
PROJECT WORK PLAN

BUFFALO COLOR CORPORATION SITE

AREAS A & B – OFF-SITE

NYSDEC SITE NO. C915230A

Prepared for

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LIST OF ACRONYMS AND ABBREVIATIONS

AOC	Area of Concern
CCR	Construction Completion Report
CPP	Citizen Participation Plan
DMU	Dredge Management Unit
GLLA	Great Lakes Legacy Act
GLNPO	Great Lakes National Program Office
Honeywell	Honeywell International Inc.
NYSDEC	New York State Department of Environmental Conservation
Order	Order on Consent
PWP	Project Work Plan
RAWP	Remedial Action Work Plan
SBD	South Buffalo Development Corporation
SMP	Site Management Plan
USACE	U.S. Army Corps of Engineers
USEPA	U.S. Environmental Protection Agency

1 INTRODUCTION

This Project Work Plan (PWP) documents the procedures associated with the Buffalo Color Corporation Site Areas A & B Off-site Area, NYSDEC Site No. C915230A. This PWP has been prepared on behalf of Honeywell International Inc. (Honeywell) and describes the activities required under the August 2016 Order on Consent (Order) and Administrative Settlement Index No. CO 9-20151109-133 under the New York State Department of Environmental Conservation State Superfund Program and Brownfield Cleanup Program. The effective date of the Order is August 27, 2016.

1.1 Project Overview

The Buffalo Color Corporation Site Areas A & B – Off-site Area is described as off-site contaminated related to the Buffalo Color Corporation Site Areas A & B., located roughly between the site property boundary and limits of the Federal navigation channel in the Buffalo River. The area includes sediments that were removed as part as part of the Buffalo River Area of Concern (AOC) Project being conducted under the Great Lakes Legacy Act (GLLA), a multi-year, multi-agency initiative to restore the Great Lakes. The stakeholders involved in the remedial planning of Buffalo River AOC work include the U.S. Environmental Protection Agency (USEPA) Great Lakes National Program Office (GLNPO), Honeywell, the New York State Department of Environmental Conservation (NYSDEC), Buffalo Niagara Riverkeeper, the U.S. Army Corps of Engineers (USACE), the U.S. Fish and Wildlife Service, the City of Buffalo, and their respective consultants.

Due to synergies with the timing of the GLLA Buffalo River project work and in anticipation of the filing and Honeywell acceptance of the 2016 Order, investigations, design, and implementation of remedial activities associated with the off-site location were completed during 2015 GLLA remedy operations. Activities associated with the work were directly coordinated with NYSDEC during implementation of the GLLA remedy operations, resulting in a change to typical sequencing of developed documents. To fulfill the requirements of the program as outlined in the Order, this PWP outlines the required documentation of the release area and subsequent remediation and describes the various documents as they fit into the previous agency coordination and project implementation.

1.2 Site Description

The Buffalo Color Corporation Site Areas A & B – Off-site Area is located in the City of Buffalo in New York State. This area is represented by the portion of the Buffalo River adjacent to the Buffalo Color Corporation Site Areas A & B located between the Buffalo Color property line and a federal navigation channel that is maintained by USACE at a depth of 22 feet below low water datum (see Figures 1 and 2). Brownfield remediation efforts associated with the upland Buffalo Color site were completed in December 2013; these efforts included building and structure demolition, groundwater cut-off wall construction, a groundwater pump and treatment system, soil cap and cover installations, and shoreline restoration. In 2006, a protective armored shoreline cover was installed along a 200-foot section of shoreline comprised of a series of anchored marine mattresses providing containment and erosion protection along the shoreline, additional information is found in the Final Engineering Report and Design Basis Report for Areas ABCE and A/B (MACTEC 2008 and 2013). Since their installation, the mattresses have been observed by the property owner and Honeywell to be stable and protective of the shoreline. Mattress sections are comprised of geo-composite grids filled with armor stone, anchored at top of slope and extending into the Buffalo River. Most recently, in early 2014, shoreline restoration (including additional planting soil and plantings) was implemented along the Area A riverbank portion of the site as part of the larger restoration effort for the full Area A shoreline portion of the property. The remaining sediments within the area are located within the GLLA AOC project Dredge Management Units (DMUs) 9 and 10 and were identified for removal as part of the GLLA AOC program prior to filing of the Order.

