	mg/L	0.024	lbs/day	2.046	2.046	lbs/day	Yes	25	0.2180	Yes
Amendable Cyanide	0.0356	0.0100	mg/L	0.004	lbs/day	2.59	2.59	lbs/day	Yes	6.2	0.0356	Yes
Total PCB	ND	0.058	ug/L	ND	lbs/day	0.0001		lbs/day	Yes	0.002	ND	Yes
Aniline or Aniline Derivative	4200	1000	ug/L	4.2	mg/L	*		mg/L	Yes			
Max Individual Purgeables	55	50	ug/L	0.06	mg/L	*		mg/L	Yes			
Total Suspended Solids	27.6	4.0	mg/L	27.6	mg/L	250		mg/L	Yes			
Total Phosphate**	1.11	0.0200	mg/L	1.1	mg/L	15.35		mg/L	Yes			
Total Flow (average)	9.30		gpm	13,393	gpd	50,000		gpd	Yes			

*Permit requires reporting of Aniline or Aniline Derivative and Max Individual Purgeables concentrations in excess of 0.01 mg/L.

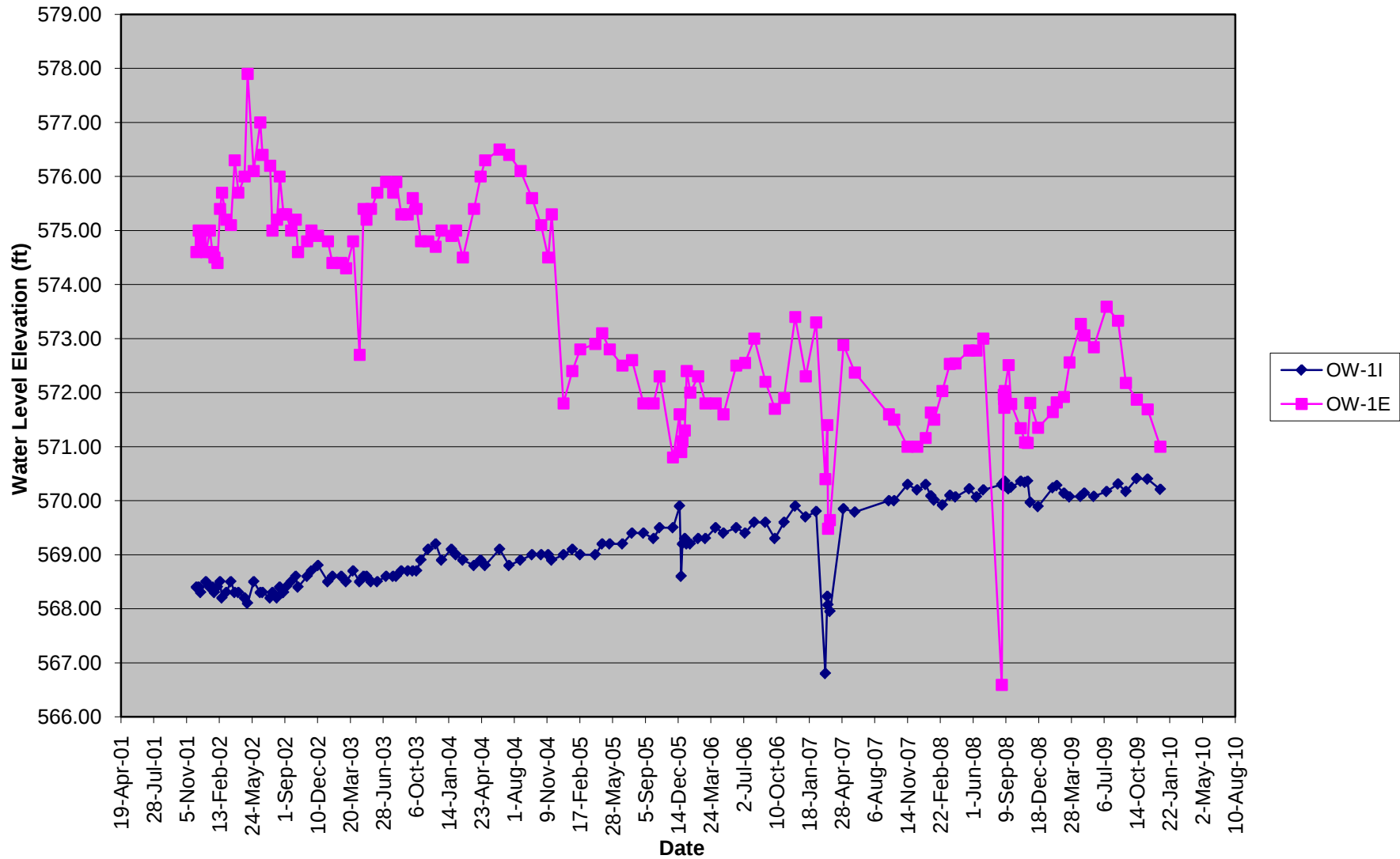
**Analyzed by total phosphorus method SM 4500-P E

MAID - Maximum Allowable Instantaneous Discharge

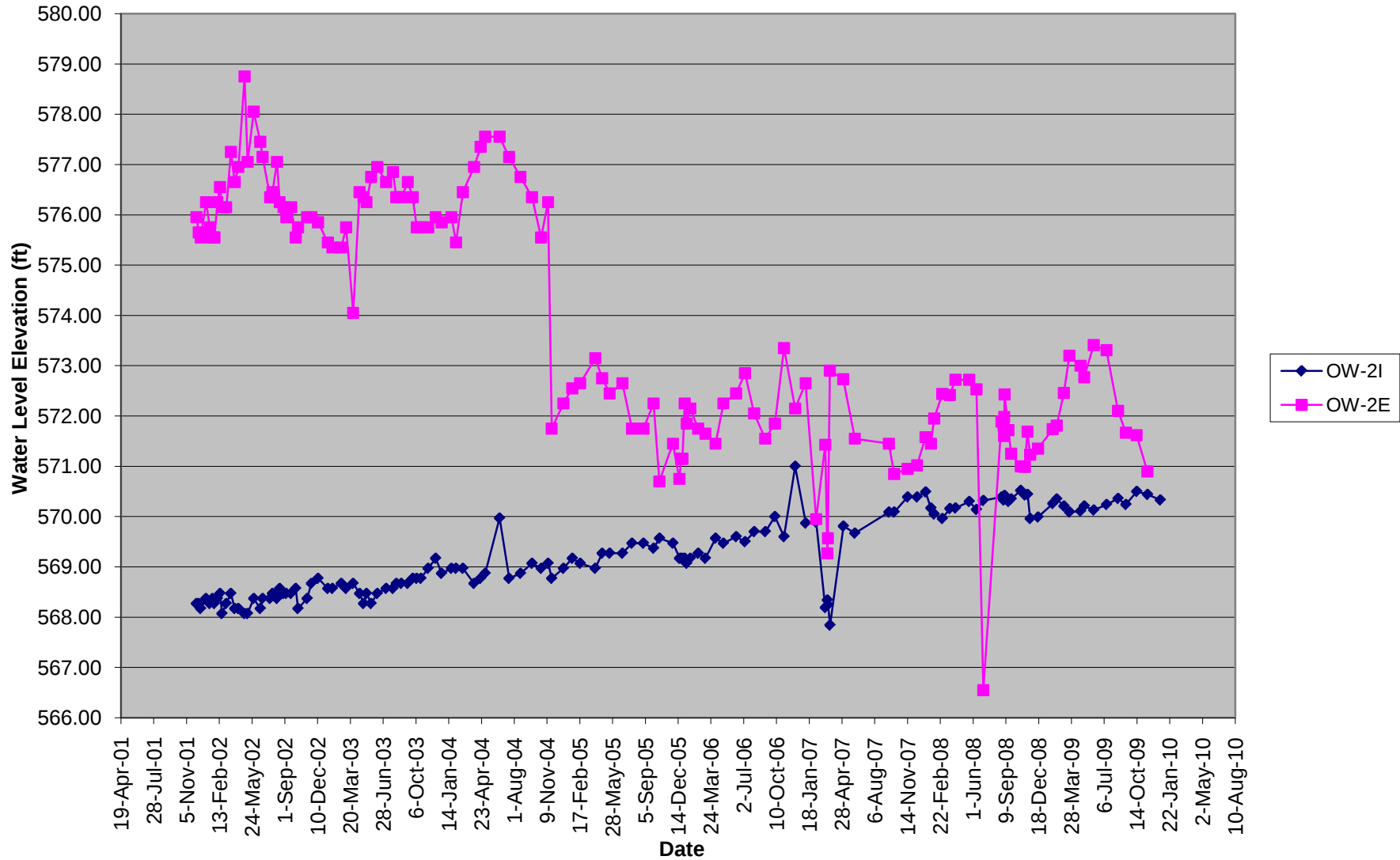
Flow Calculations					
	EW-1	EW-2	EW-3	EW-4	EW-5
Initial Reading	5,228,041	2,414,978	2,443,522	2,941,995	1,000,383
Final Reading	5,409,689	2,512,619	2,501,657	3,062,232	1,038,261
Total Days in Period	37				
Total Flow for Period	495,539				
Average Flow for Period	9.30				
	gallons				
	gpm				

