Sevenson Environmental Services, Inc.

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2005 AFTER ACTION REPORT
NEW BEDFORD HARBOR
REMEDIAL ACTION

New Bedford Harbor Superfund Site
New Bedford, MA

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TABLE OF CONTENTS

TABLE OF CONTENTS

Figure

Tables

Attachments

TABLE OF CONTENTS

TABLE OF CONTENTS

ACRONYMS AND ABBREVIATIONS

AAR	After Action Report
APEX	Apex Environmental, Inc.
Cd	cadmium
Cu	copper
Cr	chromium
cy	cubic yards
DDA	Debris Disposal Area
DMU	Dredge Management Unit
EPA	U.S. Environmental Protection Agency
EQNE	The Environmental Quality Company Northeast
First American	First American Engineered Solutions, LLC
FSP	Field Sampling Plan
FW	Foster Wheeler Environmental Corporation
GAC	granular activated carbon
gpm	gallons per minute
GPS	global positioning system
H_2S	hydrogen sulfide
Jacobs	Jacobs Engineering Group
mg/kg	milligrams per kilogram
MHHW	Mean Higher High Water
NAD 83	National North American Datum 1983, Massachusetts State Plane Coordinates, Mainland Zone Datum
NAE	U.S. Army Corps of Engineers – New England District
NGVD 29	National Geodetic Vertical Datum 1929

ACRONYMS AND ABBREVIATIONS

O&G	oil and grease
Pb	lead
PCB	polychlorinated biphenyl
PETS	Public Exposure Tracking System
PPE	personal protective equipment
ppm	parts per million
PVC	polyvinyl chloride
QAPP	Quality Assurance Project Plan
QC	Quality Control
Sevenson	Sevenson Environmental Services
TSCA	Toxic Substances Control Act
WWTP	Wastewater Treatment Plant
µg/L	micrograms per liter

1.0 INTRODUCTION

The purpose of this *2005 After Action Report* (2005 AAR) is to summarize the key activities associated with remediation of the New Bedford Harbor Superfund Site during the 2005 field season. This 2005 AAR consists of six sections and eight attachments. At the request of the U.S. Environmental Protection Agency (EPA) and the U.S. Army Corps of Engineers – New England District (NAE), this 2005 AAR is primarily a data summary report. The 2005 AAR does not present the level of detail that the Jacobs Engineering Group (Jacobs) *After Action Report 2004 New Bedford Harbor Remedial Action* (2004 AAR*)* (Jacobs 2005a) included. However, this 2005 AAR does present data collected by Jacobs during the 2005 remediation season, discusses anomalies in the data sets, and summarizes the lessons learned from the 2005 field season.

Since the administrative and background aspects of the project were presented in detail in the 2004 AAR (Jacobs 2005a), Section 1.0 of this document simply summarizes the planning conducted prior to the 2005 remediation season. The scope of work performed by the Jacobs and Sevenson Environmental Services (Sevenson) team during 2005 is presented in Section 2.0 and is organized by the following sections:

- Preparation and Mobilization (Section 2.1);
- Dredging (Section 2.2);
- Sediment Separation at Area C (Section 2.3);
- Sediment Dewatering at Area D (Section 2.4);
- Wastewater Treatment Plant (WWTP) at Area D (Section 2.5);
- North of Wood Street Remediation Activities (Section 2.6); and
- Air Monitoring Activities (Section 2.7).

Section 3.0 presents a discussion of the mass balance calculations derived from the 2005 production data. The aforementioned Sections 2.0 and 3.0 comprise the bulk of the 2005 AAR, and the information presented therein is supported by several referenced attachments that are included at the end of this document. Major conclusions are presented as Section 4.0. In addition to this report, ENSR also has submitted to the NAE

and EPA the following two reports summarizing their 2005 water quality and sediment sampling activities:

- the final August 2006 report titled *Progress Sampling for the Fall 2005 Remediation Dredging, New Bedford Harbor Superfund Site – New Bedford, Massachusetts* (ENSR 2006a) and
- the final August 2006 report titled *Water Quality Monitoring Summary Report, Fall 2005 Remediation Dredging, New Bedford Harbor Superfund Site – New Bedford, Massachusetts* (ENSR 2006b).

These two ENSR reports are briefly discussed in Section 2.8 and 2.9.

1.1 2005 PROJECT PLANNING

The Jacobs and Sevenson Team focused efforts in the winter of 2004/spring of 2005 on assessing the various remedial options for the 2005 season. These remedial options were detailed in the Jacobs *Draft Alternatives Analysis Summary 2005 Remedial Actions* [2005 Alternatives Analysis] (Jacobs 2005k). The two major remedial options analyzed in the 2005 Alternatives Analysis were as follows: (1) remediate the Pierce Mill Cove, which is adjacent to Area C and (2) continue dredging activities in the Upper Harbor in Dredge Management Units (DMUs) DMU-1, -2, -3, and -103. The 2005 Alternatives Analysis also included recommendations for the improvement of the following 2004 remediation processes: hydrogen sulfide controls; Area C fines separation; and improved control of air emissions due to the release of oils containing polychlorinated biphenyl (PCBs) during dredging.

During the February 16, 2005 meeting at the NAE headquarters in Concord, Massachusetts, the EPA and NAE agreed not to pursue remediation in the Pierce Mill Cove area in 2005. The consensus at the meeting was to continue remediation of the DMUs containing the greatest amount of PCB mass before addressing less contaminated areas to the south such as Pierce Mill Cove. Using this mass removal strategy in 2004, approximately 12,550 cubic yards (cy) of sediment were removed from DMU-2. At the request of the EPA and NAE, the Jacobs team assessed a number of factors to pick a

refined dredge footprint for the 2005 dredge season based on this mass removal remediation strategy.

During the May 4, 2005 strategy meeting between representatives of EPA, NAE, Jacobs, and Sevenson, an agreement was reached to continue the remediation approach used in 2004 in DMU-2, which is as follows:

- Sediment removal will not occur from a north-to-south (generally upgradient to downgradient) progression through the harbor. Rather, DMUs with greater amounts of PCB mass would be prioritized for remediation in 2005.
-

- The 2005 dredge season remediation efforts would continue to be focused on the DMUs in the subtidal zone. Therefore, no restoration efforts were performed during the 2005 dredge season.

The remediation strategy was outlined in the Jacobs *Draft Addendum No. 1 to Execution Plan 2004, 2005 New Bedford Harbor Remedial Action* (Jacobs 2005h). The following two proposed dredge footprints for the 2005 season were outlined:

- **Option 1** – a combination of Dredge Area A, which would include the western, undredged portion of DMU-2 and portions of adjacent DMUs -3 and -4, and Dredge Area B, which would include the eastern, undredged portion of DMU-2 and portions of adjacent DMUs -1, -4 and -103.
- **Option 2** – a combination of Dredge Area C, which has a similar footprint to Dredge Area A, and Dredge Area D, which is comprised of the majority of DMU-4 and a portion of adjacent DMU-3 and -5.

Dredging in DMU-1, which is to the north of DMU-2, was eliminated from consideration for 2005 dredge season remedial activities due to hydraulic concerns associated with transporting the slurry to Area C and uncertainty regarding property access for the anticipated booster pump location.

Based on subsequent discussions with the EPA and NAE, Option 1 was selected and the 2005 remediation approach was presented in the Jacobs *Dredge Work Plan Addendum, New Bedford Harbor Remedial Action* (Jacobs 2005d). Dredge Areas A and B are presented in Figures A-1 and A-2, respectively (Attachment A).

The following project planning documents were updated in 2005 and used as guidance documents for the dredge season: *Construction Quality Control Plan for Remedial Action, New Bedford Harbor Superfund Site, Revision #1* (Jacobs 2005c); *Field Sampling Plan, New Bedford Harbor Superfund Site, Revision #2* (FSP) (Jacobs 2005f); *Quality Assurance Project Plan – Revision 1, New Bedford Harbor Superfund Site* (QAPP) (Jacobs 2005i)*; Regulatory Compliance Plan – Revision 2, New Bedford Harbor Superfund Site* (Jacobs 2005j); *Transportation and Temporary Storage Plan, New Bedford Harbor Superfund Site, Revision #1* (Jacobs 2005g); and *Environmental Protection Plan, New Bedford Harbor Superfund Site, Revision #1* (Jacobs 2005e). Relevant points of these documents are summarized in Attachment B. A summary of the submittals of modifications to the Initial Task Order also are presented in Attachment B for informational purposes.

2.0 SCOPE OF WORK PERFORMED

This Section summarizes the mobilization and dredging activities performed in 2005. To assist in conveying an overview of the work performed, a chronology of this past year's activities is presented in Attachment B, which is a summary table of 2005 activities.

2.1 PROJECT PREPARATION/MOBILIZATION

Section 2.1 describes the design and implementation of additional engineering controls that were implemented in 2005 to prevent releases of unsafe levels of hydrogen sulfide (H_2S) within the Desanding Plant at Area C (Section 2.1.1) and the optimization of the injection of ferric sulfate into the dredge slurry (Section 2.1.2).

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2.2 DREDGE CONTAMINATED SEDIMENTS FROM AREAS A AND B

Generally speaking, the same dredging methods used in 2004 were utilized for the 2005 dredging season. The pre-established target depth for 2005 dredging was the theoretical depth below mud line (or referred to as "z-star") to remove sediment to approximately the clean-up action levels. As in 2004, dredge cuts were rounded to the nearest foot in each particular area to maximize production as part of the PCB mass removal strategy.

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2.2.4 Post-Dredging Bathymetric Surveys

At the completion of dredging activities, Apex conducted final bathymetric surveys of Area A and Area B on December 8, 2005 and November 23, 2005, respectively (Attachment B and Figures A-8, A-9, A-10, A-11, A-12, and A-13 in Attachment A). The final bathymetric survey for Area A is presented as Figure A-8. Figure A-9 illustrates the change in sediment thickness from the Pre-Dredge Survey to the Final Post Dredge Survey in Area A. The planned versus the actual dredge elevations in Area A (based on the December 8 survey) is presented in Figure A-10. The final bathymetric survey for Area B is presented in Figure A-11. Figure A-12 illustrates the change in sediment thickness from the Pre-Dredge Area A survey to the Final Post Dredge Survey in Area B. The planned versus the actual dredge elevations in Area B (based on the

November 23 survey) is presented in Figure A-13. During the 2005 dredging season, based on the above-mentioned bathymetric surveys, approximately 8,663 and 15,467 cy of sediment were removed from Dredge Areas A and B, respectively (see table on Figure A-9).

2.3 COARSE AND FINE MATERIAL SEPARATION AT AREA C

The process of separating coarse materials (shells, gravel, golf balls, etc.) and sand from the dredge slurry at the Desanding Building at Area C did not change from the 2004 season to the 2005 dredging season. Since the desanding process is described in detail in the 2004 AAR (Jacobs 2005a), the desanding process will not be described in this report. The major procedural change at Area C was the downgrading of worker PPE from Level B to modified Level D.

The material generated at the Desanding Plant was divided into the following two waste streams: sand greater than 200 mesh and less than ½-inch (fine); and material greater than ½-inch (coarse) screenings. During the Dredge Area A and B dredging activities, composite samples of fine and coarse material were collected at about every 100 tons of sand material generated. The sampling was conducted in accordance with the August 2005 FSP (Jacobs 2005f). These composite samples were submitted to an offsite laboratory and analyzed for PCBs, oil and grease (O&G), and total metals in accordance with the procedures outlined in the FSP (Jacobs 2005f) and the Jacobs' QAPP (Jacobs 2005i). In addition, selected fine soil samples were submitted to GeoTesting Express in Boxborough, Massachusetts for geotechnical (grain size) analysis. Since the sampling protocol was not determined for the coarse screening material during the 2005 season, samples of the coarse screening material were not submitted for geotechnical and chemical analysis and this material (along with the 2004 coarse material) remains stored at the Debris Disposal Area (DDA) at Area C.

Analytical summary results for Area C are presented in various tables in Attachment D. The analytical results (PCBs and O&G) are presented in Table D-1, and the grain size data are presented in Table D-2. In addition, a split composite sample was submitted to

the Jacobs' QC lab and analyzed for PCBs, O&G, and total metals. The analytical results for the QC lab are presented in Table D-3.

Dredge Area A Desanding Plant Analytical Data - During the dredging of Dredge Area A, the PCB concentrations of the Desanding Plant samples ranged from 12 milligrams per kilogram (mg/kg) to 179.7 mg/kg with an average concentration of 71.2 mg/kg (Table D-1). The sand material represented by the 12 mg/kg PCB concentration, which was below the Toxic Substances Control Act (TSCA) threshold concentration of 50 mg/kg, was segregated from the sand that was above the TSCA threshold PCB concentration at the DDA. The O&G concentrations ranged from 510 parts per million (ppm) to 1,100 ppm. For each Desanding Plant sample submitted for analysis from Dredge Area A, the metals results also are presented in Table D-4, with the PCBs and O&G results for comparison purposes.

Dredge Area B Desanding Plant Analytical Data - During the dredging of Dredge Area B, the PCB concentrations of the Desanding Plant samples ranged from 46.9 mg/kg to 485.4 mg/kg with an average concentration of 244 mg/kg (Table D-1). The O&G concentrations ranged from 780 ppm to 4,300 ppm. For each Desanding Plant sample submitted for analysis from Dredge Area B, the metals results are also presented in Table D-4, with the PCBs and O&G results for comparison purposes.

Disposition of Fine and Coarse Screenings – During the 2005 season, Sevenson moved all of the material generated in the Desanding Plant to the DDA by dump truck. Transport and Disposal reports for Area C are included in Attachment E. Each truckload was weighed prior to and after loading. The load weights are reported in Table E-1. A total of 2,508 tons of fine screenings and 488 tons of coarse screenings were generated at the Area C Desanding Plant during the 2005 season (Table E-1). Fourteen hundred sixty tons of the TSCA fine sand generated in 2004 and in 2005 was transported to a hazardous waste disposal facility during the 2005 dredge season. The fine screening material was transported offsite through the following two separate contract vehicles:

- First American Engineered Solutions, LLC (First American) contracted through Jacobs for the October 2005 trucking event (Table E-2), and
- First American subcontracted directly to the NAE for the November 2005 trucking event (Table E-3).

During the October and November 2005 trucking events, First American transported and disposed of a total of 619 tons and 841 tons of TSCA material, through these two contract vehicles, respectively (Tables E-2 and E-3).

2.4 SEDIMENT DEWATERING AT AREA D

Analytical summary results for Area D are presented in various tables in Attachment D. During the 2005 season, all of the filter cake produced by the Area D dewatering process was disposed of offsite as TSCA waste. In accordance with the August 2005 FSP (Jacobs 2005f), composite samples of the filter cake were collected at a frequency of approximately one sample per 550 tons of filter cake produced and submitted for analysis for total PCBs, metals, O&G, and grain size analysis (Tables D-1, D-2 and D-5). Since the dewatering process is described in detail in the 2004 AAR (Jacobs 2005a), it is not described in this report.

Dredge Area A Dewatering Plant Analytical Data - During the dredging of Dredge Area A, the PCB concentrations of the Dewatering Plant filter cake samples ranged from 157.8 mg/kg to 1,002 mg/kg with an average concentration of 370 mg/kg (Table D-1). The O&G concentrations ranged from 1,200 ppm to 9,900 ppm. For each filter cake sample submitted for analysis from Dredge Area A, the metals results are presented in Table D-5, with the PCBs and O&G results for comparison purposes.

Dredge Area B Dewatering Plant Analytical Data - During the dredging of Dredge Area B, the PCB concentrations of the Dewatering Plant filter cake samples ranged from 520 mg/kg to 1,975 mg/kg with an average concentration of 1,249 mg/kg (Table D-1). The O&G concentrations ranged from 1,000 ppm to 13,000 ppm. For each filter cake sample submitted for analysis from Dredge Area B, the metals results are presented in Table D-5, with the PCBs and O&G results for comparison purposes. The laboratory

duplicate samples collected from the filter cake and submitted for laboratory analysis are presented in Table D-3.

Transport and Disposal reports for Area D are included in Attachment E. All of the filter cake generated during the 2005 dredging season exceeded the 50 mg/kg PCB criterion for TSCA waste and, therefore, was transported offsite as TSCA waste by either rail (Table E-4) or truck (Table E-5). The 2005 dredge season was the first year that TSCA waste was shipped offsite by rail directly from Area D. The ability to remove filter cake by railcar in 2005 was significant in the overall production achievement. Because of the high rate of processing and filter cake generation, filter cake had to be removed at a greater rate than in 2004. If Jacobs had to rely on trucks only to ship out the filter cake, the high production rate may have had to decrease or stop, or secondary filter cake storage would have had to be acquired. During the 2005 season, 10,415 tons of filter cake were shipped offsite by rail for disposal and 5,537 tons of filter cake were shipped offsite by truck for disposal (Tables E-4 and E-5).

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2.5 WASTEWATER TREATMENT AT AREA D DEWATERING FACILITY

During the 2005 dredging season, wastewater samples were collected at the influent, midpoint, and effluent sampling ports to evaluate the effectiveness of treatment and to determine whether treated water was acceptable for discharge into the harbor. All of the

WWTP sampling activities were conducted in accordance with the FSP (Jacobs 2005f). The influent and midpoint samples were grab samples collected from sampling ports. The effluent samples were collected utilizing a composite sampler provided by NAE. The wastewater samples were packaged and transported to the contract laboratories and analyzed for PCBs, copper (Cu), chromium (Cr), cadmium (Cd), and lead (Pb) in accordance with the procedures outlined in the FSP (Jacobs 2005f) and the QAPP (Jacobs 2005i). Also, additional sampling was conducted following the detection of PCBs effluent samples on October 13, 2005 and October 14, 2005. However, these detections were determined to be false positives attributed to laboratory contamination, which will be briefly discussed later in this section.

Water quality parameters were also recorded during each sampling event at the influent, mid-point, and effluent sampling ports. These water quality parameters included pH, conductivity, turbidity, temperature, salinity, dissolved oxygen, and oxidation/ reduction potential.

Discussion of WWTP Analytical Results – The discharge goals for wastewater treatment effluent are presented in Table 2-1. The influent, midpoint, and effluent detections are presented in Tables D-6, D-7, and D-8 (Attachment D) and are briefly discussed below.

Influent Concentrations. Various Aroclors of PCB were detected in the influent at concentrations ranging from 0.53 micrograms per liter (µg/L) to 390 µg/L. Cd was detected in only one influent sample at a concentration of 2.6 µg/L. Cr was detected at concentrations ranging from below detection limits to 75.0 µg/L. Pb was detected at concentrations ranging from 2.6 µg/L to 168 µg/L. Cu was detected at concentrations ranging from 6.6 µg/L to 212 µg/L (Table D-6).

Midpoint Concentrations. Various Aroclors of PCBs were detected in select water collected at the midpoint sampling port, which is located between the lead and lag sets of granular activated carbon (GAC) vessels, at concentrations ranging from below detection limits to 0.11 µg/L (Table D-6). Following the detection of PCBs in the effluent samples

in October 2005 (discussed below), water samples were collected from the effluent from each of the eight GAC vessels at the Area D WWTP to determine if there was breakthrough of PCBs through any of the GAC vessels. However, as presented on Table D-7, PCBs were not detected in any of the eight samples collected downstream of the eight GAC vessels, and it was determined that the detection of PCBs in the September 28, 2005 sample was probably due to laboratory contamination.

Effluent Concentrations – During treatment of wastewater generated during the dredging of Dredge Areas A and B, PCBs, Cu, Cr, and Pb were detected in select effluent samples (Table D-6). Because PCBs were detected at concentrations greater than the discharge limits for PCBs (0.065 µg/l, Table 2-1) on October 13, 2005 and October 14, 2005, the effluent was sampled on a daily basis from October 20 through October 28, 2005 to confirm or disprove the PCB detections. In addition, six split samples were submitted to Jacobs' QC laboratory to confirm or reject the detections of PCBs in the effluent.

PCBs were not detected above the laboratory detection limits in any of the six samples submitted to Jacobs' QC laboratory (Table D-8) or in any of the six samples submitted to Jacobs' contract laboratory (Table D-7). Therefore, it was concluded by Jacobs that the detections of PCBs in the effluent were due to laboratory cross contamination. The laboratory subsequently performed an internal audit which confirmed that the PCB concentrations were an artifact of improper cleaning, resulting in cross-contamination of laboratory glassware and low-level PCB concentrations in the analysis.

2.6 NORTH OF WOOD STREET REMEDIATION ACTIVITIES

In 2004 and 2005, ENSR collected soil samples from areas north of Wood Street and submitted the samples for laboratory analysis for PCBs and other chemicals of concern. PCBs were detected at concentrations above the cleanup criteria in some of the soil samples collected from locations above Mean Higher High Water (MHHW) datum. As part of the 2005 remediation activities, Jacobs therefore contracted the Environmental Quality Company Northeast (EQNE) to excavate these PCB-impacted soils (restoration

of this area was performed in 2006). The soil removal and disposal activities were conducted from November 28, 2005 through December 15, 2005 (Attachment B).

Approximately 450 cy of soils were removed during the excavation. The limits of the 2005 excavation were measured, verified, and recorded using the GPS unit, and are shown in Figure 2-1. Following the completion of excavation activities, and prior to backfilling, Jacobs collected confirmation soil samples and submitted them to the laboratory for PCB analysis. As presented in Table D-9 (Attachment D), the levels of PCBs detected in all of the confirmation samples were well below the action levels. All but approximately 20 tons of material (the last material excavated), was shipped offsite for disposal (Table E-6 in Attachment E). Since the 20 tons of material did not meet the minimum tonnage requirements for shipping material by either rail or truck, and to avoid premium transportation charges, the material was not shipped in 2005. This material is currently stored at the Area C DDA, and it will be shipped with the material from next season's processing.

2.7 AIR MONITORING

The 2005 air monitoring was conducted in accordance with the project air monitoring plan and the QAPP. The 2005 air sampling followed the same procedures that were utilized during the 2004 remediation season. The 2004 air sampling methods are described in detail in the Jacobs 2004 AAR (Jacobs 2005a) and, therefore, are only briefly described in this report. The following three types of air monitoring were conducted during the 2005 remediation season and described in the following subsections: Ambient Air Monitoring (Section 2.7.1); Personnel Monitoring (Section 2.7.2); and Facility Monitoring (Section 2.7.3).

2.7.1 Ambient Air Monitoring

During the 2005 season, Cashins Associates conducted all of the ambient air monitoring events utilizing the BGI brand PQ-100 portable samplers and the low flow analytical method EPA TO-10A, as outlined in the EPA document *Compendium Method TO-10A,*

Determination of Pesticides and Polychlorinated Biphenyls in Ambient Air Using Low Flow Volume Polyurethane Foam (PUF) Sampling Followed by Gas Chromatographic/Multi-Detector Detection (GC/MD) (EPA 1999). The selection of the low-flow sampling method was discussed in the 2004 AAR (Jacobs 2005a) and, therefore, will not be discussed in this report.

During the 2005 season, a series of eight ambient air sampling events were conducted at 10 sample stations, which were basically the same sampling locations used during the 2004 season. The sampling activities were divided into the remediation phase, which involved four weekly sampling events and two monthly events, and the non-activity phase, which involved pre- and post-remediation sampling events. The air samples were analyzed for each PCB homologue group by Severn Trent Laboratories, Inc. in Knoxville, Tennessee. The collected mass of each homologue group was quantified and normalized to the total volume of air collected to develop concentrations for each homologue group by the laboratory. The ten homologue group concentrations were then summed to obtain the ambient air concentration of total PCBs.

The ambient air monitoring information is included in Attachment F. The sampling events, along with the analytical results, are summarized in Table F-1. The 2005 air sampling locations are presented in Table F-2. In addition, for comparison purposes, each of the 2005 ambient air sampling events are plotted on a log scale plot in Table F-3. During the 2005 remediation season, meteorological data were also measured, and the results for each air sampling event are presented in Attachment F. The meteorological data are further summarized in Table F-4, which compares the following weather data for each sampling event: average wind speed; wind direction; minimum and maximum temperature; minimum and maximum humidity; barometric pressure; average radiation; and maximum radiation, as well as the minimum and maximum tide for each sampling event.

As presented in Table F-3, for each of the sampling stations, the highest concentrations were detected during the October 5 through October 6, 2005 air sampling event. This

sampling event was conducted while the dredge was operating in areas where the historically highest concentrations of PCBs were detected in the 2005 dredge footprint. During the dredging, heavy oils were encountered at the water surface, and the following meteorological and tide conditions existed on October 5-6, 2005, but were not present during the following two sampling events (October 27-28 and November 17-18, 2005):

- lower average wind speeds, which may reduce dispersion due to wind;
- southerly wind direction compared to north and northwest in late October and November;
- higher maximum and minimum temperatures;
- higher minimum and maximum humidity values;
- slightly higher average and maximum radiation values, and;
- a lower minimum tide for the October 27 to 28 event than for the November 17 to 18 event.

It is not readily apparent which of these six factors, or combination of these factors (wind speed, wind direction, humidity, solar radiation, or tides), is the determining factor resulting in elevated PCB concentrations.

The data presented in Table F-1 were uploaded into the Public Exposure Tracking System (PETS) that was developed by Foster Wheeler Environmental Corporation (FW) to track exposures and to provide a "trigger" of possible actions to take as a result of airborne PCB concentrations. A series of PETS curves were generated for the following nine sampling locations (Figure F-1) and are presented in Attachment F:

- 24 Aerovox;
- 25 Cliftex;
- 42 Nstar;
- 46 Coffin Avenue;
- 48 Area C crosswind;
- 49 Area C downwind;
- 50 Area D downwind;

- 55 Aerovox West, and;
- 56 Acushnet Park.

The PETS curves graphically represent the exposure budget (the risk-based allowable PCB intake by either a commercial worker or a resident) versus the monitored exposure (as determined by the ambient air PCB concentrations for the active remediation periods and the ambient air background concentrations as determined by 1999 and 2000 background data collected by FW). With the exception of the PETS curve for 24 Aerovox, the monitored exposures for the remaining eight locations were well below the exposure budget for each location. Of particular significance, are the PETs curves for the ambient air samples collected from Area C (48 Area C crosswind and 49 Area C downwind), Area D (Area D downwind), and the residential samples (55 Aerovox West and 56 Acushnet Park). Prior to the initiation of the 2004 dredging activities, it was thought that the processing activities at the Desanding Plant (Area C) and the Dewatering Plant (Area D) would be releasing significant concentrations of PCBs to the air. However, based on the low concentrations found, it appears that the impacts of these operations are minimal. In addition, it is encouraging that the ambient air PCB concentrations detected at residential monitoring locations 55 and 56 are well below the exposure budget for these locations. The concentrations observed in the field compare favorably with those predicted by the Jacobs 2005 air modeling activities that were summarized in the Jacobs' October 2005 report titled *Air Dispersion Modeling of Emission Sources 2004 and 2005 Dredging Operations, New Bedford Harbor Superfund Site* (Jacobs 2005b).

2.7.2 Personnel Air Monitoring

During 2005, a combination of direct-read instrumentation and integrated sample collection was used to monitor personnel exposures during sediment processing at the dredge and all other work areas. The same methods of personnel air monitoring that were used in 2004 were utilized for the 2005 operations. These methods are presented in Table 2-2, and since they are summarized in greater detail in the 2004 AAR (Jacobs 2005a), the methods will not be discussed further in this document. However, during

2005, neither the direct-read instrumentation nor integrated samples that were collected identified any issues that warranted attention.

2.7.3 Facility Monitoring

Facility monitoring was routinely conducted for total volatile organic compounds, primarily chlorinated solvents, carbon monoxide, and H_2S. These data are collected using direct-read instrumentation and integrated samples. The data for the direct-read instrumentation that was data-logged by the minute, on a daily basis were transmitted by Sevenson to Jacobs. These data are available upon request and are not presented in this report due to the large volume of readings. However, during 2005, neither the direct-read instrumentation nor the integrated samples that were collected as part of the facility monitoring identified any issues that warranted attention.

2.8 SEDIMENT PROGRESS SAMPLING

Sediment sampling was conducted in 2005 at Dredge Management Unit 2 (DMU-2) and DMU-4 (ENSR 2006a) and was reported to NAE as described in this section. The work was performed by ENSR and its subcontractor CR Environmental, Inc. under contract to the USACE. The sediment samples were collected for two major reasons: (1) to collect additional core data from the two dredge areas to refine the predicted z-star elevations that were previously developed using geostatistical modeling for use in setting the target dredging cut depths for the planned 2005 work, and (2) to help assess the efficiency of the dredge in removing the PCB contaminated sediments to the planned cut depths.

Ninety-five push-core sediment samples were collected prior to the start of dredging to refine the accuracy of the predicted z-star elevations. Forty-seven post-dredge cores were collected to assess the efficiency of the dredging operation. A complete report of the sediment sampling program can be found in ENSR's final report (ENSR 2006a). ENSR's Executive Summary to the Progress Sampling Report is provided in Appendix G.

2.9 WATER QUALITY MONITORING

Water quality monitoring was conducted in support of the 2005 dredging in the areas of DMU-2 and DMU-4 (ENSR 2006b) and was reported to NAE as described in this section. The work was performed by ENSR and its subcontractor CR Environmental, Inc. under contract to the USACE. The objectives of the monitoring were to ensure that the remediation was carried out in a manner that did not result in: (1) acute impacts to organisms within the water column outside of the dredge area; (2) significant transport of contaminated sediments or floating sheens outside of the dredge area; (3) blockage of the water way to anadromous fish passage.

A complete report of the water quality monitoring program can be found in ENSR's final report (ENSR 2006b). ENSR's Executive Summary to the Water Quality Monitoring Report is provided in Appendix H.

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3.0 MASS BALANCE CALCULATION

The 2005 remedial activities removed and dewatered solids from Dredge Areas A and B. The Jacobs solids and water balance calculations are presented in Attachment I and the Sevenson Operational Monitoring Data (Monitoring Data) are presented in Attachment J. The overall processing train for the 2005 season, which remained the same as for the 2004 season, consisted of the following primary processes that separated solids from water:

- dredge and pump sediment slurry from the dredge areas, via slurry pipeline to Area C;
- separate wet solid, coarse material from slurry using Area C coarse screen shaker;
- separate wet solid sand from the slurry using Area C hydrocyclones that report wet solid sand from slurry onto the Area C, 200-mesh screens;
- on the 200-mesh inclined screens, separate wet sand from residual silt and clays by washing the material with water as it passes over the screen with the sand dropping onto the floor of the desanding plant;
- separate wet solid sediment from slurry using Area D filter presses, and;
- separate residual solids from wastewater using the Area D Wastewater Treatment Plant, recycling solids back to filter press feed tanks, and discharging treated water to New Bedford Harbor.

The information presented as monitoring data was based on the following input reported daily by Sevenson (Attachment J): totalized flow meter readings, solids grab samples/dry solids analysis, and solids quantity estimates. Water balance information associated with calculations is based on flow meter data, flow estimates, and other flow meter data, while solids balance information is based on Area C weigh-scale data and filter cake production and shipping data.

3.1 SOLIDS BALANCE

The scale-weighed solids generated at Area C and Area D were weighed on-site before truck or rail shipment and totaled 18,948 wet tons. The solids reported on Jacobs' Solid and Water Balance (Table I-1) equals 488 wet tons of debris, 2,508 wet tons of sand, and

16,070 wet tons of filter cake, totaling 19,066 wet tons: a difference of 118 wet tons from the scale-weighed solids. Sevenson reported 16,090 wet tons of filter cake in their monitoring data (Attachment J). Both the Jacobs- and the Sevenson-reported weights are based on calculations from solid volumes and average densities. Thus, the one percent difference between calculated mass and actual (weighed) mass indicates that the density measurements accurately represent the materials.

When percent moisture values are factored into the wet weights of materials, a total of 11,916 dry tons of all solids from Dredge Areas A and B is obtained, which comes from 2,250 dry tons of coarse materials and sand at Area C, and 9,666 dry tons of filter cake at Area D. The percent moisture values for the debris and sand are assumed at 50 percent and 20 percent, respectively.

Table I-2 summarizes predicted production quantities and actual productions quantities. The predicted quantities were used for scoping purposes prior to the 2005 dredging season, and were based on last year's process results and assumed dredge slurry characteristics. The actual quantities are calculated using characteristics measured during the 2005 dredge season. An analysis of predicted filter cake weight, to the actual filter cake weight shows that a greater proportion of dredge solids were removed as filter cake versus as sand or debris.

3.2 WATER BALANCE

The Dredge Area A and B total slurry flow to the Desanding Building was 109,438 wet tons (refer to Table I-1). Because 2,996 wet tons of water, coarse screenings, and sand were removed from the slurry in Area C, 106,442 tons of dredge slurry entered Area D. Dilution water added to the slurry at Area C was estimated at 1,477 tons. Therefore, the combination of dredge sediment and dilution water entering Area D was approximately 107,919 wet tons. Sevenson measured the Area D influent as 24,692,399 gallons, or approximately 102,967 tons, using a specific gravity of one. The difference between the two weights (4,952 tons) is attributable to the specific gravity of the feed, polymer make-

up water, pipeline flush water, and filtrate monitoring water. These dilution factors are presented in Table I-1.

Sevenson measured the total volume of treated effluent water as 22,237,200 gallons (92,729 tons) discharged. The effluent volume is the water volume removed from the influent feed plus volume for Area D washing activities and polymer make-up. Water meter readings indicate that 1,220,736 gallons (5,090 tons) of water were added by the various means of dilution, making the total influent volume 25,913,135 gallons. Assuming the water contained in the filter cake was 6,404 tons (1,535,731 gallons), the difference between estimated influent volume and effluent volume is 2,140,204 gallons (8 percent of total influent). This volume is attributable to solids volume in the influent.

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4.0 LESSONS LEARNED/CONCLUSIONS

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4.4 AMBIENT AIR MONITORING

The 2005 ambient air sampling results compare well with the model-predicted ambient air PCB concentrations presented in the Jacobs' October 2005 report *Air Dispersion Modeling of Emission Sources 2004 and 2005 Dredging Operations, New Bedford Harbor Superfund Site* (Jacobs 2005b). The Jacobs 2005 dispersion model, which was calibrated using Jacobs' 2004 ambient air results, predicted that the PCB concentrations at commercial and residential receptors would be well below the allowable exposure budgets, even during dredging of highly impacted sediment. The air model was also calibrated to include the surrounding mudflats as a significant source, as well as the Aerovox property as a source. In addition, source inputs to the model also discounted the impact of the activities at Area C and Area D upon the PCB concentrations in ambient

air. Even though the 2005 results have not been run through the air dispersion model, it appears that these assumptions still hold true.

During the 2005 season, the meteorological station was fully operational, and the data are presented in this report. The following observations were made by correlating the 2005 ambient air concentration data with the tide and the meteorological data:

- The highest and second highest ambient air PCB concentrations were detected during the October 5-6, 2005 and September 14-15, 2005 sampling events, respectively (Tables F-1 and F-3). These two periods of elevated ambient air PCB concentrations, had the following factors in common:
  - both of these sampling events were correlated with periods of lower tides than the other sampling events (Table F-4);
  - during both of these periods, higher minimum and maximum temperatures were recorded; and
  - higher minimum and maximum humidity values were also recorded during these sampling events.
- During the October 5-6, 2005 sampling event, the lowest average wind speeds out of the eight sampling events were recorded, which may have affected the dispersion of the PCBs in ambient air due to wind.
- During the October 5-6, 2005 sampling event, the dredging occurred in the area where the highest historical PCB concentrations were encountered during previous investigations. It is evident that each of these factors contributes to the elevated concentrations of PCBs detected in air; however, it is not known which of these factors is the greatest contributor.

Because it appears that the tidal influences have a great effect on the area of PCB-impacted mudflats that are exposed during these air monitoring events, it is proposed that a data logger be attached to one of the dredge area sheet piles to record the change in tide elevations during each of the sampling events. This will allow greater correlation of the tide elevation data with the dredging activities and the meteorological data.