1.3 Site History

The Buffalo Color Corporation Site was originally founded as the Schoellkopf Aniline and Dye Company in 1879, the plant produced dyes and organic chemicals based primarily on aniline and various aniline derivatives. The company was reorganized into the National Aniline Chemical Company in 1916. It became one of the five companies that merged to create Allied Chemical Corporation (Allied Chemical) in 1920. The existing dye-making facility and the right to produce certain dyes and intermediates were sold by Allied Chemical to Buffalo Color Corporation on July 1, 1977. At the time of the sale, the plant was divided into eight areas designated with the letters A, B, C, D, E, F, G, and H. Buffalo Color

Corporation purchased the manufacturing areas A through E, while Allied Chemical retained the acid plant (which was sold to PVS Chemical, Inc. in 1981), the research and development facility on Area F, and the parking lots on Areas G (Elk Street) and H (Smith Street).

Agreements are in place to preserve access rights to the land for the purposes of any required environmental investigation and remediation activities. The remaining buildings and property on Areas A, B, C, D and E were purchased by South Buffalo Development Corporation (SBD) in 2008. Subsequent brownfield closeout operations and shoreline softening were completed in 2013 and 2014. The NYSDEC Certificate of Completion for the Brownfield cleanup was issued in December 2013 for BCP Site No. C915230.

1.4 Purpose and Scope

The Buffalo Color Corporation Site Areas A & B – Off-site area was addressed as a component of the Buffalo River GLLA project. This PWP serves to outline the NYSDEC coordination during the implementation of the GLLA project as it pertains to the off-site area through the Order required documentation. Required documents are being developed from previously submitted and approved materials, generally following the original NYSDEC communications associated with the GLLA work.

Section 2 of this report includes descriptions of the work tasks under the scope of work identified in the Order on Consent. The following subsections describe each work task associated with the off-site area, which include:

- Project Work Plan (PWP)
- Citizen Participation Plan (CPP)
- Remedial Investigation Alternatives Analysis
- Remedial Action Work Plan (RAWP)
- Construction Completion Report (CCR)
- Site Management Plan (SMP)

2 WORK TASKS

The following sections outline the Order required documents with brief descriptions of previous coordination with NYSDEC and summaries of document contents.

2.1 Project Work Plan

This Project Work Plan is utilized to convey the previous implementation of the remedy associated with the off-site area and discuss the various communications and summary documents to be submitted to complete the Order. The submittal of this PWP outlines the remaining documents to be provided including brief descriptions of previous NYSDEC communications regarding the remedy associated with the GLLA project work.

2.2 Citizen Participation Plan

The Citizen Participation Plan (CPP) is a document that summarizes details necessary for the public associated with the site, including summaries of the site, release, and planned actions, and is a requirement as applicable under Environmental Conservation Law CL 27-1417 and 6 NYCRR 375-1.10 and 375-3.10. Though a previous CPP was developed associated with the Buffalo Color Area A/B operations, given the difference in site conditions, uplands versus submerged lands associated with the off-site area located in-river and the remediation through the GLLA program, a distinct CPP will be prepared for the off-site area to include information specific to the off-site location rather than updating the upland CPP.

2.3 Remedial Investigation Alternatives Analysis

A focused Remedial Investigation Alternatives Analysis targets a summary of investigation results, evaluations of remedial alternatives for the location, and proposes a remedy for implementation. Typical alternatives analyses outline technologies and approaches that may be applicable to a remedy and discuss site specific details to determine potential benefits and impacts associated with each option, allowing for selection of a suggested remedy to address the site. During evaluations of options for the Buffalo Color site associated with dredging operations in DMUs 9 and 10 as part of the GLLA project, an initial alternatives evaluation was developed for NYSDEC review prior to proceeding with implantation of the work. The *Alternatives Evaluation for DMUs 9 & 10 Marine Mattress, Buffalo River Area of Concern*

(Anchor QEA 2014) was submitted for review in July of 2014 prior to selection of the remedial approach. Following submittal of the evaluation, subsequent geotechnical stability evaluations added an additional option for removal which included the installation of a submerged sheetpile kneewall, which was later selected and implemented as part of the remedy. As part of the work tasks associated with the off-site area, this previous alternatives evaluation will be updated to incorporate an additional alternative that includes discussion of the sheetpile kneewall option for completeness. This revised *Alternatives Evaluation for DMUs 9 and 10 Marine Mattress, Buffalo River Area of Concern*, will be submitted in March 2017 to address the requirements of the focused Remedial Investigation Alternatives Analysis.

