New York State Department of Environmental Conservation
Division of Environmental Remediation
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Erin M. Crotty
Commissioner

June 9, 2004

Mr. John P. McAuliffe
Remediation & Evaluation Services
Honeywell International, Inc.
5000 Brittonfield Parkway, Suite 700
East Syracuse, NY 13057

Re: Geddes Brook Sampling

Dear Mr. McAuliffe:

We have received and reviewed your email (5/21/04, entitled "FW: Geddes Brook Dioxin Sampling plan") to the attention of the under-signed Project Manager, which contained a work plan for additional sampling in Geddes Brook. The sampling discussed in the referenced work plan was deemed necessary, by the New York State Department of Environmental Conservation, based on sample results collected in Geddes Brook as part of the Mathews Avenue Landfill Site Preliminary Site Assessment.

The work called for in the work plan is hereby approved and being conducted pursuant to the March 16, 1992 consent decree governing the Onondaga Lake System, as subsequently amended.

Sincerely,

Timothy J. Larson, P.E.
Project Manager
Division of Environmental Remediation

Andrew Gershon, Esq.
Assistant Attorney General
Environmental Protection Bureau
New York State Department of Law

cc: J. Davis - NYSDOL, NYC
R. Nunes - USEPA, NYC
H. Hamel - NYSDOH, Syracuse
D. Coburn - Onondaga County
M. Spera - TAMS

c:\tljm060904.wpd

bcc: B. Conlon/C. Conyers
M.J. Peachey
R. Quail/Rich Koeppicus
D. Hesler/Daybook

Tim Larson - FW: Geddes Brook Dioxin Sampling plan

From: "McAuliffe, John" <John.McAuliffe@Honeywell.com>
To: "'Larson, Timothy'" <tjlarson@gw.dec.state.ny.us>
Date: 5/21/2004 1:45 PM
Subject: FW: Geddes Brook Dioxin Sampling plan
CC: "'McDonald, Michelle'" <michelle.mcdonald@parsons.com>, "'Reks, Imants'" <imants.reks@parsons.com>

Tim,
Per your request, attached is the referenced Sampling Plan. We look forward to your review and approval.

Thanks,
John

John P. McAuliffe
Honeywell International Inc.
Remediation and Evaluation Services
5000 Brittonfield Parkway, Suite 700
East Syracuse, NY 13057
Phone: (315)431-0936
Cell: (315)440-0859

-----Original Message-----
From: Reks, Imants [mailto:Imants.Reks@parsons.com]
Sent: Friday, May 21, 2004 10:23 AM
To: 'Tim Larson' (E-mail)
Cc: John McAuliffe (E-mail); Al Labuz (E-mail); McDonald, Michelle
Subject: Geddes Brook Dioxin Sampling plan

Tim,
As we discussed, attached is the revised work plan for the additional dioxin sampling in Geddes Brook. Upon approval, we can get started on the sampling.

thanks
Imants J. Reks
Vice President
Parsons
290 Elwood Davis Road
Liverpool, NY 13088
Tel: (315) 451-9560
Fax: (315) 451-9570
Cell: (315) 382-2846
email: Imants.Reks@Parsons.com

Safety - Make it Personal

<<Sampling Locations.pdf>> <<GBSamplingPlan.doc>>

WORK PLAN
FOR SUPPLEMENTAL DIOXIN/FURAN
SAMPLING AT THE GEDDES BROOK SITE

BACKGROUND

Site investigation activities conducted by Honeywell in 2002-2003 during the Preliminary Site Assessment (PSA) for the Mathews Avenue Landfill Site indicated elevated mammalian, fish and avian Toxicity Equivalence Quotients (TEQs) for dioxins and furans at sediment sample location MASS-06 in the shallow 0-6 inches depth interval (Figure 1). TEQs ranged from 320 nanograms per kilogram (ng/kg) for mammals to 420 ng/kg for birds. Other sediment samples collected both upstream (GB-01) and downstream (MASS-04, MASS-05 and GB-2) of MASS-06 and in the deeper interval (6-12 inches) of MASS-06 did not exhibit elevated TEQs.

In addition, elevated TEQs and metals were detected at elevated concentrations at sample location MASS-11 in the 6-12 inch depth interval. This sample is located within a drainage ditch that appears to receive flow from the Mathews Avenue site and discharges to Geddes Brook. TEQs ranged from 295 ng/kg for mammals to 498 ng/kg for birds. There are no samples within Geddes Brook that are located directly downstream of the confluence with the ditch. Sample location MASS-04 is located approximately 100 feet upstream of the confluence of the drainage ditch and Geddes Brook.

The New York State Department of Environmental Conservation (NYSDEC) in a February 27th, 2004 telephone call has requested that additional samples be collected in the vicinity of MASS-06. In a follow up call on April 27, 2004, NYSDEC requested that additional samples be collected downstream of the confluence of the drainage ditch with Geddes Brook. This work plan describes the scope of work, protocols and procedures that will be followed for collecting the additional samples in Geddes Brook.