APPENDIX B
OBSERVATION WELL HYDROGRAPHS
AND WATER LEVEL DATA

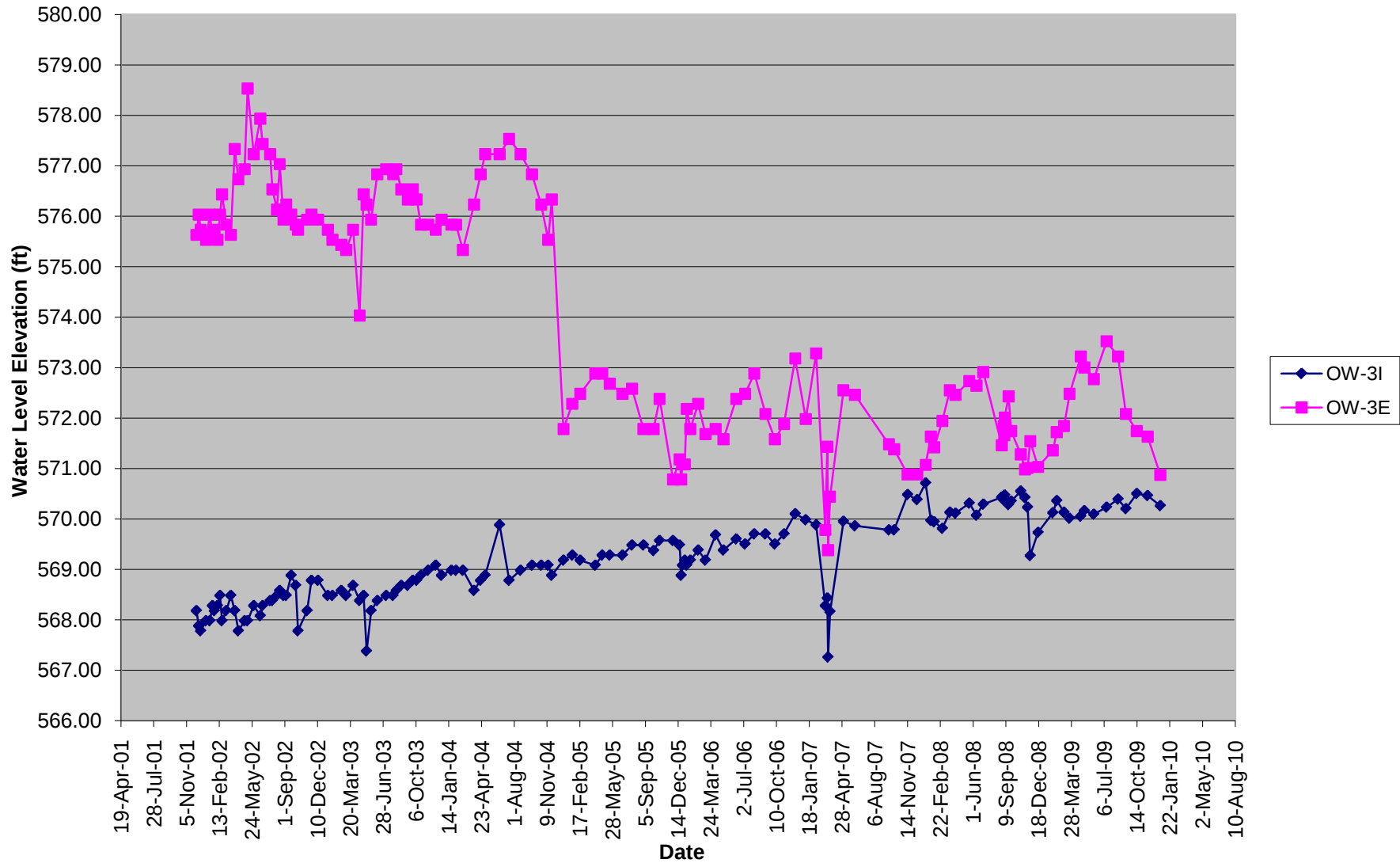
Buffalo Color Observation Wells OW-1E&1I



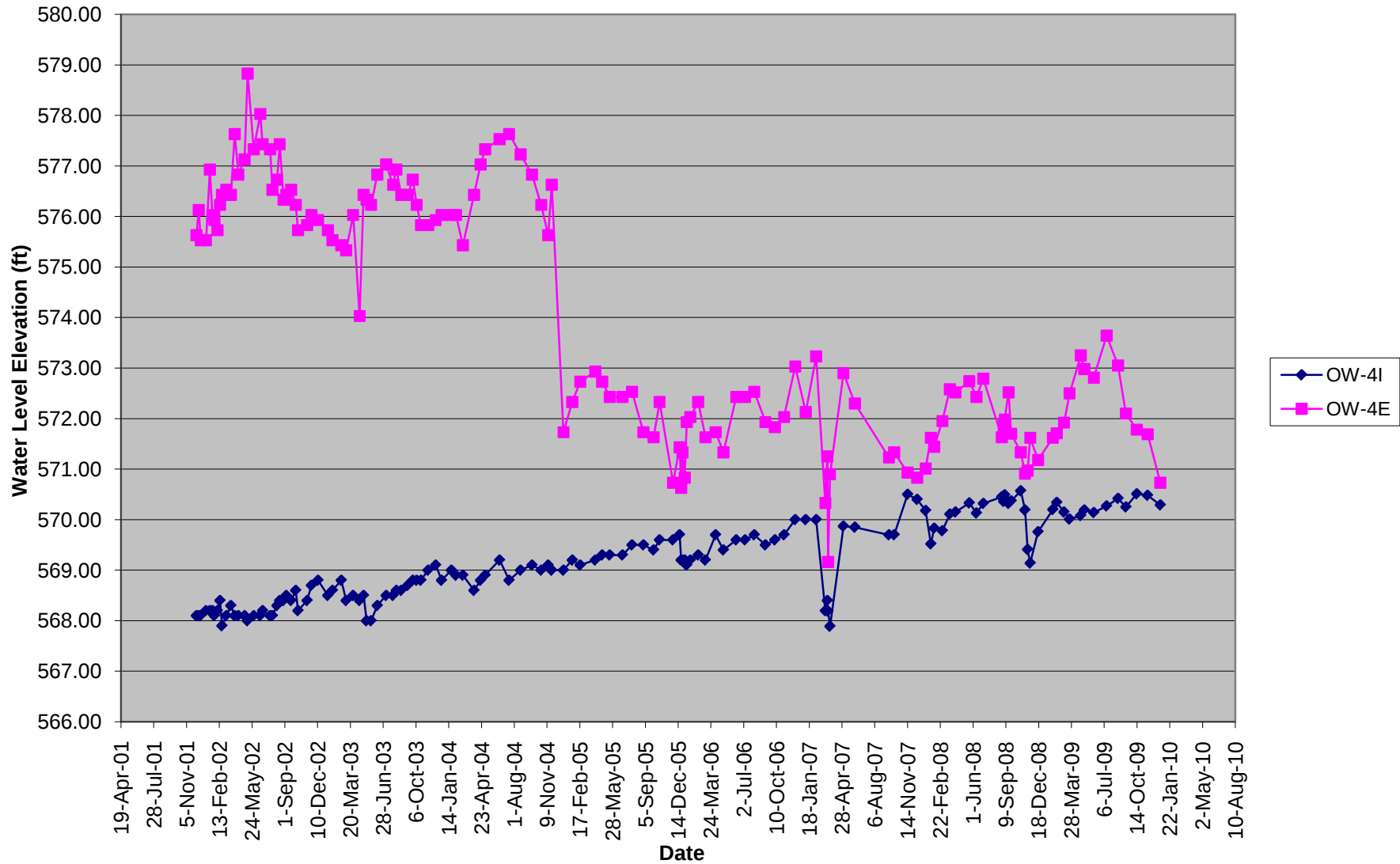
Buffalo Color Observation Wells OW-2E&2I



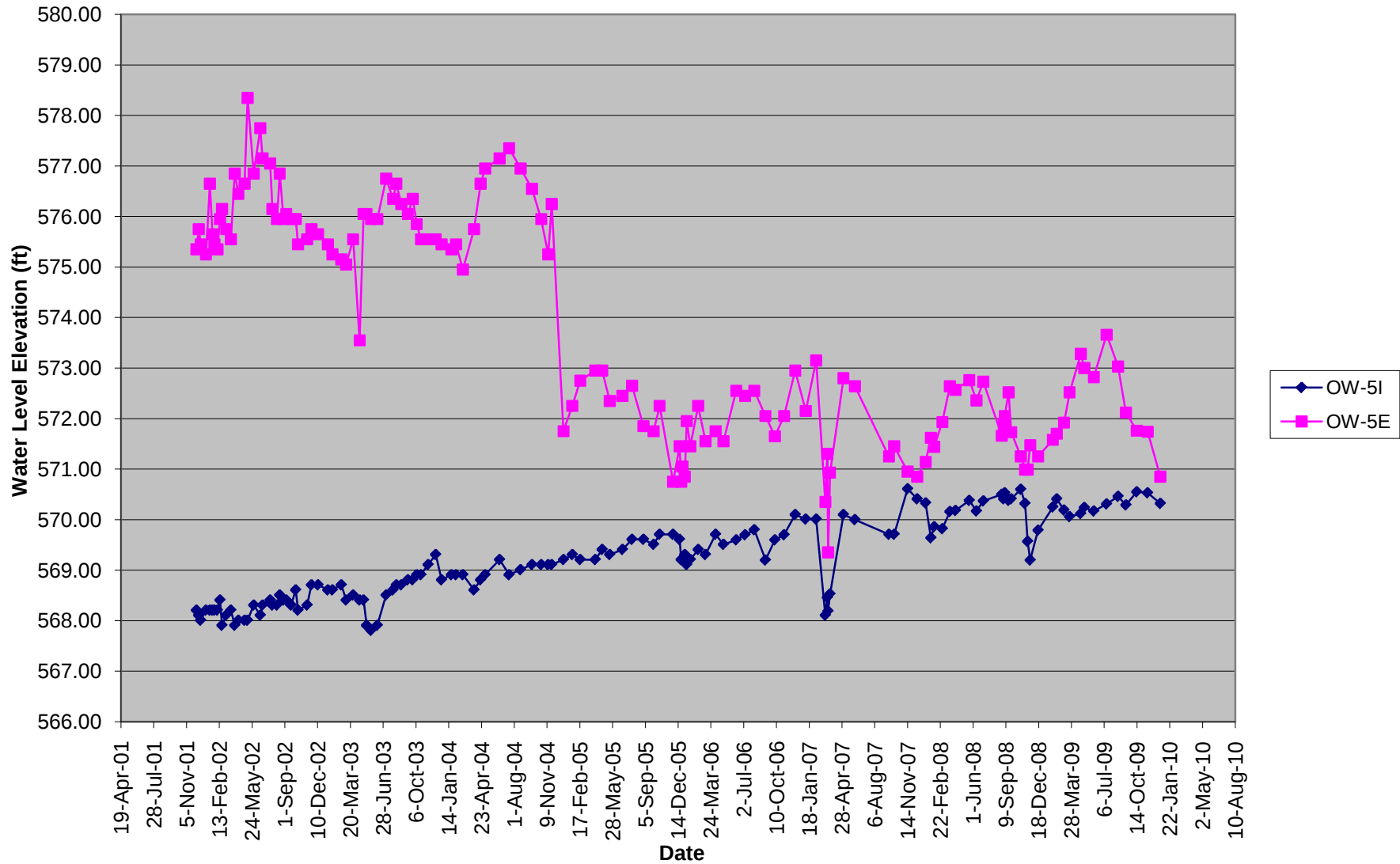
Buffalo Color Observation Wells OW-3E&EI