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5.0 REFERENCES

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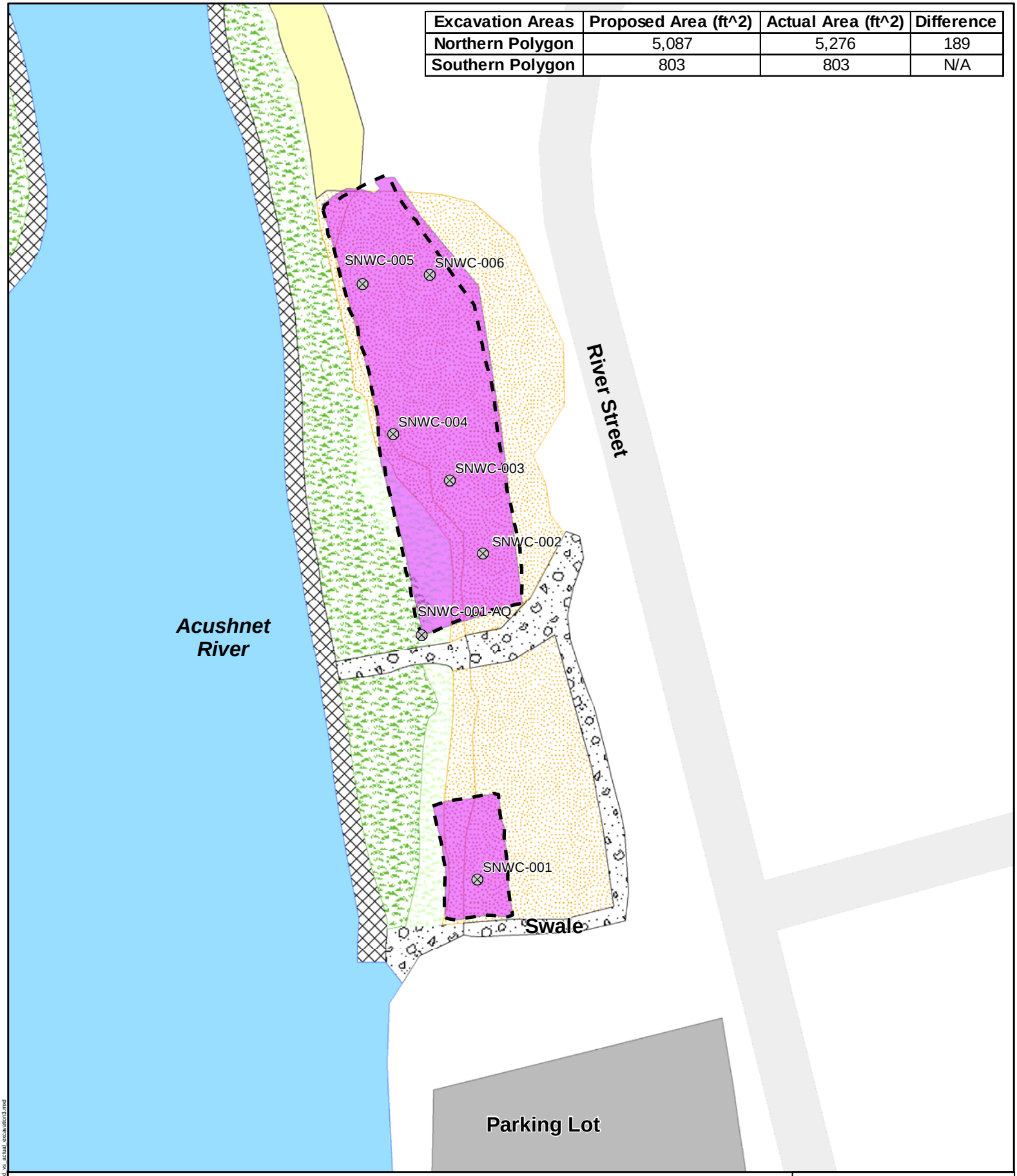
FIGURE

Excavation Areas	Proposed Area (ft^2)	Actual Area (ft^2)	Difference
Northern Polygon	5,087	5,276	189
Southern Polygon	803	803	N/A



Legend

- Post-Excavation Area
- Planned Area of Excavation
- Roads
- Parking Lot
- High Marsh Planting
- Low Marsh Planting
- Phragmites Removal Area
- Rip-Rap
- River
- Toe Stone
- Upland Seed Mix
- Sample Locations

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North of Wood Street
Planned Excavation Limits
and Actual Excavation Limits

New Bedford Harbor Superfund Site
December 2005

NAME: croberts DATE: 12/27/2005

Figure 2-1

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TABLES

Table 2-1
Wastewater Treatment Plant Discharge Goals
New Bedford Harbor Superfund Site - 2005 Season

Analysis	Surface Water Discharge Treatment Goal (µg/L)
PCB Aroclor [(1)]	0.065
Metals	
Cd	9.3
Cr	50
Cu	5.6
Pb	8.5

Notes:
[(1)] Per PCB Aroclor

Cd = Cadmium
Cr = Chromium
Cu = Copper
Pb = Lead
PCB = Polychlorinated biphenyls
µg/L = micrograms per liter

Table 2-2
Air Monitoring Protocol
New Bedford Harbor Superfund Site - 2005 Season

Instrument	Location	Mode of Operation	Action Level	Action
MultiRAE H_2S	Ground level entrance and operating pump tank	Continuous	40 ppm	***Evacuate at 50 ppm*** after 10 minutes sustained
MiniRAE (PID)[1] (H_2S)	Operating pump	Continuous	100 ppm	Detection up to 4000 ppm
AreaRAE (VOC)	Shaker Platform	Continuous	50 ppm	Use PCE[2]/TCE[3] colorimetric tubes. Collect integrated samples if detected above 50 ppm or no detection made.
Integrated Sampling (VOC)	Pump Tank	1 day/week	50 ppm	Evaluate results

Notes:
H_2S = hydrogen sulfide
PCE = perchloroethylene
PID = photoionization detector
ppm = parts per million
TCE = trichloroethylene
VOC = volatile organic compound

Table 2-3
Hydrogen Sulfide Exposure Limits
New Bedford Harbor Superfund Site - 2005 Season

H_2S Exposure Limits	OSHA[1]	ACGIH[2]	NIOSH
Ceiling	20 ppm (10 minutes)	--	10 ppm (10 minutes)
Peak	50 ppm	--	--
STEL[3]	--	15 ppm	--
8-hour TWA[4]	10 ppm	5 ppm	--
IDLH[5]	100 ppm[6]	--	100 ppm

Notes:
[1] Occupational Safety and Health Administration
[2] American Conference of Governmental Industrial Hygienists
[3] Short Term Exposure Limit
[4] Time Weighted Average
[5] IDLH = Immediately Dangerous to Life or Health
[6] ppm = parts per million

ATTACHMENT A

Dredge Planning and Progress Figures

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ATTACHMENT B

Summary of 2005 Activities

Attachment B
Summary of 2005 Activities
New Bedford Harbor Superfund Project

Date	Activity	Summary
Revise/Submit Planning Documents		
Draft April 2004 Final July 2004 Addendum No. 1 May 2005	Execution Plan 2004, 2004 New Bedford Harbor Remedial Action, New Bedford Harbor Superfund Site, New Bedford, MA. Draft Addendum No. 1 to Execution Plan 2004, 2005 New Bedford Harbor Remedial Action.	Submittal of Addendum to the Execution Plan outlining the remediation of the New Bedford Superfund Site to be accomplished for Fiscal Year (FY) 2005 and 2006.
Draft April 2004 Final September 2004	Site Specific Safety & Health Plan	This document was not revised in 2005.
Draft May 2004, Final September 2004	Emergency Response Contingency Plan	This document was not revised in 2005.
Draft May 2004, Final September 2004, Revised September 2005	Construction Quality Control Plan	The Final was revised in September 2005.
Draft May 2004, Final August 2004, Revised August 2005, Revised December 2005	Field Sampling Plan	This document was revised twice in 2005. The first (Aug.) was for 2005 dredging activities and the second (Dec.) was to incorporate debris sampling/analysis protocol.
Draft June 2004, Final September 2004, Revised May 2005	Quality Assurance Program Plan	Revisions made, including reorganizing documents to be a Program Plan.
Draft July 2004, Final November 2004, Revised August 2005	Regulatory Compliance Plan	The Final was revised in August 2005.
Draft May 2004, Final September 2004, Revised August 2005	Transportation & Temporary Storage Plan	The Final was revised in August 2005.
Draft May 2004, Final August 2004, Revised August 2005	Environmental Protection Plan	The Final was revised in August 2005.

Attachment B
Summary of 2005 Activities
New Bedford Harbor Superfund Project

Date	Activity	Summary
Submittal of Initial Task Order/Subsequent Modifications		
Negotiated Proposal Submitted on 4/8/05	Modification 7	**Tasks under Mod. 7 include the following:** Execution Plan for 2005 Remediation; update Project Work Plans; management and support; Ambient Air Modeling; evaluations of impacts to wetlands; and general site operations and maintenance.
Negotiated Proposal Submitted on 7/21/05	Modification 8	**Tasks under Mod. 8 include the following:** Task 1 - general mobilization, winterization, and demobilization; Task 2 - twenty (20) days of dredging and associated activities; Task 3 - twenty (20) days of dredging and associated activities; Task 4 - ten (10) days of dreging and associated activities; and Task 9 - remediate impacted material "North of Wood Street". Tasks 5, 6, 7, and 8 were not exercised by the NAE during the 2005 season.
Negotiated Proposal Submitted on 11/7/05	Modification 11	**Tasks under Mod. 11 include the following:** Task 1 - additional T & D of Filter Cake from Area D; and Task 2 - disposal of PCB-contaminated sand from Sawyer Street. This work was documented in Field Change Notice (FCN) #026.
Mobilization Activities		
August/September 2005	Mobilization of Equipment and Personnel Associated with 2005 Dredging Activities.	Since the majority of the equipment associated with dredging and processing of sand (Area C), filter cake production and waste water treatment (Area D), was assembled and inspected prior to the 2004 season, the 2005 activities concentrated on remobilization activites. These included the installation of sheet piles in Dredge Areas A and B, mobilizing the dredges and associated dredge pipelines, staging the combined booster pump/ferric injection system at Manomet Steet, and the installation of two fume hoods at the Area C desanding Plant. The remainder of the mobilization activities incurred general maintanance and repair activitites necessary to initiate dredging.
August 2005	Buried Pipeline Repair - Area C	Water main repair at Area C. Prep. meeting (8/16/05), Initial Inspection (8/16/05)
August 2005	Booster Pump and Ferric System setup	Combination of booster pump and ferric injection system at Manomet Street. Prep. meeting (8/22/05), Initial Inspection (9/6/05)

Attachment B
Summary of 2005 Activities
New Bedford Harbor Superfund Project

Date	Activity	Summary
Mobilization Activities (continued)		
August 2005	Service Test Pipelines	Dredge and slurry pipelines. Prep. meeting (8/29/05), Initial Inspection (9/9 and 9/12/05)
August 2005	Install Desanding System Fume Hood	Installation of modified fume hood at Desanding Plant at Area C. Prep. meeting. (8/30/05), Initial Inspection (9/12/05)
September 2006	Transportation & Disposal	Prep. meeting (9/9/05), Initial Inspection (9/26 and 10/7/05)
Dredging and Associated Activities		
9/12/2005	Intiated and suspended debris removal activities in Dredge Area A	Initiated debris removal activities in DMU-2. However, at the request of the NAE, the debris removal activities were suspended due to elevated turbidity. **Debris Removal Operations** (prep. inspect. [8/30/05] and initial inspect. [9/12/05])
9/13/2005	Initiated dredging activities in Dredge Area A (primarily Dredge Management Unit-2 [DMU-2]	This included the start-up activities for the following support operations: **Sediment Processing Operations** (prep. inspect. [8/30/05] and initial inspect. [9/7 and 9/14/05]); **Dredging Operations** (prep. inspect. [8/30/05] and initial inspect. [9/15/05]); and **Sampling** (prep. inspect. [9/9/05] and initial inspect. [9/14/05]).
9/13/2005	Downgrade of Worker Protection at Area C	Following testing of the air within the Desanding Building at Area C, the required personnel protection equipment (PPE) was downgraded from Level B (supplied air) to Level D with the personal escape air supply furnished to each worker within the building.
9/26/2005	Initiate shipment by rail of filter cake material from Waste Water Treatment Plant (WWTP) at Area D	The waste management process (including rail) was initiated with the 9/9/05 preparatory meeting and the subsequent 9/26/05 and 10/7/05 initial inspections.
10/4 and 10/5/05	Conduct Hydrocyclone Treatability Test in Dredge Area A (DMU-4)	Conducted pilot hydrocyclone treatability test in the desanding plant at Area C. The pilot test was conducted on sediment dredged during normal dredging operations. However, for the purpose of the test, the area within Dredge Area B (primarily comprised of DMU-4) with the highest PCB concentrations within Dredge Area B (primarily comprised of DMU-4) was dredged. Sediments collected during the test were submitted for analysis at the Sevenson analytical laboratory and sediments were also shipped to the USACE laboratory in Vicksburg, MS. Prep. meeting (9/23/05), initial inpection (10/05/05).

Attachment B
Summary of 2005 Activities
New Bedford Harbor Superfund Project

Date	Activity	Summary
Dredging and Associated Activities (continued)		
10/6/2006	Continued Dredging Activities in Dredge Area A (DMU-2)	Continued dredging activities in Dredge Area A following completion of hydrocyclone treatability test.
10/10/2006	Initiated continuous dredging activities in Dredge Area B, which is composed of primarily DMU-2	Started continuous Dredge Area A dredging activities.
10/14/2005 through 11/08/05	Started debris removal activities in Dredge Area B with a modified "rake".	The modified rake had a thumb-type attachment that allowed the operator to effectively remove debris from the sediment without suspending excessive material into the water column. However, due to turbidity issues during low tide, the debris removal activities were curtailed during these times of the day.
11/16/05 through 11/18/05	Offsite shipment of TSCA sand generated during 2004 dredging activities. The sand was stored at the Debris Disposal Area (DDA) at Area C.	The shipment of the sand was conducted by First American for the USACE under a separate contract between First American and the USACE. However, the trucks were loaded by Sevenson Environmental Services (SES).
Air Monitoring Activities		
8/10-11/2005	Pre-Dredge Background Sampling	Pre-dredge sampling activities conducted at eight (8) sampling locations. During this sampling round and the subsequent seven (7) sampling rounds conducted in 2005, one (1) duplicate and one (1) field blank were also collected and submitted for analysis. In addition, the samples during each of the eight rounds were collected with polyurethane foam (PUF) samples with quarter filters. Prep. Inspect. (9/14/05), Initial Inspection 9/15/05.
9/14-15/2005	1st Round of Weekly Air Sampling	Air samples were collected from ten (10) sampling locations.
9/22-23/2005	2nd Round of Weekly Air Sampling	Air samples were collected from ten (10) sampling locations.
9/28-29/2005	3rd Round of Weekly Air Sampling	Air samples were collected from ten (10) sampling locations.
10/5-6/2005	4th Round of Weekly Air Sampling	Air samples were collected from ten (10) sampling locations.
10/27-28/2005	1st Round of Monthly Air Sampling	Air samples were collected from ten (10) sampling locations.
11/17-18/2005	2nd Round of Air Sampling	Air samples were collected from ten (10) sampling locations.
12/28-29/2005	Post Dredge/North of Wood Street Round of Air Sampling	Post dredging/sediment processing samples to determine background values during inactive season. Pre-dredge sampling activities conducted at eight (8) sampling locations.

Attachment B
Summary of 2005 Activities
New Bedford Harbor Superfund Project

Date	Activity	Summary
Bathymetric Survey		
9/2/2005	Pre-Dredge Survey in Dredge Areas A and B	Survey conducted by Apex. Prep. Meeting (8/24/05), Initial Inspection (9/02/05).
9/18/2005	Bathymetric Survey in Dredge Area A	Survey conducted by Apex.
9/24/2005	Bathymetric Survey in Dredge Areas A and B	Survey conducted by Apex.
10/1/2005	Bathymetric Survey in Dredges Area A and B	Survey conducted by Apex.
10/8/2005	Bathymetric Survey in Dredges Area A and B	Survey conducted by Apex.
10/15/2005	Bathymetric Survey in Dredge Area B	Survey conducted by Apex.
10/22/2005	Bathymetric Survey in Dredge Area B	Survey conducted by Apex.
10/29/2005	Bathymetric Survey in Dredge Area B	Survey conducted by Apex.
11/5/2005	Bathymetric Survey of the Entire Dredge Area B	Survey conducted by Apex.
11/12/2005	Bathymetric Survey of the Western Portion of Dredge Area B	Survey conducted by Apex.
11/23/2005	Bathymetric Survey in Dredge Area B	Survey conducted by Apex.
12/8/2005	Bathymetric Survey in Dredge Area A and the Areas of DMU-2 dredged during 2004	Survey conducted by Apex.
North of Wood Street Remediation Activities		
11/28-12/15	Conducted excavation activities at North of Wood Street	Excavation of soils containing PCBs at concentrations greater than 50 parts per million. Environmental Quality Company Northeast (EQNE), under contract to Jacobs, conducted the excavation activities as well as the transportation and disposal of PCB-impacted soils. Prep. meeting (11/18/05).
Winterization Activities		
11/28/05 - 12/9/05	Winterization	Winterization activities were conducted for the following operations: Dredge Areas A and B; combined ferric sulfide treatment system/booster pump station at Manomet Street; docks at Area D; DDA storage; CDF ponds; desanding building (Area C); pipeline from dredge area to Area C: and dewatering plant (Area D).

ATTACHMENT C

Revised Process Flow Diagrams and As-Builts

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ATTACHMENT D

Sample Summary Tables

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ATTACHMENT E

Transport and Disposal Reports

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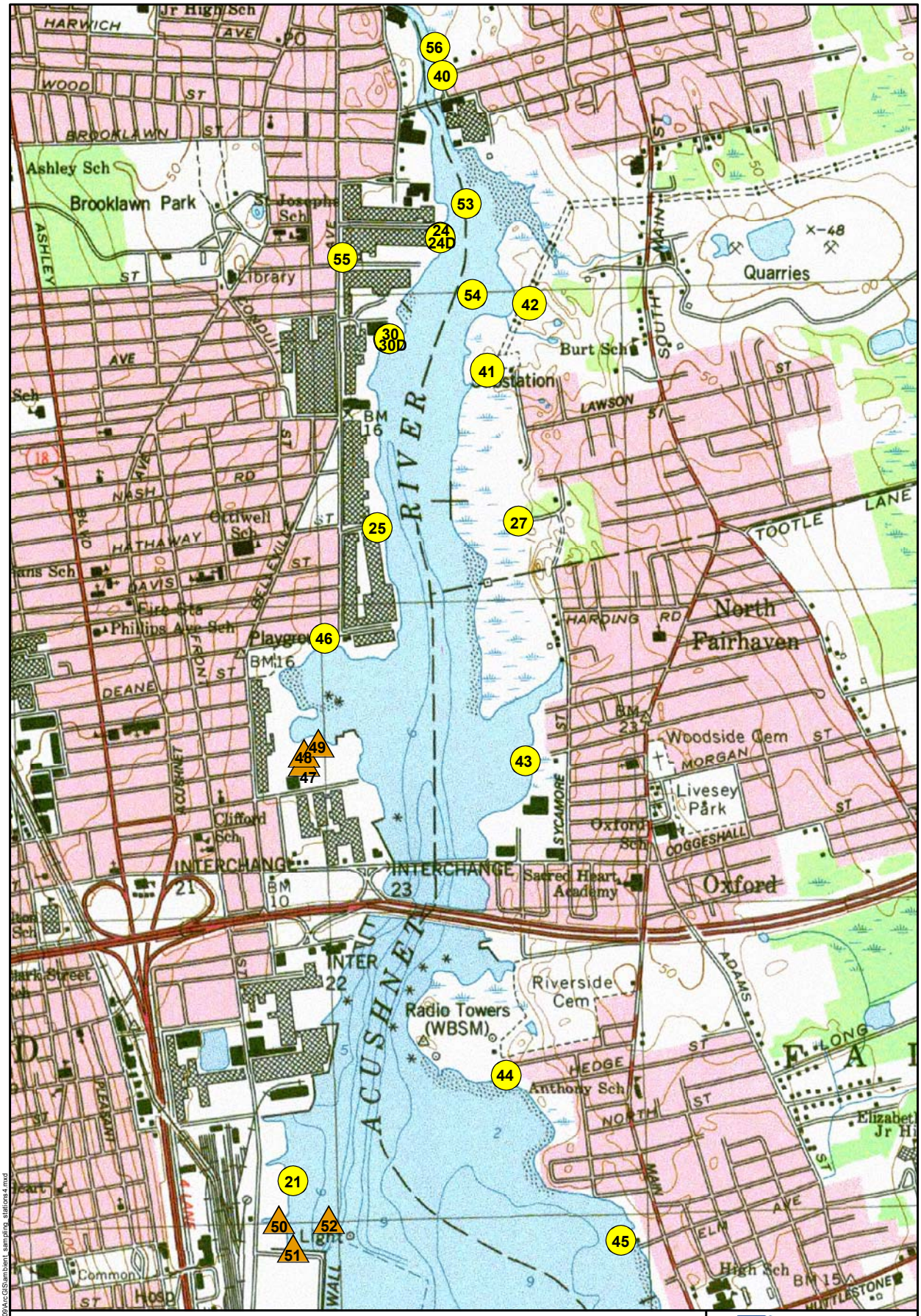
ATTACHMENT F

Ambient Air Monitoring Information



Legend

Ambient Air Sampling Locations

- Mobile Station
- Stationary Station

Aerial Photography MASSGIS 2003

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Ambient Air Sampling Station Locations

New Bedford Harbor Superfund Site

NAME: croberts DATE: 2/9/2006

Figure F-1

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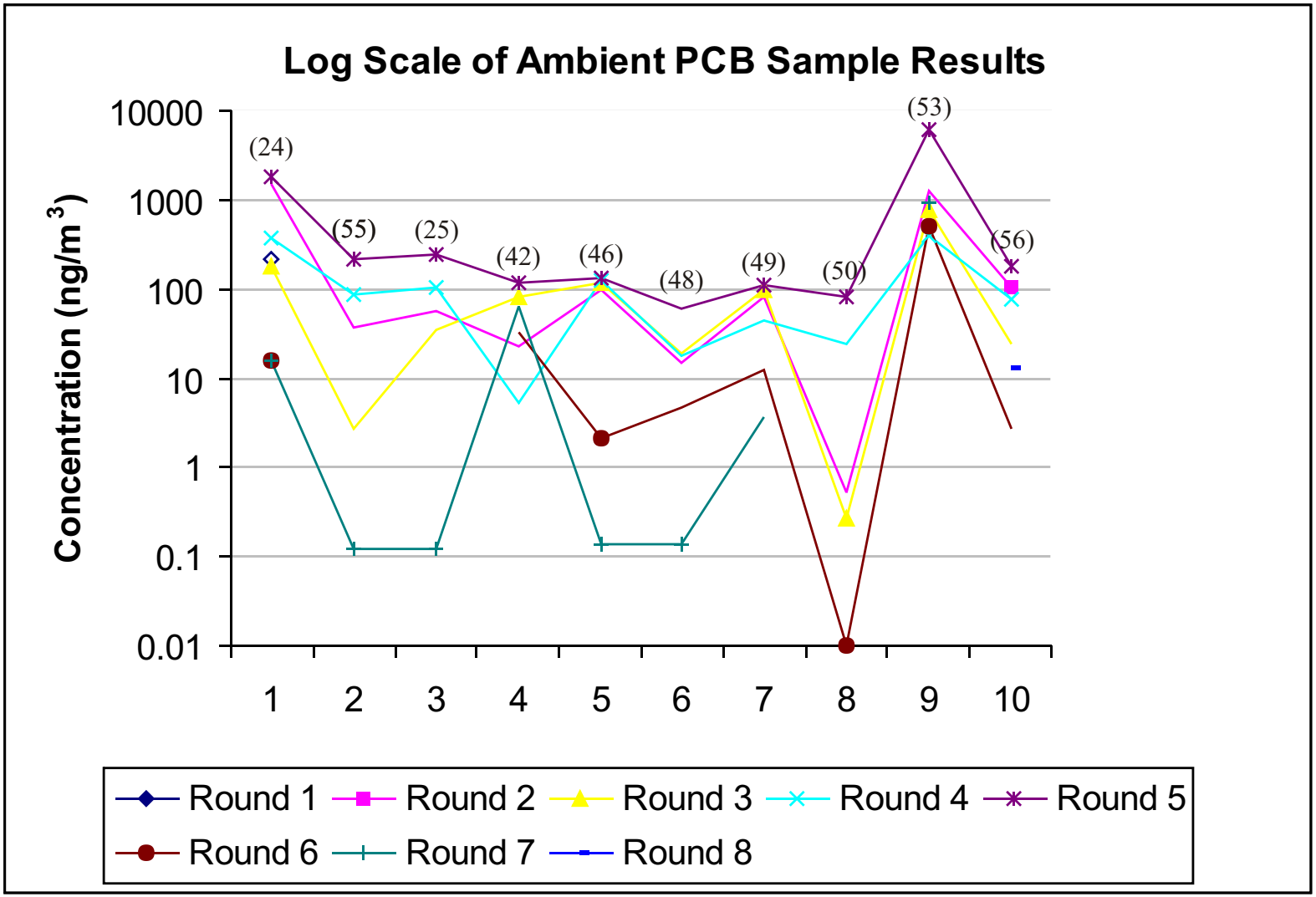
Table F-1
Ambient Monitoring Program
Total Detectable PCB in Air
New Bedford Harbor Superfund Site - 2005 Season

Sampling [1] Period	Aerovox [2] Station 24	Aerovox West Upwind Station 55	Cliftex Station 25	Nstar Station 42	Coffin Ave Station 46	Area C Downwind Station 47	Area C Crosswind Station 48	Area C Downwind Station 49	Area D Downwind Station 50	Area D Downwind Station 51	Area D Downwind Station 52	Dredge Station 53	Achusnet Park Station 56	Duplicate	ng/m^3 Sample Blank	Comments
8.10 to 8.11	216	42.1	103	25.9	37.2	NS [3]	NS	29.3	NS	NS	21.3	NS	49.9	44.1	0.32	Duplicate sample
Round 1																Aerovox West
9.14 to 9.15	1,490	37.6	58.2	22.5	99.8	NS	14.9	83.6	0.52	NS	NS	1,280	102	NS	0.26	No Duplicate Sample
Round 2																
9.22 to 9.23	178	2.64	35.2	83.3	115	NS	19.1	97	0.26	NS	NS	780	23.9	18.8	0.54	Duplicate sample
Round 3																Station 48, Area C
9.28 to 9.29	383	87	104	5.28	124	NS	17.3	44.2	24.2	NS	NS	391	77.9	QA[6]	1.16	Duplicate sample
Round 4																to Corps Lab
10.5 to 10.6	1,822	222	251	119	130	NS	60.1	114	81.7	NS	NS	6,315	180	1,708	0.96	Duplicate sample
Round 5																Aerovox Station 24
10.27 to 10.28	15.4	3.97	NS [4]	32.3	2.06	NS	4.61	12.3	0.01	NS	NS	505	2.73	QA[6]	0.42	Duplicate sample sent
Round 6																to Corps lab
11.17 to 11.18	15.9	0.12	0.12	63.6	0.14	NS	0.139	3.71	NS[5]	NS	NS	913	3.76	14.9	1.73	Duplicate sample
Round 7																Aerovox Station 24
12.28 to 12.29	83.2	10.8	10.9	21.4	65.1	7.42	NS	NS	NS	2.18	NS	NS	13.5	QA[6]	0.33	Duplicate sample sent
Round 8																to Corps lab

Notes:
(1) Sampled and analyzed using EPA TO-10A Methodology.
(2) All results reported for 24 hour time-weighted average in nanograms per cubic meter of air (ng/m^3).
(3) NS = not sampled.
(4) Sample tube for 25 Cliftex was broken during transport.
(5) Sample tube for 50 Area D was broken during analysis preparation.
(6) Duplicate sent to USACE laboratory.

Table F-2
Ambient PCB Sample Station Locations
New Bedford Harbor Superfund Site - 2005 Season

Station Number	Station Type	Location	City/Town	Northing	Easting
21	M	New Bedford Welding	New Bedford	2696913.00000	814013.00000
24	M	Aerovox NE corner	New Bedford	2706941.00000	815574.00000
24D	M	Aerovox duplicate	New Bedford	2706932.00000	815574.00000
25	M	Cliftex, Manomet Street	New Bedford	2703854.00000	814907.00000
27	M	Francis St (Porter)	Fairhaven	2703925.00000	816405.00000
30	M	Fiber Leather	New Bedford	2705861.00000	815029.00000
30D	M	Fiber Leather duplicate	New Bedford	2705864.00000	815034.00000
40	M	Wood St (Titleist)	Acushnet	2705820.00000	814933.00000
41	M	NSTAR substation	Acushnet	2705524.00000	816074.00000
42	M	NSTAR North	Fairhaven	2706236.00000	816524.00000
43	M	Bus Terminal Lot	Fairhaven	2701377.00000	816482.00000
44	M	Taber St (Pumping Station)	Fairhaven	2698035.00000	816277.00000
45	M	Cozy Cove Marina	Fairhaven	2684279.00000	817739.00000
46	M	Coffin Ave	New Bedford	2703796.00000	814947.00000
47	S	Area C Downwind	New Bedford	2701361.00000	814129.00000
48	S	Area C Crosswind	New Bedford	2701462.00000	814128.00000
49	S	Area C Upwind	New Bedford	2701564.00000	814279.00000
50	S	Area D Downwind	New Bedford	2696198.00000	814012.00000
51	S	Area D Crosswind	New Bedford	2696500.00000	812858.00000
52	S	Area D Upwind	New Bedford	2695390.00000	814397.00000
53	S	DMU2 Dredge	Varies	2706636.00000	815839.00000
54	M	DMU2 DW on barge	Varies	2706333.00000	815917.00000
55	M	Aerovox West (R7 receptor)	New Bedford	2706728.00000	814540.00000
56	M	Acushnet Park	New Bedford	2708962.00000	815519.00000



JACOBS

Log Scale of Ambient PCB Sample Results

New Bedford Superfund Site

CROBERTS 02/09/06

Table F-3

Table F-4
Meteorological Data/Tide Data Summary
New Bedford Harbor Superfund Site - 2005 Season

Date	Avg. Wind (mph)	Direction	Min Temp (^{o}F)	Max Temp (^{o}F)	Min Humidity %	Max Humidity %	Barometer (inch)	Avg. Radiation (watts /m^{3})	Max Radiation (watts /m^{3})	Tide Min (ft msl)	Tide Max (ft msl)
Aug 10, 11	6.9	SSW	71	92	39	94	29.9	330	809	0.3	3.9
Sep 14, 15	7.8	SSW	69	80	60	96	30	186	775	0	4.6
Sep 22, 23	8.3	SW	61	81	39	90	30	267	757	0.3	4.6
Sep 28, 29	12.2	SSE	52	73	42	85	30.1	264	750	0.8	3.7
Oct 05, 06	4.2	SSE	58	73	75	100	30.2	158	704	-0.1	4.5
Oct 27, 28	7.3	NNW	40	50	48	81	30.2	114	583	0.8	3.5
Nov 17, 18	8.8	NW	34	48	26	90	30.1	145	530	-0.2	4.8
Dec 28, 29	6.1	S	28	50	63	98	29.7	61	353	-0.2	4.5

Notes:
^{o}F = Fahrenheit
% = percent
ft msl = feet mean sea level
mph = miles per hour
watts/m^{3} = watts per meter cubed

Air Sampling Status Reports (PETS Curves)

Air Sampling Status

New Bedford Harbor Superfund Site

Station #: 24 Aerovox
Exposure Budget Slope (EBS) = 344 (ng/m^3-day)

Collection Date: 12/29/2005

Construction Activity: The 2005 dredging activities were completed on November 18, 2005.

This report summarizes sample results for the above referenced location and date. The samples were collected on polyurethane foam (PUF)/XAD sample media with a glass fiber pre-filter using a BGI, PQ-1 Low-Vol sampler. The samples were analyzed using high-resolution mass spectrometry (HRGCMS) for total PCB homologue groups. Results are evaluated relative to the Exposure Budget Tracking Process described in the Development of PCB Air Action Levels for the Protection of the Public, New Bedford Superfund Site, August 2001. Cumulative data for this reporting period are included on pages 3 and 4.

Summary of This Sampling Period:

The results from the Baseline Ambient Air Sampling program were used to assign background concentrations for each air sampling location. For Station 24 Aerovox, the quarterly average ambient air PCB concentrations for the June 1999 through May 2000 baseline sampling were used as background concentrations. These background concentrations were used for the inactive field times from 11/12/02 through 9/8/04 and for the period from 12/4/04 through 8/10/05 to close the inactive field season. Low triggers were identified, which will be evaluated for potential necessary response.