OBJECTIVE

The purpose of the additional sampling is to:

- Confirm the presence or absence of elevated mammalian, fish and bird TEQs at sample location MASS-06;
- Collect samples upstream and downstream of MASS-06 to determine if the elevated TEQs are a local anomaly;
- Identify potential sources of the dioxins and furans at location MASS-06; and
- Identify if compounds detected in sample MASS-11, located within the Mathews Avenue site drainage ditch, are impacting Geddes Brook downstream of sample MASS-04.

SCOPE OF WORK

The proposed scope of work for this project includes site reconnaissance and sediment sample collection. All fieldwork will be performed in accordance with the methods and procedures presented in the NYSDEC-approved Interim Remedial Measures Work Plan for the Geddes Brook Site and the referenced Quality Assurance Project Plan (QAPP), and Health and Safety Plan (HASP). Details of these proposed tasks are described below. Representatives of the NYSDEC will be notified of the proposed reconnaissance and sampling dates.

Site Reconnaissance

A site reconnaissance will be conducted to identify potential sources of impacts in the subject area. This reconnaissance will include, but will not be limited to the following:

- A review of current maps and photographs of the area and a review of any available historic documents that may help to identify potential sources.
- A site walk to identify current discharges (e.g. culverts), surface water flow pathways, potential current sources, and potential evidence of historic sources.
- Staking the sediment sample locations in Geddes Brook. The exact sampling locations will be selected in the field in concurrence with Honeywell and NYSDEC.

A preliminary review of GIS and topographic mapping indicates that an electrical substation is located approximately 250 feet directly west of sample location MASS-06 (Figure 1). There is a potential that the substation could be a source of dioxins and furans. The area between the substation and Geddes Brook will be inspected during the reconnaissance to identify if surface water flows from the substation are in the direction of Geddes Brook.

Sediment Sampling

Supplemental sediment samples and quality assurance/quality control (QA/QC) samples will be collected from two areas within Geddes Brook. A description of the sample locations and sampling scope for each is presented below.

MASS-04 Area

Sediment samples will be collected from shallow (0-6") and deep (6-12") intervals at two locations (GB-14 and GB-15) downstream of sample location MASS-04. Samples will be collected in Geddes Brook from depositional areas downstream of the confluence of the Mathews Avenue drainage ditch, and immediately north of Belle Isle Road. Proposed sample locations are shown on Figure 1. A contingency has been included for collecting two additional samples from this area. Contingency samples will be located and collected, if required, based on field observations and agreement between Honeywell and NYSDEC field representatives.

Sediment samples will be collected using a hand-driven core sampler, or other tube-type sampler. It is assumed that the sample locations will be accessible by wading using rubber boots or hip waders. Sample locations will be modified as necessary to afford safe access. Sample

locations will be staked, marked, and surveyed using Digital Global Positioning System equipment or a ground-based survey.

Each sediment sample will be examined visually in the field for evidence of impacts, and physically described using the Unified Soil Classification System. Each sample will then be placed in a stainless steel bowl and homogenized before being placed in containers provided by the analytical laboratory. The samples will be stored and shipped on ice following chain-of-custody procedures to the analytical laboratory. Each sample collected downstream of MASS-04 will be analyzed for polychlorinated dibenzo-p-dioxin and polychlorinated dibenzofurans (PCDDs/PCDFs), Target Compound List (TCL) Metals, semi-volatile organic compounds (SVOC's), and polychlorinated biphenyls (PCB's).