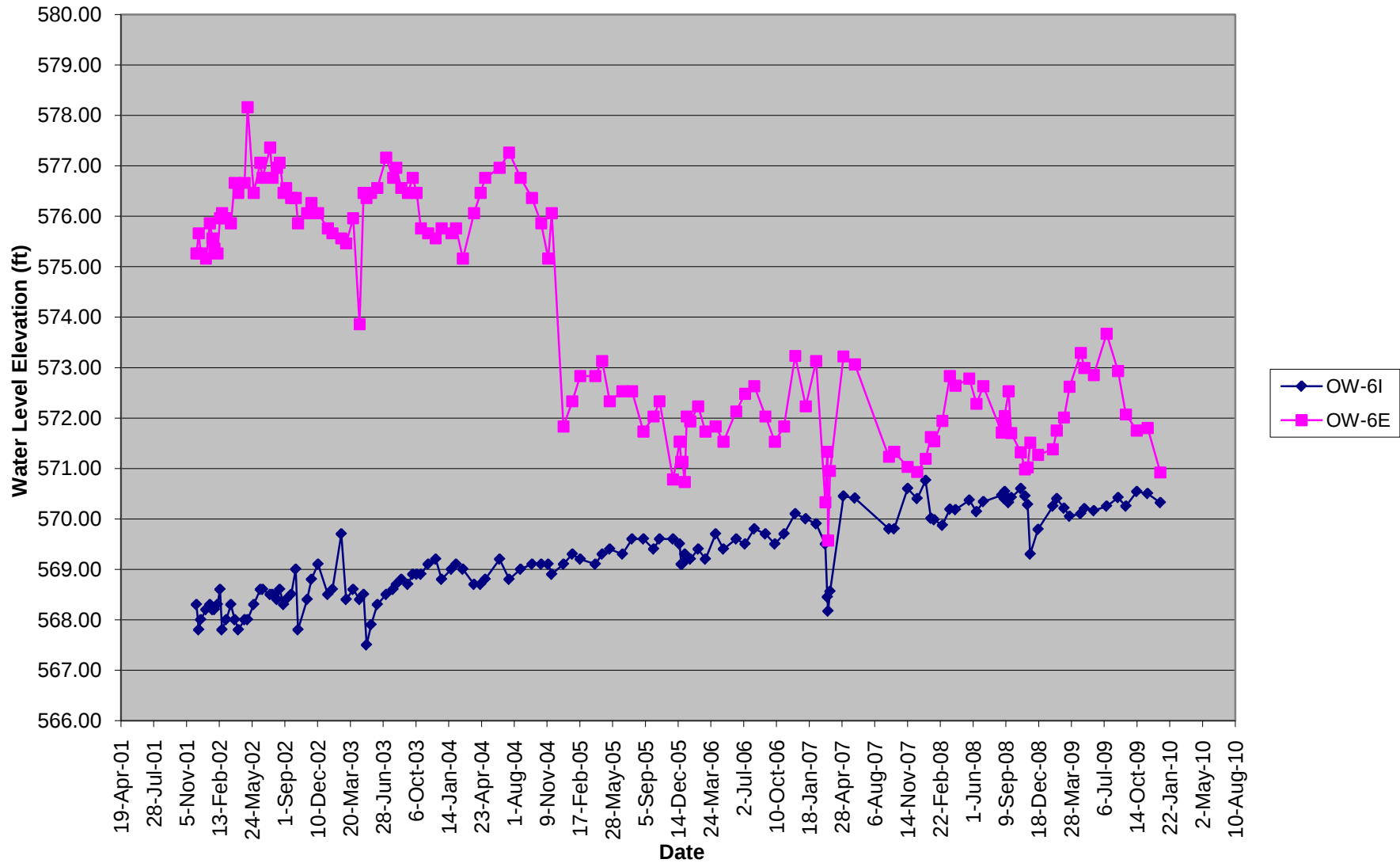
Buffalo Color Observation Wells
OW-4E&4I



Buffalo Color Observation Wells OW-5E&5I



Buffalo Color Observation Wells OW-6E&6I



Buffalo Color - Monitoring Well Levels and Totalizer Readings - 2007

Landfill Monitoring Well - Groundwater Elevation (MSL) (ft)

Well	Pt Elev.	7-Jan	8-Feb	8-Mar	14-Mar	16-Mar	22-Mar	2-May	6-Jun	18-Sep	4-Oct	14-Nov	13-Dec
OW-11	587.80	569.70	569.80	566.80	568.23	568.07	567.95	569.85	569.79	570.00	570.00	570.30	570.20
OW-21	588.39	569.89	569.89	568.19	568.34	568.24	567.84	569.81	569.67	570.09	570.09	570.39	570.39
OW-31	588.38	569.98	569.88	568.28	568.43	567.26	568.16	569.95	569.86	569.78	569.78	570.48	570.38
OW-41	588.10	570.00	570.00	568.20	568.40	568.19	567.89	569.87	569.85	569.70	569.70	570.50	570.40
OW-51	588.11	570.01	570.01	568.11	568.46	568.19	568.53	570.10	570.00	569.71	569.71	570.61	570.41
OW-61	589.60	570.00	569.90	569.50	568.45	568.17	568.56	570.45	570.41	569.80	569.80	570.60	570.40

Landfill Monitoring Well - Distance Between Water level and Top of Well Casing (ft)

Well	Pt Elev.	7-Jan	8-Feb	8-Mar	14-Mar	16-Mar	22-Mar	2-May	6-Jun	18-Sep	4-Oct	14-Nov	13-Dec
OW-11	587.80	18.10	18.00	21.00	19.57	19.73	19.85	17.95	18.01	17.80	17.80	17.50	17.60
OW-21	588.39	18.50	18.50	20.20	20.05	20.15	20.55	18.58	18.72	18.30	18.30	18.00	18.00
OW-31	588.38	18.40	18.50	20.10	19.95	21.12	20.22	18.43	18.52	18.60	18.60	17.90	18.00
OW-41	588.10	18.10	18.10	19.90	19.70	19.91	20.21	18.23	18.25	18.40	18.40	17.60	17.70
OW-51	588.11	18.10	18.10	20.00	19.65	19.92	19.58	18.01	18.11	18.40	18.40	17.50	17.70
OW-61	589.60	19.60	19.70	20.10	21.15	21.43	21.04	19.15	19.19	19.80	19.80	19.00	19.20

River Monitoring Well - Ground water Elevation (MSL) (ft)

Well	Pt Elev.	7-Jan	8-Feb	8-Mar	14-Mar	16-Mar	22-Mar	2-May	6-Jun	18-Sep	4-Oct	14-Nov	13-Dec
OW-1E	583.20	572.30	573.30	570.40	571.40	569.48	569.64	572.88	572.37	571.60	571.50	571.00	571.00
OW-2E	583.05	572.15	572.65	569.95	571.43	569.27	569.57	572.90	572.73	571.55	571.45	570.85	570.95
OW-3E	582.68	571.98	573.28	569.78	571.43	569.38	570.44	572.55	572.46	571.48	571.38	570.88	570.88
OW-4E	582.93	572.13	573.23	570.33	571.25	569.16	570.90	572.90	572.30	571.23	571.33	570.93	570.83
OW-5E	582.65	572.15	573.15	570.35	571.30	569.35	570.93	572.80	572.64	571.25	571.45	570.95	570.85
OW-6E	583.23	572.23	573.13	570.33	571.33	569.57	570.95	573.22	573.06	571.23	571.33	571.03	570.93

River Monitoring Well - Distance Between Water Level and Top of Well Casing (ft)