Monitoring Station		24 Aerovox
Exposure Budget Slope	[ng/m^3-day]	344
Work Start Date	[mm/dd/yyyy]	11/12/2002
Projected Work End Date	[mm/dd/yyyy]	11/10/2028
Occupational Limit Used as Ceiling	[ng/m^3]	500,000
TEL for Worker in Public	[ng/m^3]	50,000
NTEL for Worker in Public	[ng/m^3]	1,789
Minimum of TEL/NTEL	[ng/m^3]	1,789
Baseline Average Concentration	[ng/m^3]	75

Sample Results, Calculated Budget and Exposure Values

(A) Event	(B) Sampling Date	(C) Days Since Previous Sampling Event	(D) Work Effort Elapsed Time	(E) Estimated Work Effort Remaning	(F) PCB Concentration Result	(G) Average of Most Recent Two Concentration Results	(H) Weighted Average of Concentration Results	(I) Exposure Budget for the Period	(J) Cumulative Exposure Budget for Work Effort to Date	(K) Measured Exposure During the Period	(L) Calculated Cumulative Exposure for Work Effort to Date	(M) Exposure Budget Expended During the Period	(N) Cumulative Exposure Expended for Work Effort to Date
[#]	[month/day/year]	[days]	Runnig Sum of Column (C) to Date [days]	[days]	[ng/m^3]	[ng/m^3]	Column (L)/Column (D) [ng/m^3]	EBS[1] * Column (C) [ng/m^3-days]	Sum of Column (I) [ng/m^3-days]	Column (G)* Column (C) [ng/m^3-days]	Sum of Column (K) [ng/m^3-days]	Column (K) /Column (I) [%]	Column (L) /Column (J) [%]
1	11/12/2002	0	0	9495	67	67.00	67.00	NC	NC	NC	NC	NC	NC
2	11/30/2002	18	18	9477	67	67.00	67.00	6192	6192	1206.0	1,206.0	19.5%	19.5%
3	12/1/2002	1	19	9476	32	49.50	66.08	344	6536	49.5	1,255.5	14.4%	19.2%
4	2/28/2003	89	108	9387	32	32.00	38.00	30616	37152	2848.0	4,103.5	9.3%	11.0%
5	5/31/2003	92	200	9295	76	54.00	45.36	31648	68800	4968.0	9,071.5	15.7%	13.2%
6	8/31/2003	92	292	9203	130	103.00	63.52	31648	100448	9476.0	18,547.5	29.9%	18.5%
7	11/30/2003	91	383	9112	67	98.50	71.83	31304	131752	8963.5	27,511.0	28.6%	20.9%
8	2/28/2004	90	473	9022	32	49.50	67.58	30960	162712	4455.0	31,966.0	14.4%	19.6%
9	5/31/2004	93	566	8929	76	54.00	65.35	31992	194704	5022.0	36,988.0	15.7%	19.0%
10	8/31/2004	92	658	8837	130	103.00	70.61	31648	226352	9476.0	46,464.0	29.9%	20.5%
11	9/8/2004	8	666	8829	67	98.50	70.95	2752	229104	788.0	47,252.0	28.6%	20.6%
12	9/9/2004	1	667	8828	1024	545.50	71.66	344	229448	545.5	47,797.5	158.6%	20.8%
13	9/14/2004	5	672	8823	1449	1236.50	80.33	1720	231168	6182.5	53,980.0	359.4%	23.4%
14	9/23/2004	9	681	8814	588	1018.50	92.73	3096	234264	9166.5	63,146.5	296.1%	27.0%
15	9/27/2004	4	685	8810	9557	5072.50	121.81	1376	235640	20290.0	83,436.5	1474.6%	35.4%
16	10/19/2004	22	707	8788	559	5058.00	275.41	7568	243208	111276.0	194,712.5	1470.3%	80.1%
17	11/5/2004	17	724	8771	578	568.50	282.29	5848	249056	9664.5	204,377.0	165.3%	82.1%
18	12/3/2004	28	752	8743	30	304.00	283.10	9632	258688	8512.0	212,889.0	88.4%	82.3%
19	2/28/2005	87	839	8656	32	31.00	256.96	29928	288616	2697.0	215,586.0	9.0%	74.7%
20	5/31/2005	92	931	8564	76	54.00	236.90	31648	320264	4968.0	220,554.0	15.7%	68.9%
21	8/10/2005	71	1002	8493	130	103.00	227.41	24424	344688	7313.0	227,867.0	29.9%	66.1%
22	8/11/2005	1	1003	8492	216	173.00	227.36	344	345032	173.0	228,040.0	50.3%	66.1%
23	9/15/2005	35	1038	8457	1490	853.00	248.45	12040	357072	29855.0	257,895.0	248.0%	72.2%
24	9/23/2005	8	1046	8449	178	834.00	252.93	2752	359824	6672.0	264,567.0	242.4%	73.5%
25	9/29/2005	6	1052	8443	383	280.50	253.09	2064	361888	1683.0	266,250.0	81.5%	73.6%
26	10/6/2005	7	1059	8436	1822	1102.50	258.70	2408	364296	7717.5	273,967.5	320.5%	75.2%
27	10/28/2005	22	1081	8414	15.4	918.70	272.14	7568	371864	20211.4	294,178.9	267.1%	79.1%
28	11/18/2005	21	1102	8393	15.9	15.65	267.25	7224	379088	328.7	294,507.6	4.5%	77.7%
29	12/29/2005	41	1143	8352	83.2	49.55	259.44	14104	393192	2031.6	296,539.1	14.4%	75.4%

Notes:

[1]EBS: Exposure Budget Slope= ng/m^3-day

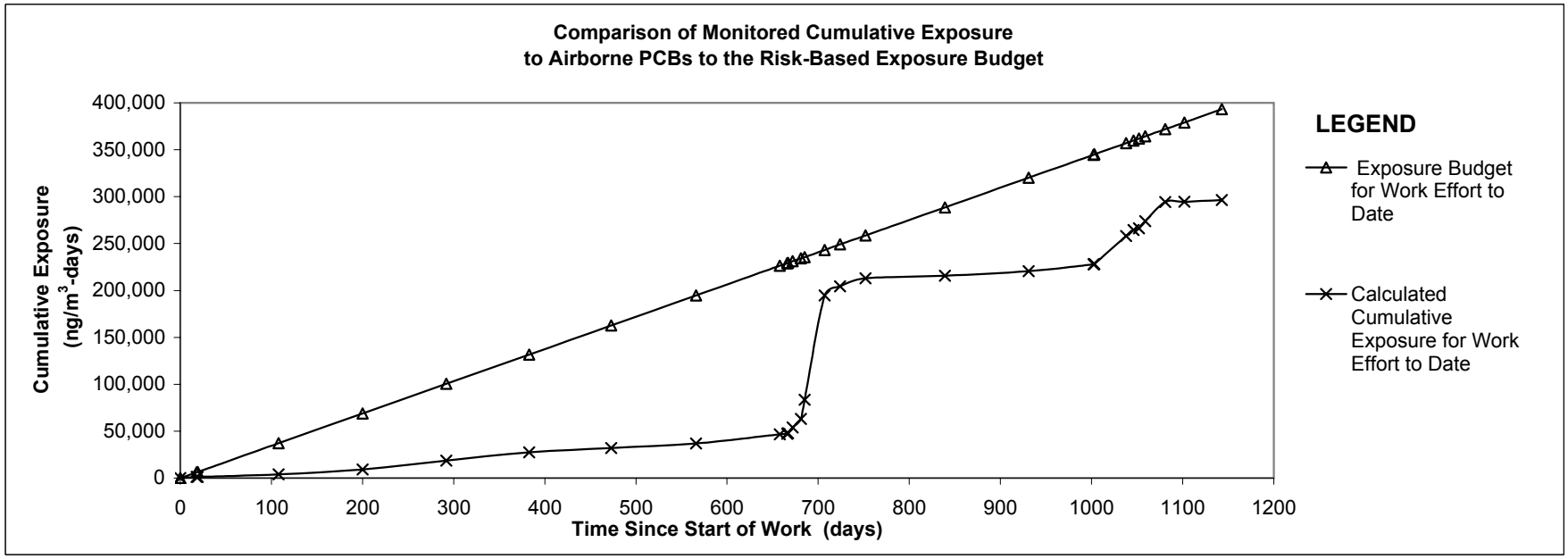
NC = Not Calculated

Shading represents actual sampling data. All other numbers represent projected PCB concentrations for that period.

Air Sampling Status Report

Sample Station :	24 Aerovox
Collection Date:	12/29/2005
Measured PCB Concentration (ng/m^3):	83.2
Exposure Budget Expended During This Period:	14.4%
Cumulative Exposure Budget Expended to Date:	75.4%
Response Level:	LOW
Response:	Evaluate the Cause and Significance of the Triggering Conditions

Triggers:



Air Sampling Status

New Bedford Harbor Superfund Site

Station #: 25 Cliftex
Exposure Budget Slope (EBS) = 344 (ng/m^3-day)

Collection Date: 12/29/2005

Construction Activity: The 2005 dredging activities were completed on November 18, 2005.

This report summarizes sample results for the above referenced location and date. The samples were collected on polyurethane foam (PUF)/XAD sample media with a glass fiber pre-filter using a BGI, PQ-1 Low-Vol sampler. The samples were analyzed using high-resolution mass spectrometry (HRGCMS) for total PCB homologue groups. Results are evaluated relative to the Exposure Budget Tracking Process described in the Development of PCB Air Action Levels for the Protection of the Public, New Bedford Superfund Site, August 2001. Cumulative data for this reporting period are included on pages 3 and 4.

Summary of This Sampling Period:

The results from the Baseline Ambient Air Sampling program were used to assign background concentrations for each air sampling location. For Station 25 Cliftex, the quarterly average ambient air PCB concentrations were used as a background concentration, which represent the quarterly baseline averages for the period of June 1999 through May 2000. These background concentrations were used for the inactive field times from 11/12/02 through 9/8/04 and for the period from 12/4/04 through 8/10/05 to close the inactive field season. No triggers were identified, therefore, no action is required.

Monitoring Station		25 Cliftex
Exposure Budget Slope	[ng/m^3-day]	344
Work Start Date	[mm/dd/yyyy]	11/12/2002
Projected Work End Date	[mm/dd/yyyy]	11/10/2028
Occupational Limit Used as Ceiling	[ng/m^3]	500,000
TEL for Worker in Public	[ng/m^3]	50,000
NTEL for Worker in Public	[ng/m^3]	1,789
Minimum of TEL/NTEL	[ng/m^3]	1,789
Baseline Average Concentration	[ng/m^3]	23

Sample Results, Calculated Budget and Exposure Values

(A) Event	(B) Sampling Date	(C) Days Since Previous Sampling Event	(D) Work Effort Elapsed Time	(E) Estimated Work Effort Remaning	(F) PCB Concentration Result	(G) Average of Most Recent Two Concentration Results	(H) Weighted Average of Concentration Results	(I) Exposure Budget for the Period	(J) Cumulative Exposure Budget for Work Effort to Date	(K) Measured Exposure During the Period	(L) Calculated Cumulative Exposure for Work Effort to Date	(M) Exposure Budget Expended During the Period	(N) Cumulative Exposure Expended for Work Effort to Date
[#]	[month/day/year]	[days]	Runnig Sum of Column (C) to Date [days]	[days]	[ng/m^3]	[ng/m^3]	Column (L)/Column (D) [ng/m^3]	EBS[1] * Column (C) [ng/m^3-days]	Sum of Column (I) [ng/m^3-days]	Column (G)* Column (C) [ng/m^3-days]	Sum of Column (K) [ng/m^3-days]	Column (K) /Column (I) [%]	Column (L) /Column (J) [%]
1	11/12/2002	0	0	9495	22	22.00	22.00	NC	NC	NC	NC	NC	NC
2	11/30/2002	18	18	9477	22	22.00	22.00	6192	6192	396.0	396.0	6.4%	6.4%
3	12/1/2002	1	19	9476	3.2	12.60	21.51	344	6536	12.6	408.6	3.7%	6.3%
4	2/28/2003	89	108	9387	3.2	3.20	6.42	30616	37152	284.8	693.4	0.9%	1.9%
5	5/31/2003	92	200	9295	35	19.10	12.25	31648	68800	1757.2	2,450.6	5.6%	3.6%
6	8/31/2003	92	292	9203	46	40.50	21.15	31648	100448	3726.0	6,176.6	11.8%	6.1%
7	11/30/2003	91	383	9112	22	34.00	24.21	31304	131752	3094.0	9,270.6	9.9%	7.0%
8	2/28/2004	90	473	9022	3.2	12.60	22.00	30960	162712	1134.0	10,404.6	3.7%	6.4%
9	5/31/2004	93	566	8929	35	19.10	21.52	31992	194704	1776.3	12,180.9	5.6%	6.3%
10	8/31/2004	92	658	8837	46	40.50	24.17	31648	226352	3726.0	15,906.9	11.8%	7.0%
11	9/8/2004	8	666	8829	22	34.00	24.29	2752	229104	272.0	16,178.9	9.9%	7.1%
12	9/9/2004	1	667	8828	167	94.50	24.40	344	229448	94.5	16,273.4	27.5%	7.1%
13	9/14/2004	5	672	8823	229	198.00	25.69	1720	231168	990.0	17,263.4	57.6%	7.5%
14	9/23/2004	9	681	8814	97	163.00	27.50	3096	234264	1467.0	18,730.4	47.4%	8.0%
15	9/28/2004	5	686	8809	423	260.00	29.20	1720	235984	1300.0	20,030.4	75.6%	8.5%
16	10/19/2004	21	707	8788	259	341.00	38.46	7224	243208	7161.0	27,191.4	99.1%	11.2%
17	11/15/2004	27	734	8761	61	160.00	42.93	9288	252496	4320.0	31,511.4	46.5%	12.5%
18	12/3/2004	18	752	8743	27	44.00	42.96	6192	258688	792.0	32,303.4	12.8%	12.5%
19	2/28/2005	87	839	8656	3.2	15.10	40.07	29928	288616	1313.7	33,617.1	4.4%	11.6%
20	5/31/2005	92	931	8564	35	19.10	38.00	31648	320264	1757.2	35,374.3	5.6%	11.0%
21	8/10/2005	71	1002	8493	46	40.50	38.17	24424	344688	2875.5	38,249.8	11.8%	11.1%
22	8/11/2005	1	1003	8492	103	74.50	38.21	344	345032	74.5	38,324.3	21.7%	11.1%
23	9/15/2005	35	1038	8457	58.2	80.60	39.64	12040	357072	2821.0	41,145.3	23.4%	11.5%
24	9/23/2005	8	1046	8449	35.2	46.70	39.69	2752	359824	373.6	41,518.9	13.6%	11.5%
25	9/29/2005	6	1052	8443	104	69.60	39.86	2064	361888	417.6	41,936.5	20.2%	11.6%
26	10/6/2005	7	1059	8436	251	177.50	40.77	2408	364296	1242.5	43,179.0	51.6%	11.9%
27	11/18/2005	43	1102	8393	0.12	125.56	44.08	14792	379088	5399.1	48,578.1	36.5%	12.8%
28	12/29/2005	41	1143	8352	10.9	5.51	42.70	14104	393192	225.9	48,804.0	1.6%	12.4%

Notes:

[1]EBS: Exposure Budget Slope= ng/m^3-day

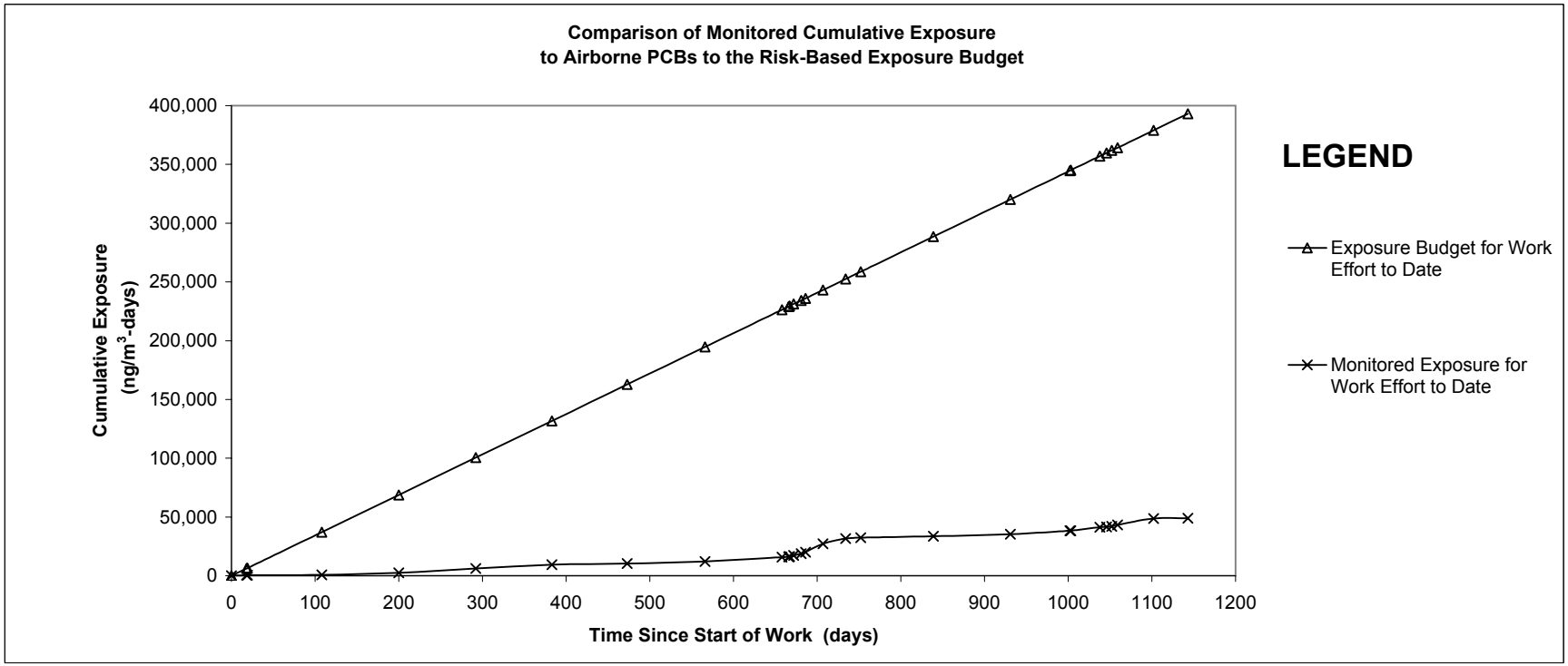
NC = Not Calculated

Shading represents actual sampling data. All other numbers represent projected PCB concentrations for that period.

Air Sampling Status Report

Sample Station :	25 Cliftex
Collection Date:	12/29/2005
Measured PCB Concentration (ng/m^3):	10.9
Exposure Budget Expended During This Period:	1.6%
Cumulative Exposure Budget Expended to Date:	12.4%
Response Level:	No Triggers Identified
Response:	No Response Necessary

Triggers:



Air Sampling Status

New Bedford Harbor Superfund Site

Station #: 42 NSTAR N

Exposure Budget Slope (EBS) = 344 (ng/m^3-day)

Collection Date: 12/29/2005

Construction Activity: The 2005 dredging activities were completed on November 18, 2005.

This report summarizes sample results for the above referenced location and date. The samples were collected on polyurethane foam (PUF)/XAD sample media with a glass fiber pre-filter using a BGI, PQ-1 Low-Vol sampler. The samples were analyzed using high-resolution mass spectrometry (HRGCMS) for total PCB homologue groups. Results are evaluated relative to the Exposure Budget Tracking Process described in the Development of PCB Air Action Levels for the Protection of the Public, New Bedford Superfund Site, August 2001. Cumulative data for this reporting period are included on pages 3 and 4.

Summary of This Sampling Period:

The results from the Baseline Ambient Air Sampling program were used to assign background concentrations for each air sampling location. For Station 42 NSTAR N, the quarterly average ambient air PCB concentrations were used as a background concentration, which represent the quarterly baseline averages from Station 23 - Achusnet Substation, for the period of June 1999 through May 2000. These background concentrations were used for the inactive field times from 11/12/02 through 9/8/04 and for the period from 12/4/04 through 8/10/05 to close the inactive field season. No triggers were identified, therefore, no action is required.

Monitoring Station		42 NSTAR N
Exposure Budget Slope	[ng/m^3-day]	344
Work Start Date	[mm/dd/yyyy]	11/12/2002
Projected Work End Date	[mm/dd/yyyy]	11/10/2028
Occupational Limit Used as Ceiling	[ng/m^3]	500,000
TEL for Worker in Public	[ng/m^3]	50,000
NTEL for Worker in Public	[ng/m^3]	1,789
Minimum of TEL/NTEL	[ng/m^3]	1,789
Baseline Average Concentration	[ng/m^3]	23

Sample Results, Calculated Budget and Exposure Values

(A) Event	(B) Sampling Date	(C) Days Since Previous Sampling Event	(D) Work Effort Elapsed Time	(E) Estimated Work Effort Remaning	(F) PCB Concentration Result	(G) Average of Most Recent Two Concentration Results	(H) Weighted Average of Concentration Results	(I) Exposure Budget for the Period	(J) Cumulative Exposure Budget for Work Effort to Date	(K) Measured Exposure During the Period	(L) Calculated Cumulative Exposure for Work Effort to Date	(M) Exposure Budget Expended During the Period	(N) Cumulative Exposure Expended for Work Effort to Date
[#]	[month/day/year]	[days]	Runnig Sum of Column (C) to Date [days]	[days]	[ng/m^3]	[ng/m^3]	Column (L)/Column (D) [ng/m^3]	EBS[1] * Column (C) [ng/m^3-days]	Sum of Column (I) [ng/m^3-days]	Column (G)* Column (C) [ng/m^3-days]	Sum of Column (K) [ng/m^3-days]	Column (K) /Column (I) [%]	Column (L) /Column (J) [%]
1	11/12/2002	0	0	9495	24	24.00	24.00	NC	NC	NC	NC	NC	NC
2	11/30/2002	18	18	9477	24	24.00	24.00	6192	6192	432.0	432.0	7.0%	7.0%
3	12/1/2002	1	19	9476	9.9	16.95	23.63	344	6536	17.0	449.0	4.9%	6.9%
4	2/28/2003	89	108	9387	9.9	9.90	12.32	30616	37152	881.1	1,330.1	2.9%	3.6%
5	5/31/2003	92	200	9295	29	19.45	15.60	31648	68800	1789.4	3,119.5	5.7%	4.5%
6	8/31/2003	92	292	9203	31	30.00	20.14	31648	100448	2760.0	5,879.5	8.7%	5.9%
7	11/30/2003	91	383	9112	24	27.50	21.88	31304	131752	2502.5	8,382.0	8.0%	6.4%
8	2/28/2004	90	473	9022	9.9	16.95	20.95	30960	162712	1525.5	9,907.5	4.9%	6.1%
9	5/31/2004	93	566	8929	29	19.45	20.70	31992	194704	1808.9	11,716.3	5.7%	6.0%
10	8/31/2004	92	658	8837	31	30.00	22.00	31648	226352	2760.0	14,476.3	8.7%	6.4%
11	11/4/2004	65	723	8772	24	27.50	22.49	22360	248712	1787.5	16,263.8	8.0%	6.5%
12	11/5/2004	1	724	8771	73	48.50	22.53	344	249056	48.5	16,312.3	14.1%	6.5%
13	12/3/2004	28	752	8743	40	56.50	23.80	9632	258688	1582.0	17,894.3	16.4%	6.9%
14	2/28/2005	87	839	8656	9.9	24.95	23.92	29928	288616	2170.7	20,065.0	7.3%	7.0%
15	5/31/2005	92	931	8564	29	19.45	23.47	31648	320264	1789.4	21,854.4	5.7%	6.8%
16	8/10/2005	71	1002	8493	31	30.00	23.94	24424	344688	2130.0	23,984.4	8.7%	7.0%
17	8/11/2005	1	1003	8492	25.9	28.45	23.94	344	345032	28.5	24,012.8	8.3%	7.0%
18	9/15/2005	35	1038	8457	22.5	24.20	23.95	12040	357072	847.0	24,859.8	7.0%	7.0%
19	9/23/2005	8	1046	8449	83.3	52.90	24.17	2752	359824	423.2	25,283.0	15.4%	7.0%
20	9/29/2005	6	1052	8443	5.28	44.29	24.29	2064	361888	265.7	25,548.7	12.9%	7.1%
21	10/6/2005	7	1059	8436	119	62.14	24.54	2408	364296	435.0	25,983.7	18.1%	7.1%
22	10/28/2005	22	1081	8414	32.3	75.65	25.58	7568	371864	1664.3	27,648.0	22.0%	7.4%
23	11/18/2005	21	1102	8393	63.6	47.95	26.00	7224	379088	1007.0	28,655.0	13.9%	7.6%
24	12/29/2005	41	1143	8352	21.4	42.50	26.59	14104	393192	1742.5	30,397.5	12.4%	7.7%

Notes:

[1]EBS: Exposure Budget Slope= ng/m^3-day

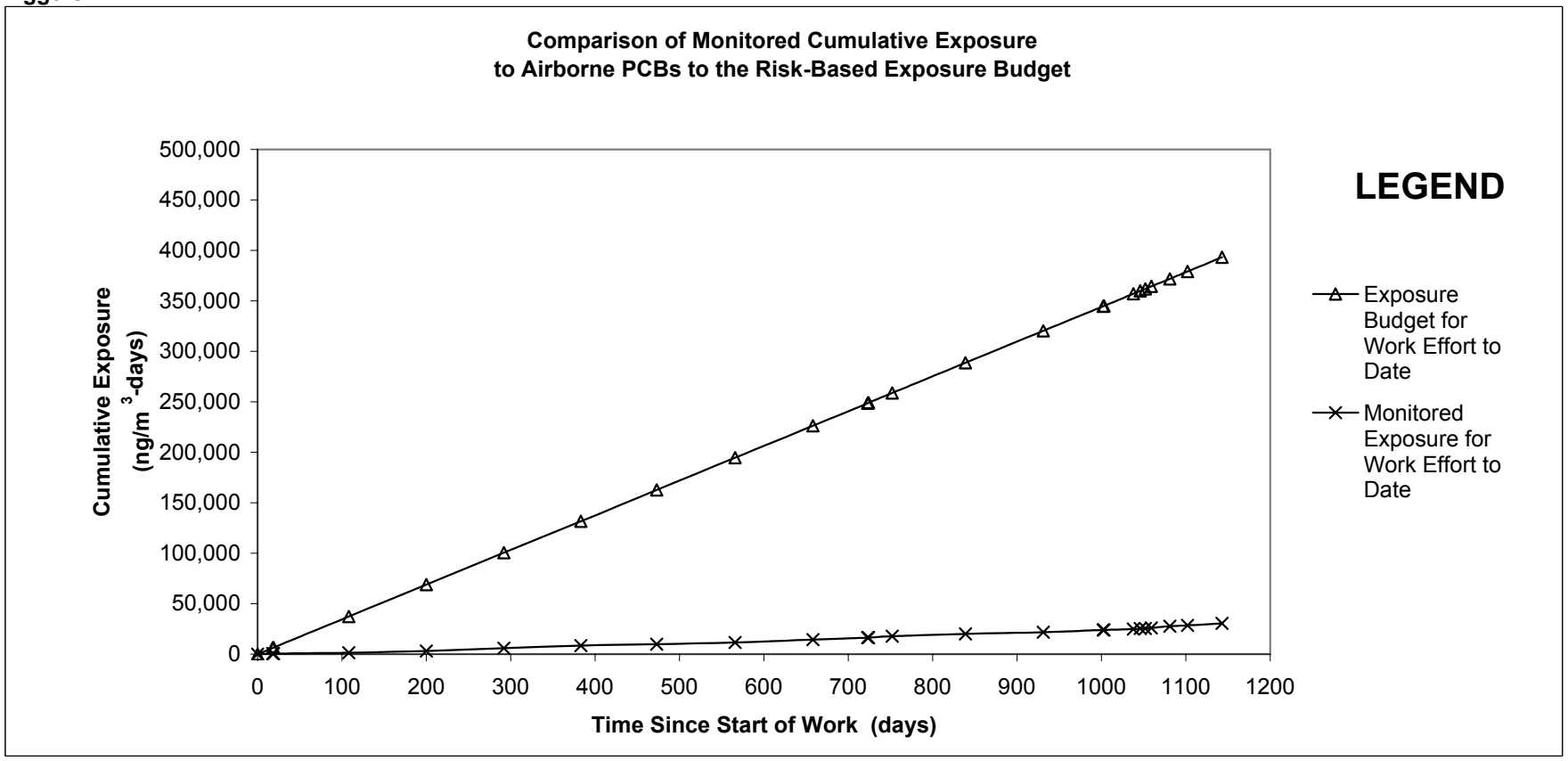
NC = Not Calculated

Shading represents actual sampling data. All other numbers represent projected PCB concentrations for that period.

Air Sampling Status Report

Sample Station :	42 NSTAR N
Collection Date:	12/29/2005
Measured PCB Concentration (ng/m^3):	21.4
Exposure Budget Expended During This Period:	12.4%
Cumulative Exposure Budget Expended to Date:	7.7%
Response Level:	No Triggers Identified
Response:	No Response Necessary

Triggers:



Air Sampling Status

New Bedford Harbor Superfund Site

Station #: 46 Coffin Ave
Exposure Budget Slope (EBS) = 344 (ng/m^3-day)

Collection Date: 12/29/2005

Construction Activity: The 2005 dredging activities were completed on November 18, 2005.

This report summarizes sample results for the above referenced location and date. The samples were collected on polyurethane foam (PUF)/XAD sample media with a glass fiber pre-filter using a BGI, PQ-1 Low-Vol sampler. The samples were analyzed using high-resolution mass spectrometry (HRGCMS) for total PCB homologue groups. Results are evaluated relative to the Exposure Budget Tracking Process described in the Development of PCB Air Action Levels for the Protection of the Public, New Bedford Superfund Site, August 2001. Cumulative data for this reporting period are included on pages 3 and 4.

Summary of This Sampling Period:

The results from the Baseline Ambient Air Sampling program were used to assign background concentrations for each air sampling location. For Station 46 Coffin Ave., the quarterly ambient air PCB concentrations were used for background concentrations. These values represent the quarterly baseline averages from Stations 21 and 25 - Cliftex, for the period of June 1999 through May 2000. These background concentrations were used for the inactive field times from 11/12/02 through 9/8/04 and for the period from 12/4/04 through 8/10/05 to close the inactive field season. No triggers were identified, therefore, no action is required.

Monitoring Station		46 Coffin Ave
Exposure Budget Slope	[ng/m^3-day]	344
Work Start Date	[mm/dd/yyyy]	11/12/2002
Projected Work End Date	[mm/dd/yyyy]	11/10/2028
Occupational Limit Used as Ceiling	[ng/m^3]	500,000
TEL for Worker in Public	[ng/m^3]	50,000
NTEL for Worker in Public	[ng/m^3]	1,789
Minimum of TEL/NTEL	[ng/m^3]	1,789
Baseline Average Concentration	[ng/m^3]	26.1

Sample Results, Calculated Budget and Exposure Values

(A) Event	(B) Sampling Date	(C) Days Since Previous Sampling Event	(D) Work Effort Elapsed Time	(E) Estimated Work Effort Remaning	(F) PCB Concentration Result	(G) Average of Most Recent Two Concentration Results	(H) Weighted Average of Concentration Results	(I) Exposure Budget for the Period	(J) Cumulative Exposure Budget for Work Effort to Date	(K) Measured Exposure During the Period	(L) Calculated Cumulative Exposure for Work Effort to Date	(M) Exposure Budget Expended During the Period	(N) Cumulative Exposure Expended for Work Effort to Date
[#]	[month/day/year]	[days]	Runnig Sum of Column (C) to Date [days]	[days]	[ng/m^3]	[ng/m^3]	Column (L)/Column (D) [ng/m^3]	EBS[1] * Column (C) [ng/m^3-days]	Sum of Column (I) [ng/m^3-days]	Column (G)* Column (C) [ng/m^3-days]	Sum of Column (K) [ng/m^3-days]	Column (K) /Column (I) [%]	Column (L) /Column (J) [%]
1	11/12/2002	0	0	9495	22	22.00	22.00	NC	NC	NC	NC	NC	NC
2	11/30/2002	18	18	9477	22	22.00	22.00	6192	6192	396.0	396.0	6.4%	6.4%
3	12/1/2002	1	19	9476	3.2	12.60	21.51	344	6536	12.6	408.6	3.7%	6.3%
4	2/28/2003	89	108	9387	3.2	3.20	6.42	30616	37152	284.8	693.4	0.9%	1.9%
5	5/31/2003	92	200	9295	35	19.10	12.25	31648	68800	1757.2	2,450.6	5.6%	3.6%
6	8/31/2003	92	292	9203	46	40.50	21.15	31648	100448	3726.0	6,176.6	11.8%	6.1%
7	11/30/2003	91	383	9112	22	34.00	24.21	31304	131752	3094.0	9,270.6	9.9%	7.0%
8	2/28/2004	90	473	9022	3.2	12.60	22.00	30960	162712	1134.0	10,404.6	3.7%	6.4%
9	5/31/2004	93	566	8929	35	19.10	21.52	31992	194704	1776.3	12,180.9	5.6%	6.3%
10	8/31/2004	92	658	8837	46	40.50	24.17	31648	226352	3726.0	15,906.9	11.8%	7.0%
11	9/8/2004	8	666	8829	22	34.00	24.29	2752	229104	272.0	16,178.9	9.9%	7.1%
12	9/9/2004	1	667	8828	145	83.50	24.38	344	229448	83.5	16,262.4	24.3%	7.1%
13	9/14/2004	5	672	8823	48	96.50	24.92	1720	231168	482.5	16,744.9	28.1%	7.2%
14	9/23/2004	9	681	8814	5	26.50	24.94	3096	234264	238.5	16,983.4	7.7%	7.2%
15	9/28/2004	5	686	8809	342	173.50	26.02	1720	235984	867.5	17,850.9	50.4%	7.6%
16	10/19/2004	21	707	8788	36	189.00	30.86	7224	243208	3969.0	21,819.9	54.9%	9.0%
17	11/5/2004	17	724	8771	80	58.00	31.50	5848	249056	986.0	22,805.9	16.9%	9.2%
18	12/3/2004	28	752	8743	15	47.50	32.10	9632	258688	1330.0	24,135.9	13.8%	9.3%
19	2/28/2005	87	839	8656	3.2	9.10	29.71	29928	288616	791.7	24,927.6	2.6%	8.6%
20	5/31/2005	92	931	8564	35	19.10	28.66	31648	320264	1757.2	26,684.8	5.6%	8.3%
21	8/10/2005	71	1002	8493	46	40.50	29.50	24424	344688	2875.5	29,560.3	11.8%	8.6%
22	8/11/2005	1	1003	8492	37.2	41.60	29.51	344	345032	41.6	29,601.9	12.1%	8.6%
23	9/15/2005	35	1038	8457	99.8	68.50	30.83	12040	357072	2397.5	31,999.4	19.9%	9.0%
24	9/23/2005	8	1046	8449	115	107.40	31.41	2752	359824	859.2	32,858.6	31.2%	9.1%
25	9/29/2005	6	1052	8443	124	119.50	31.92	2064	361888	717.0	33,575.6	34.7%	9.3%
26	10/6/2005	7	1059	8436	130	127.00	32.54	2408	364296	889.0	34,464.6	36.9%	9.5%
27	10/28/2005	22	1081	8414	2.06	66.03	33.23	7568	371864	1452.7	35,917.3	19.2%	9.7%
28	11/18/2005	21	1102	8393	0.14	1.10	32.61	7224	379088	23.1	35,940.4	0.3%	9.5%
29	12/29/2005	41	1143	8352	65.1	32.62	32.61	14104	393192	1337.4	37,277.8	9.5%	9.5%

Notes:

[1]EBS: Exposure Budget Slope= ng/m^3-day

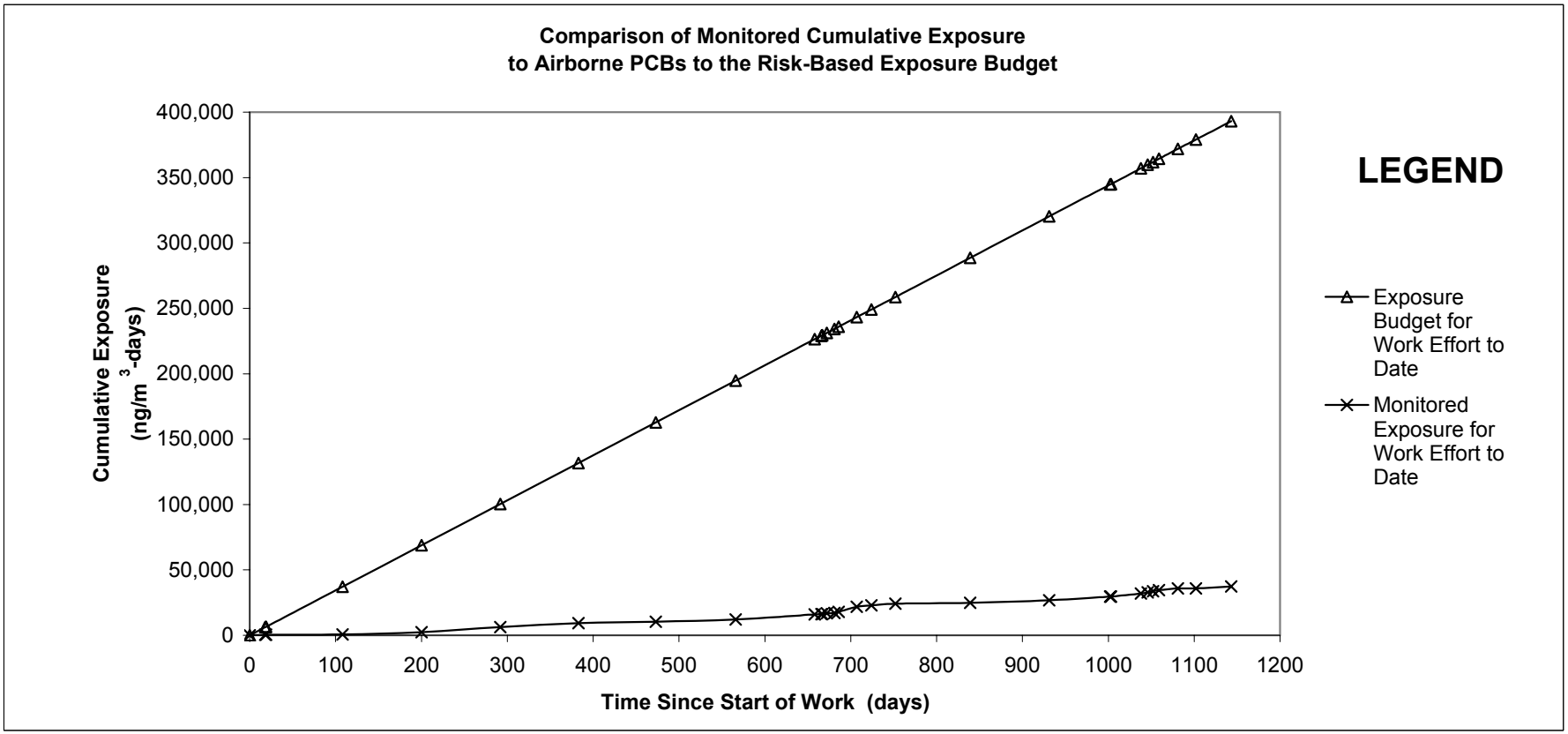
NC = Not Calculated

Shading represents actual sampling data. All other numbers represent projected PCB concentrations for that period.