2.4 Remedial Action Work Plan (RAWP)

A focused Remedial Action Work Plan details elements of the design and analysis necessary to perform the selected remedial action for the work, including construction details necessary for implementation. Due to the prior schedule of work associated with the GLLA AOC project, including initial attempts to complete operations during 2014 work prior to the eventual 2015 completion, remedial design efforts associated with the Area A/B off-site / DMUs 9 and 10 area occurred through a variety of supplemental investigations and design efforts as the remedial approach proceeded. Preliminary design details associated with the removal of sediments were extrapolated from the original dredging design outlined in the *Final Basis of Design Report. Final Design for Sediment Remediation: Volume 1*. (CH2M 2013) and later revised and updated based on further investigations and analysis performed by Anchor QEA Engineering, PLLC, and as formalized in the final design for dredging and sheeting installation *Buffalo River AOC 2015 Additional Dredging, Construction Drawings* (Anchor QEA 2015). Details of the sequence of data collection, slope stability and sheetpile evaluations, and final design as coordinated with NYSDEC through the GLLA project process will be summarized in a separate RAWP specific to the off-site area, to be submitted in March 2017.

2.5 Construction Completion Report (CCR)

A Construction Completion Report documents the implementation of the remedy and includes information on permitting, contractors and oversight, means and methods of

implementation, schedule, any deviations from original designs, and summarizes as-built information as a baseline for later monitoring efforts. As part of the GLLA AOC remedy activities an overall *Construction Completion Report, Buffalo River Area of Concern* (Anchor QEA 2016) is in development for Honeywell implemented activities outlining dredging, capping, and habitat restoration required under that design. To meet the needs of the off-site Order, a separate focused CCR will be developed to describe the portion of the remedy associated with the off-site area, including installation of the submerged sheetpile kneewall, dredging of contaminated sediments, and backfill installation. This off-site specific CCR will utilize information from the GLLA project CCR and is anticipated to be submitted in March 2017.

2.6 Site Management Plan (SMP)

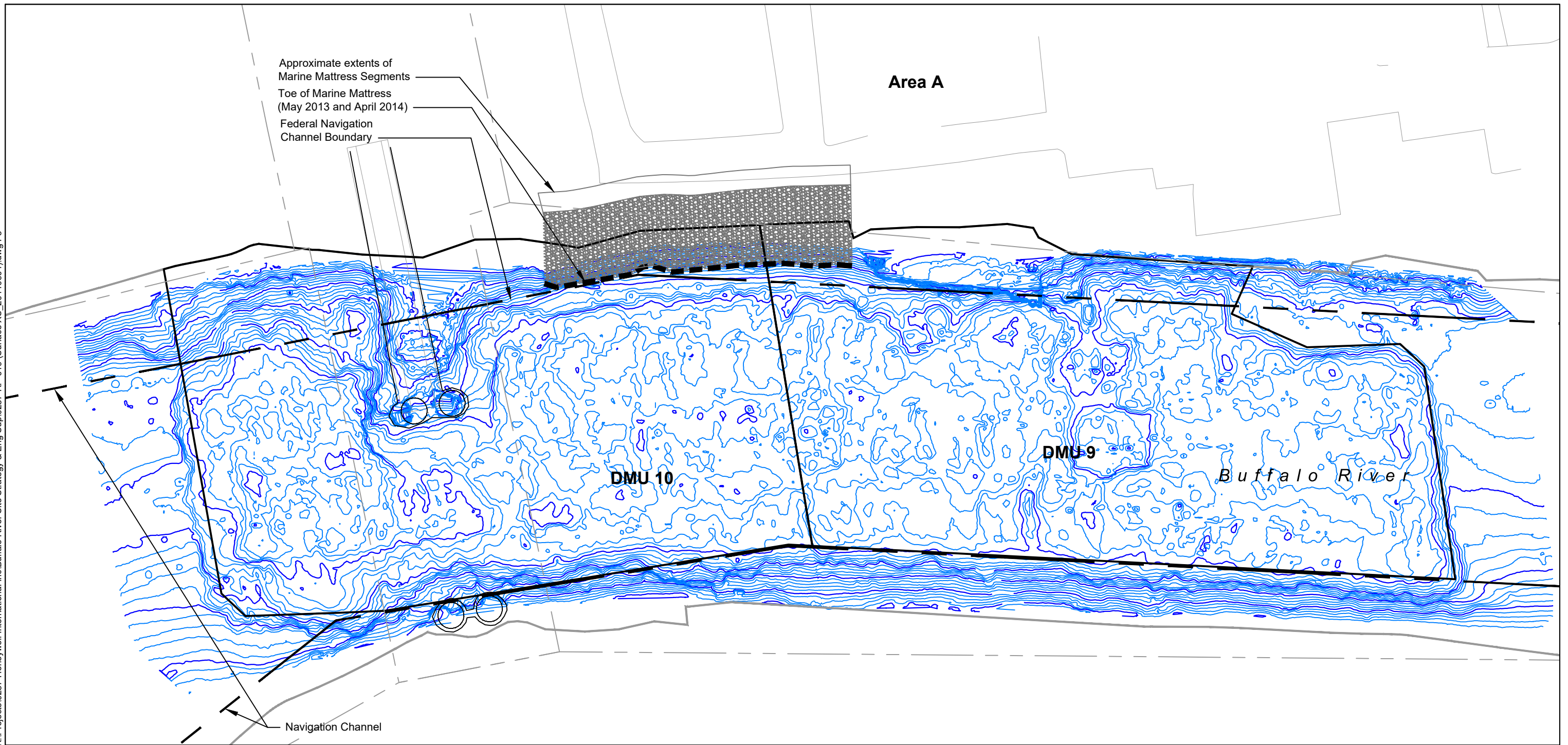
A Site Management Plan will be developed to outline performance monitoring for the applied remedy at the offsite area. The SMP will incorporate considerations for bathymetric survey to evaluate the implemented remedy from the GLLA project. Due to the location of the off-site area immediately adjacent to ongoing SMP activities associated with Buffalo Color Area A and B and in the vicinity of Area D, monitoring may include overlaps or combined efforts where feasible and as approved by NYSDEC. The SMP will be submitted following coordination with NYSDEC on combined efforts at the various Buffalo Color locations and is anticipated to occur in March or April of 2017, depending on department approvals.