Well	Pt Elev.	7-Jan	8-Feb	8-Mar	14-Mar	16-Mar	22-Mar	2-May	6-Jun	18-Sep	4-Oct	14-Nov	13-Dec
OW-1E	583.20	10.90	9.90	12.80	11.80	13.72	13.56	10.32	10.83	11.60	11.70	12.20	12.20
OW-2E	583.05	10.90	10.40	13.10	11.62	13.78	13.48	10.15	10.32	11.50	11.60	12.20	12.10
OW-3E	582.68	10.70	9.40	12.90	11.25	13.30	12.24	10.13	10.22	11.20	11.30	11.80	11.80
OW-4E	582.93	10.80	9.70	12.60	11.68	13.77	12.03	10.03	10.63	11.70	11.60	12.00	12.10
OW-5E	582.65	10.50	9.50	12.30	11.35	13.30	11.72	9.85	10.01	11.40	11.20	11.70	11.80
OW-6E	583.23	11.00	10.10	12.90	11.90	13.66	12.28	10.01	10.17	12.00	11.90	12.20	12.30

Flow Totalizer Readings (gal)

Vault	7-Jan	8-Feb	8-Mar	14-Mar	16-Mar	22-Mar	2-May	6-Jun	18-Sep	4-Oct	14-Nov	13-Dec
EW-1	1526130	1526130	1526130	1526130	1526130	1526130	1526130	1526130	1526130	1526130	1526130	1526130
EW-2	1648660	1648660	1648660	1648660	1648660	1648660	1648660	1648660	1648660	1648660	1648660	1648660
EW-3	871050	871050	871050	871050	871050	871050	871050	871050	871050	871050	871050	871050
EW-4	1685720	1685720	1685720	1685720	1685720	1685720	1685720	1685720	1685720	1685740	1685720	1685740

Level Difference Between River Wells and Landfill Wells (ft)

Wells	7-Jan	8-Feb	8-Mar	14-Mar	16-Mar	22-Mar	2-May	6-Jun	18-Sep	4-Oct	14-Nov	13-Dec
OW-1E & OW-11	2.60	3.50	3.60	3.17	1.41	4.69	3.03	2.58	1.64	1.51	0.70	0.82
OW-2E & OW-21	2.28	2.78	1.78	3.11	1.05	1.75	3.11	3.08	1.51	1.41	0.53	0.60
OW-3E & OW-31	2.00	3.40	1.50	3.00	2.12	2.28	2.60	2.60	1.68	1.35	0.39	0.55
OW-4E & OW-41	2.13	3.23	2.13	2.85	0.97	3.01	3.03	2.45	1.53	1.23	0.36	0.48
OW-5E & OW-51	2.14	3.14	2.24	2.84	1.16	2.40	2.70	2.64	1.51	1.26	0.39	0.42
OW-6E & OW-61	2.23	3.23	0.83	2.88	1.40	2.39	2.77	2.65	1.48	1.05	0.46	0.44
Average	2.23	3.21	2.01	2.98	1.35	2.25	2.87	2.67	1.56	1.3	0.47	0.55

Buffalo Color - Monitoring Well Levels and Totalizer Readings - 2008

Landfill Monitoring Well - Groundwater Elevation (MSL) (ft)

Well	Pt Elev.	8-Jan	24-Jan	3-Feb	28-Feb	22-Mar	8-Apr	20-May	11-Jun	2-Jul	27-Aug	2-Sep	3-Sep	4-Sep	5-Sep	17-Sep	25-Sep	24-Oct	6-Nov	14-Nov	22-Nov	16-Dec
OW-1I	587.80	570.30	570.09	570.01	569.92	570.10	570.07	570.22	570.07	570.20	570.30	570.27	570.34	570.29	570.36	570.22	570.25	570.36	570.34	570.36	569.97	569.89
OW-2I	588.37	570.49	570.17	570.05	569.96	570.16	570.17	570.30	570.14	570.32	570.39	570.33	570.41	570.34	570.42	570.30	570.35	570.52	570.43	570.44	569.96	569.99
OW-3I	588.38	570.71	569.97	569.94	569.81	570.13	570.11	570.31	570.07	570.29	570.43	570.38	570.43	570.37	570.47	570.28	570.35	570.55	570.42	570.23	569.27	569.73
OW-4I	588.10	570.18	569.52	569.83	569.78	570.11	570.15	570.33	570.13	570.32	570.45	570.36	570.43	570.39	570.49	570.32	570.37	570.57	570.19	569.41	569.14	569.76
OW-5I	588.11	570.33	569.64	569.86	569.82	570.16	570.18	570.38	570.17	570.37	570.50	570.41	570.49	570.44	570.53	570.38	570.41	570.60	570.32	569.57	569.20	569.79
OW-6I	589.60	570.76	570.01	569.98	569.87	570.19	570.18	570.37	570.14	570.34	570.47	570.43	570.48	570.40	570.54	570.32	570.42	570.60	570.45	570.28	569.30	569.79

Landfill Monitoring Well - Distance Between Water Level and Top of Well Casing (ft)

Well	Pt Elev.	8-Jan	24-Jan	3-Feb	28-Feb	22-Mar	8-Apr	20-May	11-Jun	2-Jul	27-Aug	2-Sep	3-Sep	4-Sep	5-Sep	17-Sep	25-Sep	24-Oct	6-Nov	14-Nov	22-Nov	16-Dec
OW-1I	587.80	17.50	17.71	17.79	17.88	17.70	17.73	17.58	17.73	17.60	17.50	17.53	17.46	17.51	17.44	17.58	17.55	17.44	17.46	17.44	17.83	17.91
OW-2I	588.37	17.88	18.20	18.32	18.41	18.21	18.20	18.07	18.23	18.05	17.98	18.04	17.96	18.03	17.95	18.07	18.02	17.85	17.94	17.93	18.41	18.38
OW-3I	588.38	17.67	18.41	18.44	18.57	18.25	18.27	18.07	18.31	18.09	17.95	18.00	17.95	18.01	17.91	18.10	18.03	17.83	17.96	18.15	19.11	18.65
OW-4I	588.10	17.92	18.58	18.27	18.32	17.99	17.95	17.77	17.97	17.78	17.65	17.74	17.67	17.71	17.61	17.78	17.73	17.53	17.91	18.69	18.96	18.34
OW-5I	588.11	17.78	18.47	18.25	18.29	17.95	17.93	17.73	17.94	17.74	17.61	17.70	17.62	17.67	17.58	17.73	17.70	17.51	17.79	18.54	18.91	18.32
OW-6I	589.60	18.84	19.59	19.62	19.73	19.41	19.42	19.23	19.46	19.26	19.13	19.17	19.12	19.20	19.06	19.28	19.18	19.00	19.15	19.32	20.30	19.81

River Monitoring Well - Groundwater Elevation (MSL) (ft)

Well	Pt Elev.	8-Jan	24-Jan	3-Feb	28-Feb	22-Mar	8-Apr	20-May	11-Jun	2-Jul	27-Aug	2-Sep	3-Sep	4-Sep	5-Sep	17-Sep	25-Sep	24-Oct	6-Nov	14-Nov	22-Nov	16-Dec
OW-1E	583.20	571.16	571.63	571.50	572.03	572.53	572.54	572.78	572.78	573.00	566.59	571.96	571.88	571.72	572.03	572.51	571.79	571.34	571.08	571.07	571.81	571.35
OW-2E	583.05	571.02	571.58	571.45	571.95	572.44	572.42	572.72	572.72	572.53	566.55	571.89	571.81	571.60	571.98	572.43	571.72	571.25	571.00	570.99	571.69	571.23
OW-3E	582.68	571.07	571.63	571.42	571.94	572.55	572.46	572.73	572.64	572.91	571.46	571.82	571.84	571.66	572.01	572.43	571.74	571.28	570.98	571.01	571.54	571.03
OW-4E	582.93	571.01	571.62	571.44	571.95	572.58	572.52	572.74	572.43	572.79	571.63	571.77	571.88	571.78	571.98	572.52	571.70	571.33	570.91	570.97	571.62	571.18
OW-5E	582.65	571.14	571.62	571.44	571.93	572.64	572.57	572.76	572.36	572.73	571.66	571.82	571.90	571.80	572.05	572.52	571.73	571.25	570.99	570.99	571.47	571.25
OW-6E	583.23	571.19	571.62	571.54	571.94	572.83	572.64	572.78	572.28	572.63	571.71	571.83	571.90	571.85	572.04	572.53	571.70	571.32	570.98	571.02	571.51	571.27

River Monitoring Well - Distance Between Water Level and Top of Well Casing (ft)

Well	Pt Elev.	8-Jan	24-Jan	3-Feb	28-Feb	22-Mar	8-Apr	20-May	11-Jun	2-Jul	27-Aug	2-Sep	3-Sep	4-Sep	5-Sep	17-Sep	25-Sep	24-Oct	6-Nov	14-Nov	22-Nov	16-Dec
OW-1E	583.20	12.04	11.57	11.70	11.17	10.67	10.66	10.42	10.42	10.20	16.61	11.24	11.32	11.48	11.17	10.69	11.41	11.86	12.12	12.13	11.39	11.85
OW-2E	583.05	12.03	11.47	11.60	11.10	10.61	10.63	10.33	10.33	10.52	16.50	11.16	11.24	11.45	11.07	10.62	11.33	11.80	12.05	12.06	11.36	11.82
OW-3E	582.68	11.61	11.05	11.26	10.74	10.13	10.22	9.95	10.04	9.77	11.22	10.86	10.84	11.02	10.67	10.25	10.94	11.40	11.70	11.67	11.14	11.65
OW-4E	582.93	11.92	11.31	11.49	10.98	10.35	10.41	10.19	10.50	10.14	11.30	11.16	11.05	11.15	10.95	10.41	11.23	11.60	12.02	11.96	11.31	11.75
OW-5E	582.65	11.51	11.03	11.21	10.72	10.01	10.08	9.89	10.29	9.92	10.99	10.83	10.75	10.85	10.60	10.13	10.92	11.40	11.66	11.66	11.18	11.40
OW-6E	583.23	12.04	11.61	11.69	11.29	10.40	10.59	10.45	10.95	10.60	11.52	11.40	11.33	11.38	11.19	10.70	11.53	11.91	12.25	12.21	11.72	11.96