Air Sampling Status Report

Sample Station : 46 Coffin Ave
Collection Date: 12/29/2005
Measured PCB Concentration (ng/m^3): 65.1
Exposure Budget Expended During This Period: 9.5%
Cumulative Exposure Budget Expended to Date: 9.5%
Response Level: No Triggers Identified
Response: No Response Necessary

Triggers:



Air Sampling Status

New Bedford Harbor Superfund Site

Station #: 48 Area C Crosswind
Exposure Budget Slope (EBS) = 344 (ng/m^3-day)

Collection Date: 11/18/2005

Construction Activity: The 2005 dredging activities were completed on November 18, 2005.

This report summarizes sample results for the above referenced location and date. The samples were collected on polyurethane foam (PUF)/XAD sample media with a glass fiber pre-filter using a BGI, PQ-1 Low-Vol sampler. The samples were analyzed using high-resolution mass spectrometry (HRGCMS) for total PCB homologue groups. Results are evaluated relative to the Exposure Budget Tracking Process described in the Development of PCB Air Action Levels for the Protection of the Public, New Bedford Superfund Site, August 2001. Cumulative data for this reporting period are included on pages 3 and 4.

Summary of This Sampling Period:

The results from the Baseline Ambient Air Sampling program were used to assign background concentrations for each air sampling location. For Station 48 Area C Crosswind, the quarterly average ambient air PCB concentrations were used for background. These values represent the quarterly baseline averages from Station 26 - Sawyer for the period of June 1999 through May 2000. These background concentrations were used for the inactive field times from 11/12/02 through 9/8/04 and for the period from 12/4/04 through 9/14/05 to close the inactive field season. No triggers were identified, therefore, no action is required.

Monitoring Station		48 Area C Crosswind
Exposure Budget Slope	[ng/m^3-day]	344
Work Start Date	[mm/dd/yyyy]	11/12/2002
Projected Work End Date	[mm/dd/yyyy]	11/10/2028
Occupational Limit Used as Ceiling	[ng/m^3]	500,000
TEL for Worker in Public	[ng/m^3]	50,000
NTEL for Worker in Public	[ng/m^3]	1,789
Minimum of TEL/NTEL	[ng/m^3]	1,789
Baseline Average Concentration	[ng/m^3]	56

Sample Results, Calculated Budget and Exposure Values

(A) Event	(B) Sampling Date	(C) Days Since Previous Sampling Event	(D) Work Effort Elapsed Time	(E) Estimated Work Effort Remaning	(F) PCB Concentration Result	(G) Average of Most Recent Two Concentration Results	(H) Weighted Average of Concentration Results	(I) Exposure Budget for the Period	(J) Cumulative Exposure Budget for Work Effort to Date	(K) Measured Exposure During the Period	(L) Calculated Cumulative Exposure for Work Effort to Date	(M) Exposure Budget Expended During the Period	(N) Cumulative Exposure Expended for Work Effort to Date
[#]	[month/day/year]	[days]	Runnig Sum of Column (C) to Date [days]	[days]	[ng/m^3]	[ng/m^3]	Column (L)/Column (D) [ng/m^3]	EBS[1] * Column (C) [ng/m^3-days]	Sum of Column (I) [ng/m^3-days]	Column (G)* Column (C) [ng/m^3-days]	Sum of Column (K) [ng/m^3-days]	Column (K) /Column (I) [%]	Column (L) /Column (J) [%]
1	11/12/2002	0	0	9495	43	43.00	43.00	NC	NC	NC	NC	NC	NC
2	11/30/2002	18	18	9477	43	43.00	43.00	6192	6192	774.0	774.0	12.5%	12.5%
3	12/1/2002	1	19	9476	89	66.00	44.21	344	6536	66.0	840.0	19.2%	12.9%
4	2/28/2003	89	108	9387	89	89.00	81.12	30616	37152	7921.0	8,761.0	25.9%	23.6%
5	5/31/2003	92	200	9295	61	75.00	78.31	31648	68800	6900.0	15,661.0	21.8%	22.8%
6	8/31/2003	92	292	9203	33	47.00	68.44	31648	100448	4324.0	19,985.0	13.7%	19.9%
7	11/30/2003	91	383	9112	43	38.00	61.21	31304	131752	3458.0	23,443.0	11.0%	17.8%
8	2/28/2004	90	473	9022	89	66.00	62.12	30960	162712	5940.0	29,383.0	19.2%	18.1%
9	5/31/2004	93	566	8929	61	75.00	64.24	31992	194704	6975.0	36,358.0	21.8%	18.7%
10	8/31/2004	92	658	8837	33	47.00	61.83	31648	226352	4324.0	40,682.0	13.7%	18.0%
11	9/8/2004	8	666	8829	43	38.00	61.54	2752	229104	304.0	40,986.0	11.0%	17.9%
12	9/9/2004	1	667	8828	37	40.00	61.51	344	229448	40.0	41,026.0	11.6%	17.9%
13	9/14/2004	5	672	8823	64	50.50	61.43	1720	231168	252.5	41,278.5	14.7%	17.9%
14	9/23/2004	9	681	8814	10	37.00	61.10	3096	234264	333.0	41,611.5	10.8%	17.8%
15	9/28/2004	5	686	8809	165	87.50	61.30	1720	235984	437.5	42,049.0	25.4%	17.8%
16	10/19/2004	21	707	8788	48	106.50	62.64	7224	243208	2236.5	44,285.5	31.0%	18.2%
17	11/30/2004	42	749	8746	43	45.50	61.68	14448	257656	1911.0	46,196.5	13.2%	17.9%
18	2/28/2005	90	839	8656	89	66.00	62.14	30960	288616	5940.0	52,136.5	19.2%	18.1%
19	5/31/2005	92	931	8564	61	75.00	63.41	31648	320264	6900.0	59,036.5	21.8%	18.4%
20	8/31/2005	92	1023	8472	33	47.00	61.94	31648	351912	4324.0	63,360.5	13.7%	18.0%
21	9/14/2005	14	1037	8458	43	38.00	61.61	4816	356728	532.0	63,892.5	11.0%	17.9%
22	9/15/2005	1	1038	8457	14.9	28.95	61.58	344	357072	29.0	63,921.5	8.4%	17.9%
23	9/23/2005	8	1046	8449	19.1	17.00	61.24	2752	359824	136.0	64,057.5	4.9%	17.8%
24	9/29/2005	6	1052	8443	17.3	18.20	60.99	2064	361888	109.2	64,166.7	5.3%	17.7%
25	10/6/2005	7	1059	8436	60.1	38.70	60.85	2408	364296	270.9	64,437.6	11.3%	17.7%
26	10/28/2005	22	1081	8414	4.61	32.36	60.27	7568	371864	711.8	65,149.4	9.4%	17.5%
27	11/18/2005	21	1102	8393	0.139	2.37	59.16	7224	379088	49.9	65,199.2	0.7%	17.2%

Notes:

[1]EBS: Exposure Budget Slope= ng/m^3-day

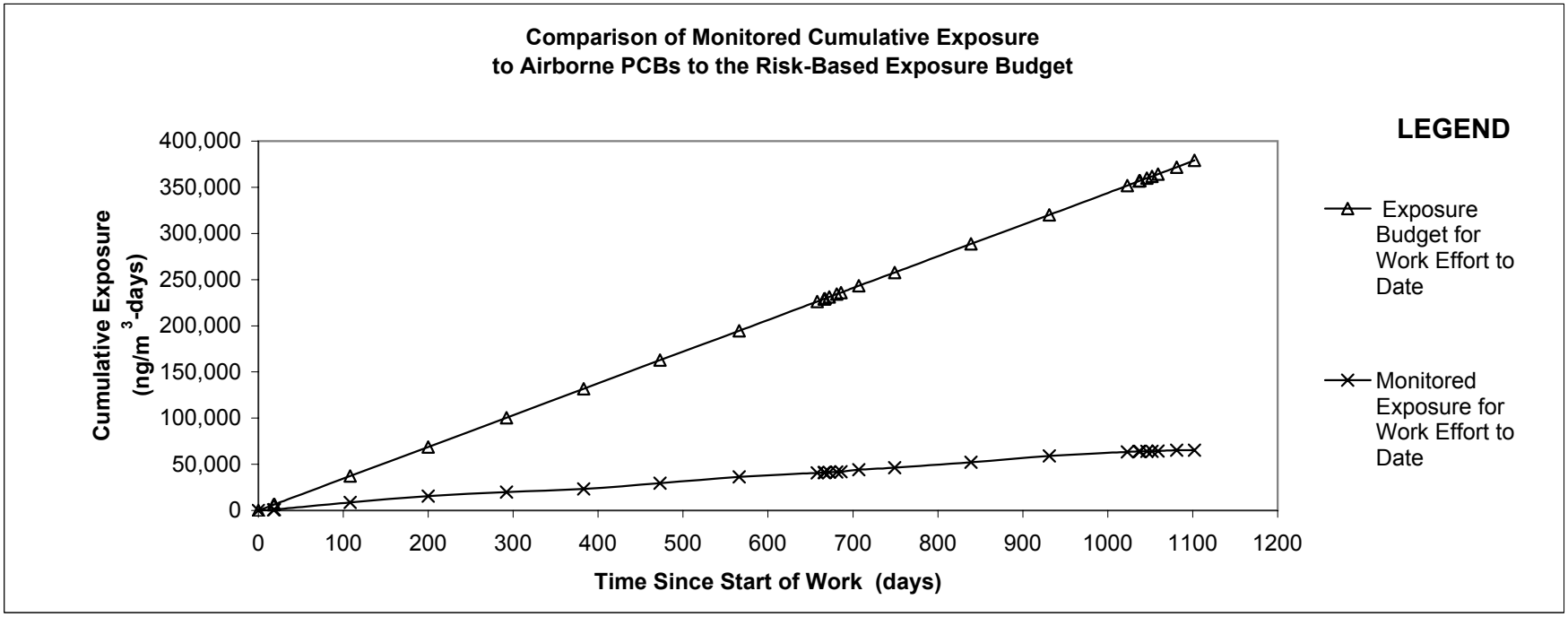
NC = Not Calculated

Shading represents actual sampling data. All other numbers represent projected PCB concentrations for that period.

Air Sampling Status Report

Sample Station :	48 Area C Crosswind
Collection Date:	11/18/2005
Measured PCB Concentration (ng/m^3):	0.139
Exposure Budget Expended During This Period:	0.7%
Cumulative Exposure Budget Expended to Date:	17.2%
Response Level:	No Triggers Identified
Response:	No Response Necessary

Triggers:



Air Sampling Status

New Bedford Harbor Superfund Site

Station #: 49 Area C Downwind
Exposure Budget Slope (EBS) = 344 (ng/m^3-day)

Collection Date: 12/29/2005

Construction Activity: The 2005 dredging activities were completed on November 18, 2005.

This report summarizes sample results for the above referenced location and date. The samples were collected on polyurethane foam (PUF)/XAD sample media with a glass fiber pre-filter using a BGI, PQ-1 Low-Vol sampler. The samples were analyzed using high-resolution mass spectrometry (HRGCMS) for total PCB homologue groups. Results are evaluated relative to the Exposure Budget Tracking Process described in the Development of PCB Air Action Levels for the Protection of the Public, New Bedford Superfund Site, August 2001. Cumulative data for this reporting period are included on pages 3 and 4.

Summary of This Sampling Period:

The results from the Baseline Ambient Air Sampling program were used to assign background concentrations for each air sampling location. For Station 49 Area C Upwind, the quarterly average ambient air PCB concentrations were used for background. For the December 2005 sampling event, the results from Station 47 were used to represent Area D downgradient air PCB concentrations. These represent the average quarterly baseline averages from Station 26 - Sawyer, for the period of June 1999 through May 2000. These background concentrations were used for the inactive field times from 11/12/02 through 9/8/04 and for the period from 12/4/04 through 8/10/05 to close the inactive field season. No triggers were identified, therefore, no action is required.

Monitoring Station		49 Area C Downwind
Exposure Budget Slope	[ng/m^3-day]	344
Work Start Date	[mm/dd/yyyy]	11/12/2002
Projected Work End Date	[mm/dd/yyyy]	11/10/2028
Occupational Limit Used as Ceiling	[ng/m^3]	500,000
TEL for Worker in Public	[ng/m^3]	50,000
NTEL for Worker in Public	[ng/m^3]	1,789
Minimum of TEL/NTEL	[ng/m^3]	1,789
Baseline Average Concentration	[ng/m^3]	56

Sample Results, Calculated Budget and Exposure Values

(A) Event	(B) Sampling Date	(C) Days Since Previous Sampling Event	(D) Work Effort Elapsed Time	(E) Estimated Work Effort Remaning	(F) PCB Concentration Result	(G) Average of Most Recent Two Concentration Results	(H) Weighted Average of Concentration Results	(I) Exposure Budget for the Period	(J) Cumulative Exposure Budget for Work Effort to Date	(K) Measured Exposure During the Period	(L) Calculated Cumulative Exposure for Work Effort to Date	(M) Exposure Budget Expended During the Period	(N) Cumulative Exposure Expended for Work Effort to Date
[#]	[month/day/year]	[days]	Runnig Sum of Column (C) to Date [days]	[days]	[ng/m^3]	[ng/m^3]	Column (L)/Column (D) [ng/m^3]	EBS[1] * Column (C) [ng/m^3-days]	Sum of Column (I) [ng/m^3-days]	Column (G)* Column (C) [ng/m^3-days]	Sum of Column (K) [ng/m^3-days]	Column (K) /Column (I) [%]	Column (L) /Column (J) [%]
1	11/12/2002	0	0	9495	43	43.00	43.00	NC	NC	NC	NC	NC	NC
2	11/30/2002	18	18	9477	43	43.00	43.00	6192	6192	774.0	774.0	12.5%	12.5%
3	12/1/2002	1	19	9476	89	66.00	44.21	344	6536	66.0	840.0	19.2%	12.9%
4	2/28/2003	89	108	9387	89	89.00	81.12	30616	37152	7921.0	8,761.0	25.9%	23.6%
5	5/31/2003	92	200	9295	61	75.00	78.31	31648	68800	6900.0	15,661.0	21.8%	22.8%
6	8/31/2003	92	292	9203	33	47.00	68.44	31648	100448	4324.0	19,985.0	13.7%	19.9%
7	11/30/2003	91	383	9112	43	38.00	61.21	31304	131752	3458.0	23,443.0	11.0%	17.8%
8	2/28/2004	90	473	9022	89	66.00	62.12	30960	162712	5940.0	29,383.0	19.2%	18.1%
9	5/31/2004	93	566	8929	61	75.00	64.24	31992	194704	6975.0	36,358.0	21.8%	18.7%
10	8/31/2004	92	658	8837	33	47.00	61.83	31648	226352	4324.0	40,682.0	13.7%	18.0%
11	9/8/2004	8	666	8829	43	38.00	61.54	2752	229104	304.0	40,986.0	11.0%	17.9%
12	9/9/2004	1	667	8828	56	49.50	61.52	344	229448	49.5	41,035.5	14.4%	17.9%
13	9/14/2004	5	672	8823	86	71.00	61.59	1720	231168	355.0	41,390.5	20.6%	17.9%
14	9/23/2004	9	681	8814	17	51.50	61.46	3096	234264	463.5	41,854.0	15.0%	17.9%
15	9/28/2004	5	686	8809	207	112.00	61.83	1720	235984	560.0	42,414.0	32.6%	18.0%
16	10/19/2004	21	707	8788	66	136.50	64.05	7224	243208	2866.5	45,280.5	39.7%	18.6%
17	11/5/2004	17	724	8771	28	47.00	63.65	5848	249056	799.0	46,079.5	13.7%	18.5%
18	12/3/2004	28	752	8743	26	27.00	62.28	9632	258688	756.0	46,835.5	7.8%	18.1%
19	2/28/2005	87	839	8656	89	57.50	61.79	29928	288616	5002.5	51,838.0	16.7%	18.0%
20	5/31/2005	92	931	8564	61	75.00	63.09	31648	320264	6900.0	58,738.0	21.8%	18.3%
21	8/10/2005	71	1002	8493	33	47.00	61.95	24424	344688	3337.0	62,075.0	13.7%	18.0%
22	8/11/2005	1	1003	8492	29.3	31.15	61.92	344	345032	31.2	62,106.2	9.1%	18.0%
23	9/15/2005	35	1038	8457	83.6	56.45	61.74	12040	357072	1975.8	64,081.9	16.4%	17.9%
24	9/23/2005	8	1046	8449	97	90.30	61.95	2752	359824	722.4	64,804.3	26.3%	18.0%
25	9/29/2005	6	1052	8443	44.2	70.60	62.00	2064	361888	423.6	65,227.9	20.5%	18.0%
26	10/6/2005	7	1059	8436	114	79.10	62.12	2408	364296	553.7	65,781.6	23.0%	18.1%
27	10/28/2005	22	1081	8414	12.3	63.15	62.14	7568	371864	1389.3	67,170.9	18.4%	18.1%
28	11/18/2005	21	1102	8393	3.71	8.01	61.11	7224	379088	168.1	67,339.0	2.3%	17.8%
29	12/29/2005	41	1143	8352	7.42	5.57	59.11	14104	393192	228.2	67,567.2	1.6%	17.2%

Notes:

[1]EBS: Exposure Budget Slope= ng/m^3-day

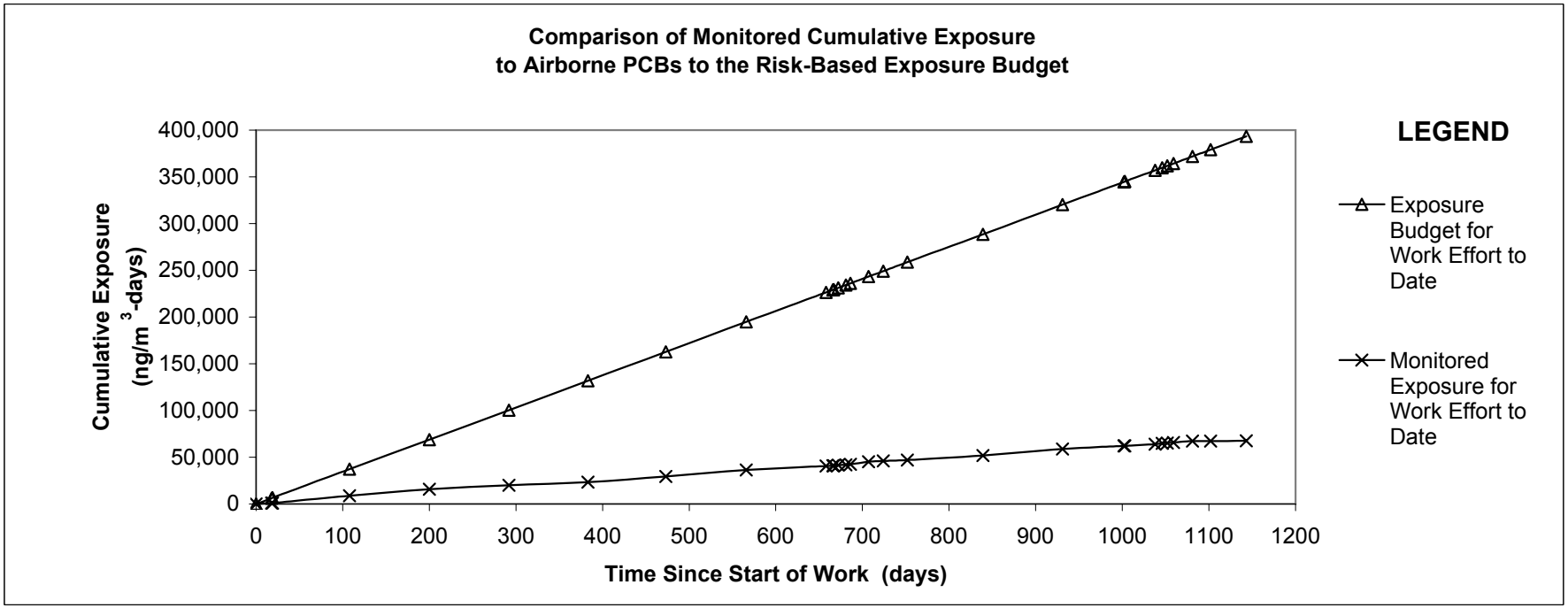
NC = Not Calculated

Shading represents actual sampling data. All other numbers represent projected PCB concentrations for that period.

Air Sampling Status Report

Sample Station :	49 Area C Downwind
Collection Date:	12/29/2005
Measured PCB Concentration (ng/m^3):	7.42
Exposure Budget Expended During This Period:	1.6%
Cumulative Exposure Budget Expended to Date:	17.2%
Response Level:	No Triggers Identified
Response:	No Response Necessary

Triggers:



Air Sampling Status

New Bedford Harbor Superfund Site

Station #: 50 Area D Downwind

Exposure Budget Slope (EBS) = 344 (ng/m^3-day)

Collection Date: 12/29/2005

Construction Activity: The October 28, 2005 sample was broken during analysis. The 2005 dredging activities were completed on November 18, 200

This report summarizes sample results for the above referenced location and date. The samples were collected on polyurethane foam (PUF)/XAD sample media with a glass fiber pre-filter using a BGI, PQ-1 Low-Vol sampler. The samples were analyzed using high-resolution mass spectrometry (HRGCMS) for total PCB homologue groups. Results are evaluated relative to the Exposure Budget Tracking Process described in the Development of PCB Air Action Levels for the Protection of the Public, New Bedford Superfund Site, August 2001. Cumulative data for this reporting period are included on pages 3 and 4.

Summary of This Sampling Period:

The results from the Baseline Ambient Air Sampling program were used to assign background concentrations for each air sampling location. However, for the August 2005 background sampling event, the results from Station 52 were used to represent Area D downgradient air PCB concentrations. For the December 2005 post-dredging sampling event, the results from Station 51 were used to represent Area D downgradient air PCB concentrations. For Station 50 Area D, the average quarterly air PCB concentrations were used as background concentrations, which represent the average quarterly from Station 21 - New Bedford Welding, for the period of June 1999 through May 2000. These background concentrations were used for the inactive field times from 11/12/02 through 9/8/04 and for the period from 12/4/04 through 8/10/05 to close the inactive field season. No triggers were identified, therefore, potential necessary response is not necessary.

Monitoring Station		50 Area D Downwind
Exposure Budget Slope	[ng/m^3-day]	344
Work Start Date	[mm/dd/yyyy]	11/12/2002
Projected Work End Date	[mm/dd/yyyy]	11/10/2028
Occupational Limit Used as Ceiling	[ng/m^3]	500,000
TEL for Worker in Public	[ng/m^3]	50,000
NTEL for Worker in Public	[ng/m^3]	1,789
Minimum of TEL/NTEL	[ng/m^3]	1,789
Baseline Average Concentration	[ng/m^3]	16.7

Sample Results, Calculated Budget and Exposure Values

(A) Event	(B) Sampling Date	(C) Days Since Previous Sampling Event	(D) Work Effort Elapsed Time	(E) Estimated Work Effort Remaning	(F) PCB Concentration Result	(G) Average of Most Recent Two Concentration Results	(H) Weighted Average of Concentration Results	(I) Exposure Budget for the Period	(J) Cumulative Exposure Budget for Work Effort to Date	(K) Measured Exposure During the Period	(L) Calculated Cumulative Exposure for Work Effort to Date	(M) Exposure Budget Expended During the Period	(N) Cumulative Exposure Expended for Work Effort to Date
[#]	[month/day/year]	[days]	Runnig Sum of Column (C) to Date [days]	[days]	[ng/m^3]	[ng/m^3]	Column (L)/Column (D) [ng/m^3]	EBS[1] * Column (C) [ng/m^3-days]	Sum of Column (I) [ng/m^3-days]	Column (G)* Column (C) [ng/m^3-days]	Sum of Column (K) [ng/m^3-days]	Column (K) /Column (I) [%]	Column (L) /Column (J) [%]
1	11/12/2002	0	0	9495	5.9	5.90	5.90	NC	NC	NC	NC	NC	NC
2	11/30/2002	18	18	9477	5.9	5.90	5.90	6192	6192	106.2	106.2	1.7%	1.7%
3	12/1/2002	1	19	9476	3.4	4.65	5.83	344	6536	4.7	110.9	1.4%	1.7%
4	2/28/2003	89	108	9387	3.4	3.40	3.83	30616	37152	302.6	413.5	1.0%	1.1%
5	5/31/2003	92	200	9295	6.8	5.10	4.41	31648	68800	469.2	882.7	1.5%	1.3%
6	8/31/2003	92	292	9203	12	9.40	5.98	31648	100448	864.8	1,747.5	2.7%	1.7%
7	11/30/2003	91	383	9112	5.9	8.95	6.69	31304	131752	814.5	2,561.9	2.6%	1.9%
8	2/28/2004	90	473	9022	3.4	4.65	6.30	30960	162712	418.5	2,980.4	1.4%	1.8%
9	5/31/2004	93	566	8929	6.8	5.10	6.10	31992	194704	474.3	3,454.7	1.5%	1.8%
10	8/31/2004	92	658	8837	12	9.40	6.56	31648	226352	864.8	4,319.5	2.7%	1.9%
11	9/8/2004	8	666	8829	5.9	8.95	6.59	2752	229104	71.6	4,391.1	2.6%	1.9%
12	9/9/2004	1	667	8828	20	12.95	6.60	344	229448	13.0	4,404.1	3.8%	1.9%
13	9/14/2004	5	672	8823	38	29.00	6.77	1720	231168	145.0	4,549.1	8.4%	2.0%
14	9/23/2004	9	681	8814	6	22.00	6.97	3096	234264	198.0	4,747.1	6.4%	2.0%
15	9/28/2004	5	686	8809	80	43.00	7.23	1720	235984	215.0	4,962.1	12.5%	2.1%
16	10/19/2004	21	707	8788	17	48.50	8.46	7224	243208	1018.5	5,980.6	14.1%	2.5%
17	12/3/2004	45	752	8743	22	19.50	9.12	15480	258688	877.5	6,858.1	5.7%	2.7%
18	2/28/2005	87	839	8656	3.4	12.70	9.49	29928	288616	1104.9	7,963.0	3.7%	2.8%
19	5/31/2005	92	931	8564	6.8	5.10	9.06	31648	320264	469.2	8,432.2	1.5%	2.6%
20	8/10/2005	71	1002	8493	12	9.40	9.08	24424	344688	667.4	9,099.6	2.7%	2.6%
21	8/11/2005	1	1003	8492	21.3	16.65	9.09	344	345032	16.7	9,116.2	4.8%	2.6%
22	9/15/2005	35	1038	8457	0.52	10.91	9.15	12040	357072	381.9	9,498.1	3.2%	2.7%
23	9/23/2005	8	1046	8449	0.26	0.39	9.08	2752	359824	3.1	9,501.2	0.1%	2.6%
24	9/29/2005	6	1052	8443	24.2	12.23	9.10	2064	361888	73.4	9,574.6	3.6%	2.6%
25	10/6/2005	7	1059	8436	81.7	52.95	9.39	2408	364296	370.7	9,945.2	15.4%	2.7%
26	10/28/2005	22	1081	8414	0.01	40.86	10.03	7568	371864	898.8	10,844.0	11.9%	2.9%
27	12/29/2005	62	1143	8352	2.18	1.10	9.55	21328	393192	67.9	10,911.9	0.3%	2.8%

Notes:

[1]EBS: Exposure Budget Slope= ng/m^3-day

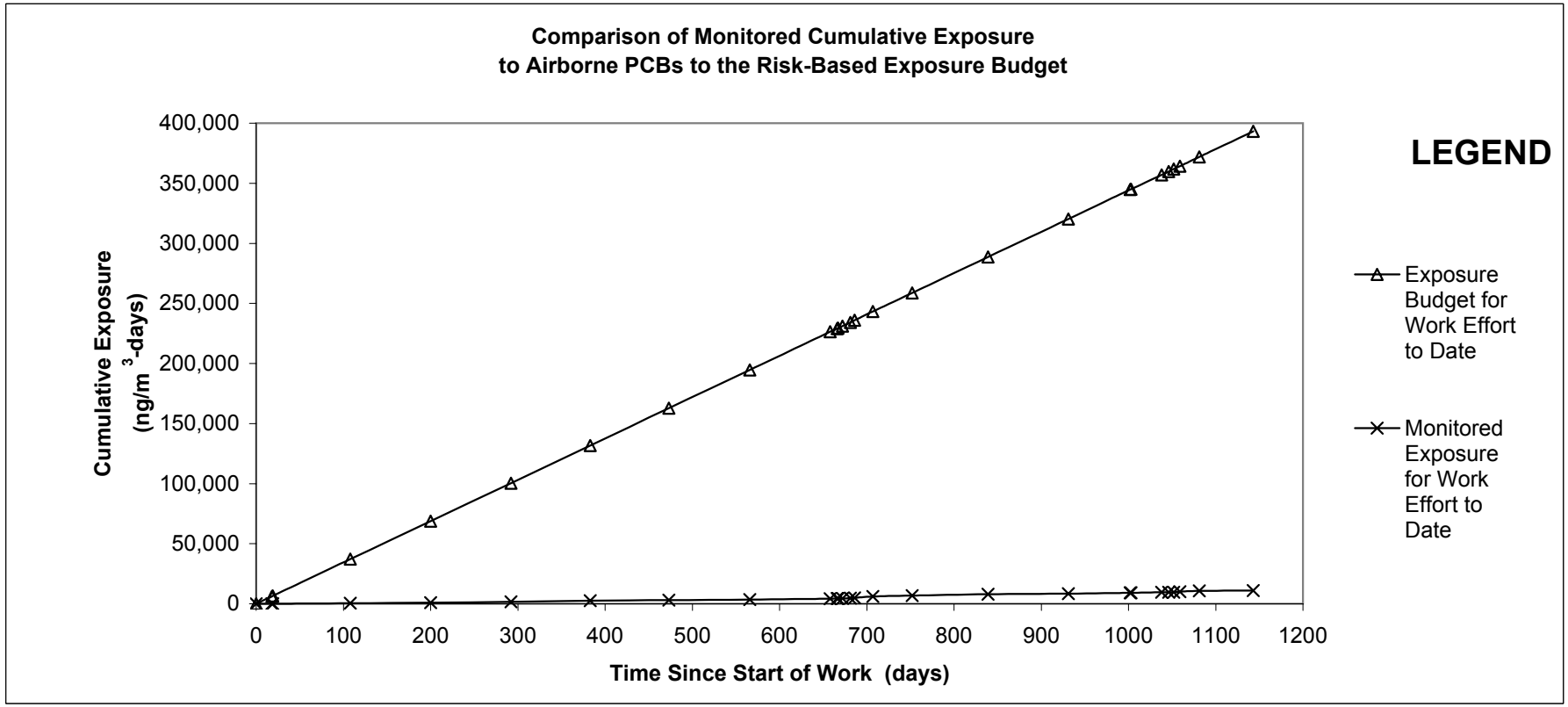
NC = Not Calculated

Shading represents actual sampling data. All other numbers represent projected PCB concentrations for that period.

Air Sampling Status Report

Sample Station :	50 Area D Downwind
Collection Date:	12/29/2005
Measured PCB Concentration (ng/m^3):	2.18
Exposure Budget Expended During This Period:	0.3%
Cumulative Exposure Budget Expended to Date:	2.8%
Response Level:	No Triggers Identified
Response:	No Response Necessary

Triggers:



Air Sampling Status

New Bedford Harbor Superfund Site

Station #: 55 Aerovox West
Exposure Budget Slope (EBS) = 202 (ng/m^3-day)

Collection Date: 12/29/2005

Construction Activity: The 2005 dredging activities were completed on November 18, 2005.

This report summarizes sample results for the above referenced location and date. The samples were collected on polyurethane foam (PUF)/XAD sample media with a glass fiber pre-filter using a BGI, PQ-1 Low-Vol sampler. The samples were analyzed using high-resolution mass spectrometry (HRGCMS) for total PCB homologue groups. Results are evaluated relative to the Exposure Budget Tracking Process described in the Development of PCB Air Action Levels for the Protection of the Public, New Bedford Superfund Site, August 2001. Cumulative data for this reporting period are included on pages 3 and 4.

Summary of This Sampling Period:

This is a new sample location that was first sampled on December 3, 2004. Due to elevated concentrations on the East side of the facility, this location was selected to demonstrate what a local resident receptor (child receptor) might be seeing during remedial work. The results from the Baseline Ambient Air Sampling program were used to assign background concentrations for each air sampling location. For Station 55 Aerovox West, the maximum baseline result of 5.2 ng/m3 was used, which represents the maximum baseline result from Station 40 - Wood Street (Titleist), during the pre-construction sampling round on 11/18/02. Since there were no background concentrations measured at this location, the maximum concentration was used. These background concentrations were used for the inactive field times from 11/12/02 through 9/8/04 and for the period from 12/4/04 through 8/10/05 to close the inactive field season. No triggers were identified, therefore, no action is required.

Monitoring Station		55 Aerovox West
Exposure Budget Slope	[ng/m^3-day]	202
Work Start Date	[mm/dd/yyyy]	11/12/2002
Projected Work End Date	[mm/dd/yyyy]	11/10/2028
Occupational Limit Used as Ceiling	[ng/m^3]	500,000
TEL for Worker in Public	[ng/m^3]	50,000
NTEL for Worker in Public	[ng/m^3]	1,789
Minimum of TEL/NTEL	[ng/m^3]	1,789
Baseline Average Concentration	[ng/m^3]	5.2

Sample Results, Calculated Budget and Exposure Values

(A) Event	(B) Sampling Date	(C) Days Since Previous Sampling Event	(D) Work Effort Elapsed Time	(E) Estimated Work Effort Remaning	(F) PCB Concentration Result	(G) Average of Most Recent Two Concentration Results	(H) Weighted Average of Concentration Results	(I) Exposure Budget for the Period	(J) Cumulative Exposure Budget for Work Effort to Date	(K) Measured Exposure During the Period	(L) Calculated Cumulative Exposure for Work Effort to Date	(M) Exposure Budget Expended During the Period	(N) Cumulative Exposure Expended for Work Effort to Date
[#]	[month/day/year]	[days]	Runnig Sum of Column (C) to Date [days]	[days]	[ng/m^3]	[ng/m^3]	Column (L)/Column (D) [ng/m^3]	EBS[1] * Column (C) [ng/m^3-days]	Sum of Column (I) [ng/m^3-days]	Column (G)* Column (C) [ng/m^3-days]	Sum of Column (K) [ng/m^3-days]	Column (K) /Column (I) [%]	Column (L) /Column (J) [%]
1	11/12/2002	0	0	9495	5	5.00	5.00	NC	NC	NC	NC	NC	NC
2	11/4/2004	723	723	8772	5	5.00	5.00	146046	146046	3615.0	3,615.0	2.5%	2.5%
3	11/5/2004	1	724	8771	28	16.50	5.02	202	146248	16.5	3,631.5	8.2%	2.5%
4	12/3/2004	28	752	8743	9	18.50	5.52	5656	151904	518.0	4,149.5	9.2%	2.7%
5	8/10/2005	250	1002	8493	5	7.00	5.89	50500	202404	1750.0	5,899.5	3.5%	2.9%
6	8/11/2005	1	1003	8492	42.1	23.55	5.91	202	202606	23.6	5,923.1	11.7%	2.9%
7	9/15/2005	35	1038	8457	37.6	39.85	7.05	7070	209676	1394.8	7,317.8	19.7%	3.5%
8	9/23/2005	8	1046	8449	2.64	20.12	7.15	1616	211292	161.0	7,478.8	10.0%	3.5%
9	9/29/2005	6	1052	8443	87	44.82	7.36	1212	212504	268.9	7,747.7	22.2%	3.6%
10	10/6/2005	7	1059	8436	222	154.50	8.34	1414	213918	1081.5	8,829.2	76.5%	4.1%
11	10/28/2005	22	1081	8414	3.97	112.99	10.47	4444	218362	2485.7	11,314.9	55.9%	5.2%
12	11/18/2005	21	1102	8393	0.12	2.05	10.31	4242	222604	42.9	11,357.8	1.0%	5.1%
13	12/29/2005	41	1143	8352	10.8	5.46	10.13	8282	230886	223.9	11,581.7	2.7%	5.0%

Notes:

[1]EBS: Exposure Budget Slope= ng/m^3-day

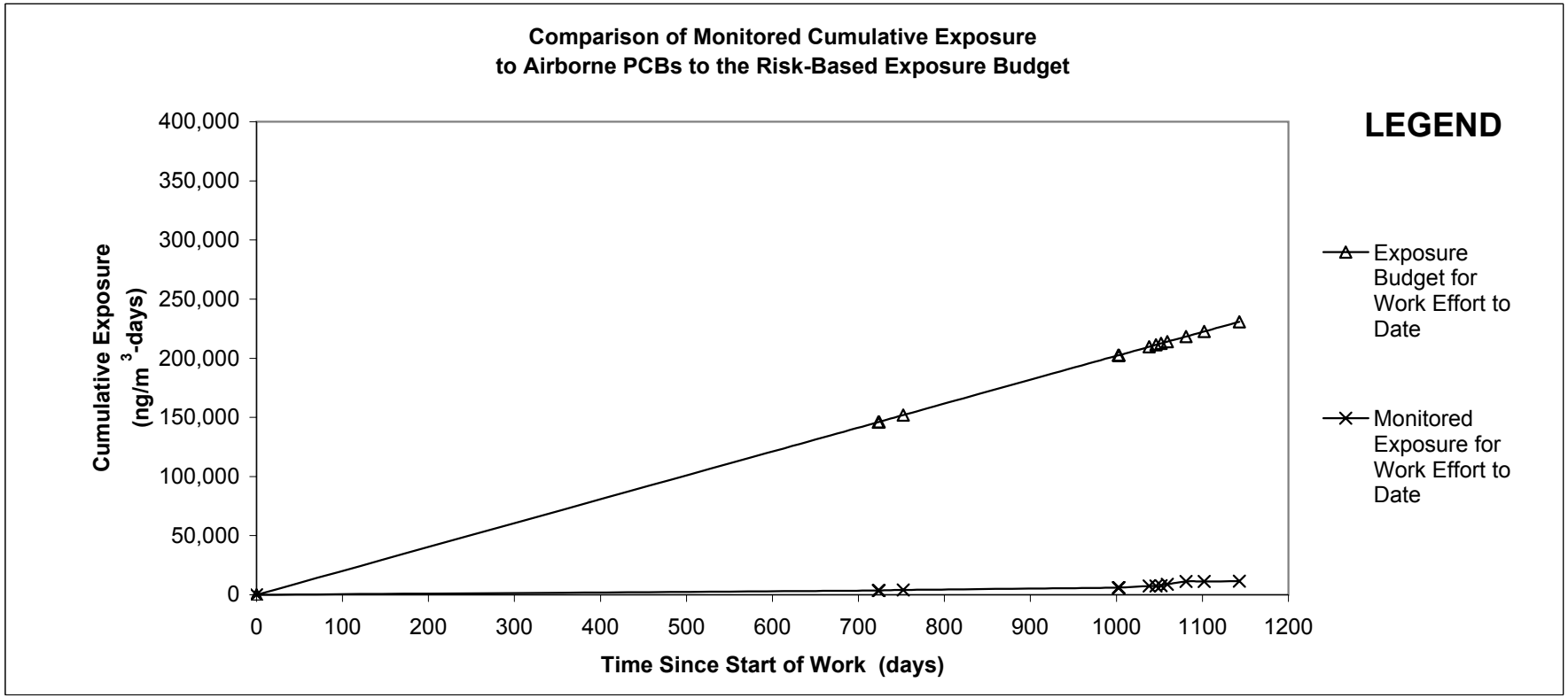
NC = Not Calculated

Shading represents actual data. All other numbers represent projected PCB concentrations for that period.

