EXPLANATION OF SIGNIFICANT DIFFERENCE
LCP CHEMICAL SITE
OPERABLE UNIT NO.2

Town of Geddes / Onondaga County / Site No. 7-34-049 / January 2013

Prepared by the New York State Department of Environmental Conservation
Division of Environmental Remediation

1.0 INTRODUCTION

The purpose of this notice is to inform you about a change in remedy at the LCP Chemical Operable Unit No. 2 Site (Site). The Site is located in an industrial area two miles northwest of the City of Syracuse, in the Town of Geddes, Onondaga County, New York. In March 2010, the New York State Department of Environmental Conservation (NYSDEC) issued a Record of Decision (ROD) which selected a remedy for the Site. The remedy outlined in the ROD included various remedial elements. For vadose zone soils (shallow soils above the groundwater), the ROD called for on-site treatment to achieve site cleanup goals. Based on detailed evaluations conducted during the design phase of the project, it was determined that neither *in-situ* nor *ex-situ* treatment were technically viable for achieving the site cleanup goals. It was determined that the most feasible method to remediate the shallow soils would be to excavate the soil for off-site disposal. This Explanation of Significant Difference (ESD) presents the change from on-site treatment of vadose zone soils exceeding the site cleanup goals to excavation of these soils, and disposal of the excavated soils at a permitted off-site facility. The remedy outlined in the ROD for deep soils and groundwater*, in-situ* chemical oxidation, remains unchanged.

This ESD will become part of the Administrative Record for this Site. The information here is a summary of what can be found in greater detail in documents that have been placed in the following repositories:

NYSDEC, Central Office
625 Broadway
Albany, NY 12233
Telephone: 518-402-9676

NYSDEC, Syracuse Office
615 Erie Boulevard West
Syracuse, NY 13204
Telephone: 315-426-7400

Solvay Public Library
615 Woods Road
Solvay, NY 13209
Telephone: 315-468-2441

Atlantic States Legal Foundation
658 West Onondaga Street
Syracuse, NY 13204
Telephone: 315-475-1170
Please call for an appointment.

Onondaga County Public Library
Syracuse Branch at the Galleries
447 South Salina Street
Syracuse, NY 13202
Telephone: 315-435-1900

The ROD for the site may also be viewed electronically on the NYSDEC web site at http://www.dec.ny.gov/docs/regions_pdf/lcpou2fsrod.pdf.

Interested persons are invited to contact the Department's Project Manager for this site to obtain more information or have questions answered. For further information contact:

Project Related Questions
Richard A. Mustico, P.E.
New York State Department of
Environmental Conservation
625 Broadway, Albany, NY 12233-7013
Phone: (518) 402-9676
E-Mail: rxmustic@gw.dec.state.ny.us

Project Related Health Questions
Mark S. Sergott, Project Manager
New York State Department of Health
Empire State Plaza Corning Tower, Room 1787
Albany, NY 12237
Phone: (518) 402-7860
E-Mail: beei@health.state.ny.us

2.0 SITE DESCRIPTION AND ORIGINAL REMEDY

The LCP Chemical site is located two miles northwest of the City of Syracuse, in the Town of Geddes, Onondaga County, New York **(**see Figure 1**)**. The approximately 20-acre site is located in an industrial area on Gere Lock Road (formerly called Belle Isle Road), west of Bridge Street (Route 297), and south of the New York State Fairgrounds and an active railroad right-of-way. A scrap yard is located north of the site, a cogeneration facility is located to the west, and the former NAKOH Chemical facility is located to the northeast.

The LCP Chemical Operable Unit No. 2 Site consists of a 1.7-acre area where a former hydrogen peroxide plant was located. This area is north of the West Flume; south of the New York State Fairgrounds, a scrap metal recycling facility and an active railroad right-of-way; and west of the former NAKOH Chemical facility.

The two buildings formerly located on the site, a hydrogen peroxide plant process building and a hydrogen compressor building, along with associated tanks and containers, were demolished and/or removed in 2001. The underground sewers and utilities located on the site were removed, and surface soil (*i.e.*, 1 to 3 feet) from a portion of the site was excavated, as part of the Operable Unit No. 1 remedial action.