Flow Totalizer Readings (gal)

Vault	8-Jan	24-Jan	3-Feb	28-Feb	22-Mar	8-Apr	20-May	11-Jun	2-Jul	27-Aug	2-Sep	3-Sep	4-Sep	5-Sep	17-Sep	25-Sep	24-Oct	6-Nov	14-Nov	22-Nov	16-Dec
EW-1	1528300	1542420	1542750	1543850	1543850	1543850	1543850	1543850	1543850	1543850	1544030	1544030	1544030	1544030	1544030	1544030	1544030	1546990	1558530	1566000	1566160
EW-2	1637910	1637910	1637910	1637910	1637910	1637910	1637910	1637910	1637910	1637910	1637910	1637910	1637910	1637910	1637910	1637910	1637910	1637910	1637910	1637910	1637910
EW-3	872160	872790	872790	872790	872790	872790	872790	872790	872790	872790	872790	872790	872790	872790	872790	872790	872790	872790	872790	882020	883080
EW-4	1685720	1685720	1685720	1685720	1685720	1685720	1685720	1685720	1685720	1685720	1685720	1685720	1685720	1685720	1685720	1685720	1685720	1685720	1685720	1685720	1685720

Level Difference Between River Wells and Landfill Wells (ft)

Wells	8-Jan	24-Jan	3-Feb	28-Feb	22-Mar	8-Apr	20-May	11-Jun	2-Jul	27-Aug	2-Sep	3-Sep	4-Sep	5-Sep	17-Sep	25-Sep	24-Oct	6-Nov	14-Nov	22-Nov	16-Dec
OW-1E & OW-1I	0.86	1.54	1.49	2.11	2.43	2.47	2.56	2.71	2.80		1.69	1.54	1.43	1.67	2.29	1.54	0.98	0.74	0.71	1.84	1.46
OW-2E & OW-2I	0.53	1.41	1.40	1.99	2.28	2.25	2.42	2.58	2.21		1.56	1.40	1.26	1.56	2.13	1.37	0.73	0.57	0.55	1.73	1.24
OW-3E & OW-3I	0.36	1.66	1.48	2.13	2.42	2.35	2.42	2.57	2.62	1.03	1.44	1.41	1.29	1.54	2.15	1.39	0.73	0.56	0.78	2.27	1.30
OW-4E & OW-4I	0.83	2.10	1.61	2.17	2.47	2.37	2.41	2.30	2.47	1.18	1.41	1.45	1.39	1.49	2.20	1.33	0.76	0.72	1.56	2.48	1.42
OW-5E & OW-5I	0.81	1.98	1.58	2.11	2.48	2.39	2.38	2.19	2.36	1.16	1.41	1.41	1.36	1.52	2.14	1.32	0.65	0.67	1.42	2.27	1.46
OW-6E & OW-6I	0.43	1.61	1.56	2.07	2.64	2.46	2.41	2.14	2.29	1.24	1.40	1.42	1.45	1.50	2.21	1.28	0.72	0.53	0.74	2.21	1.48
Average	0.64	1.72	1.52	2.10	2.45	2.38	2.43	2.42	2.46	1.15	1.48	1.44	1.36	1.55	2.19	1.37	0.76	0.63	0.96	2.13	1.39

Buffalo Color - Monitoring Well Levels and Totalizer Readings - 2009

Landfill Monitoring Well - Groundwater Elevation (MSL) (ft)

Well	Pt Elev.	30-Jan	11-Feb	5-Mar	22-Mar	25-Apr	6-May	4-Jun	13-Jul	17-Aug	10-Sep	13-Oct	15-Nov	24-Dec
OW-1I	587.80	570.24	570.28	570.14	570.07	570.08	570.14	570.08	570.17	570.31	570.17	570.41	570.40	570.21
OW-2I	588.37	570.26	570.35	570.21	570.09	570.11	570.21	570.13	570.24	570.36	570.24	570.50	570.44	570.33
OW-3I	588.38	570.12	570.36	570.13	570.01	570.05	570.16	570.09	570.23	570.39	570.20	570.50	570.46	570.26
OW-4I	588.10	570.20	570.34	570.15	570.01	570.08	570.19	570.14	570.27	570.42	570.25	570.51	570.48	570.29
OW-5I	588.11	570.25	570.41	570.19	570.06	570.12	570.24	570.17	570.31	570.46	570.29	570.55	570.53	570.32
OW-6I	589.60	570.25	570.40	570.21	570.05	570.10	570.20	570.16	570.25	570.42	570.25	570.54	570.50	570.32

Landfill Monitoring Well - Distance Between Water Level and Top of Well Casing (ft)

Well	Pt Elev.	8-Jan	11-Feb	5-Mar	22-Mar	25-Apr	6-May	4-Jun	13-Jul	17-Aug	10-Sep	13-Oct	15-Nov	24-Dec
OW-1I	587.80	17.56	17.52	17.66	17.73	17.72	17.66	17.72	17.63	17.49	17.63	17.39	17.40	17.59
OW-2I	588.37	18.11	18.02	18.16	18.28	18.26	18.16	18.24	18.13	18.01	18.13	17.87	17.93	18.04
OW-3I	588.38	18.26	18.02	18.25	18.37	18.33	18.22	18.29	18.15	17.99	18.18	17.88	17.92	18.12
OW-4I	588.10	17.90	17.76	17.95	18.09	18.02	17.91	17.96	17.83	17.68	17.85	17.59	17.62	17.81
OW-5I	588.11	17.86	17.70	17.92	18.05	17.99	17.87	17.94	17.80	17.65	17.82	17.56	17.58	17.79
OW-6I	589.60	19.35	19.20	19.39	19.55	19.50	19.40	19.44	19.35	19.18	19.35	19.06	19.10	19.28

River Monitoring Well - Groundwater Elevation (MSL) (ft)

Well	Pt Elev.	30-Jan	11-Feb	5-Mar	22-Mar	25-Apr	6-May	4-Jun	13-Jul	17-Aug	10-Sep	13-Oct	15-Nov	24-Dec
OW-1E	583.20	571.64	571.82	571.92	572.56	573.27	573.06	572.84	573.59	573.33	572.18	571.87	571.69	571.00
OW-2E	583.05	571.35	571.74	571.81	572.46	573.20	573.00	572.77	573.41	573.31	572.10	571.67	571.62	570.90
OW-3E	582.68	571.36	571.72	571.84	572.48	573.22	573.00	572.77	573.52	573.22	572.08	571.74	571.63	570.87
OW-4E	582.93	571.62	571.71	571.92	572.50	573.25	572.98	572.81	573.64	573.05	572.10	571.78	571.69	570.73
OW-5E	582.65	571.58	571.70	571.92	572.52	573.28	573.00	572.82	573.66	573.03	572.12	571.76	571.74	570.85
OW-6E	583.23	571.38	571.75	572.01	572.62	573.29	572.99	572.85	573.67	572.93	572.07	571.75	571.80	570.92

River Monitoring Well - Distance Between Water Level and Top of Well Casing (ft)

Well	Pt Elev.	30-Jan	11-Feb	5-Mar	22-Mar	25-Apr	6-May	4-Jun	13-Jul	17-Aug	10-Sep	13-Oct	15-Nov	24-Dec
OW-1E	583.20	11.56	11.38	11.28	10.64	9.93	10.14	10.36	9.61	9.87	11.02	11.33	11.51	12.20
OW-2E	583.05	11.70	11.31	11.24	10.59	9.85	10.05	10.28	9.64	9.74	10.95	11.38	11.43	12.15
OW-3E	582.68	11.32	10.96	10.84	10.20	9.46	9.68	9.91	9.16	9.46	10.60	10.94	11.05	11.81
OW-4E	582.93	11.31	11.22	11.01	10.43	9.68	9.95	10.12	9.29	9.88	10.83	11.15	11.24	12.20
OW-5E	582.65	11.07	10.95	10.73	10.13	9.37	9.65	9.83	8.99	9.62	10.53	10.89	10.91	11.80
OW-6E	583.23	11.85	11.48	11.22	10.61	9.94	10.24	10.38	9.56	10.30	11.16	11.48	11.43	12.31

Flow Totalizer Readings (gal)

Vault	30-Jan	11-Feb	5-Mar	22-Mar	25-Apr	6-May	4-Jun	13-Jul	17-Aug	10-Sep	13-Oct	15-Nov	24-Dec
EW-1	1566490	1566530	1566860	1567090	1567500	1567550	1567820	1568000	1568070	1568240	1568390	1568630	1569040
EW-2	1637910	1637910	1637910	1637910	1637910	1637910	1637910	1637910	1637910	1637910	1637910	1637910	1637910
EW-3	885360	885590	887730	889290	892100	892480	894300	895490	895920	897090	898260	900070	903080
EW-4	1685720	1685720	1685720	1685720	1685720	1685720	1686920	1687790	1688090	1688090	1688090	1688090	1688090

Level Difference Between River Wells and Landfill Wells (ft)