Air Sampling Status Report

Sample Station :	55 Aerovox West
Collection Date:	12/29/2005
Measured PCB Concentration (ng/m^3):	10.8
Exposure Budget Expended During This Period:	2.7%
Cumulative Exposure Budget Expended to Date:	5.0%
Response Level:	No Triggers Identified
Response:	No Response Necessary

Triggers:



Air Sampling Status

New Bedford Harbor Superfund Site

Station #: 56 Achushnet Park
Exposure Budget Slope (EBS) = 202 (ng/m^3-day)

Collection Date: 12/29/2005

Construction Activity: The 2005 dredging activities were completed on November 18, 2005.

This report summarizes sample results for the above referenced location and date. The samples were collected on polyurethane foam (PUF)/XAD sample media with a glass fiber pre-filter using a BGI, PQ-1 Low-Vol sampler. The samples were analyzed using high-resolution mass spectrometry (HRGCMS) for total PCB homologue groups. Results are evaluated relative to the Exposure Budget Tracking Process described in the Development of PCB Air Action Levels for the Protection of the Public, New Bedford Superfund Site, August 2001. Cumulative data for this reporting period are included on pages 3 and 4.

Summary of This Sampling Period:

This is a new sample location that was first sampled on December 3, 2004. Due to elevated concentrations on the East side of the facility, this location was selected to demonstrate what a local resident receptor (child receptor) might be seeing during remedial work. The results from the Baseline Ambient Air Sampling program were used to assign background concentrations for each air sampling location. For Station 56 Acushnet Park, the maximum baseline result of 5.2 ng/m3 was used, which represents the maximum result from Station 40 - Wood Street (Titleist), during the NWS pre-construction sampling round on 11/18/05. Since there were no background concentrations measured at this location, the maximum concentration was used. These background concentrations were used for the inactive field times from 11/12/02 through 9/8/04 and for the period from 12/4/04 through 8/10/05 to close the inactive field season. No triggers were identified, therefore, no action is required.

Monitoring Station		56 Achushnet Park
Exposure Budget Slope	[ng/m^3-day]	202
Work Start Date	[mm/dd/yyyy]	11/12/2002
Projected Work End Date	[mm/dd/yyyy]	11/10/2028
Occupational Limit Used as Ceiling	[ng/m^3]	500,000
TEL for Worker in Public	[ng/m^3]	50,000
NTEL for Worker in Public	[ng/m^3]	1,789
Minimum of TEL/NTEL	[ng/m^3]	1,789
Baseline Average Concentration	[ng/m^3]	5.2

Sample Results, Calculated Budget and Exposure Values

(A) Event	(B) Sampling Date	(C) Days Since Previous Sampling Event	(D) Work Effort Elapsed Time	(E) Estimated Work Effort Remaning	(F) PCB Concentration Result	(G) Average of Most Recent Two Concentration Results	(H) Weighted Average of Concentration Results	(I) Exposure Budget for the Period	(J) Cumulative Exposure Budget for Work Effort to Date	(K) Measured Exposure During the Period	(L) Calculated Cumulative Exposure for Work Effort to Date	(M) Exposure Budget Expended During the Period	(N) Cumulative Exposure Expended for Work Effort to Date
[#]	[month/day/year]	[days]	Runnig Sum of Column (C) to Date [days]	[days]	[ng/m^3]	[ng/m^3]	Column (L)/Column (D) [ng/m^3]	EBS[1] * Column (C) [ng/m^3-days]	Sum of Column (I) [ng/m^3-days]	Column (G)* Column (C) [ng/m^3-days]	Sum of Column (K) [ng/m^3-days]	Column (K) /Column (I) [%]	Column (L) /Column (J) [%]
1	11/12/2002	0	0	9495	5.2	5.20	5.20	NC	NC	NC	NC	NC	NC
2	11/4/2004	723	723	8772	5.2	5.20	5.20	146046	146046	3759.6	3,759.6	2.6%	2.6%
3	11/5/2004	1	724	8771	39	22.10	5.22	202	146248	22.1	3,781.7	10.9%	2.6%
4	12/3/2004	28	752	8743	2	20.50	5.79	5656	151904	574.0	4,355.7	10.1%	2.9%
5	8/10/2005	250	1002	8493	5.2	3.60	5.25	50500	202404	900.0	5,255.7	1.8%	2.6%
6	8/11/2005	1	1003	8492	49.9	27.55	5.27	202	202606	27.6	5,283.3	13.6%	2.6%
7	9/15/2005	35	1038	8457	102	75.95	7.65	7070	209676	2658.3	7,941.5	37.6%	3.8%
8	9/23/2005	8	1046	8449	23.9	62.95	8.07	1616	211292	503.6	8,445.1	31.2%	4.0%
9	9/29/2005	6	1052	8443	77.9	50.90	8.32	1212	212504	305.4	8,750.5	25.2%	4.1%
10	10/6/2005	7	1059	8436	180	128.95	9.12	1414	213918	902.7	9,653.2	63.8%	4.5%
11	10/28/2005	22	1081	8414	2.73	91.37	10.79	4444	218362	2010.0	11,663.2	45.2%	5.3%
12	11/18/2005	21	1102	8393	3.76	3.25	10.65	4242	222604	68.1	11,731.3	1.6%	5.3%
13	12/29/2005	41	1143	8352	13.5	8.63	10.57	8282	230886	353.8	12,085.2	4.3%	5.2%

Notes:

[1]EBS: Exposure Budget Slope= ng/m^3-day

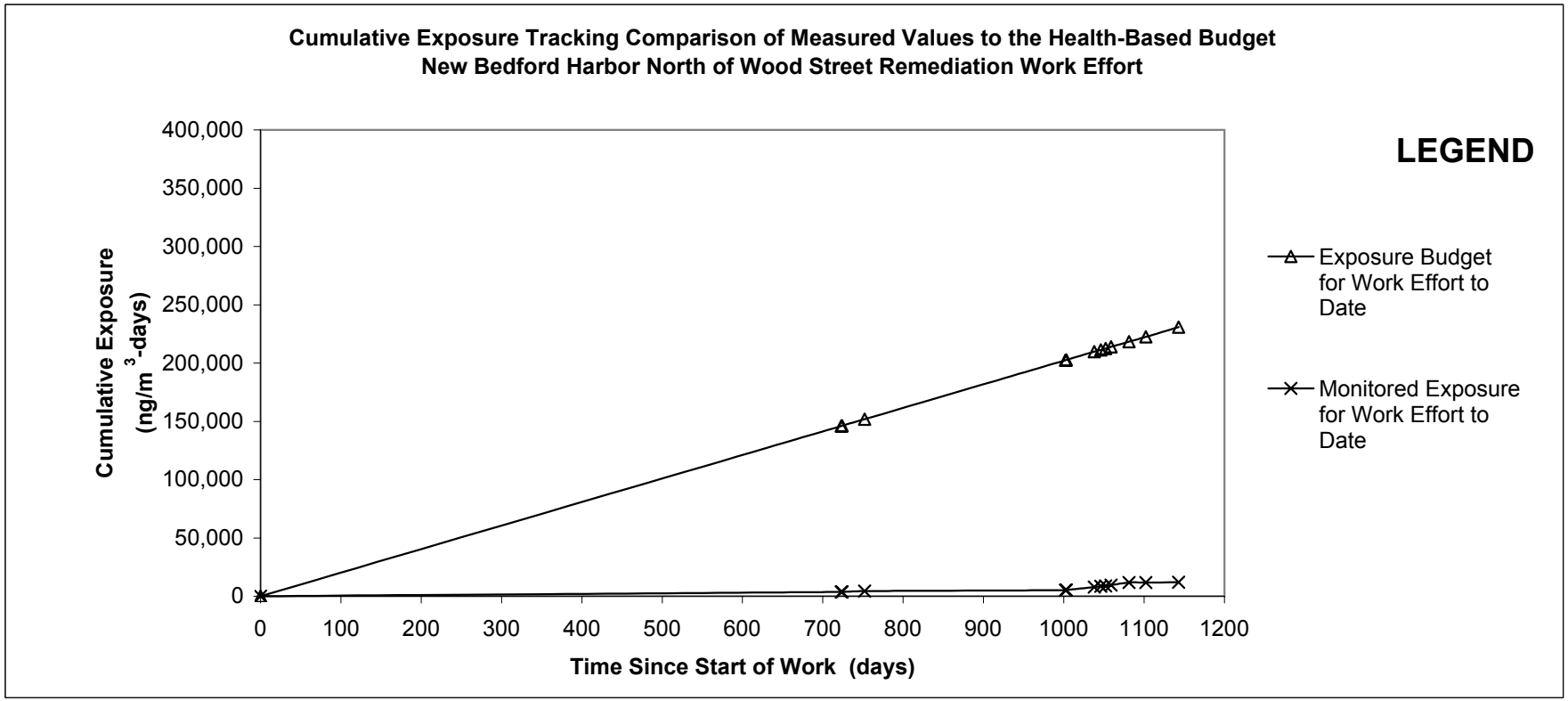
NC = Not Calculated

Shading represents actual sampling data. All other numbers represent projected PCB concentrations for that period.

Air Sampling Status Report

Sample Station :	56 Achushnet Park
Collection Date:	12/29/2005
Measured PCB Concentration (ng/m^3):	13.5
Exposure Budget Expended During This Period:	4.3%
Cumulative Exposure Budget Expended to Date:	5.2%
Response Level:	No Triggers Identified
Response:	No Response Necessary

Triggers:

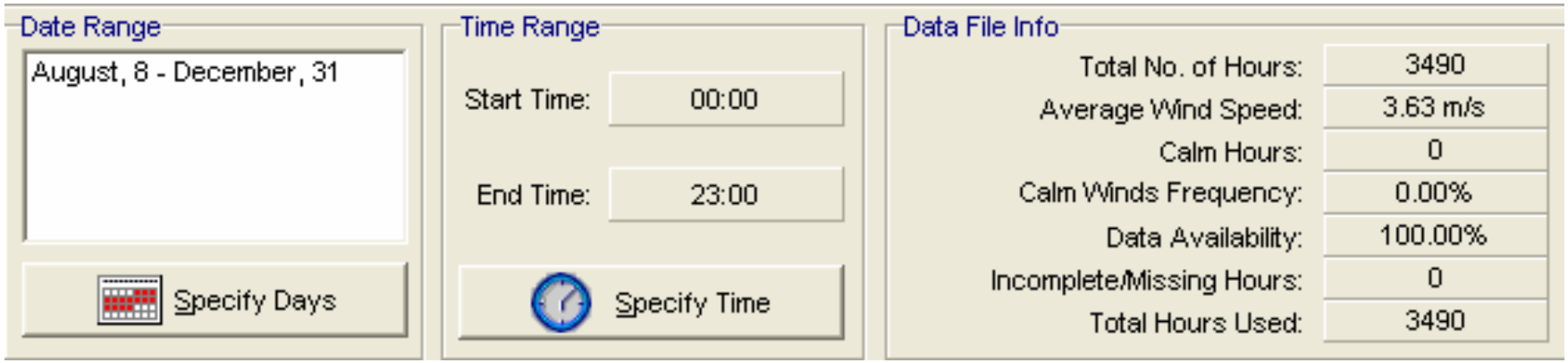


2005 New Bedford Harbor On-Site

Climatic Data Survey

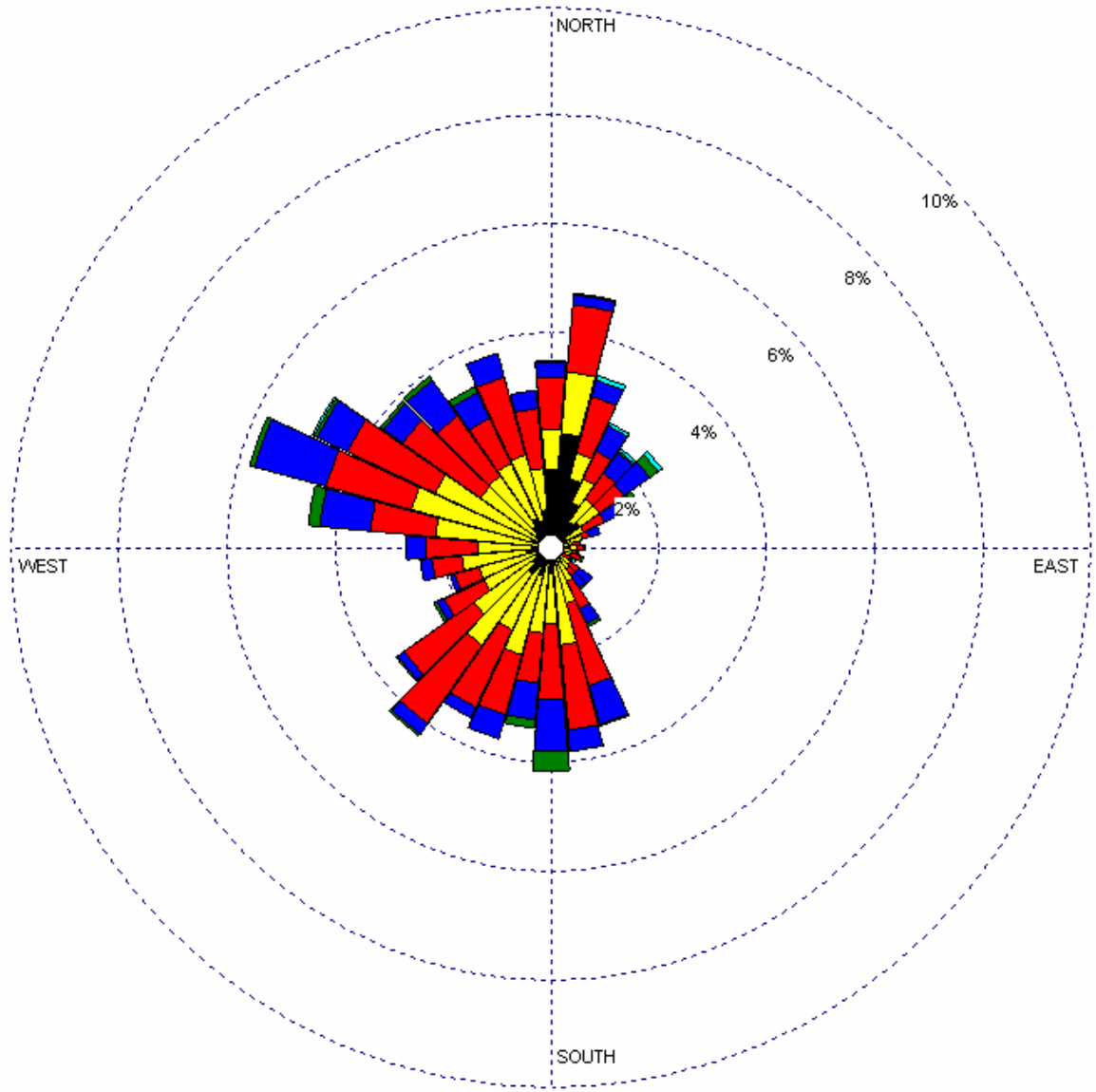
(August 8 – December 31, 2005, Hourly Data)

2005 New Bedford Harbor On-Site Climatic Data Summary
(August 8 – December 31, 2005 Hourly Data)



1 m/s (meter per second) = 2.237 mile per hour

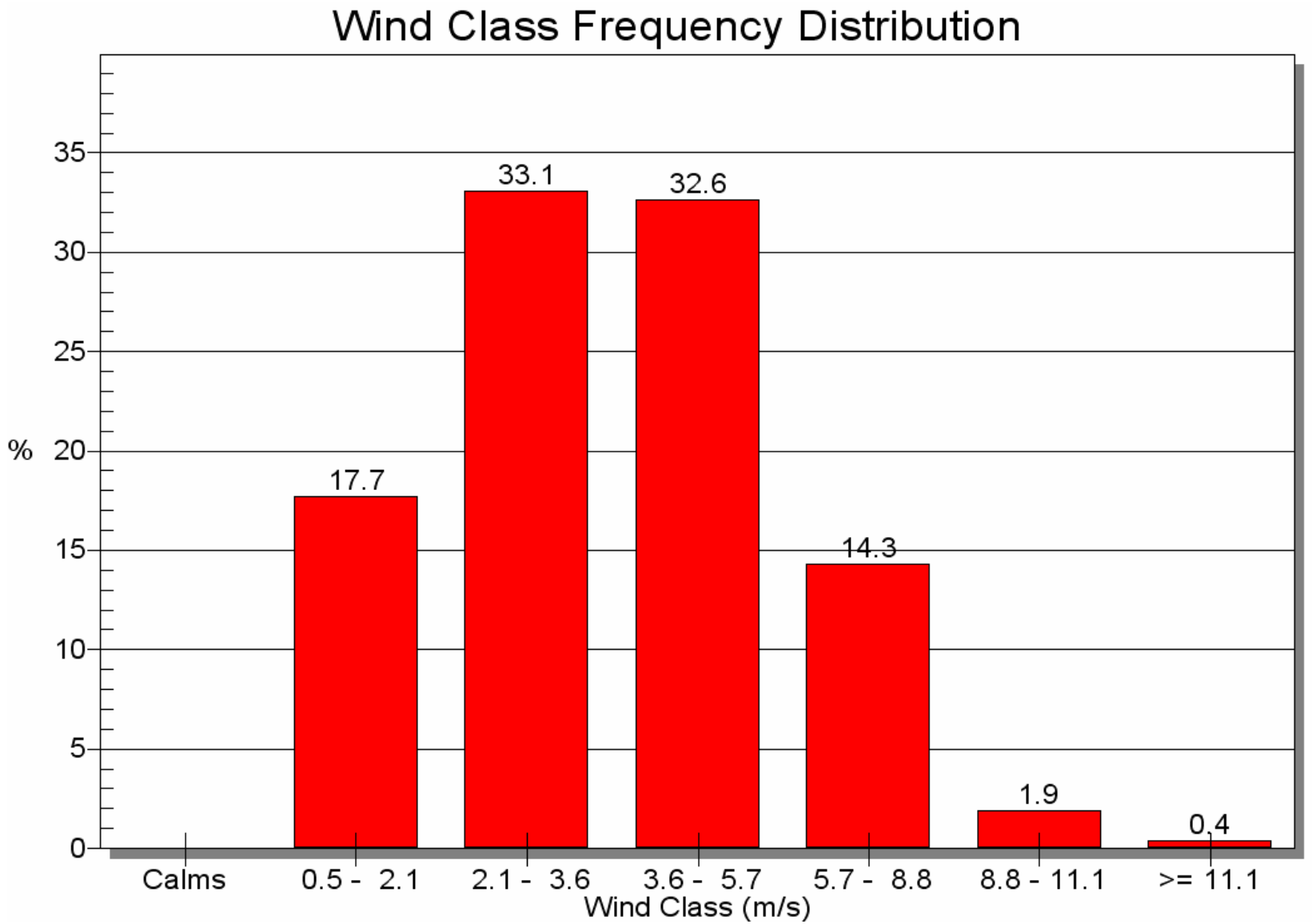
(August 8 – December 31, 2005 Hourly Data)



Wind Direction: Blowing From

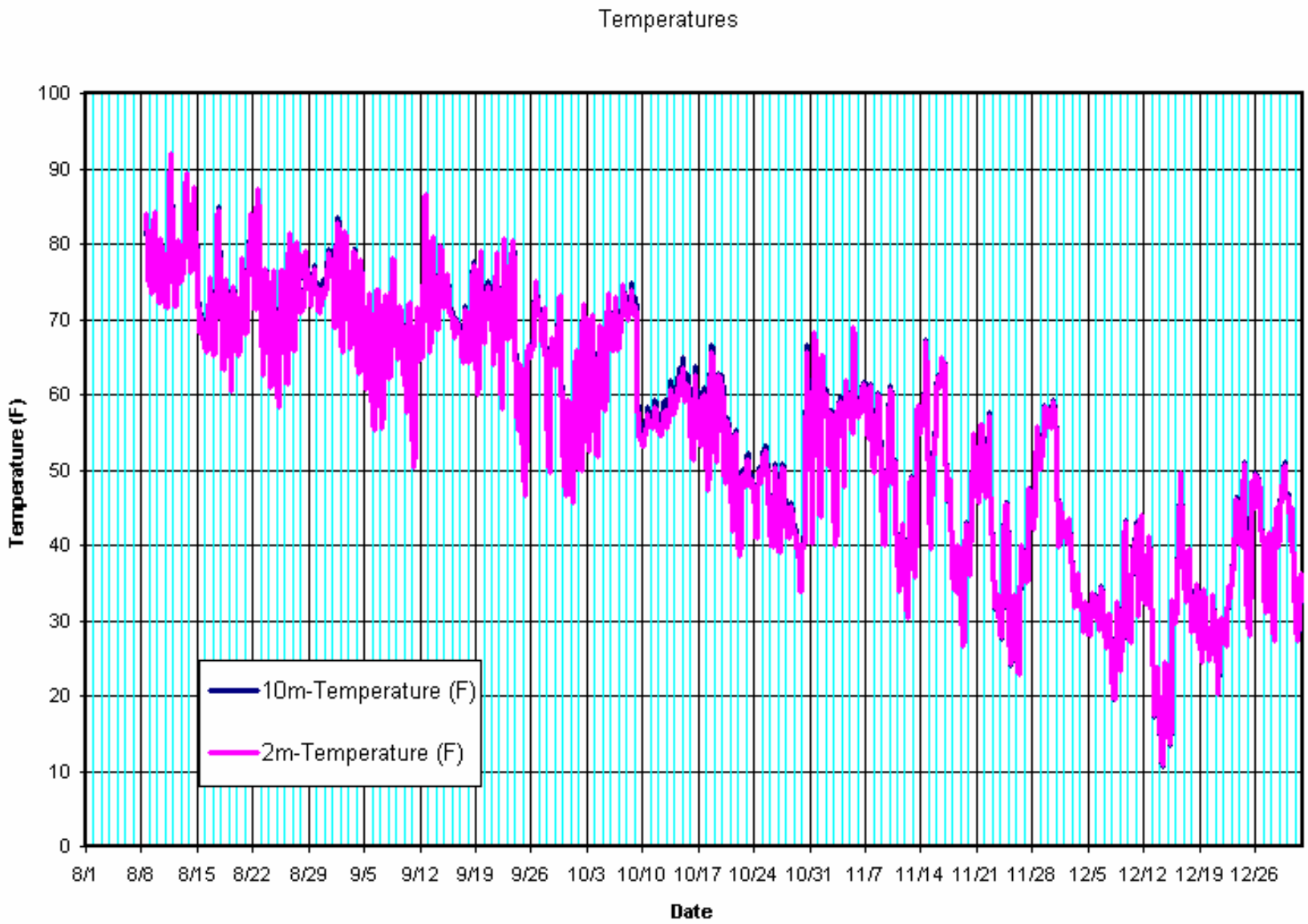
1 m/s (meter per second) = 2.237 miles per hour

(August 8 – December 31, 2005 Hourly Data)

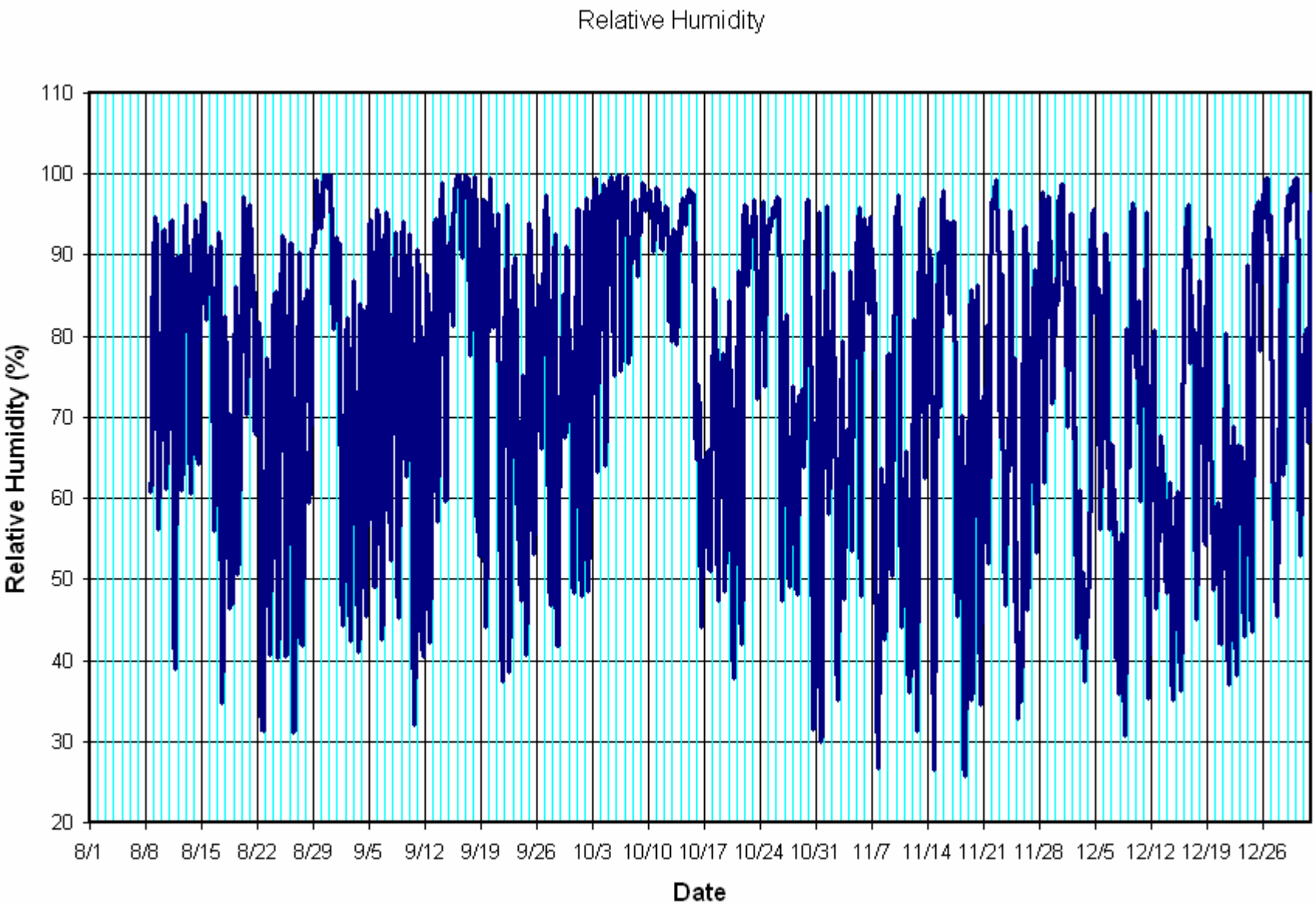


1 m/s (meter per second) = 2.237 miles per hour

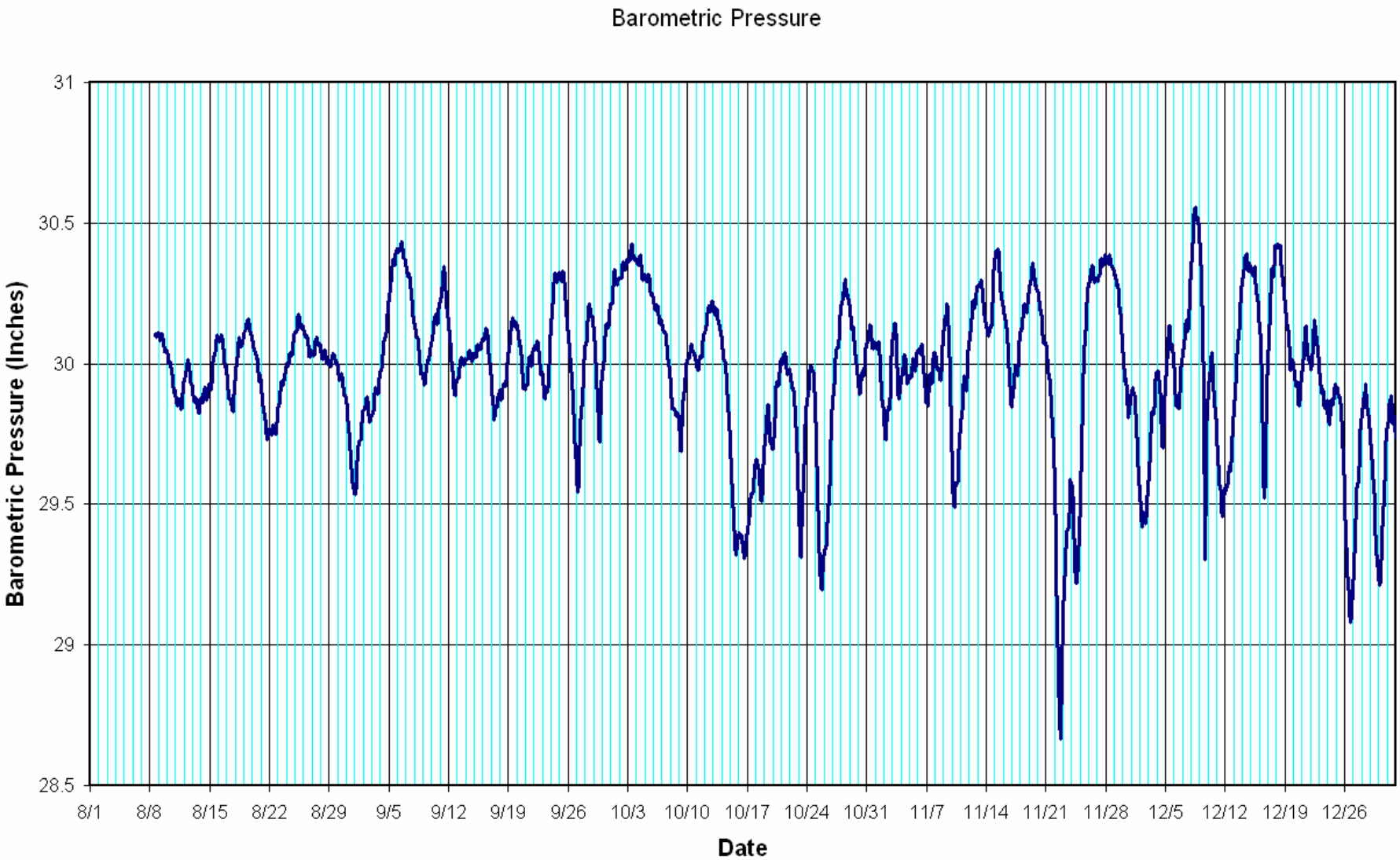
(August 8 – December 31, 2005 Hourly Data)



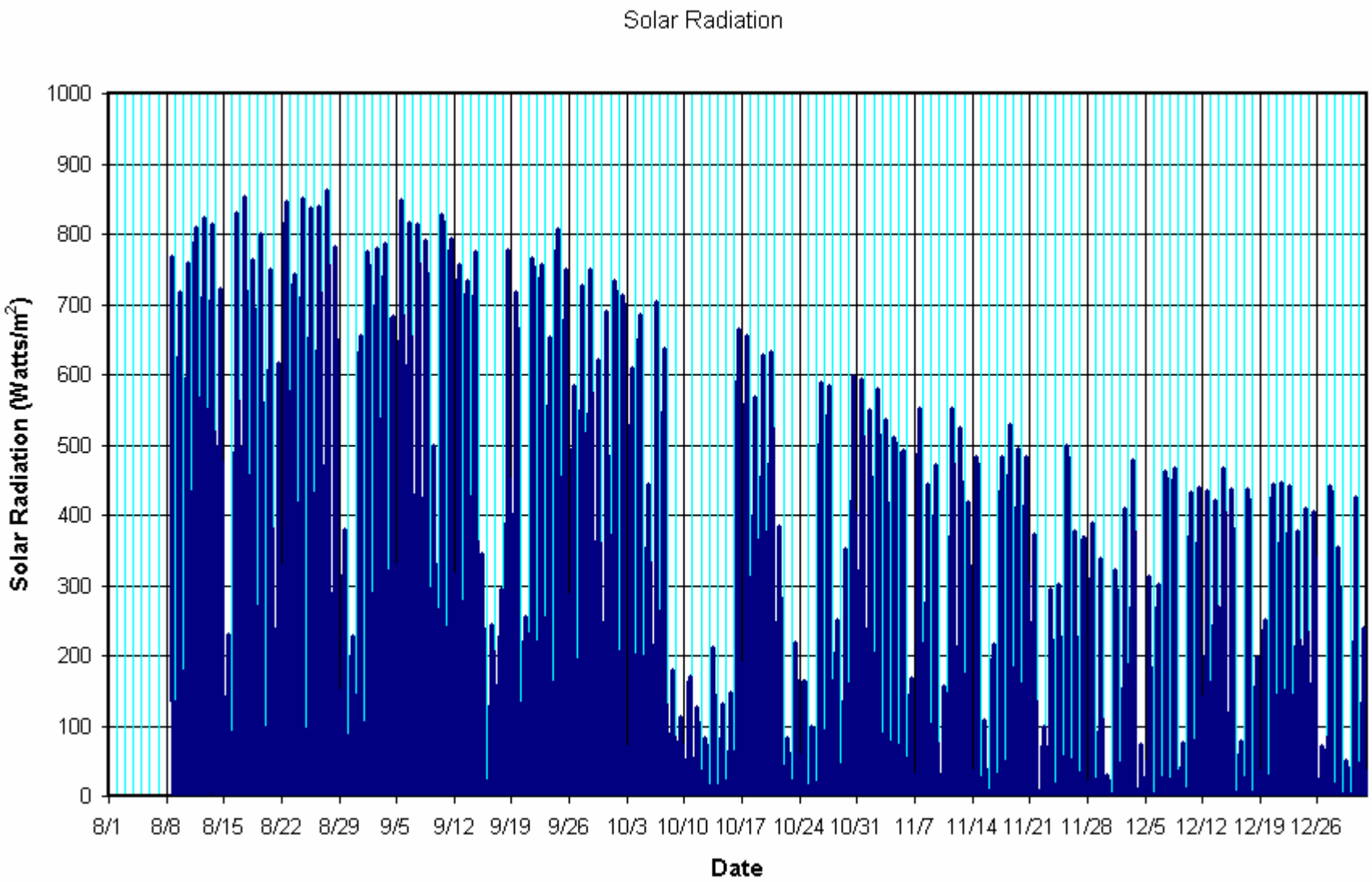
(August 8 – December 31, 2005 Hourly Data)