3 REFERENCES

- Anchor QEA, 2014. *Alternatives Evaluation for DMUs 9 & 10 Marine Mattress, Buffalo River Area of Concern*. Prepared for Buffalo River Project Coordination Team. July 2014.
- Anchor QEA, 2015. *Buffalo River AOC 2015 Additional Dredging*. Construction Drawings prepared for Honeywell International Inc. November 2015.
- Anchor QEA, 2016. *Draft Construction Completion Report, Buffalo River Area of Concern*. Prepared for Honeywell International Inc. October 2016.
- CH2M Hill, 2013. *Final Basis of Design Report. Final Design for Sediment Remediation: Volume 1*. Prepared for USEPA WA No. 146-RDRD-1524/Contract No. EP-S5-06-01. March 2016.
- MACTEC 2008. Final Engineering Report, Buffalo Color Site – Area ABCE Interim Corrective Measure. Prepared for Honeywell Internal Inc. October 2008.
- MACTEC 2013. Design Basis Report Former Buffalo Color Corporation Site – Area A/B. Prepared for Sout Buffalo Development LLC. May 2013.

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SOURCE: Basemap prepared from CH2MHILL drawings, titled 'Existing Conditions' and 'Dredging Operations'. Bathymetry from AECOM, dated October 2014.

HORIZONTAL DATUM: New York State Plane West, NAD83, U.S. Feet.

VERTICAL DATUM: International Great Lakes Datum of 1985 (IGLD85)

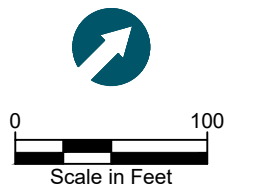
NOTES:

1. Base map information including navigation channel, in-water structure and 90% Design toe of marine mattress is shown as indicated in the Basis of Design Report prepared by CH2MHill/Ecology and Environment (March, 2013)
2. Actual toe of marine mattress is based on May 28, 2013 diver survey and probing conducted by OSI (April 2014).

LEGEND:

- Existing Contours (October 2014, 1' and 5' Interval)
- Toe of Marine Mattress (May 2013 and April 2014)
- DMU Boundary

- Naturally-sloped Shoreline
- Marine Mattress Design Footprint
- Parcels





LEGEND:

- Shoreline
- Navigation Channel



Figure 2
Site Overview
Buffalo Color Corporation Site Areas A&B - Off-site