Wells	30-Jan	11-Feb	5-Mar	22-Mar	25-Apr	6-May	4-Jun	13-Jul	17-Aug	10-Sep	13-Oct	15-Nov	24-Dec
OW-1E & OW-1I	1.40	1.54	1.78	2.49	3.19	2.92	2.76	3.42	3.02	2.01	1.46	1.29	0.79
OW-2E & OW-2I	1.09	1.39	1.60	2.37	3.09	2.79	2.64	3.17	2.95	1.86	1.17	1.18	0.57
OW-3E & OW-3I	1.24	1.36	1.71	2.47	3.17	2.84	2.68	3.29	2.83	1.88	1.24	1.17	0.61
OW-4E & OW-4I	1.42	1.37	1.77	2.49	3.17	2.79	2.67	3.37	2.63	1.85	1.27	1.21	0.44
OW-5E & OW-5I	1.33	1.29	1.73	2.46	3.16	2.76	2.65	3.35	2.57	1.83	1.21	1.21	0.53
OW-6E & OW-6I	1.13	1.35	1.80	2.57	3.19	2.79	2.69	3.42	2.51	1.82	1.21	1.30	0.60
Average	1.27	1.38	1.73	2.47	3.16	2.81	2.68	3.34	2.75	1.87	1.26	1.23	0.59

APPENDIX C

GROUNDWATER GRADIENT ACROSS CONTAINMENT WALL

**BUFFALO COLOR "AREA D"
OBSERVATION WELLS
GROUNDWATER ELEVATION DIFFERENCE**

OBSERVATION WELLS	Jan-09	Feb-09	March-09		April-09	May-09	Jun-09
	1/30/2009	2/11/2009	3/5/2009	3/22/2009	4/25/2009	5/6/2009	6/4/2009
(OW-1)-(OW-1E)	-1.40	-1.54	-1.78	-2.49	-3.19	-2.92	-2.76
(OW-2)-(OW-2E)	-1.09	-1.39	-1.60	-2.37	-3.09	-2.79	-2.64
(OW-3)-(OW-3E)	-1.24	-1.36	-1.71	-2.47	-3.17	-2.84	-2.68
(OW-4)-(OW-4E)	-1.42	-1.37	-1.77	-2.49	-3.17	-2.79	-2.67
(OW-5)-(OW-5E)	-1.33	-1.29	-1.73	-2.46	-3.16	-2.76	-2.65
(OW-6)-(OW-6E)	-1.13	-1.35	-1.80	-2.57	-3.19	-2.79	-2.69
	-1.27	-1.38	-1.73	-2.47	-3.16	-2.81	-2.68

OBSERVATION WELLS	July-09	Aug-09	Sep-09	Oct-09	Nov-09	Dec-09
	7/13/2009	8/17/2009	9/10/2009	10/13/2009	11/15/2009	12/24/2009
(OW-1)-(OW-1E)	-3.42	-3.02	-2.01	-1.46	-1.29	-0.79
(OW-2)-(OW-2E)	-3.17	-2.95	-1.86	-1.17	-1.18	-0.57
(OW-3)-(OW-3E)	-3.29	-2.83	-1.88	-1.24	-1.17	-0.61
(OW-4)-(OW-4E)	-3.37	-2.63	-1.85	-1.27	-1.21	-0.44
(OW-5)-(OW-5E)	-3.35	-2.57	-1.83	-1.21	-1.21	-0.53
(OW-6)-(OW-6E)	-3.42	-2.51	-1.82	-1.21	-1.30	-0.60
	-3.34	-2.75	-1.87	-1.26	-1.23	-0.59

STATISTICS	Average Elevation Difference
(OW-1)-(OW-1E)	-2.16
(OW-2)-(OW-2E)	-1.99
(OW-3)-(OW-3E)	-2.04
(OW-4)-(OW-4E)	-2.03
(OW-5)-(OW-5E)	-2.01
(OW-6)-(OW-6E)	-2.03

GRADIENT	
Max	-3.42
Min	-0.44
average	-2.04

Note: - = an inward gradient

APPENDIX D
SITE INSPECTIONS AND PHOTOGRAPHS



Site Inspection Form

Site Name: Buffalo Color Area DWeather: 41 F and SunnyProject Number: 30074Assessment by: Scott SalesDate: 02/25/09

Yes	No	N/A
☒	☐	☐
☐	☒	☐
☒	☐	☐
☒	☐	☐
☐	☒	☐

A. Security

- Does fence exist? _____
- Is there a breach in fence? _____
- Locks on gate? _____
- Posted signs? _____
- Signs of trespassers/vandalism? _____
- Other _____

☐	☐	☒
☐	☐	☒
☒	☐	☐
☐	☒	☐

B. General Site Conditions

- Vegetation stress? _____
- Mowing required? _____
- Access road drivable? _____
- Odors? _____
- Other _____

☐	☒	☐
☒	☐	☐
☐	☒	☐
☐	☒	☐
☐	☒	☐
☐	☒	☐
☐	☒	☐
☐	☒	☐
☐	☒	☐
☐	☒	☐
☐	☒	☐

C. Cap Inspection

- Exposed waste? _____
- Side slope stable? _____
- Erosion? _____
- Leachate seeps (discolored vegetation)? _____
- Synthetic liner exposed? _____
- Bare spots? _____
- Presence of burrowing animals? _____
- Deep rooted vegetation? _____
- Cracking? _____
- Ponding water? _____
- Evidence of methane seeps? _____
- Other _____

☐	☒	☐
☐	☒	☐
☒	☐	☐
☒	☐	☐
☐	☒	☐
☐	☐	☒
☐	☐	☒

D. Surface Water

- Obstruction of flow ditches? _____
- Erosion of ditches? _____
- Silt & erosion control? _____
- Culverts in good condition? _____
- Evidence of overflow or uncontrolled flow? _____
- Outfalls in good condition? _____
- Sedimentation basin/ponds secure? _____
- Other _____

☒	☐	☐
-------------------------------------	--------------------------	--------------------------

E. Methane Gas Control

- Does one exist? _____



Site Inspection Form

Yes No N/A

☐	☐	☐
☐	☒	☐
☒	☐	☐
☒	☐	☐
☐	☐	☒
☒	☐	☐
☒	☐	☐

2. Is system active or passive? passive
3. Permanent methane gas probes? _____
4. Locks on monitoring wells? _____
5. Vents in working order? _____
6. Well seals in place? _____
7. Methane levels within LEL limits? _____
8. Monitoring reports current? _____
9. Other _____

F. Leachate Collection System

☒	☐	☐
-------------------------------------	--------------------------	--------------------------

1. Does one exist? _____

2. Collection method:

☐	☒	☐
☒	☐	☐
☐	☐	☒
☒	☐	☐

- a. Sump? _____
- b. Well point? 4 extraction wells
- c. Earthen basin/pond? _____
- d. Structure secured? _____
- e. Other _____

3. Pumping system:

☒	☐	☐
☒	☐	☐
☒	☐	☐
☒	☐	☐

- a. Automatic? _____
- b. Manual? _____
- c. Mechanically operable? EW-2 & EW-4 not operable at this time.
- d. Leaks/failures? _____

4. Disposals:

☒	☐	☐
☐	☒	☐
☒	☐	☐
☐	☐	☒

- a. Onsite pretreatment/treatment? Water is treated in Plant (Area A).
- b. Surface discharge? (NPDES/SPDES) _____
- c. POTW – hardpiped? _____
- d. Quick disconnect caps in place? _____

5. Transportation (if any):

☐	☐	☒
☐	☐	☒
☐	☐	☒

- a. Chemicals? _____
- b. Filter cake? _____

6. Ancillary equipment in good condition? (Pipes, valves, pumps, vaults, instruments and etc.) _____

☐	☐	☒
--------------------------	--------------------------	-------------------------------------

7. Monitoring reports current? _____

8. Other _____

G. Groundwater Monitoring & Recovery Wells (if any)

☒	☐	☐
☒	☐	☐
☒	☐	☐
☒	☐	☐
☒	☐	☐

1. Locks on wells? _____
2. Wells in good condition? _____
3. Well seals in good condition? _____
4. Access to wells? _____
5. Monitoring reports current? _____
6. Other _____



Site Inspection Form

Yes	No	N/A
-----	----	-----

☐	☐	☒
☐	☐	☒
☐	☐	☒
☐	☐	☒
☐	☐	☒
☐	☐	☒
☐	☐	☒
☐	☐	☒
☐	☐	☒
☐	☐	☒

H. Treatment Plant

1. Building in good condition? (Doors, windows, wells, roof) _____
2. Visual tank inspection performed? _____
3. Visual inspection of pipes, valves, fittings etc.? _____
4. Pump operation/inspection performed? _____
5. Instruments operation/calibration? _____
6. Mixer operation/inspection? _____
7. Proper personal protection equipment? _____
8. Air compressor system functioning properly? _____
9. Filter press inspected? _____
10. Emergency generator functioning properly? _____

☐	☐	☒
☐	☐	☒
☐	☐	☒
☐	☐	☒
☐	☐	☒
☐	☐	☒
☐	☐	☒
☐	☐	☒
☐	☐	☒
☐	☐	☒

I. Polymeric Marine Mattress (PMM)

1. Damage due to burrowing animals? _____
2. Damage due ice and/or ice flowages? _____
3. Impacts or damage due to the periodic dredging of the Buffalo River? _____
4. Impacts or damage due to navigation activities in the Buffalo River? _____
5. Establishment of woody plant growth causing displacement or stress on the system? _____
6. Areas of settlement or displacement of the system? _____
7. Erosion at the upstream and downstream limits of the system? _____
8. Damage to the stone infill adjacent to Outfall #006 and the concrete wall/sheet pile along the upstream limit of the system? _____
9. Damage to the stone infill within the marine mattresses? _____
10. Damage to the general integrity of the system (Look for splits, cuts and gaps)? _____

J. General Comments

NYSDEC - David Szymanski on site for inspection. His comments were as follows: 1)

Need to wait for snow melt to inspect shore line. 2) In regards to the Extraction Wells, he stated that if the pumps that are working are sufficient to maintain proper water levels then the two that are down are not an issue.