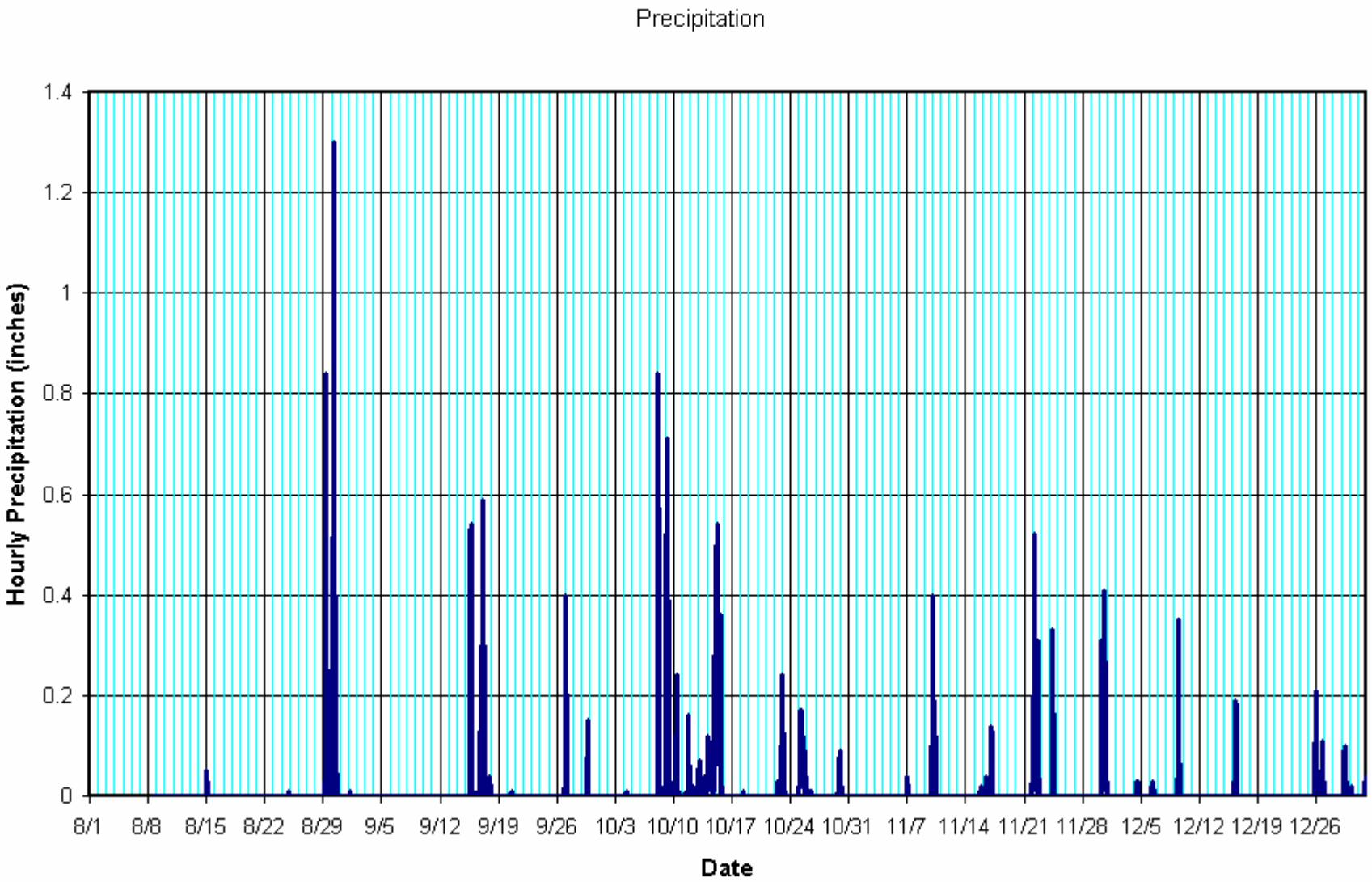
(August 8 – December 31, 2005 Hourly Data)



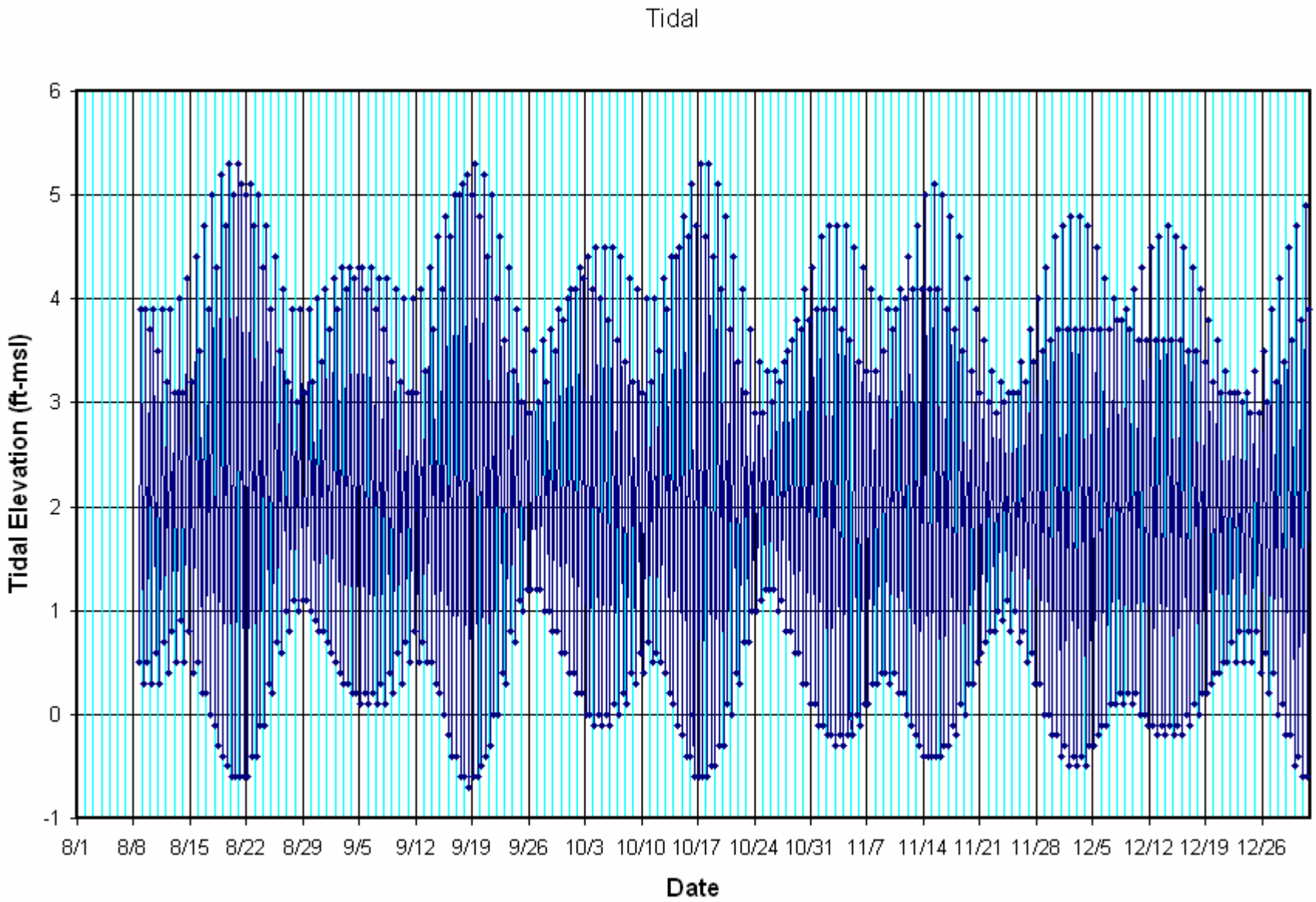
(August 8 – December 31, 2005 Hourly Data)



(August 8 – December 31, 2005 Hourly Data)



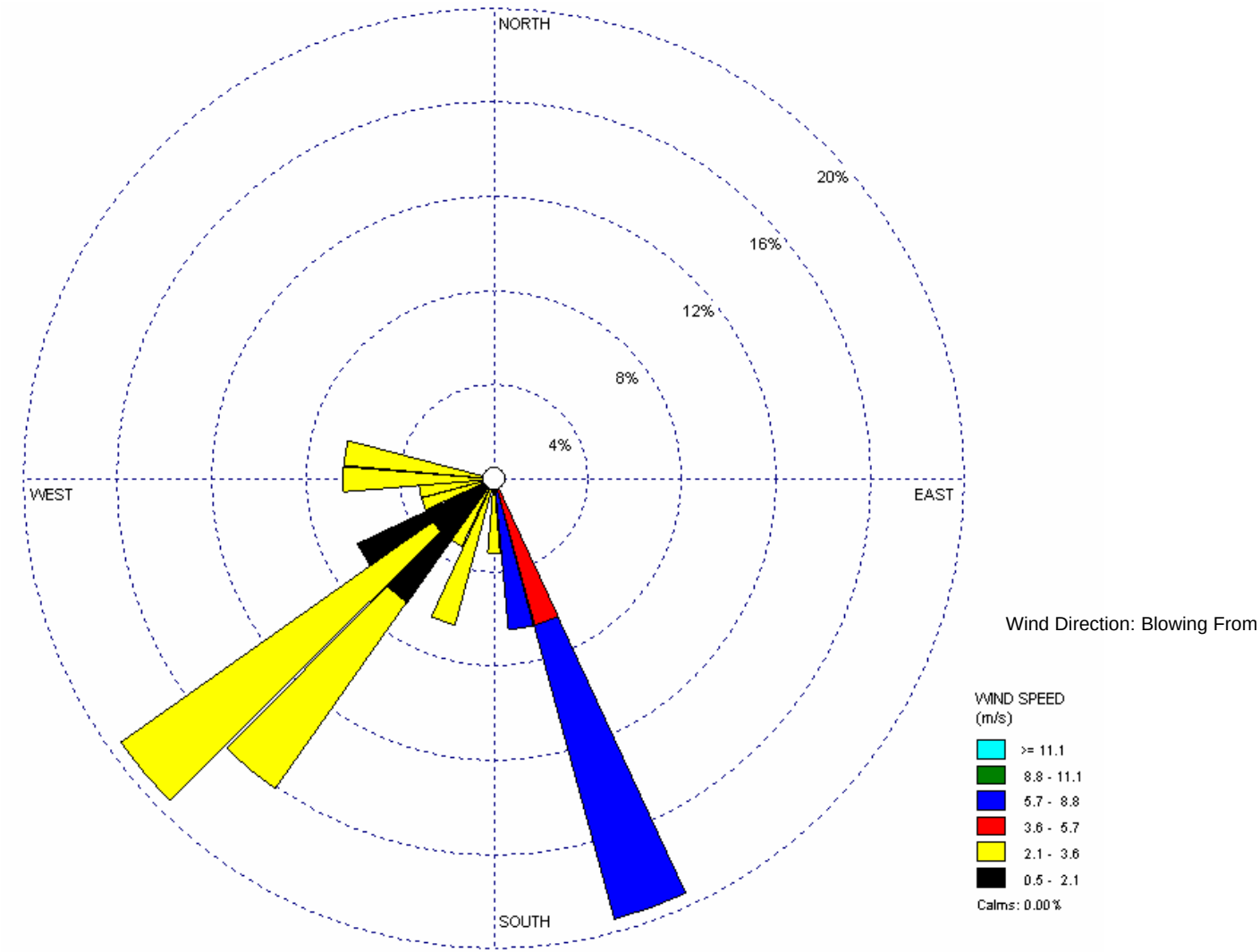
(August 8 – December 31, 2005 – from Belleville, Acushnet River)



Baseline (August 10, 8 AM – August 11, 3 PM, Hourly Data)

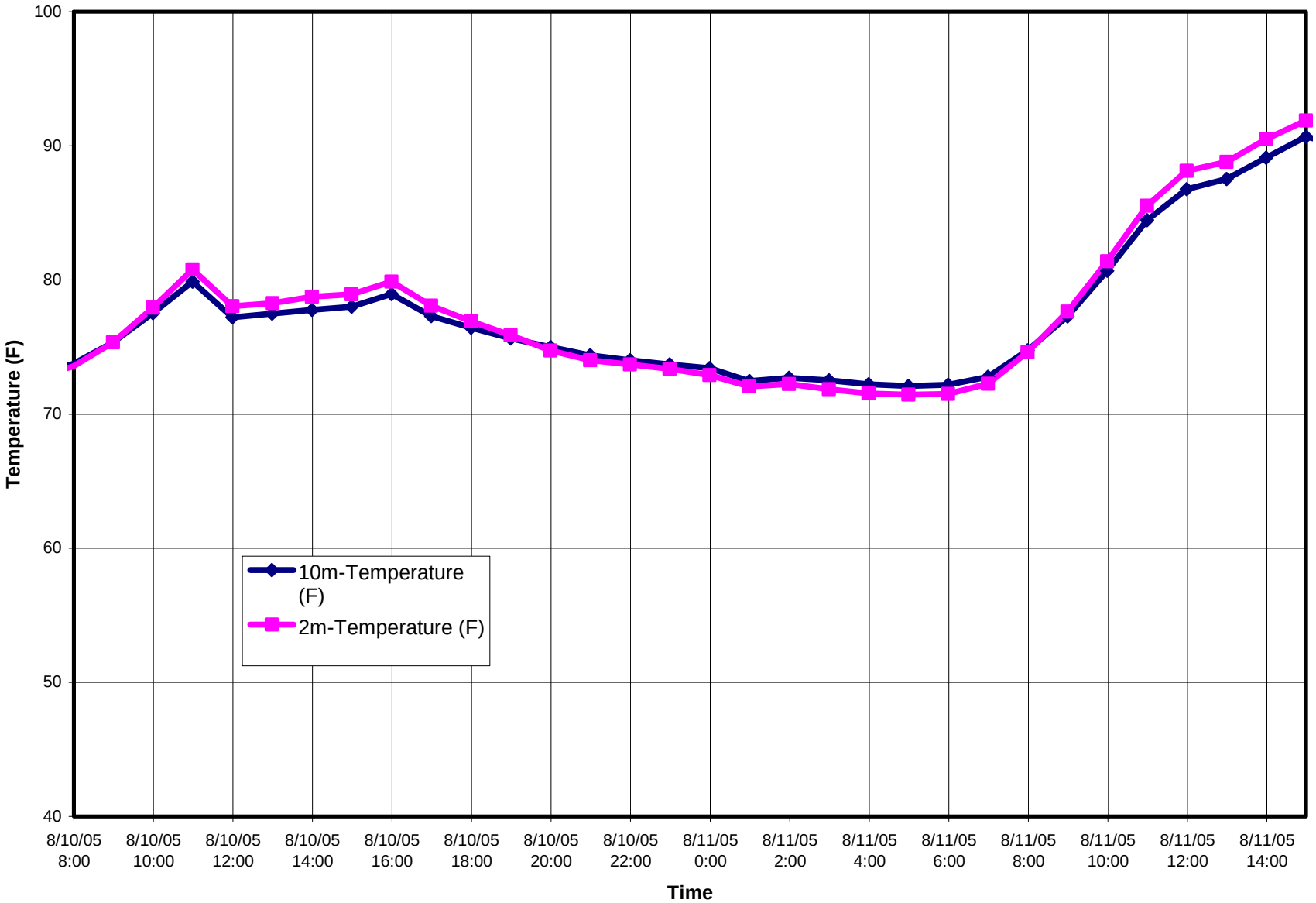
Day-Time	Wind Speed (mph)	Wind Direction (degree)	10m-Temperature (F)	2m-Temperature (F)	Delta-T (F)	Relative Humidity (%)	Barometric Pressure (inch)	Solar Radiation (Watts/m^2)	Precipitation (inch)	Tidal Elevation (ft-msl)
8/10/05 8:00 AM	6.144	248.4	73.740	73.559	0.181	90.732	30.007	85.236	0	
8/10/05 9:00 AM	4.715	207.4	75.353	75.343	0.009	82.942	30.008	172.020	0	
8/10/05 10:00 AM	5.280	225.1	77.538	77.938	-0.399	73.231	29.993	345.880	0	
8/10/05 11:00 AM	6.618	231.3	79.875	80.782	-0.907	61.248	29.984	532.830	0	
8/10/05 12:00 PM	12.730	157.4	77.221	78.056	-0.834	76.845	29.984	568.500	0	3.9
8/10/05 1:00 PM	12.370	169.2	77.489	78.265	-0.777	70.136	29.980	623.890	0	
8/10/05 2:00 PM	12.350	163.6	77.774	78.750	-0.976	67.926	29.968	759.310	0	
8/10/05 3:00 PM	13.480	165.5	78.018	78.932	-0.915	71.284	29.951	746.900	0	
8/10/05 4:00 PM	12.450	164.1	78.945	79.876	-0.932	64.253	29.933	671.650	0	
8/10/05 5:00 PM	12.210	161.4	77.310	78.079	-0.769	68.570	29.923	544.500	0	0.6
8/10/05 6:00 PM	11.180	162.0	76.437	76.916	-0.479	74.168	29.906	323.170	0	
8/10/05 7:00 PM	10.070	158.9	75.653	75.884	-0.232	79.566	29.901	168.960	0	
8/10/05 8:00 PM	6.658	176.1	74.999	74.742	0.256	85.386	29.896	27.472	0	
8/10/05 9:00 PM	5.663	201.2	74.384	74.025	0.359	87.126	29.903	-1.035	0	
8/10/05 10:00 PM	6.153	204.4	74.023	73.700	0.323	88.438	29.909	-0.067	0	
8/10/05 11:00 PM	5.441	220.1	73.702	73.369	0.331	89.360	29.901	-0.398	0	
8/11/05 12:00 AM	5.314	217.5	73.421	72.909	0.512	90.361	29.887	-2.672	0	3.5
8/11/05 1:00 AM	5.057	221.5	72.470	72.062	0.408	92.411	29.879	-0.972	0	
8/11/05 2:00 AM	4.422	233.8	72.700	72.236	0.466	92.219	29.875	-1.486	0	
8/11/05 3:00 AM	3.287	227.1	72.515	71.866	0.648	93.546	29.861	-2.704	0	
8/11/05 4:00 AM	3.270	220.9	72.227	71.549	0.676	93.716	29.855	-2.364	0	
8/11/05 5:00 AM	3.214	221.0	72.103	71.457	0.647	94.254	29.848	-1.805	0	
8/11/05 6:00 AM	3.559	235.9	72.185	71.505	0.680	94.371	29.851	-0.139	0	0.3
8/11/05 7:00 AM	3.740	236.6	72.778	72.257	0.522	91.294	29.858	59.357	0	
8/11/05 8:00 AM	4.970	226.4	74.756	74.635	0.121	82.817	29.867	198.890	0	
8/11/05 9:00 AM	5.406	255.1	77.291	77.644	-0.353	73.468	29.874	379.490	0	
8/11/05 10:00 AM	5.638	266.4	80.689	81.398	-0.709	63.725	29.875	547.560	0	
8/11/05 11:00 AM	4.502	227.5	84.463	85.529	-1.067	53.534	29.873	675.910	0	
8/11/05 12:00 PM	5.105	217.5	86.775	88.143	-1.368	50.542	29.863	767.770	0	
8/11/05 1:00 PM	7.220	281.3	87.529	88.807	-1.278	47.801	29.856	809.460	0	3.9
8/11/05 2:00 PM	6.815	278.0	89.108	90.497	-1.389	43.915	29.849	803.730	0	
8/11/05 3:00 PM	5.218	273.1	90.694	91.891	-1.197	38.945	29.836	747.450	0	
Maximum	**13.480**		**90.694**	**91.891**	**0.680**	**94.371**	**30.008**	**809.460**	**0.000**	**3.900**
Mimimum	**3.214**		**72.103**	**71.457**	**-1.389**	**38.945**	**29.836**	**-2.704**	**0.000**	**0.300**
Average	**6.883**		**77.318**	**77.581**	**-0.264**	**75.879**	**29.905**	**329.572**	**0.000**	**2.440**

Baseline (August 10, 8 AM – August 11, 3 PM, Hourly Data)

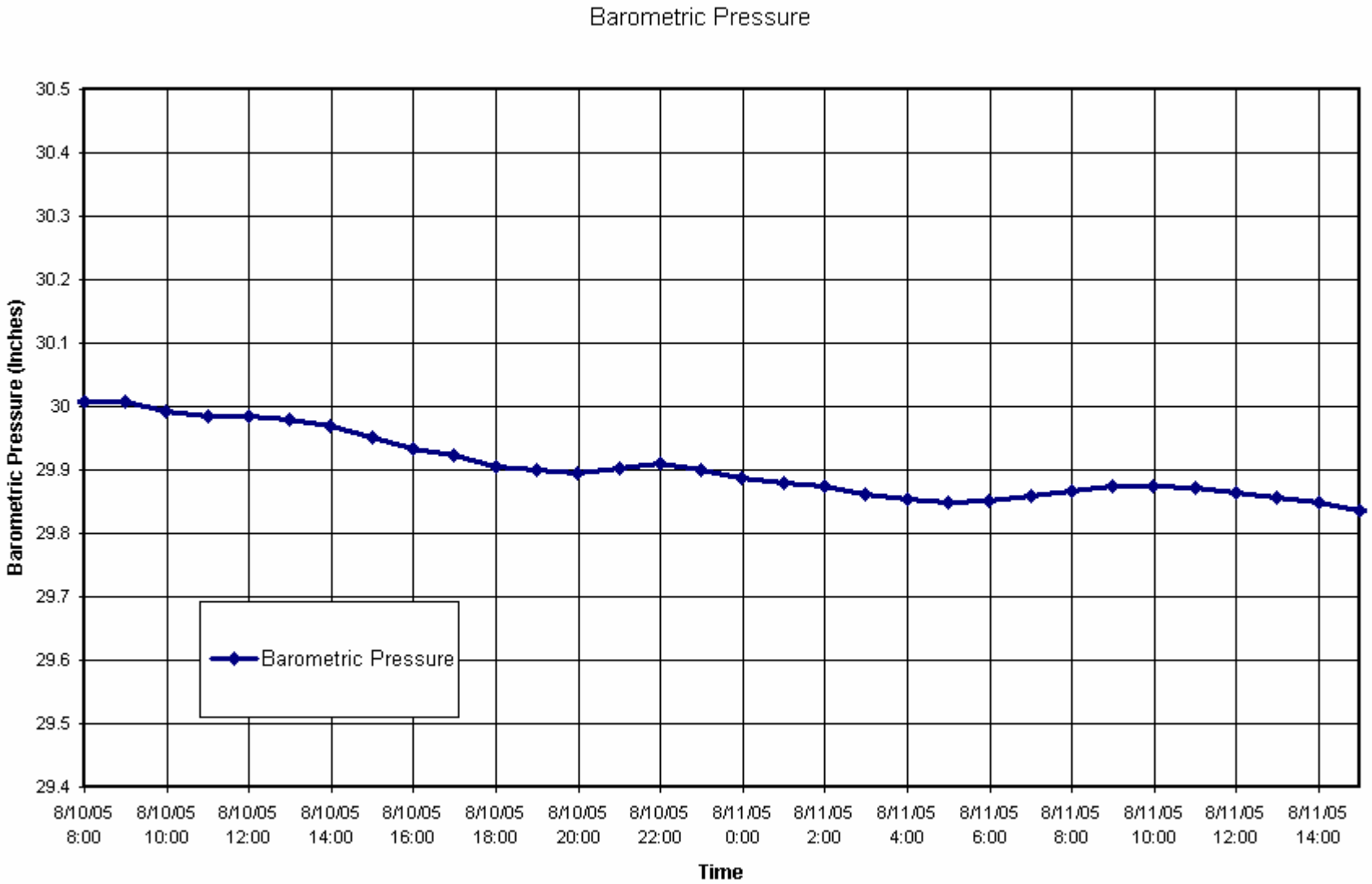


1 m/s (meter per second) = 2.237 miles per hour

Baseline (August 10, 8 AM – August 11, 3 PM, Hourly Data)

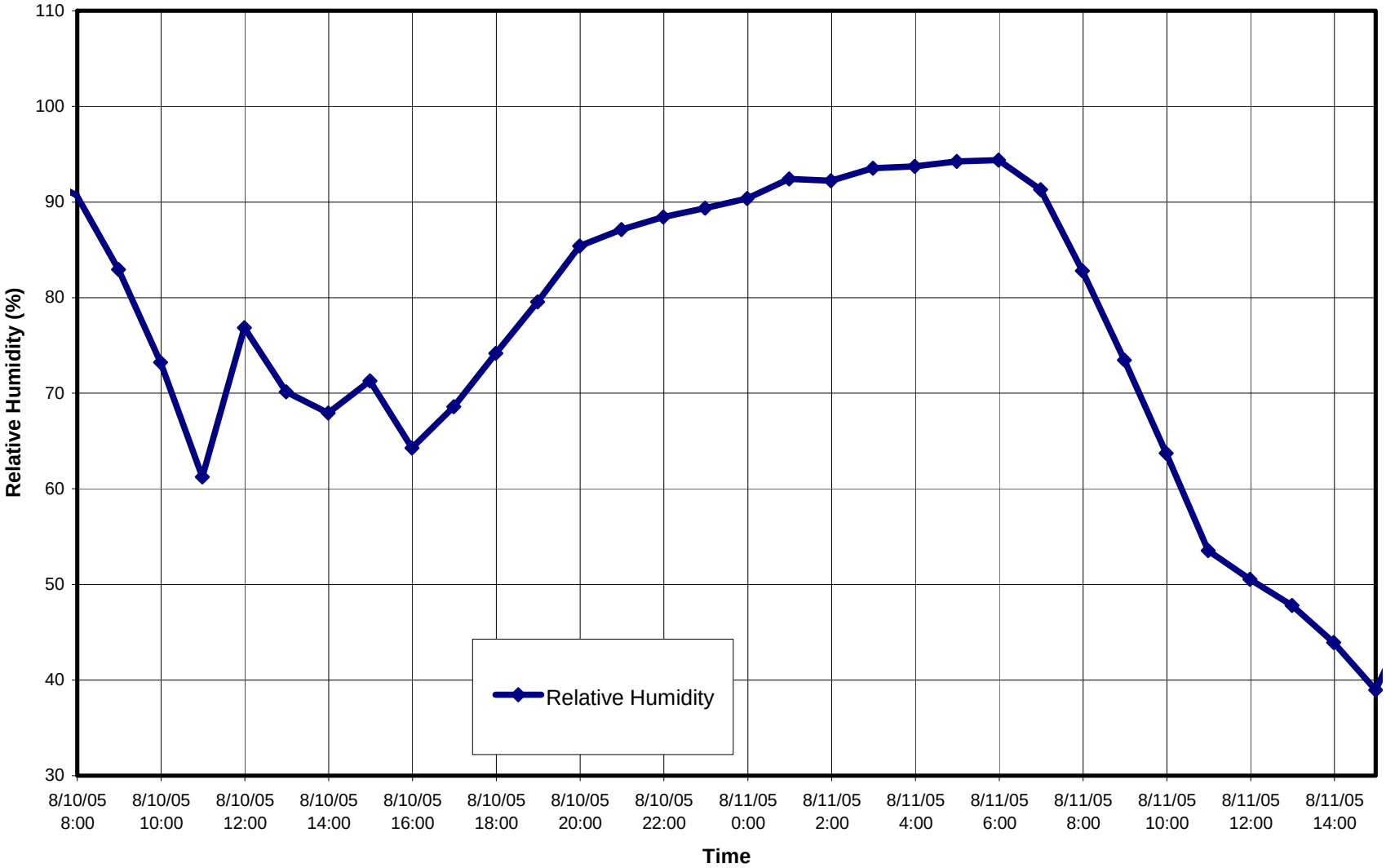


Baseline (August 10, 8 AM – August 11, 3 PM, Hourly Data)

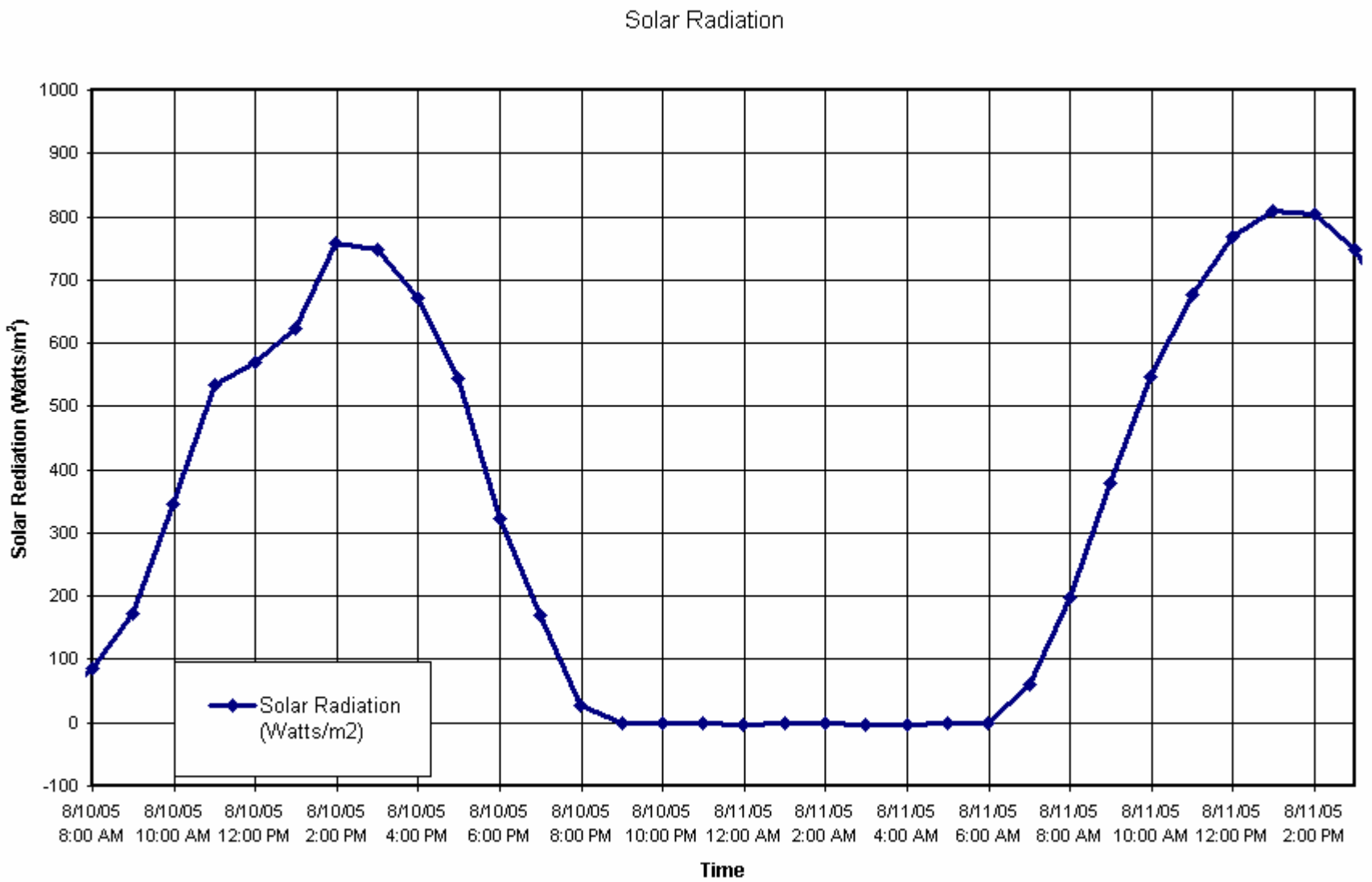


Baseline (August 10, 8 AM – August 11, 3 PM, Hourly Data)

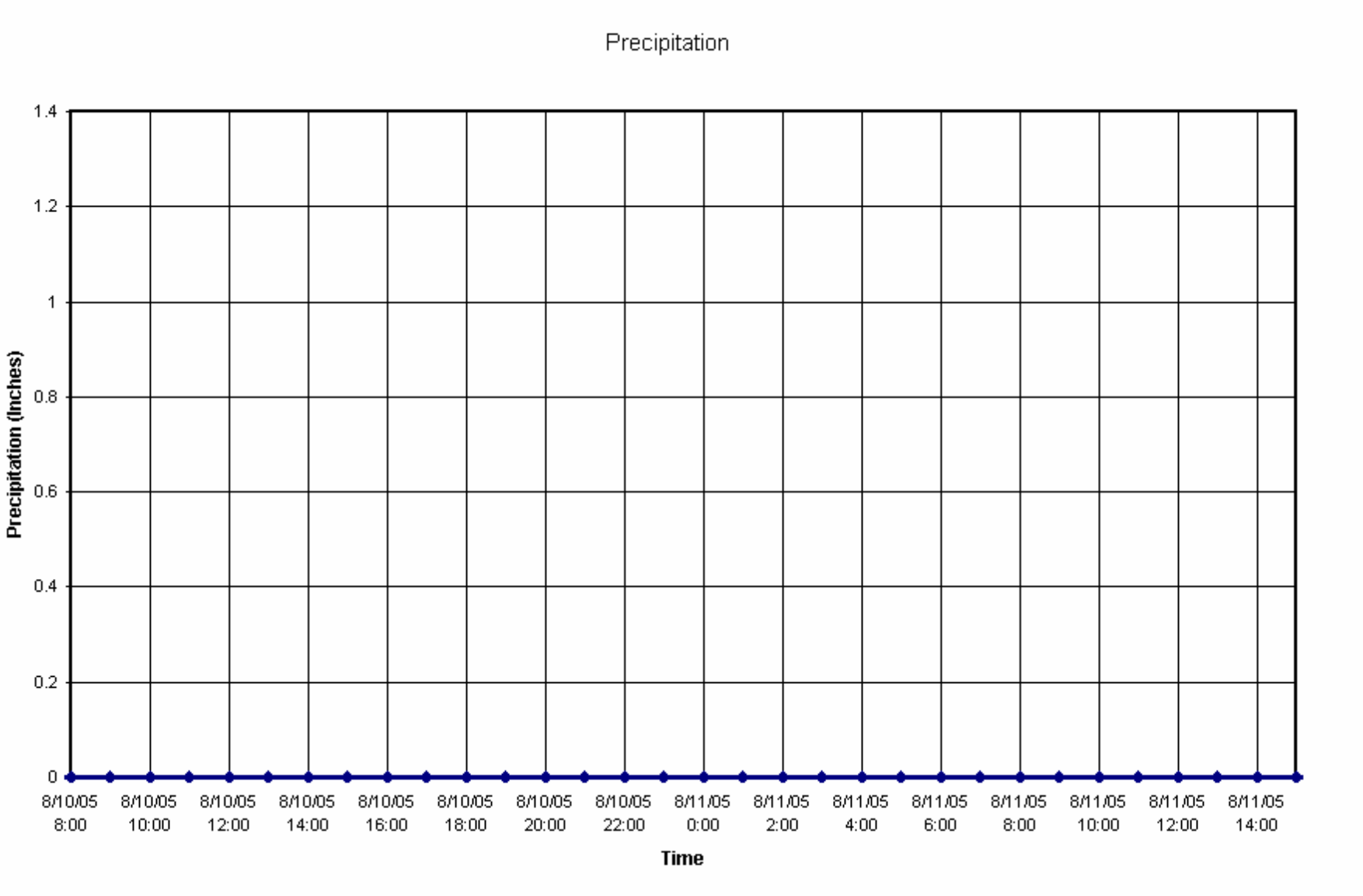
Relative Humidity



Baseline (August 10, 8 AM – August 11, 3 PM, Hourly Data)