The following is a summary of the site remedy included in the March 2010 ROD:

- *In situ* chemical oxidation for on-site subsurface soils (soils that are below the groundwater) and groundwater to address site remedial action objectives;
- Supplemental treatment (chemical oxidation, biological, etc) of vadose zone soils to address site remedial action objectives;
- Installation of a 12-inch soil cover on-site to prevent exposure to on-site contaminated soils;
- Development of a site management plan to maintain the cover installed as part of the remedy, outline controls required for the site, and monitor future site use;
- Soil excavations on the NAKOH property; and
- Imposition of an institutional control in the form of an environmental easement that would outline and enforce restrictions on future use of the site.

3.0 CURRENT STATUS

A remedial design report, which provides design details for the *in situ* chemical oxidation (ISCO) and shallow soil removal portions of the remedy, was submitted to the NYSDEC in October 2012, comments were provided to Honeywell in November 2012, and a revised document is due to the NYSDEC in December 2012. Upon issuance and acceptance of this ESD, and approval of the Remedial Design report, remedial construction will be initiated. A remedial design work plan for the soil excavations on the NAKOH property was approved by the Department in August 2011. The soil excavation on the NAKOH property is scheduled to be conducted during the early part of 2013.

4.0 DESCRIPTION OF SIGNIFICANT DIFFERENCE

4.1 NEW INFORMATION

The remedy for the site has been modified from on-site soil treatment of vadose zone soils to excavation and off-site disposal. This modification has been made as a result of design evaluations which included field investigations conducted in early 2012. It was determined that *in-situ* chemical treatment of shallow soils would have a limited effectiveness, as the distribution of oxidants to maximize contact with impacted soils relies on the presence of groundwater. Furthermore, due to the high concentrations of xylene and ethylbenzene, biological treatment [*in-situ* or *ex-situ*] options would likely require a significant period of time (*e.g.*, several years) to achieve the site cleanup objectives. Finally, it was determined that shallow soils would need to be remediated in advance of treating the saturated soils and groundwater to avoid recontamination if *in-situ* treatment of shallow soils were to be attempted.

4.2 COMPARISON OF CHANGES WITH ORIGINAL REMEDY

As presented in the ROD, the original remedy for vadose soils called for on-site soil treatment.

Vadose zone soils exceeding soil clean up objectives will be excavated and transported off-site for disposal rather than treated on-site. As per 6 NYCRR Part 375-6.7(d)(1)(ii)(*c*), excavated areas will be backfilled with soils that meet the lower of protection of groundwater or the protection of public health soil cleanup objectives for commercial use as set forth in 6 NYCRR Part 375 Table 375-6.8(b). Following the completion of *in situ* chemical oxidation of soils below the vadose zone, there will be the placement of a 1-foot soil or crushed stone cover. The areas to be excavated (see Figure 2) correspond to an estimated volume of approximately 3,100 cubic yards. Based on the close proximity of the site to exit and entrance ramps to major highways, trucking associated with off-site disposal is not expected to have impact on residential areas.

This change to the selected remedy, as discussed above, does not affect the plan for the treatment of the estimated 51,000 cubic yards of deep soil and groundwater, nor does it change the site cover.

The ROD, as modified by this ESD, is protective of human health and environment, and meets the goals originally included in the March 2010 ROD. The NYSDOH concurs with this modification.

5.0 SCHEDULE AND MORE INFORMATION

After the final design is approved, Honeywell will implement remedy construction. The planned schedule calls for the remedial construction to commence in early 2013.

If you have questions or need additional information you may contact any of the following:

For Project Related Questions
Richard A. Mustico, P.E.
New York State Department of
Environmental Conservation
625 Broadway, Albany, NY 12233-7013
Phone: (518) 402-9676
E-Mail: rxmustic@gw.dec.state.ny.us

For Project Related Health Questions
Mark S. Sergott, Project Manager
New York State Department of Health
Empire State Plaza Corning Tower, Room 1787
Albany, NY 12237
Phone: (518) 402-7860
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01/02/2013
Date

Richard Mustico, Project Manager
Remedial Bureau D

01/02/2013
Date

Donald Hesler, Section Chief
Remedial Bureau D

1/2/13
Date

William Daigle, Director
Remedial Bureau D

1/3/2013
Date

Robert W. Schick, Director
Division of Environmental Remediation

N

LATITUDE: N40° 42' 51"
LONGITUDE: W74° 06' 07"