Scott Ayler
2/25/09



Site Inspection Form

Site Name: Buffalo Color Area DProject Number: 30074Date: 05/19/2009Weather: 60° sunnyAssessment by: S. Sayles, D. Olbrich, L. Ross

Yes	No	N/A
☒	☐	☐
☐	☒	☐
☒	☐	☐
☒	☐	☐
☐	☒	☐

A. Security

1. Does fence exist? _____
2. Is there a breach in fence? _____
3. Locks on gate? _____
4. Posted signs? _____
5. Signs of trespassers/vandalism? _____
6. Other _____

☐	☒	☐
☐	☒	☐
☒	☒	☐
☐	☒	☐

B. General Site Conditions

1. Vegetation stress? _____
2. Mowing required? _____
3. Access road drivable? _____
4. Odors? _____
5. Other _____

☐	☒	☐
☒	☐	☐
☐	☒	☐
☐	☒	☐
☐	☒	☐
☒	☐	☐
☒	☐	☐
☐	☒	☐
☐	☒	☐
☐	☒	☐
☐	☒	☐

C. Cap Inspection

1. Exposed waste? _____
2. Side slope stable? _____
3. Erosion? _____
4. Leachate seeps (discolored vegetation)? _____
5. Synthetic liner exposed? _____
6. Bare spots? Near EW2 & EW1 (small)
7. Presence of burrowing animals? _____
8. Deep rooted vegetation? _____
9. Cracking? _____
10. Ponding water? _____
11. Evidence of methane seeps? _____
12. Other _____

☐	☒	☐
☐	☒	☐
☒	☐	☐
☒	☐	☐
☐	☒	☐
☐	☐	☒
☐	☐	☒

D. Surface Water

1. Obstruction of flow ditches? _____
2. Erosion of ditches? _____
3. Silt & erosion control? _____
4. Culverts in good condition? _____
5. Evidence of overflow or uncontrolled flow? _____
6. Outfalls in good condition? _____
7. Sedimentation basin/ponds secure? _____
8. Other _____

☒	☐	☐
-------------------------------------	--------------------------	--------------------------

E. Methane Gas Control

1. Does one exist? _____



Site Inspection Form

Yes No N/A

☐	☐	☐
☐	☒	☐
☒	☐	☐
☒	☐	☐
☒	☐	☐
☒	☐	☐
☒	☐	☐

2. Is system active or passive? Passive
3. Permanent methane gas probes? _____
4. Locks on monitoring wells? _____
5. Vents in working order? _____
6. Well seals in place? _____
7. Methane levels within LEL limits? _____
8. Monitoring reports current? _____
9. Other _____

☒	☐	☐
-------------------------------------	--------------------------	--------------------------

☐	☐	☒
☒	☐	☐
☐	☐	☒
☒	☐	☐

☒	☐	☐
☒	☐	☐
☐	☒	☐
☐	☒	☐

☒	☐	☐
☐	☒	☐
☒	☐	☐
☐	☐	☒

☐	☐	☒
☐	☐	☒
☒	☐	☐

☒	☐	☐
-------------------------------------	--------------------------	--------------------------

☒	☐	☐
☒	☐	☐
☒	☐	☐
☒	☐	☐
☒	☐	☐

F. Leachate Collection System

1. Does one exist? _____
2. Collection method:
- Sump? _____
 - Well point? 4 extraction wells
 - Earthen basin/pond? _____
 - Structure secured? _____
 - Other _____
3. Pumping system:
- Automatic? _____
 - Manual? _____
 - Mechanically operable? _____
 - Leaks/failures? _____
4. Disposals:
- Onsite pretreatment/treatment? Water is treated in Plant (Area A).
 - Surface discharge? (NPDES/SPDES) _____
 - POTW – hardpiped? _____
 - Quick disconnect caps in place? _____
5. Transportation (if any):
- Chemicals? _____
 - Filter cake? _____
6. Ancillary equipment in good condition? (Pipes, valves, pumps, vaults, instruments and etc.) _____
7. Monitoring reports current? _____
8. Other _____

G. Groundwater Monitoring & Recovery Wells (if any)

- Locks on wells? _____
- Wells in good condition? _____
- Well seals in good condition? _____
- Access to wells? _____
- Monitoring reports current? _____
- Other _____



Site Inspection Form

Yes	No	N/A
-----	----	-----

☐	☐	☒
☐	☐	☒
☐	☐	☒
☐	☐	☒
☐	☐	☒
☐	☐	☒
☐	☐	☒
☐	☐	☒
☐	☐	☒
☐	☐	☒

H. Treatment Plant

1. Building in good condition? (Doors, windows, wells, roof) _____
2. Visual tank inspection performed? _____
3. Visual inspection of pipes, valves, fittings etc.? _____
4. Pump operation/inspection performed? _____
5. Instruments operation/calibration? _____
6. Mixer operation/inspection? _____
7. Proper personal protection equipment? _____
8. Air compressor system functioning properly? _____
9. Filter press inspected? _____
10. Emergency generator functioning properly? _____

I. Polymeric Marine Mattress (PMM)

☐	☐	☒
☐	☐	☒
☐	☐	☒
☐	☐	☒
☐	☐	☒
☐	☐	☒
☐	☐	☒
☐	☐	☒
☐	☐	☒
☐	☐	☒

1. Damage due to burrowing animals? _____
2. Damage due ice and/or ice flowages? _____
3. Impacts or damage due to the periodic dredging of the Buffalo River? _____
4. Impacts or damage due to navigation activities in the Buffalo River? _____
5. Establishment of woody plant growth causing displacement or stress on the system? _____
6. Areas of settlement or displacement of the system? _____
7. Erosion at the upstream and downstream limits of the system? _____
8. Damage to the stone infill adjacent to Outfall #006 and the concrete wall/sheet pile along the upstream limit of the system? _____
9. Damage to the stone infill within the marine mattresses? _____
10. Damage to the general integrity of the system (Look for splits, cuts and gaps)? _____

J. General Comments

Bare spots need seeding
 Burrowed holes need filling
 Monitoring wells need protective casings
 One monitoring well need repair
 Pumps run weekly for 5min as preventive maintenance
 Cap inspection at least once per month







Site Inspection Form

Site Name: Buffalo Color Area D

Weather: 65 F and Sunny

Project Number: 30074

Assessment by: Scott Sales and Dallas Ulbrich

Date: 08/25/09

Yes	No	N/A
☒	☐	☐
☐	☒	☐
☒	☐	☐
☒	☐	☐
☐	☒	☐

A. Security

1. Does fence exist? _____
2. Is there a breach in fence? _____
3. Locks on gate? _____
4. Posted signs? _____
5. Signs of trespassers/vandalism? _____
6. Other _____

☐	☐	☒
☒	☐	☐
☒	☐	☐
☐	☒	☐

B. General Site Conditions

1. Vegetation stress? _____
2. Mowing required? Mowing is set for 9/4/09
3. Access road drivable? _____
4. Odors? _____
5. Other _____

☐	☒	☐
☒	☐	☐
☐	☒	☐
☐	☒	☐
☐	☒	☐
☐	☒	☐
☐	☒	☐
☐	☒	☐
☐	☒	☐
☐	☒	☐
☐	☒	☐

C. Cap Inspection

1. Exposed waste? _____
2. Side slope stable? _____
3. Erosion? _____
4. Leachate seeps (discolored vegetation)? _____
5. Synthetic liner exposed? _____
6. Bare spots? _____
7. Presence of burrowing animals? _____
8. Deep rooted vegetation? _____
9. Cracking? _____
10. Ponding water? _____
11. Evidence of methane seeps? _____
12. Other _____

☐	☒	☐
☐	☒	☐
☒	☐	☐
☒	☐	☐
☐	☒	☐
☐	☐	☒
☐	☐	☒

D. Surface Water

1. Obstruction of flow ditches? _____
2. Erosion of ditches? _____
3. Silt & erosion control? _____
4. Culverts in good condition? _____
5. Evidence of overflow or uncontrolled flow? _____
6. Outfalls in good condition? _____
7. Sedimentation basin/ponds secure? _____
8. Other _____

☒	☐	☐
-------------------------------------	--------------------------	--------------------------

E. Methane Gas Control

1. Does one exist? _____

Site Inspection Form

Yes	No	N/A
☐	☐	☐
☐	☒	☐
☒	☐	☐
☒	☐	☐
☐	☐	☒
☒	☐	☐
☒	☐	☐

2. Is system active or passive? passive
3. Permanent methane gas probes? _____
4. Locks on monitoring wells? _____
5. Vents in working order? _____
6. Well seals in place? _____
7. Methane levels within LEL limits? _____
8. Monitoring reports current? _____
9. Other _____

☒	☐	☐
-------------------------------------	--------------------------	--------------------------

F. Leachate Collection System

1. Does one exist? _____
2. Collection method:
 - a. Sump? _____
 - b. Well point? 4 extraction wells
 - c. Earthen basin/pond? _____
 - d. Structure secured? _____
 - e. Other _____
3. Pumping system:
 - a. Automatic? _____
 - b. Manual? Can be operated manually as well.
 - c. Mechanically operable? EW-2 is setting above the water level.
 - d. Leaks/failures? _____
4. Disposals:
 - a. Onsite pretreatment/treatment? Water is treated in Plant (Area A).
 - b. Surface discharge? (NPDES/SPDES) _____
 - c. POTW – hardpiped? _____
 - d. Quick disconnect caps in place? _____
5. Transportation (if any):
 - a. Chemicals? _____
 - b. Filter cake? _____
6. Ancillary equipment in good condition? (Pipes, valves, pumps, vaults, instruments and etc.) _____
7. Monitoring reports current? _____
8. Other _____