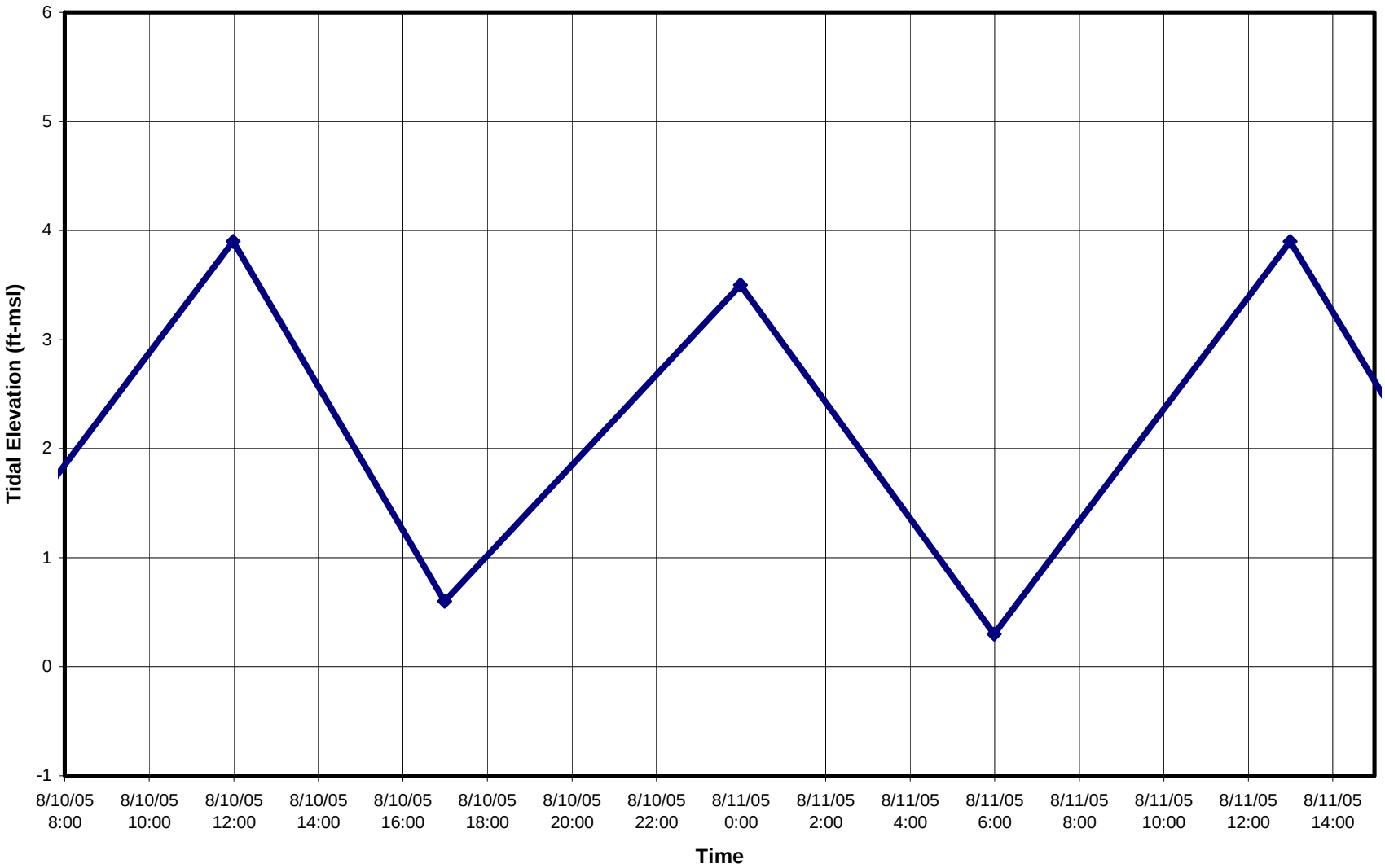


Baseline (August 10, 8 AM – August 11, 3 PM, Hourly Data)



Baseline (August 10, 8 AM – August 11, 3 PM)

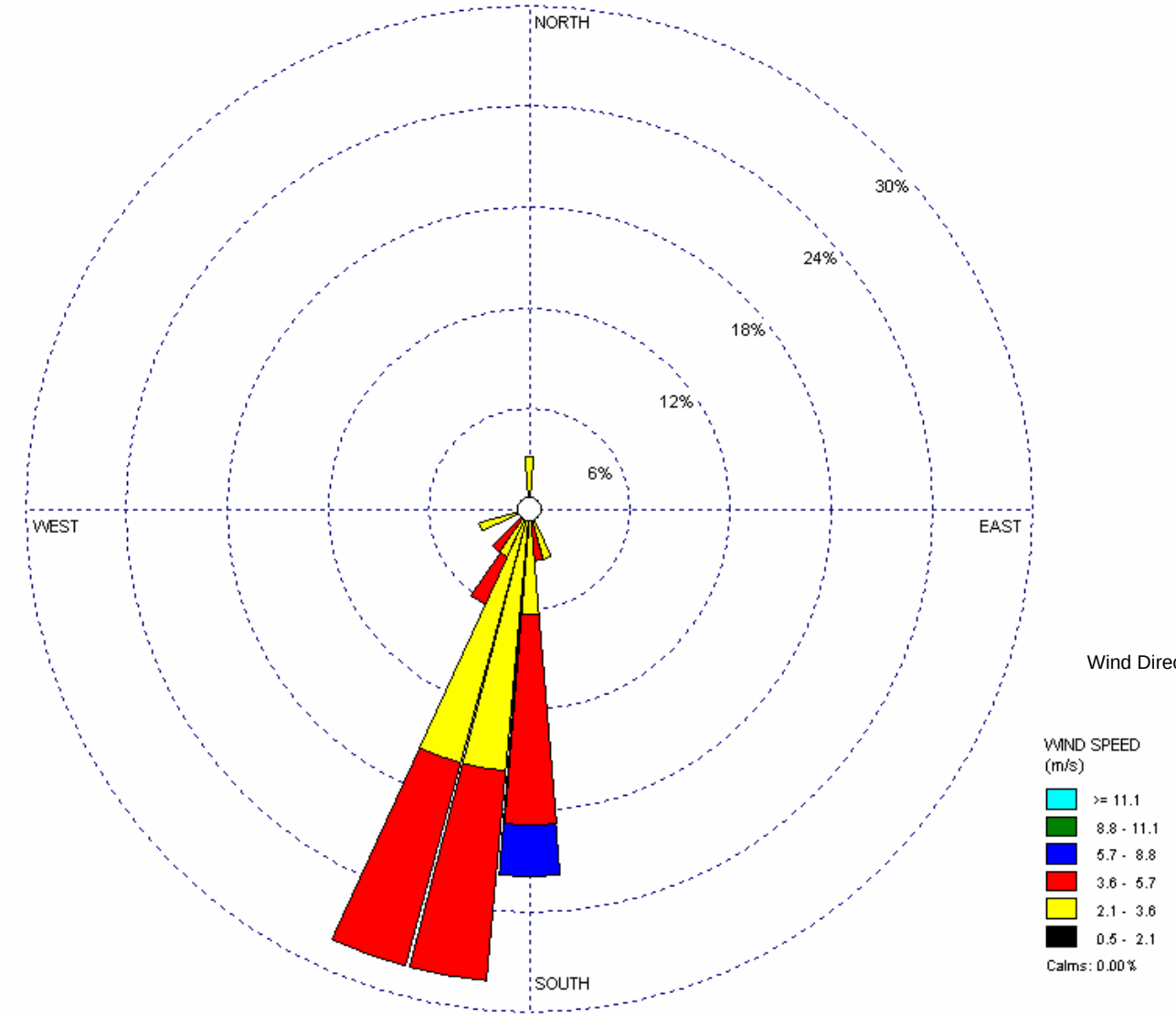
Tidal



(Sept. 14, 8 AM – Sept. 15, 3 PM, Hourly Data)

Day-Time	Wind Speed (mph)	Wind Direction (degree)	10m-Temperature (F)	2m-Temperature (F)	Delta-T (F)	Relative Humidity (%)	Barometric Pressure (inch)	Solar Radiation (Watts/m^2)	Precipitation (inch)	Tidal Elevation (ft-msl)
9/14/05 8:00 AM	8.610	186.2	69.161	68.768	0.392	89.862	30.036	61.960	0	
9/14/05 9:00 AM	8.890	182.7	69.178	68.960	0.219	89.341	30.043	121.180	0	
9/14/05 10:00 AM	7.300	199.3	70.396	70.372	0.024	85.840	30.044	254.210	0	
9/14/05 11:00 AM	6.842	185.6	75.158	75.793	-0.634	69.529	30.046	670.750	0	0.3
9/14/05 12:00 PM	9.120	221.0	78.258	79.057	-0.799	60.583	30.043	751.710	0	
9/14/05 1:00 PM	10.560	203.3	78.502	79.264	-0.763	60.854	30.035	775.280	0	
9/14/05 2:00 PM	10.100	200.4	79.147	79.834	-0.687	59.634	30.026	757.600	0	
9/14/05 3:00 PM	10.500	194.7	79.134	79.851	-0.717	60.085	30.017	692.910	0	
9/14/05 4:00 PM	11.660	200.8	78.448	78.828	-0.380	67.003	30.011	470.990	0	
9/14/05 5:00 PM	10.140	191.6	77.344	77.349	-0.004	75.189	30.006	257.790	0	
9/14/05 6:00 PM	7.800	206.8	76.945	76.876	0.069	78.255	30.008	152.700	0	4.6
9/14/05 7:00 PM	8.350	196.6	75.392	75.021	0.373	85.161	30.009	19.902	0	
9/14/05 8:00 PM	8.040	186.4	73.639	73.161	0.478	89.565	30.018	-1.659	0	
9/14/05 9:00 PM	6.951	189.0	73.556	73.060	0.496	90.061	30.030	-0.960	0	
9/14/05 10:00 PM	5.708	192.5	73.764	73.169	0.595	89.988	30.035	-2.075	0	
9/14/05 11:00 PM	6.396	190.0	73.334	72.750	0.585	91.193	30.034	-2.277	0	
9/15/05 12:00 AM	5.991	195.8	72.770	72.123	0.648	87.553	30.033	-2.376	0	0.2
9/15/05 1:00 AM	4.449	195.5	72.330	71.589	0.741	83.147	30.032	-2.572	0	
9/15/05 2:00 AM	4.599	203.6	72.234	71.646	0.589	88.371	30.034	-0.321	0	
9/15/05 3:00 AM	4.703	212.1	72.651	72.088	0.563	88.261	30.037	-0.443	0	
9/15/05 4:00 AM	7.070	183.5	72.684	72.004	0.679	90.752	30.023	-2.060	0	
9/15/05 5:00 AM	6.252	188.4	72.500	71.852	0.644	92.583	30.024	-1.520	0	
9/15/05 6:00 AM	4.961	189.6	72.353	71.652	0.699	93.185	30.035	-2.457	0	4.1
9/15/05 7:00 AM	5.028	178.7	72.611	71.962	0.652	93.008	30.048	6.403	0	
9/15/05 8:00 AM	6.370	163.4	72.534	72.099	0.435	93.444	30.059	51.434	0	
9/15/05 9:00 AM	7.650	171.0	73.215	72.854	0.363	91.473	30.067	117.240	0	
9/15/05 10:00 AM	9.860	182.1	74.238	74.083	0.155	88.210	30.070	189.200	0	
9/15/05 11:00 AM	11.090	177.0	76.052	76.062	-0.011	81.239	30.065	345.190	0	
9/15/05 12:00 PM	12.380	183.1	75.787	75.517	0.271	82.815	30.064	135.130	0	0
9/15/05 1:00 PM	9.690	173.6	75.406	74.989	0.417	85.511	30.057	72.850	0.06	
9/15/05 2:00 PM	7.220	248.6	73.894	73.312	0.582	94.155	30.050	32.452	0.08	
9/15/05 3:00 PM	5.730	0.3	71.988	71.494	0.495	96.374	30.053	22.225	0.3	
Maximum	**12.380**		**79.147**	**79.851**	**0.741**	**96.374**	**30.070**	**775.280**	**0.300**	**4.600**
Mimimum	**4.449**		**69.161**	**68.768**	**-0.799**	**59.634**	**30.006**	**-2.572**	**0.000**	**0.000**
Average	**7.813**		**74.206**	**73.982**	**0.224**	**83.507**	**30.037**	**185.637**		**1.840**

(Sept. 14, 8 AM – Sept. 15, 3 PM, Hourly Data)

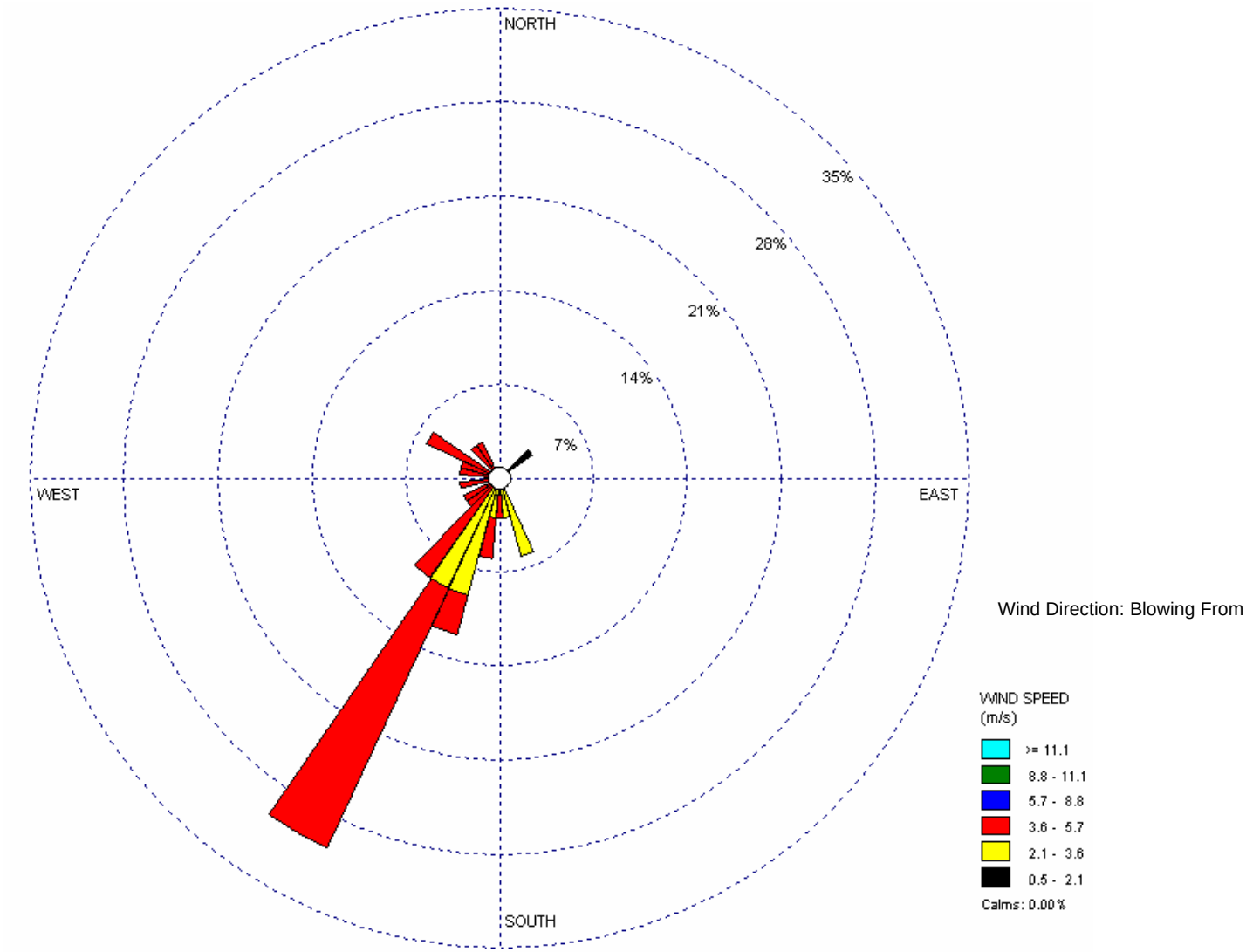


1 m/s (meter per second) = 2.237 miles per hour

(Sept. 22, 8 AM – Sept. 23, 4 PM, Hourly Data)

Day-Time	Wind Speed (mph)	Wind Direction (degree)	10m-Temperature (F)	2m-Temperature (F)	Delta-T (F)	Relative Humidity (%)	Barometric Pressure (inch)	Solar Radiation (Watts/m^2)	Precipitation (inch)	Tidal Elevation (ft-msl)
9/22/05 8:00 AM	2.899	52.3	60.572	59.689	0.883	84.369	30.066	128.080	0	
9/22/05 9:00 AM	5.258	170.0	68.358	67.768	0.590	72.153	30.076	312.790	0	
9/22/05 10:00 AM	5.633	159.5	72.380	72.025	0.355	63.413	30.082	488.320	0	
9/22/05 11:00 AM	5.918	162.7	76.048	75.913	0.136	56.054	30.078	624.420	0	
9/22/05 12:00 PM	8.460	181.1	79.739	79.864	-0.124	42.616	30.068	717.640	0	4.6
9/22/05 1:00 PM	9.770	192.2	80.617	80.637	-0.020	38.506	30.057	757.250	0	
9/22/05 2:00 PM	10.030	202.7	79.964	80.103	-0.140	42.007	30.034	731.960	0	
9/22/05 3:00 PM	9.830	208.6	79.656	79.707	-0.052	43.559	30.019	650.440	0	
9/22/05 4:00 PM	10.520	201.8	77.888	77.854	0.034	53.117	30.008	518.920	0	
9/22/05 5:00 PM	10.640	209.6	76.697	76.419	0.277	58.481	29.989	349.970	0	
9/22/05 6:00 PM	9.610	206.5	74.890	74.283	0.606	61.981	29.976	162.940	0	0.4
9/22/05 7:00 PM	9.720	213.2	72.676	71.717	0.959	67.902	29.963	15.583	0	
9/22/05 8:00 PM	8.970	210.3	70.962	69.943	1.020	82.074	29.963	-3.373	0	
9/22/05 9:00 PM	7.160	207.8	70.252	69.118	1.134	80.407	29.971	-3.701	0	
9/22/05 10:00 PM	7.130	207.4	69.355	68.219	1.137	83.883	29.975	-3.386	0	
9/22/05 11:00 PM	7.100	200.1	69.365	68.230	1.135	82.822	29.969	-2.986	0	
9/23/05 12:00 AM	6.746	197.2	68.799	67.701	1.097	86.067	29.960	-2.862	0	3.6
9/23/05 1:00 AM	6.879	190.4	68.439	67.328	1.112	88.828	29.939	-2.809	0	
9/23/05 2:00 AM	5.867	196.4	68.333	67.220	1.113	88.633	29.932	-2.804	0	
9/23/05 3:00 AM	6.979	211.5	68.644	67.526	1.119	87.707	29.918	-2.768	0	
9/23/05 4:00 AM	8.130	214.3	69.158	68.095	1.063	85.926	29.903	-2.685	0	
9/23/05 5:00 AM	10.080	220.0	69.484	68.475	1.008	88.547	29.883	-2.426	0	0.3
9/23/05 6:00 AM	11.600	219.3	69.857	68.878	0.977	89.621	29.874	-2.264	0	
9/23/05 7:00 AM	9.610	220.5	70.217	69.237	0.979	89.689	29.877	4.734	0	
9/23/05 8:00 AM	8.960	232.4	71.262	70.467	0.794	85.980	29.891	104.830	0	
9/23/05 9:00 AM	8.650	244.8	72.742	72.289	0.453	80.938	29.894	253.320	0	
9/23/05 10:00 AM	9.170	263.3	74.495	74.243	0.252	75.467	29.899	338.120	0	
9/23/05 11:00 AM	7.710	277.4	76.433	76.446	-0.013	67.473	29.905	424.910	0	
9/23/05 12:00 PM	7.620	287.8	77.487	77.783	-0.296	63.508	29.916	555.580	0	
9/23/05 1:00 PM	8.510	300.5	77.981	77.752	0.229	62.311	29.910	293.710	0	4.3
9/23/05 2:00 PM	9.810	300.5	79.387	79.703	-0.317	56.452	29.901	653.190	0	
9/23/05 3:00 PM	9.460	328.4	80.248	80.504	-0.256	54.797	29.911	489.640	0	
9/23/05 4:00 PM	9.280	323.4	80.571	80.364	0.206	55.700	29.915	266.300	0	
Maximum	**11.600**		**80.617**	**80.637**	**1.137**	**89.689**	**30.082**	**757.250**	**0.000**	**4.600**
Mimimum	**2.899**		**60.572**	**59.689**	**-0.317**	**38.506**	**29.874**	**-3.701**	**0.000**	**0.300**
Average	**8.294**		**73.423**	**72.894**	**0.529**	**70.333**	**29.961**	**266.987**	**0.000**	**2.640**

(Sept. 22, 8 AM – Sept. 23, 4 PM, Hourly Data)

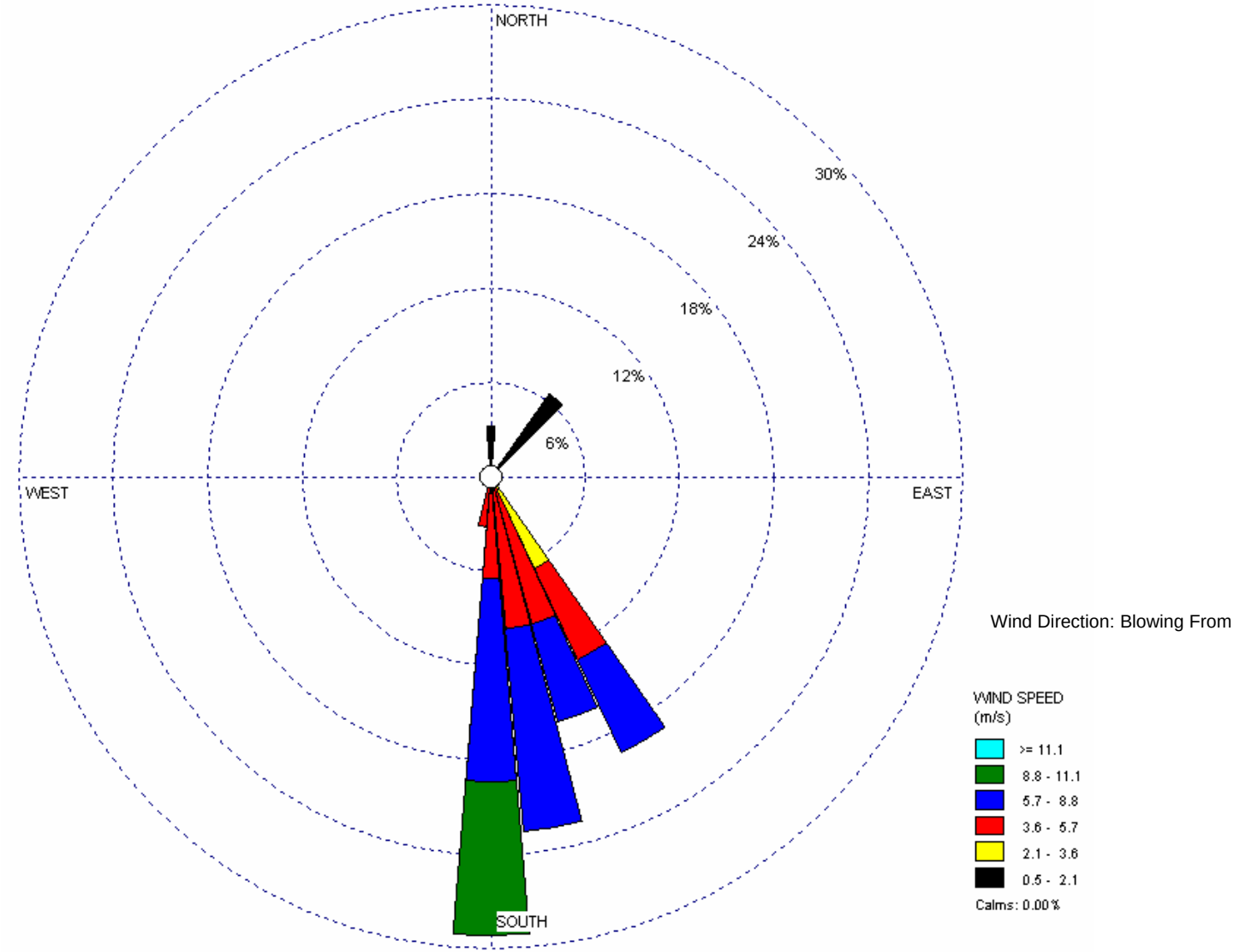


1 m/s (meter per second) = 2.237 miles per hour

(Sept. 28, 8 AM – Sept. 29, 2 PM, Hourly Data)

Day-Time	Wind Speed (mph)	Wind Direction (degree)	10m-Temperature (F)	2m-Temperature (F)	Delta-T (F)	Relative Humidity (%)	Barometric Pressure (inch)	Solar Radiation (Watts/m^2)	Precipitation (inch)	Tidal Elevation (ft-msl)
9/28/05 8:00 AM	3.208	3.2	52.388	51.773	0.616	77.157	30.161	116.720	0	
9/28/05 9:00 AM	2.748	37.2	55.829	55.887	-0.058	68.833	30.182	300.700	0	
9/28/05 10:00 AM	2.805	37.9	61.783	61.889	-0.106	51.071	30.199	474.590	0	
9/28/05 11:00 AM	4.294	153.9	65.007	65.332	-0.325	41.851	30.209	615.330	0	1
9/28/05 12:00 PM	7.180	154.9	65.752	66.326	-0.573	42.854	30.212	714.070	0	
9/28/05 1:00 PM	9.070	155.6	66.619	67.047	-0.429	43.916	30.205	749.610	0	
9/28/05 2:00 PM	10.670	154.2	67.087	67.386	-0.300	42.724	30.189	724.760	0	
9/28/05 3:00 PM	11.060	158.8	67.458	67.632	-0.174	41.774	30.176	646.410	0	
9/28/05 4:00 PM	11.140	167.8	66.904	66.956	-0.051	52.902	30.166	506.460	0	
9/28/05 5:00 PM	10.080	171.5	66.631	66.508	0.123	54.706	30.164	333.980	0	3.7
9/28/05 6:00 PM	9.540	181.2	65.919	65.456	0.464	58.324	30.170	141.700	0	
9/28/05 7:00 PM	10.010	178.1	65.298	64.419	0.880	59.679	30.168	9.652	0	
9/28/05 8:00 PM	10.290	176.2	65.056	64.125	0.932	62.845	30.169	-3.283	0	
9/28/05 9:00 PM	11.300	171.5	64.909	64.059	0.851	68.669	30.168	-3.008	0	
9/28/05 10:00 PM	13.050	170.1	65.061	64.217	0.844	65.029	30.165	-2.880	0	
9/28/05 11:00 PM	14.850	165.7	65.237	64.399	0.838	62.875	30.147	-2.827	0	
9/29/05 12:00 AM	17.090	157.7	65.022	64.319	0.701	72.025	30.118	-2.804	0	0.8
9/29/05 1:00 AM	16.560	161.3	65.297	64.563	0.735	73.295	30.102	-2.804	0	
9/29/05 2:00 AM	14.750	153.7	64.989	64.331	0.656	75.066	30.096	-2.804	0	
9/29/05 3:00 AM	14.410	152.0	64.459	63.853	0.606	75.600	30.064	-2.691	0	
9/29/05 4:00 AM	12.280	154.5	64.750	64.131	0.619	78.393	30.047	-1.437	0	
9/29/05 5:00 AM	11.460	158.5	65.683	65.039	0.643	81.550	30.022	-0.933	0	
9/29/05 6:00 AM	11.250	153.9	65.972	65.379	0.592	85.018	29.982	-0.499	0	3.5
9/29/05 7:00 AM	12.350	166.4	67.711	66.974	0.736	83.055	29.953	2.564	0	
9/29/05 8:00 AM	14.740	168.9	68.642	68.007	0.635	80.513	29.931	63.133	0	
9/29/05 9:00 AM	16.360	176.6	69.923	69.630	0.292	75.925	29.919	293.910	0	
9/29/05 10:00 AM	15.230	184.0	71.923	71.846	0.077	68.120	29.905	432.040	0	
9/29/05 11:00 AM	17.340	181.7	71.981	71.936	0.045	69.272	29.890	442.240	0	
9/29/05 12:00 PM	19.330	180.9	71.929	72.129	-0.200	73.136	29.853	620.650	0	0.8
9/29/05 1:00 PM	19.680	180.9	72.294	72.359	-0.064	70.873	29.803	505.480	0	
9/29/05 2:00 PM	23.160	183.5	73.101	73.122	-0.021	67.467	29.766	523.630	0	
Maximum	**23.160**		**73.101**	**73.122**	**0.932**	**85.018**	**30.212**	**749.610**	**0.000**	**3.700**
Mimimum	**2.748**		**52.388**	**51.773**	**-0.573**	**41.774**	**29.766**	**-3.283**	**0.000**	**0.800**
Average	**12.170**		**66.149**	**65.840**	**0.309**	**65.307**	**30.074**	**264.247**	**0.000**	**1.960**

(Sept. 28, 8 AM – Sept. 29, 2 PM, Hourly Data)

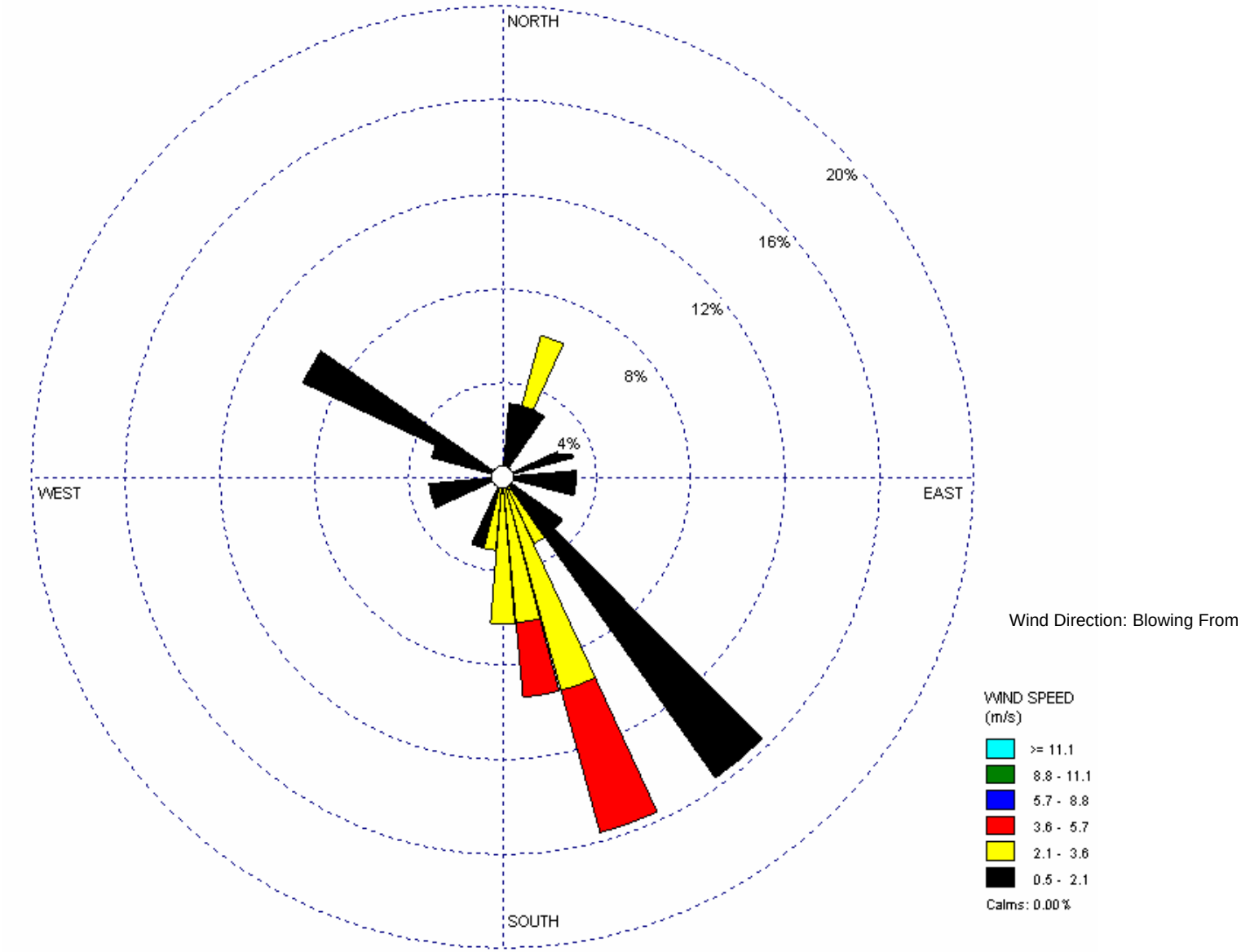


1 m/s (meter per second) = 2.237 miles per hour

(October 5, 8AM – Oct. 6, 3 PM, 2005, Hourly Data)

Day-Time	Wind Speed (mph)	Wind Direction (degree)	10m-Temperature (F)	2m-Temperature (F)	Delta-T (F)	Relative Humidity (%)	Barometric Pressure (inch)	Solar Radiation (Watts/m^2)	Precipitation (inch)	Tidal Elevation (ft-msl)
10/5/05 8:00 AM	3.832	29.8	58.661	58.243	0.418	99.583	30.314	28.455	0	
10/5/05 9:00 AM	4.019	9.5	59.799	59.417	0.381	99.423	30.319	74.190	0	
10/5/05 10:00 AM	3.489	22.5	61.281	61.136	0.145	90.470	30.319	216.670	0	4.5
10/5/05 11:00 AM	5.090	24.7	63.894	64.185	-0.291	82.223	30.314	355.150	0	
10/5/05 12:00 PM	2.116	66.0	66.696	66.772	-0.077	81.348	30.311	264.390	0	
10/5/05 1:00 PM	2.805	102.8	68.568	70.195	-1.627	80.498	30.295	256.840	0	
10/5/05 2:00 PM	5.932	174.6	70.211	70.364	-0.154	83.082	30.274	219.210	0	
10/5/05 3:00 PM	4.593	178.0	71.094	71.501	-0.408	79.669	30.259	442.610	0	0
10/5/05 4:00 PM	4.674	169.0	72.926	73.339	-0.412	75.142	30.250	442.970	0	
10/5/05 5:00 PM	6.851	175.9	71.064	71.078	-0.015	82.026	30.246	222.940	0	
10/5/05 6:00 PM	5.374	177.8	69.009	68.647	0.363	91.902	30.244	47.195	0	
10/5/05 7:00 PM	4.957	146.7	68.144	67.747	0.398	94.104	30.245	1.730	0	
10/5/05 8:00 PM	4.750	164.0	67.929	67.401	0.529	94.660	30.248	-0.003	0	
10/5/05 9:00 PM	2.649	137.5	68.106	67.558	0.548	94.896	30.249	-0.013	0	
10/5/05 10:00 PM	4.160	155.7	67.609	67.027	0.583	96.822	30.242	0.000	0	3.8
10/5/05 11:00 PM	2.560	142.3	67.078	66.459	0.620	98.295	30.235	0.000	0	
10/6/05 12:00 AM	3.644	136.7	66.725	66.131	0.593	98.873	30.229	0.000	0	
10/6/05 1:00 AM	2.621	138.8	66.584	65.981	0.602	99.354	30.220	0.000	0	
10/6/05 2:00 AM	1.900	85.3	66.652	66.038	0.613	99.649	30.209	0.000	0	
10/6/05 3:00 AM	2.042	131.5	66.728	66.105	0.622	99.686	30.199	0.000	0	-0.1
10/6/05 4:00 AM	2.159	137.8	66.826	66.187	0.636	99.705	30.196	0.000	0	
10/6/05 5:00 AM	1.432	204.5	67.124	66.457	0.665	99.736	30.190	0.000	0	
10/6/05 6:00 AM	3.614	299.6	66.641	66.026	0.613	99.749	30.190	0.000	0	
10/6/05 7:00 AM	3.062	301.7	66.555	65.914	0.641	99.761	30.198	0.957	0	
10/6/05 8:00 AM	2.213	286.7	66.794	66.181	0.612	99.793	30.201	27.410	0	
10/6/05 9:00 AM	3.229	263.8	67.343	66.743	0.600	99.422	30.206	61.347	0	
10/6/05 10:00 AM	3.274	295.8	68.474	68.176	0.298	91.540	30.206	126.230	0	4.5
10/6/05 11:00 AM	3.356	245.1	70.335	70.214	0.122	83.558	30.208	181.120	0	
10/6/05 12:00 PM	4.051	155.7	71.450	71.236	0.214	79.592	30.204	250.240	0	
10/6/05 1:00 PM	10.000	157.7	71.710	71.661	0.049	79.117	30.194	704.200	0	
10/6/05 2:00 PM	10.580	169.2	72.978	73.041	-0.062	75.815	30.179	667.370	0	
10/6/05 3:00 PM	10.460	159.5	72.492	72.539	-0.047	77.763	30.164	481.780	0	
Maximum	**10.580**		**72.978**	**73.339**	**0.665**	**99.793**	**30.319**	**704.200**	**0.000**	**4.500**
Mimimum	**1.432**		**58.661**	**58.243**	**-1.627**	**75.142**	**30.164**	**-0.013**	**0.000**	**-0.100**
Average	**4.234**		**67.734**	**67.491**	**0.243**	**90.852**	**30.236**	**158.531**	**0.000**	**2.540**