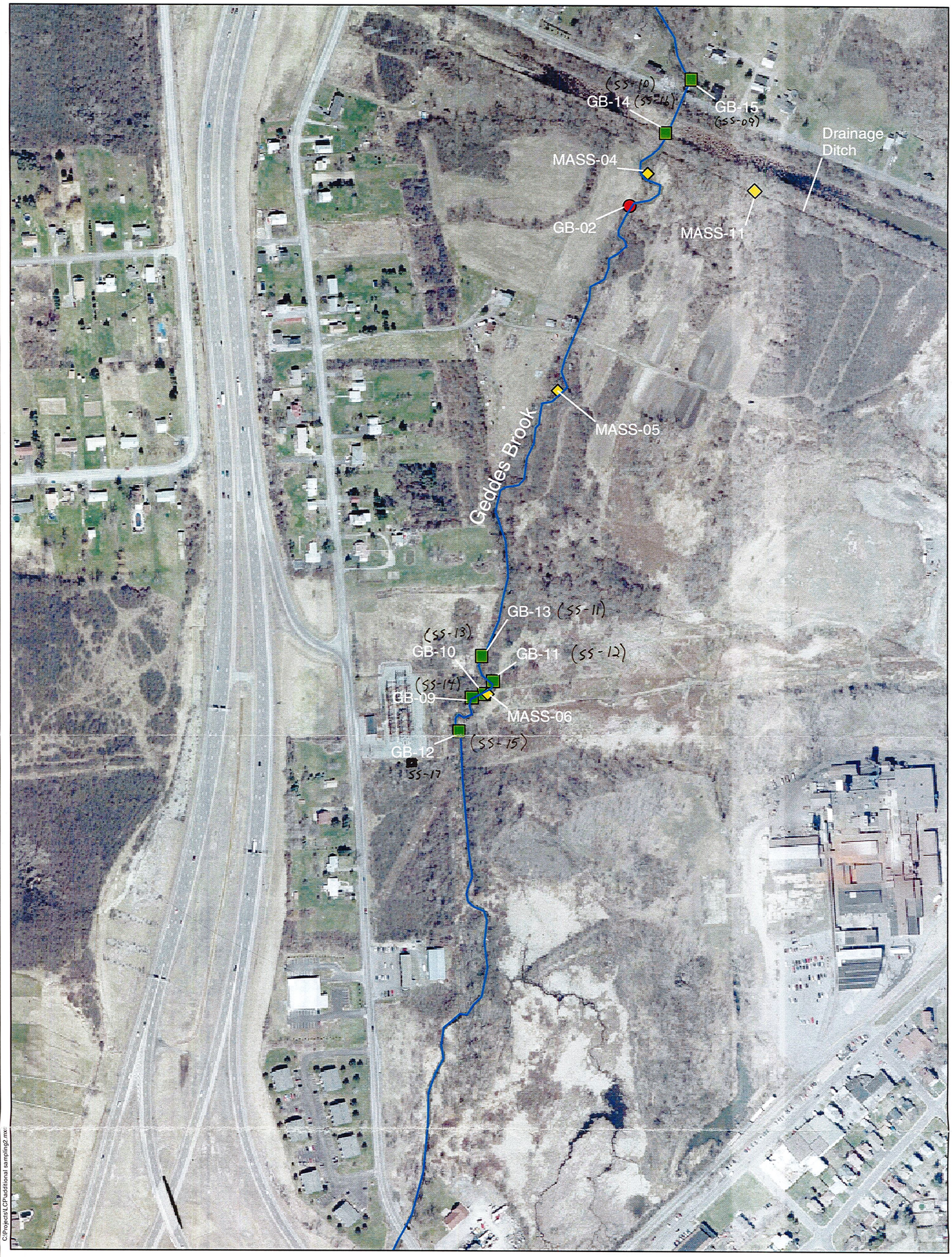
MASS-06 Area

Sediment samples will be collected from shallow (0-6") and deep (6-12") intervals at five locations (GB-09 and GB-13) approximately 50-feet and 100-feet upstream of sample MASS-06, adjacent to sample MASS-06, and approximately 50-feet and 100-feet downstream of MASS-06. Proposed sample locations are shown on Figure 1. If surface water flow pathways are identified from the electrical substation or other areas that may be potential sources (e.g. stormwater culverts from Horan Road), up to four additional soil/sediment samples will be collected from those pathways. The additional sampling locations will be selected in the field in concurrence with Honeywell and NYSDEC field representatives.

The sediment samples will be collected from the middle of the Geddes Brook channel using a hand-driven core sampler, or other tube-type sampler. It is assumed that the sample locations will be accessible by wading using rubber boots or hip waders. Sample locations will be modified as necessary to afford safe access. Sample locations will be staked, marked, and surveyed using Digital Global Positioning System equipment or a ground-based survey.

Each sediment sample will be examined visually in the field for evidence of impacts, and physically described using the Unified Soil Classification System. Each sample will then be placed in a stainless steel bowl and homogenized before being placed in containers provided by the analytical laboratory. The samples will be stored and shipped on ice following chain-of-custody procedures to the analytical laboratory. Each sample collected from the vicinity of MASS-06 will be analyzed for PCDDs/PCDFs and SVOC's. Quality assurance and quality control (QA/QC) samples will include 1 pair of MS/MSD, 1 field duplicate, and one field blank sample. Samples collected from the locations 100-feet upstream and downstream of MASS-06 will be archived at the laboratory and analyzed if required based on the results of the other samples.

Following completion of laboratory analysis, the sample data will be validated and mammalian, fish, and avian TEQs will be calculated for each sample. Tabulated data will be provided to NYSDEC for review. A figure illustrating the sample locations will be provided with the data tables. If possible, results of the sampling will be incorporated into the revised Geddes Brook/Ninemile Creek Feasibility Study (FS).



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0 300 600

Feet

1" = 300'

GB-01 & GB-02 ;
Approximate location of Exponent sampling (1998)

Sample collected by MWH (2003)

Proposed Sediment Sample

Approximate location of Geddes Brook

Orthoimagery courtesy of NYS GIS Clearinghouse (2002)

FIGURE 1

Honeywell

Mathews Ave. Landfill
Syracuse, New York

Sediment Sample Locations

290 Elwood Davis Road, Suite 312, Liverpool , NY 13088
Phone 315-451-9560