☐	☒	☐
☒	☐	☐
☐	☐	☒
☒	☐	☐

☒	☐	☐
☒	☐	☐
☒	☐	☐
☒	☐	☐

☒	☐	☐
☐	☒	☐
☒	☐	☐
☐	☐	☒

☐	☐	☒
☐	☐	☒
☒	☐	☐

☒	☐	☐
-------------------------------------	--------------------------	--------------------------

G. Groundwater Monitoring & Recovery Wells (if any)

1. Locks on wells? _____
2. Wells in good condition? Cemented around 3 of the 5 monitoring wells. Can't locate the other two because of the vegetation.
3. Well seals in good condition? _____
4. Access to wells? _____
5. Monitoring reports current? _____
6. Other _____

☒	☐	☐
☒	☐	☐
☒	☐	☐

Site Inspection Form

Yes	No	N/A
☐	☐	☒
☐	☐	☒
☐	☐	☒
☐	☐	☒
☐	☐	☒
☐	☐	☒
☐	☐	☒
☐	☐	☒
☐	☐	☒
☐	☐	☒

H. Treatment Plant

1. Building in good condition? (Doors, windows, wells, roof) _____
2. Visual tank inspection performed? _____
3. Visual inspection of pipes, valves, fittings etc.? _____
4. Pump operation/inspection performed? _____
5. Instruments operation/calibration? _____
6. Mixer operation/inspection? _____
7. Proper personal protection equipment? _____
8. Air compressor system functioning properly? _____
9. Filter press inspected? _____
10. Emergency generator functioning properly? _____

☐	☐	☒
☐	☐	☒
☐	☐	☒
☐	☐	☒
☐	☐	☒
☐	☐	☒
☐	☐	☒
☐	☐	☒
☐	☐	☒
☐	☐	☒

I. Polymeric Marine Mattress (PMM)

1. Damage due to burrowing animals? _____
2. Damage due ice and/or ice flowages? _____
3. Impacts or damage due to the periodic dredging of the Buffalo River? _____
4. Impacts or damage due to navigation activities in the Buffalo River? _____
5. Establishment of woody plant growth causing displacement or stress on the system? _____
6. Areas of settlement or displacement of the system? _____
7. Erosion at the upstream and downstream limits of the system? _____
8. Damage to the stone infill adjacent to Outfall #006 and the concrete wall/sheet pile along the upstream limit of the system? _____
9. Damage to the stone infill within the marine mattresses? _____
10. Damage to the general integrity of the system (Look for splits, cuts and gaps)? _____

J. General Comments

NYSDEC - David Szymanski on site for inspection. His comments were as follows: 1) Plenty of vegetation on the cap. 2) The cement around the monitoring wells looks good.

Dallas Ulbrich

Date: 08/25/2009



Site Inspection Form





Site Inspection Form

Site Name: Buffalo Color Area DProject Number: 30074Date: 11/25/09Weather: 52 F and overcastAssessment by: Scott Sayles

Yes	No	N/A
☒	☐	☐
☐	☒	☐
☒	☐	☐
☒	☐	☐
☐	☒	☐

A. Security

1. Does fence exist? _____
2. Is there a breach in fence? _____
3. Locks on gate? _____
4. Posted signs? _____
5. Signs of trespassers/vandalism? _____
6. Other _____

☐	☒	☐
☐	☒	☐
☒	☐	☐
☐	☒	☐

B. General Site Conditions

1. Vegetation stress? _____
2. Mowing required? _____
3. Access road drivable? _____
4. Odors? _____
5. Other _____

☐	☒	☐
☒	☐	☐
☐	☒	☐
☐	☒	☐
☐	☒	☐
☐	☒	☐
☐	☒	☐
☐	☒	☐
☐	☒	☐
☐	☒	☐
☐	☒	☐

C. Cap Inspection

1. Exposed waste? _____
2. Side slope stable? _____
3. Erosion? _____
4. Leachate seeps (discolored vegetation)? _____
5. Synthetic liner exposed? _____
6. Bare spots? _____
7. Presence of burrowing animals? _____
8. Deep rooted vegetation? _____
9. Cracking? _____
10. Ponding water? _____
11. Evidence of methane seeps? _____
12. Other _____

☐	☒	☐
☐	☒	☐
☒	☐	☐
☒	☐	☐
☐	☒	☐
☐	☐	☒
☐	☐	☒

D. Surface Water

1. Obstruction of flow ditches? _____
2. Erosion of ditches? _____
3. Silt & erosion control? _____
4. Culverts in good condition? _____
5. Evidence of overflow or uncontrolled flow? _____
6. Outfalls in good condition? _____
7. Sedimentation basin/ponds secure? _____
8. Other _____

☒	☐	☐
-------------------------------------	--------------------------	--------------------------

E. Methane Gas Control

1. Does one exist? _____



Site Inspection Form

Yes	No	N/A
☐	☐	☐
☐	☒	☐
☒	☐	☐
☒	☐	☐
☐	☐	☒
☒	☐	☐
☒	☐	☐

2. Is system active or passive? passive
3. Permanent methane gas probes? _____
4. Locks on monitoring wells? _____
5. Vents in working order? _____
6. Well seals in place? _____
7. Methane levels within LEL limits? _____
8. Monitoring reports current? _____
9. Other _____

☒	☐	☐
-------------------------------------	--------------------------	--------------------------

F. Leachate Collection System

1. Does one exist? _____
2. Collection method:
 - a. Sump? _____
 - b. Well point? 4 extraction wells
 - c. Earthen basin/pond? _____
 - d. Structure secured? _____
 - e. Other _____
3. Pumping system:
 - a. Automatic? _____
 - b. Manual? Can be operated manually as well.
 - c. Mechanically operable? EW-2 is setting above the water level.
 - d. Leaks/failures? EW-2 & EW-4 not operable at this time.
4. Disposals:
 - a. Onsite pretreatment/treatment? Water is treated in Plant (Area A).
 - b. Surface discharge? (NPDES/SPDES) _____
 - c. POTW – hardpiped? _____
 - d. Quick disconnect caps in place? _____
5. Transportation (if any):
 - a. Chemicals? _____
 - b. Filter cake? _____
6. Ancillary equipment in good condition? (Pipes, valves, pumps, vaults, instruments and etc.) _____
7. Monitoring reports current? _____
8. Other _____

☒	☐	☐
-------------------------------------	--------------------------	--------------------------

☐	☒	☐
--------------------------	-------------------------------------	--------------------------

☒	☐	☐
-------------------------------------	--------------------------	--------------------------

☐	☐	☒
--------------------------	--------------------------	-------------------------------------

☐	☐	☒
--------------------------	--------------------------	-------------------------------------

☐	☐	☒
--------------------------	--------------------------	-------------------------------------

☒	☐	☐
-------------------------------------	--------------------------	--------------------------

☒	☐	☐
-------------------------------------	--------------------------	--------------------------

G. Groundwater Monitoring & Recovery Wells (if any)

1. Locks on wells? _____
2. Wells in good condition? Cemented around 1 more monitoring well bringing the total to 4 out of 5 monitoring wells. Can't locate the last well.
3. Well seals in good condition? _____
4. Access to wells? _____
5. Monitoring reports current? _____
6. Other _____

☒	☐	☐
-------------------------------------	--------------------------	--------------------------

☒	☐	☐
-------------------------------------	--------------------------	--------------------------

☒	☐	☐
-------------------------------------	--------------------------	--------------------------

☒	☐	☐
-------------------------------------	--------------------------	--------------------------

☒	☐	☐
-------------------------------------	--------------------------	--------------------------



Site Inspection Form

Yes	No	N/A
☐	☐	☒
☐	☐	☒
☐	☐	☒
☐	☐	☒
☐	☐	☒
☐	☐	☒
☐	☐	☒
☐	☐	☒
☐	☐	☒
☐	☐	☒

H. Treatment Plant

1. Building in good condition? (Doors, windows, wells, roof) _____
2. Visual tank inspection performed? _____
3. Visual inspection of pipes, valves, fittings etc.? _____
4. Pump operation/inspection performed? _____
5. Instruments operation/calibration? _____
6. Mixer operation/inspection? _____
7. Proper personal protection equipment? _____
8. Air compressor system functioning properly? _____
9. Filter press inspected? _____
10. Emergency generator functioning properly? _____

☐	☐	☒
☐	☐	☒
☐	☐	☒
☐	☐	☒
☐	☐	☒
☐	☐	☒
☐	☐	☒
☐	☐	☒
☐	☐	☒
☐	☐	☒

I. Polymeric Marine Mattress (PMM)

1. Damage due to burrowing animals? _____
2. Damage due ice and/or ice flowages? _____
3. Impacts or damage due to the periodic dredging of the Buffalo River? _____
4. Impacts or damage due to navigation activities in the Buffalo River? _____
5. Establishment of woody plant growth causing displacement or stress on the system? _____
6. Areas of settlement or displacement of the system? _____
7. Erosion at the upstream and downstream limits of the system? _____
8. Damage to the stone infill adjacent to Outfall #006 and the concrete wall/sheet pile along the upstream limit of the system? _____
9. Damage to the stone infill within the marine mattresses? _____
10. Damage to the general integrity of the system (Look for splits, cuts and gaps)? _____

J. General Comments

DEC was informed of the inspection but could not attend.

Date: 11/25/09

Scott Hayler