(October 5, 8AM – Oct. 6, 3 PM, 2005, Hourly Data)

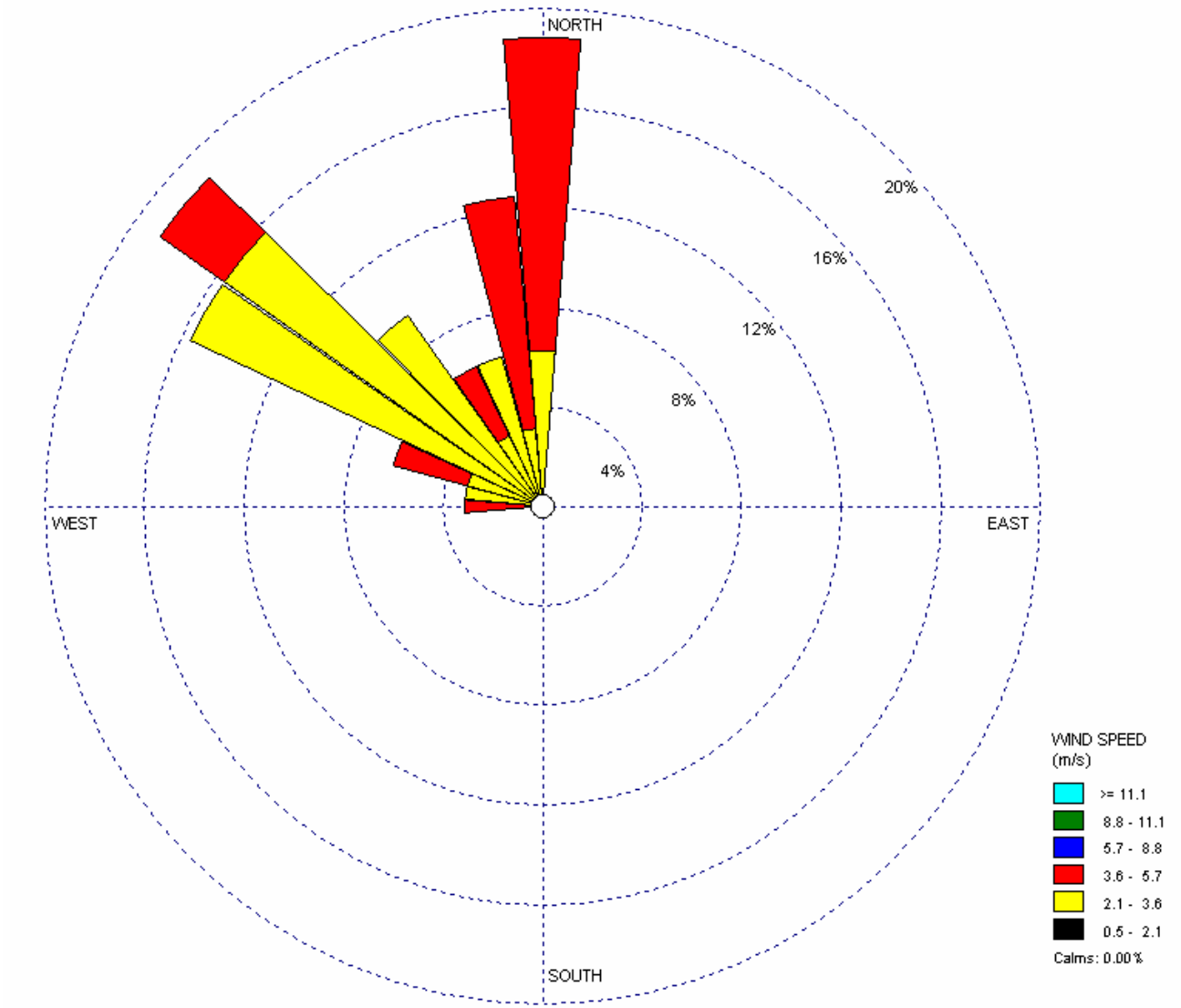


1 m/s (meter per second) = 2.237 miles per hour

(October 27, 7 AM – October 28, 2 PM, 2005, Hourly Data)

Day-Time	Wind Speed (mph)	Wind Direction (degree)	10m-Temperature (F)	2m-Temperature (F)	Delta-T (F)	Relative Humidity (%)	Barometric Pressure (inch)	Solar Radiation (Watts/m^2)	Precipitation (inch)	Tidal Elevation (ft-msl)
10/27/05 7:00 AM	7.03	296.3	40.658	39.705	0.953	80.742	29.984	-2.5218	0	
10/27/05 8:00 AM	6.597	303.4	40.892	39.959	0.932	78.503	30.005	38.799	0	
10/27/05 9:00 AM	6.778	297.4	42.376	41.749	0.628	70.501	30.033	145.64	0	
10/27/05 10:00 AM	8.49	312	44.523	44.027	0.496	64.834	30.045	283.74	0	1.1
10/27/05 11:00 AM	10.38	331.8	46.492	46.197	0.295	55.394	30.045	498.93	0	
10/27/05 12:00 PM	7.24	337.3	48.213	48.205	0.008	53.02	30.058	582.85	0	
10/27/05 1:00 PM	5.674	315.7	49.586	49.375	0.211	50.322	30.062	381.68	0	
10/27/05 2:00 PM	6.679	284.5	50.362	49.985	0.377	51.34	30.06	190.27	0	
10/27/05 3:00 PM	7.88	270.7	50.815	50.253	0.562	49.131	30.057	186.57	0	
10/27/05 4:00 PM	8.58	289.2	50.673	50.098	0.574	49.256	30.068	264.82	0	
10/27/05 5:00 PM	6.441	294.4	49.705	48.967	0.739	52.262	30.079	69.654	0	3.4
10/27/05 6:00 PM	5.557	304.8	48.841	47.939	0.902	53.191	30.095	9.606	0	
10/27/05 7:00 PM	5.272	308.3	47.756	46.829	0.926	55.205	30.117	-1.4396	0	
10/27/05 8:00 PM	6.719	308.7	46.57	45.701	0.868	57.632	30.139	-1.4032	0	
10/27/05 9:00 PM	6.647	312.3	45.731	44.885	0.846	58.073	30.161	-1.3484	0	
10/27/05 10:00 PM	5.773	310.6	45.003	44.16	0.843	61.279	30.181	-1.3922	0	
10/27/05 11:00 PM	4.448	304.6	44.367	43.534	0.834	65.27	30.196	-1.381	0	0.8
10/28/05 12:00 AM	5.302	299.2	43.864	43.037	0.827	68.411	30.205	-1.2779	0	
10/28/05 1:00 AM	6.56	306.6	43.411	42.628	0.781	70.453	30.215	-0.87602	0	
10/28/05 2:00 AM	5.556	322.9	42.922	42.149	0.773	73.353	30.214	-0.68355	0	
10/28/05 3:00 AM	5.359	331.1	42.824	42.044	0.780	73.812	30.222	-0.31828	0	
10/28/05 4:00 AM	5.884	348.5	42.765	41.96	0.805	69.714	30.226	-0.70792	0	
10/28/05 5:00 AM	5.034	355.5	42.584	41.781	0.803	65.185	30.235	-0.23344	0	3.5
10/28/05 6:00 AM	5.656	338.7	42.306	41.518	0.788	65.22	30.241	-0.04056	0	
10/28/05 7:00 AM	6.733	354.4	41.972	41.203	0.768	64.954	30.247	-0.37542	0	
10/28/05 8:00 AM	7.55	347	41.67	40.93	0.739	68.279	30.259	8.585	0	
10/28/05 9:00 AM	9.2	358.4	41.886	41.209	0.677	63.705	30.266	31.526	0	
10/28/05 10:00 AM	11.27	359.6	42.136	41.523	0.612	59.478	30.271	93.425	0	
10/28/05 11:00 AM	10.37	352.4	43.078	42.577	0.501	57.753	30.3	157.52	0	0.8
10/28/05 12:00 PM	11.2	354.3	44.127	43.77	0.356	54.237	30.281	250.01	0	
10/28/05 1:00 PM	11.24	347	45.245	44.952	0.293	49.232	30.278	228.7	0	
10/28/05 2:00 PM	11.05	1.539	45.513	45.194	0.319	48.099	30.261	229.24	0	
Maximum	**11.27**	**359.6**	**50.815**	**50.253**	**0.953**	**80.742**	**30.300**	**582.850**	**0**	**3.5**
Minimum	**4.448**	**1.539**	**40.658**	**39.705**	**0.008**	**48.099**	**29.984**	**-2.522**	**0**	**0.8**
Average	**7.317**	**311.2**	**44.965**	**44.314**	**0.651**	**61.183**	**30.160**	**113.674**		**1.9**

(October 27, 7 AM – Oct. 28, 2 PM, 2005, Hourly Data)



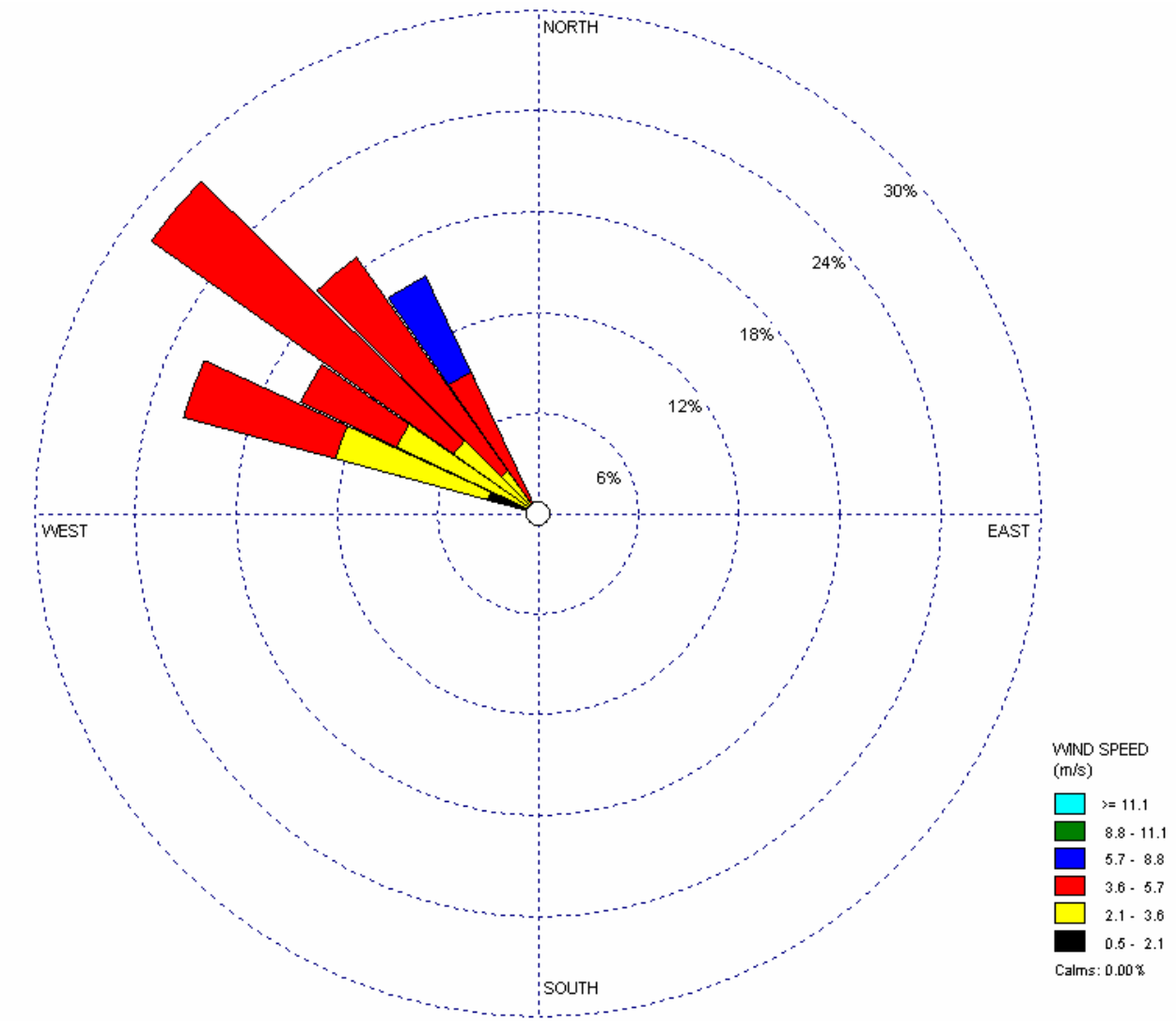
Wind Direction: Blowing From

1 m/s (meter per second) = 2.237 miles per hour

(November 17, 7 AM – November 18, 2 PM, 2005, Hourly Data)

Day-Time	Wind Speed (mph)	Wind Direction (degree)	10m-Temperature (F)	2m-Temperature (F)	Delta-T (F)	Relative Humidity (%)	Barometric Pressure (inch)	Solar Radiation (Watts/m^2)	Precipitation (inch)	Tidal Elevation (ft-msl)
11/17/05 7:00 AM	6.48	307.8	46.251	46.228	0.024	89.645	29.937	0.10428	0	
11/17/05 8:00 AM	7.44	315.8	46.156	46.133	0.022	85.198	29.953	3.1373	0	4.8
11/17/05 9:00 AM	9.03	315.2	45.916	45.94	-0.024	82.711	29.978	23.018	0	
11/17/05 10:00 AM	11.45	317.8	45.677	45.782	-0.106	76.18	29.989	120.61	0	
11/17/05 11:00 AM	10.95	316	45.833	46.014	-0.181	63.081	29.995	216.32	0	
11/17/05 12:00 PM	11.22	326.2	45.731	46.147	-0.416	57.845	29.995	387.22	0	
11/17/05 1:00 PM	11.91	321.1	46.923	47.408	-0.485	49.222	29.983	483.14	0	
11/17/05 2:00 PM	9.31	308.9	47.437	47.927	-0.490	47.389	29.966	443.33	0	-0.1
11/17/05 3:00 PM	9.79	295.4	48.25	48.642	-0.392	46.014	29.956	375.58	0	
11/17/05 4:00 PM	10.6	290.4	47.809	47.978	-0.169	46.552	29.959	211.13	0	
11/17/05 5:00 PM	9.4	299.1	47.158	47.165	-0.006	45.458	29.975	99.248	0	
11/17/05 6:00 PM	9.69	311.9	45.363	45.228	0.135	46.648	30.002	1.4003	0	
11/17/05 7:00 PM	9.52	304.4	42.999	42.879	0.120	48.357	30.026	-3.9451	0	
11/17/05 8:00 PM	9.81	320.7	41.054	40.941	0.114	51.579	30.061	-3.3154	0	
11/17/05 9:00 PM	8.52	325.1	39.492	39.337	0.155	51.576	30.073	-3.6786	0	3.7
11/17/05 10:00 PM	7.56	310.1	38.162	38.053	0.109	51.044	30.084	-3.9433	0	
11/17/05 11:00 PM	5.082	293.7	37.042	36.868	0.174	55.462	30.095	-4.4677	0	
11/18/05 12:00 AM	7.68	292.6	36.12	36.03	0.090	58.145	30.108	-3.8683	0	
11/18/05 1:00 AM	7.25	297.2	35.445	35.363	0.082	61.326	30.117	-3.7258	0	
11/18/05 2:00 AM	7.55	294.4	35.136	35.046	0.089	62.506	30.117	-3.541	0	-0.2
11/18/05 3:00 AM	6.331	295.9	34.892	34.756	0.136	65.604	30.127	-3.622	0	
11/18/05 4:00 AM	3.159	292.6	34.599	34.336	0.264	69.872	30.126	-3.6662	0	
11/18/05 5:00 AM	4.103	285.1	34.534	34.212	0.322	70.203	30.124	-3.5103	0	
11/18/05 6:00 AM	6.903	294.4	34.936	34.763	0.173	67.31	30.135	-3.386	0	
11/18/05 7:00 AM	6.631	292.3	34.458	34.301	0.157	68.365	30.15	-3.8651	0	
11/18/05 8:00 AM	6.815	296.3	34.092	33.945	0.147	68.817	30.173	4.8139	0	
11/18/05 9:00 AM	8.99	305	34.362	34.441	-0.079	59.253	30.196	116.31	0	4.6
11/18/05 10:00 AM	14.09	320.6	35.066	35.281	-0.216	42.356	30.202	280.38	0	
11/18/05 11:00 AM	13.84	329.9	36.007	36.344	-0.337	33.677	30.213	413.84	0	
11/18/05 12:00 PM	11.27	313.3	37.035	37.475	-0.440	28.862	30.214	499.89	0	
11/18/05 1:00 PM	11.24	310.9	37.969	38.474	-0.505	27.13	30.199	529.59	0	
11/18/05 2:00 PM	8.14	310	38.899	39.49	-0.591	25.941	30.192	494.91	0	
Maximum	**14.09**	**329.9**	**48.250**	**48.642**	**0.322**	**89.645**	**30.214**	**529.590**	**0**	**4.8**
Minimum	**3.159**	**285.1**	**34.092**	**33.945**	**-0.591**	**25.941**	**29.937**	**-4.468**	**0**	**-0.2**
Average	**8.805**	**306.6**	**40.338**	**40.404**	**-0.066**	**56.354**	**30.076**	**145.482**		**2.6**

(November 17, 7 AM – November 18, 2 PM, 2005, Hourly Data)



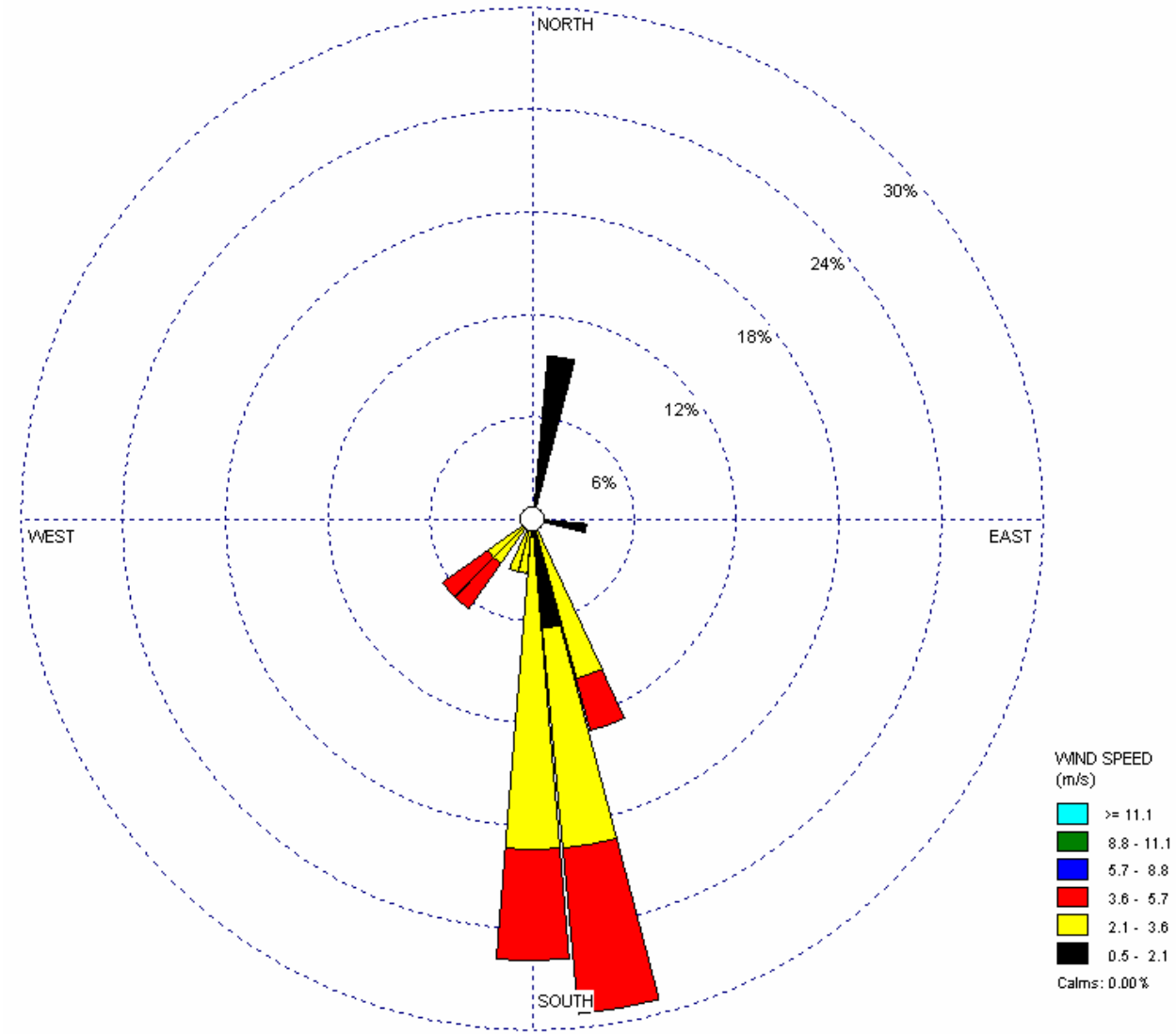
Wind Direction: Blowing From

1 m/s (meter per second) = 2.237 miles per hour

(December 28, 7 AM – December 29, 1 PM, 2005, Hourly Data)

Day-Time	Wind Speed (mph)	Wind Direction (degree)	10m-Temperature (F)	2m-Temperature (F)	Delta-T (F)	Relative Humidity (%)	Barometric Pressure (inch)	Solar Radiation (Watts/m^2)	Precipitation (inch)	Tidal Elevation (ft-msl)
12/28/05 7:00 AM	2.066	6.526	29.391	28.578	0.813	87.693	29.883	-2.7823	0	
12/28/05 8:00 AM	2.2	12.25	29.031	28.271	0.760	89.425	29.889	-2.6527	0	
12/28/05 9:00 AM	3.08	7.17	27.805	27.25	0.554	89.718	29.895	38.131	0	
12/28/05 10:00 AM	1.593	100.8	29.361	29.583	-0.222	76.997	29.904	166.25	0	
12/28/05 11:00 AM	4.564	163.7	33.89	34.184	-0.294	70.088	29.928	281.22	0	0.1
12/28/05 12:00 PM	5.725	156.3	36.928	36.986	-0.059	67.34	29.907	353.06	0	
12/28/05 1:00 PM	6.15	172.9	40.281	40.552	-0.271	68.289	29.878	337.23	0	
12/28/05 2:00 PM	9.74	223.9	43.851	44.078	-0.228	62.886	29.857	255.88	0	
12/28/05 3:00 PM	7.87	225.4	44.482	44.581	-0.098	65.543	29.839	150.54	0	
12/28/05 4:00 PM	7.46	228.2	44.879	44.957	-0.077	69.354	29.842	138.72	0	
12/28/05 5:00 PM	6.734	218.7	44.661	44.586	0.076	71.064	29.843	49.522	0	
12/28/05 6:00 PM	4.03	200.7	43.817	43.532	0.285	75.572	29.837	1.318	0	3.4
12/28/05 7:00 PM	3.842	165.1	42.209	41.583	0.626	82.844	29.823	-2.4487	0	
12/28/05 8:00 PM	4.204	171.7	40.28	39.807	0.473	90.278	29.807	-1.4649	0	
12/28/05 9:00 PM	6.973	176.7	40.455	40.185	0.270	91.97	29.793	-1.1771	0	
12/28/05 10:00 PM	6.901	181.8	41.152	40.872	0.281	92.753	29.778	-1.1116	0	
12/28/05 11:00 PM	6.724	175.4	41.034	40.763	0.271	95.249	29.768	-2.1072	0	-0.2
12/29/05 12:00 AM	5.115	181.1	40.956	40.541	0.415	96.469	29.748	-2.4042	0	
12/29/05 1:00 AM	5.466	167	42.496	41.98	0.516	97.182	29.725	-0.55358	0	
12/29/05 2:00 AM	11.04	166.8	43.767	43.555	0.213	97.373	29.702	-0.39349	0	
12/29/05 3:00 AM	9.03	172.2	43.742	43.59	0.151	97.421	29.692	-0.87368	0	
12/29/05 4:00 AM	9.87	160.7	44.97	44.662	0.308	97.434	29.674	-1.9868	0	
12/29/05 5:00 AM	6.992	170.8	45.624	45.334	0.290	96.427	29.645	-2.394	0	
12/29/05 6:00 AM	7.5	176.6	46.298	45.992	0.305	94.25	29.611	-1.716	0.02	4.5
12/29/05 7:00 AM	10.26	166	46.258	45.913	0.345	94.54	29.603	0.03392	0.09	
12/29/05 8:00 AM	9.77	177.9	46.975	46.78	0.195	95.892	29.594	0.0499	0.05	
12/29/05 9:00 AM	4.844	159.7	46.827	46.421	0.406	97.104	29.588	9.7296	0.02	
12/29/05 10:00 AM	5.604	178.2	48.056	47.886	0.170	98.014	29.581	20.716	0.04	
12/29/05 11:00 AM	5.159	182	47.987	47.881	0.106	98.028	29.563	24.347	0.1	
12/29/05 12:00 PM	3.808	172.9	49.069	48.72	0.349	98.346	29.519	50.417	0	-0.2
12/29/05 1:00 PM	5.246	181.6	49.978	49.765	0.213	97.828	29.465	44.128	0	
Maximum	**11.04**	**228.2**	**49.978**	**49.765**	**0.813**	**98.346**	**29.928**	**353.060**	**0.1**	**4.5**
Minimum	**1.593**	**6.526**	**27.805**	**27.250**	**-0.294**	**62.886**	**29.465**	**-2.782**	**0**	**-0.2**
Average	**6.115**	**161.3**	**41.823**	**41.593**	**0.230**	**87.206**	**29.748**	**61.201**		**1.5**

(December 28, 7 AM – December 29, 1 PM, 2005, Hourly Data)



Wind Direction: Blowing From

1 m/s (meter per second) = 2.237 miles per hour

ATTACHMENT G

ENSR Progress Sampling Report

Executive Summary

EXECUTIVE SUMMARY

Remediation dredging was performed within Dredge Management Units (DMU) 2, 3, 4, and 5 of the New Bedford Harbor Superfund Site from September through mid-November 2005. Dredging was conducted with auger-equipped hydraulic dredges over a combined area of approximately 383,000 square feet of the Acushnet River. Approximately 24,000 cubic yards of polychlorinated biphenyl (PCB) contaminated sediments were removed from the dredged area with the depth of cut ranging from 1 to 5 feet. The 2005 dredging removed sediments to the approximate depth of the z* elevation (where PCB concentrations are predicted to be less than the 10 mg/kg remediation criteria), but the focus was on maximizing the volume of contaminated sediments removed rather than fully remediating the area (i.e., no cleanup passes were performed). Dredged material was pumped to shore-side facilities for desanding and dewatering with approximately 16,000 tons of filter cake transported for offsite disposal.

The fall 2005 dredging was performed in areas adjoining the area dredged in 2004, including the eastern portion that remained of DMU-2 (Area-A), and the entire area of DMU-4 and limited portions of DMU-3 and DMU-5 located immediately to the south (Area-B). Based on historical sampling, total PCB concentrations were reported at thousands of mg/kg for some sediments within this area with the depth of contamination ranging from 1 foot to nearly 5 feet. Ninety-five push-core sediment samples were collected prior to the start of the dredging to refine the accuracy of the predicted z* elevation over the dredge area. A limited number of these samples were submitted for analysis to determine total PCB concentrations above and below the visual transition between black surficial silt and lighter underlying sediments as a means of comparing the accuracy of the observed interface in predicting actual z* elevations. Forty-seven post-dredge cores were collected to assess the efficiency of the dredge in removing the intended depth of PCB contaminated sediment.

Pre-dredge cores were fairly consistent over both dredge areas with a distinct layer of black fluidized silt (OL layer) with a thickness up to 53 inches, transitioning to a lighter underlying layer of olive colored silt-clay. For some samples collected along the edge of the marsh on the eastern side of the harbor, an underlying layer of peat was observed beneath the black OL layer. PCB concentrations above the interface ranged up to 18,200 mg/kg (total Aroclors) and were generally non-detect or low beneath the interface. The PCB data supported the model used previously for the Upper Harbor that the visually identifiable physical characteristics of the sediment provided a good indicator of PCB concentrations and that the core measured interface elevation provided an estimate of the z* elevation. The agreement between the field measured elevation for the visual transition and the target dredge elevation in the dredge plan was determined to be within 1-foot at 67 of the 95 pre-dredge core locations with no apparent bias above or below the target dredge elevation. The limited offsets between the planned dredging elevation and the observed transition elevation were reviewed by Jacobs Engineering, and adjustments were made to the target cut depth elevation to increase overall dredging efficiency.

Visual assessment of the pre-dredge cores also allowed for comparison of the core measured thickness of the black surficial OL layer with the planned sediment removal thickness. The agreement between these two parameters was not as good as the z*/planned cut elevation comparison, particularly for Area-A with a bias toward over predicting the sediment thickness. The offset between the thickness predictions and measurements could have been due to the technical constraints of bathymetric measurements in shallow waters with fluidized surficial sediments or the constraints of collecting representative cores of the fluidized surficial sediments (historical core samples were collected by vibratory techniques). Although this potential offset could affect the predicted volume of sediment removed from a given area, it in no way affected the actual dredging, as dredging control was based on the elevation of the dredge cut rather than the thickness of the material to be removed.

Physical characterization of the post-dredge cores indicated the complete removal of the black surficial OL layer in all the samples that were collected from Area-A and approximately one-half of those collected from Area-B, with the other half retaining the distinct black surficial silt layer with an average thickness of 12 inches. For the post-dredge cores where the OL layer had been removed, it was replaced by a dark olive post-dredge surficial layer, ranging in thickness from 3 to 22 inches, and overlying the more consolidated olive colored silt.

Six sets of pre- and post-dredge core samples were selected for PCB analysis from locations in Area-B where dredging had proceeded below the sediment transition interface. The PCB concentrations in the post-dredge surficial layer were generally much lower than in surficial layer of the area prior to dredging. However, the post-dredge surficial concentrations (ranging from 4.8 to 208 mg/kg with a mean of 102 mg/kg) were well above the pre-dredge concentrations from same elevation (ranging from non-detect to 33 mg/kg with a mean of 6.1 mg/kg). The presence of a residual post-dredge surficial layer retaining some of the physical and chemical characteristics of the previously overlying pre-dredge material is not unexpected, especially given that no cleanup passes were performed in the 2005 dredging. This residual surficial layer is considered to be the result of one or more of a number of processes, including undisturbed residuals (material not fully removed), generated residuals (sloughing within and adjacent to the dredge cut, resuspension and deposition related to the dredging and support activities), and normal background resuspension and deposition in the harbor unrelated to the dredging.

ATTACHMENT H

ENSR Water Quality Report

Executive Summary

EXECUTIVE SUMMARY

Remediation dredging was performed within Dredge Management Units (DMU) 2, 3, 4, and 5 of the New Bedford Harbor Superfund Site from September through November 2005. The eastern portion of DMU-2, left open during the 2004 dredge program to allow anadromous fish passage through the Acushnet River estuary, was dredged during the early stages of the 2005 program with removal of approximately 8,660 cubic yards of contaminated sediments. Approximately 15,470 cubic yards were removed from DMU-4 and limited portions of DMU-3 and DMU-5, making for a total of approximately 24,130 cubic yards of contaminated sediments removed during the 2005 dredging. Similar to the 2004 work, the dredging was performed using auger-equipped hydraulic dredges, with the dredged material pumped to shore-side facilities for desanding, dewatering, and preparation for offsite disposal. Because of elevated PCB concentrations in the dredged sediments (>1,000 mg/kg), special material handling was required for the work as well as the performance of a water quality monitoring program.

The water quality monitoring program was developed by the USEPA and the USACE to help ensure that the dredging and support activities were carried out in a manner that did not result in: 1) acute impacts to organisms within the water column outside of the dredge area; 2) significant transport of contaminated sediments or floating sheens outside of the work zone to clean or previously remediated areas; or 3) blockage of the water way to anadromous fish passage. The monitoring included measurement of water column turbidity in real-time using meters on monitoring vessels and using deployed recording meters in and around the dredging work area and visual observation for fish passage.

Similar to previous in-water work within the New Bedford Harbor Superfund Site, an upper level turbidity criterion of 50 NTUs (Nephelometric Turbidity Unit) above background was set for the project at two down current compliance transects. A warning level was set at 300 feet down current of dredging operations (triggering sampling and evaluation of work operations if exceeded) and a project criterion was set at 600 feet down current (triggering additional sampling and operation shutdown if exceeded). Toxicity testing of water samples was the primary analytical tool for evaluating impacts to the water column. The 2005 monitoring program also featured deployment of sediment traps to support characterization of potential sediment transport and oil sheen monitoring to evaluate the potential for contaminants to be transported outside the work zone via surface sheens.

The 2005 dredging removed nearly double the amount of contaminated sediment as compared to 2004. As the work was performed without the use of partial depth silt curtains, as used in 2004, there were no apparent restrictions to fish passage. A number of large schools of baitfish (believed to be herring), along with predatory fish (believed to be bluefish

and/or striped bass) were seen in the area throughout much of the dredging period. Given the higher production rate and lack of curtains, turbidity levels were higher on average in 2005 within and immediately down current of the work zone as compared to 2004, and the sediment trap data indicated accelerated deposition within the work area. There were five exceedences of the turbidity warning level during the 2005 season (50 NTU above background at 300 feet down current of operations) and one exceedence of the project turbidity criterion (50 NTU above background at 600 feet down current of operations). The exceedences corresponded to work in shallow water depths, particularly where equipment was moved through the water column. In all cases, turbidity levels dropped quickly with cessation of the activity. Toxicity testing revealed that there were only limited sub-lethal effects associated with the elevated turbidity levels, and that the 50 NTU criterion was ecologically protective.

Oil sheens on the water surface were noted on most monitoring days, not unexpected given that the 2005 work continued in an area with extremely high PCB concentrations. In some instances, the oil surfaced and formed the sheen beyond the extent of the boom boundary around the work zone. The mass of PCBs estimated within the individual sheens was small (a maximum of approximately 18 g), representing a very small fraction of the PCBs actually being dredged (estimated at 9.5 tons PCBs removed over the 2005 dredge season, Jacobs 2006). All sheens that were noted outside of the boundaries of the boomed area were observed to move with the prevailing currents (ebb or flood tide) and disperse with distance, remaining near the axis of the channel.

ATTACHMENT I

Jacobs Solids and Water Balance

CBI

CBI

CBI

ATTACHMENT J

Sevenson Operational Monitoring Data

CBI

CBI