FIGURE 1

LCP BRIDGE STREET OU-2

SITE LOCATION MAP

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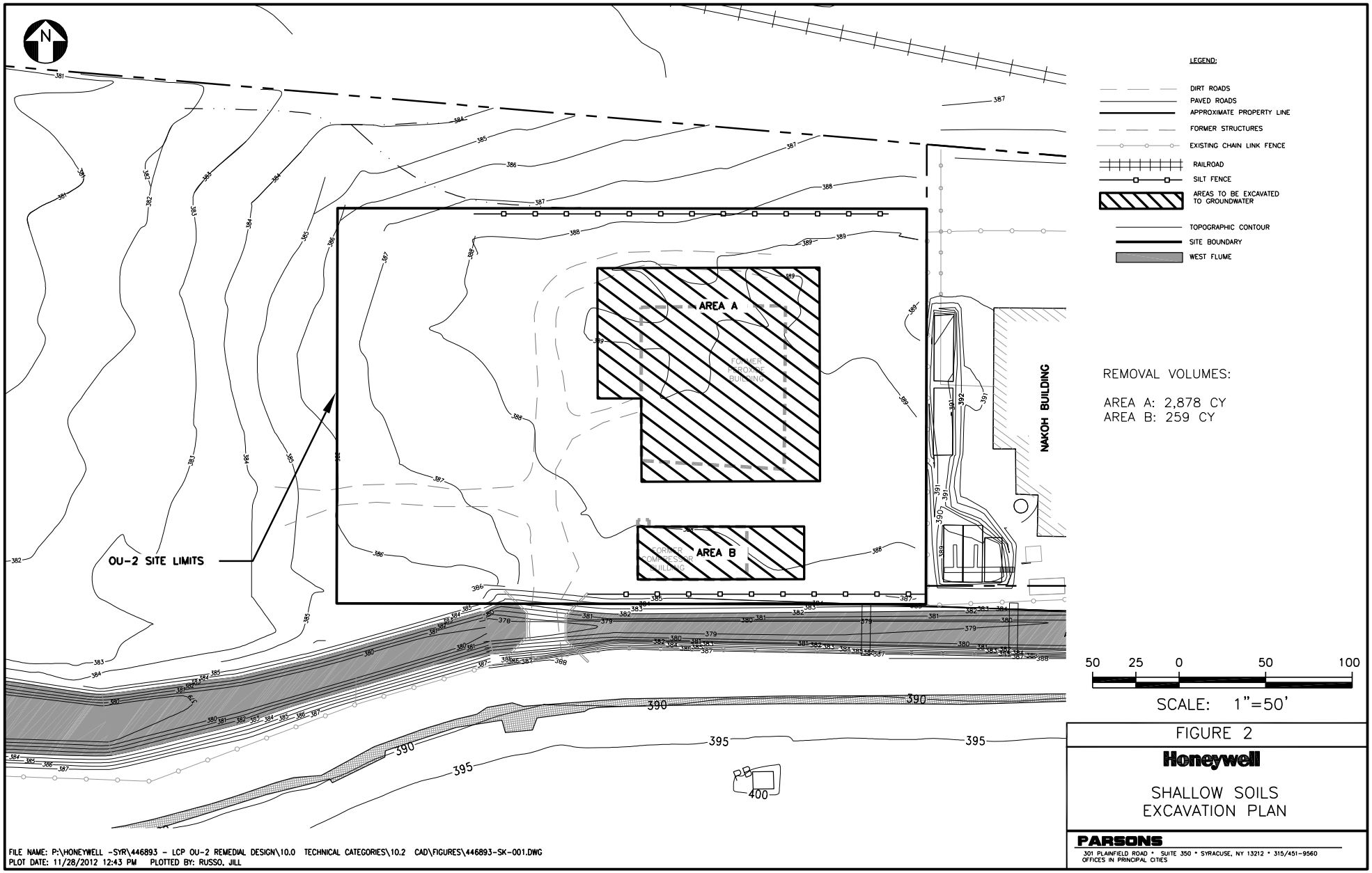

FIGURE 2

Honeywell

SHALLOW SOILS
EXCAVATION PLAN

PARSONS
301 PLAINFIELD ROAD • SUITE 350 • SYRACUSE, NY 13212 • 315/451-9560
OFFICES IN PRINCIPAL CITIES

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