UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5
77 WEST JACKSON BOULEVARD
CHICAGO, IL 60604-3590

EPA Region 5 Records Ctr.
223172

REPLY TO THE ATTENTION OF

(SR-6J)

November 19, 2001

Mr. Steven D. Smith
Solutia, Inc.
P.O. Box 66760
St. Louis, Missouri 63166-6760

RE: Comments on Revised RI/FS Support Sampling Plan
Sauget Area 2 Site – St. Clair County, Illinois

Dear Mr. Smith:

A review of the Sauget Area 2 Site Group's September 10, 2001, submittal of the Revised RI/FS Support Sampling Plan has been conducted by the U.S. Environmental Protection Agency (U.S. EPA) with technical comments provided in Attachment 1. Comments from our ecologist James Chapman are included in Attachment 2. Comments from our chemist Richard Byvik are included in Attachment 3. The Revised Sampling Plan has also been reviewed by Illinois EPA. Comments from the Illinois EPA are included in Attachment 4. Please incorporate all attached comments into the revised Sampling Plan as necessary, and re-submit the final document to U.S. EPA on or before December 19, 2001.

If you have any questions regarding the attached comments, please do not hesitate to contact me at 312/886-4592.

Sincerely,

Mike Ribordy
Remedial Project Manager
Superfund Division

Attachments

cc: Thomas Martin, USEPA
Peter Barrett, CH2M HILL
Sandra Bron, IEPA
Kevin de la Bruere, USFWS
Michael Henry, IDNR

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ATTACHMENT 2

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5

DATE: October 30, 2001

SUBJECT: Comments on revised Ecological Risk Assessment Work Plan (no date) electronically submitted 10/28/01 by Solutia for the Sauget Site.

FROM: James Chapman, Ph.D., Ecologist

TO: Mike Ribordy, RPM

Thank you for the opportunity to review the above mentioned report.

The revisions still do not reflect the previous agreements on the WP revisions, in particular, the WP still calls for comparisons between the site and reference locations but without the necessary DQO procedures to ensure that the study design will have sufficient power to detect differences if present. Examples are given under the original report headings.

Comments on other issues are presented at the end of the memo.

Section 12.7.2 Assessment and Measurement Endpoints
Measurement Endpoints for Assessment Endpoint #1

d and e The WP states that comparison of fish body burdens to toxicological benchmarks will not be performed unless the burdens of the fish near the site are elevated compared to reference location fish. This procedure conflicts with Section 12.8.1.4 in which the benchmark comparison is not contingent on the results of near-site and reference comparisons. In order to approve the approach in 12.7.2, the amount of difference between near-site and reference body burdens considered biologically significant should be negotiated, and then the sampling design should be planned such that the specified difference will be detectable at the agreed significance and power values given the expected variance at the site.

f This measurement endpoint calls for comparison of toxicity test benthic survival rates between site and reference locations. The amount of difference in survival considered biologically significant should be negotiated, and then the sampling design should be planned such that the specified difference will be detectable at the agreed significance and power values given the expected variance at the site.

In Section 12.7.7 Wildlife Exposure Models, a seasonal use factor (SUF) is proposed for receptors that are not expected to be present on-site throughout the year. Before this factor is applied, the duration of the exposures that resulted in adverse effects in the toxicological studies used to assess risk should be compared to the seasonal duration the receptor is expected to be on-site. Adjustment of the exposure by the SUF is only appropriate if the time required to exhibit adverse effects exceeds the expected duration of seasonal use of the site. For example, if adverse effects may occur after 6 weeks exposure, but the receptor is expected to use the site for 4 months of the year, application of a SUF is unwarranted.

In multiple sections the WP attributes population or community level effects to exceedances of acute toxicity values, LOAELs, or, in the case of sediments, SELs; and attributes individual effects to exceedances of chronic toxicity values, NOAELs, or LELs. Besides the obvious logical inconsistencies (what is the expected outcome of exceedance of an acute NOAEL?, or a chronic LOAEL?) (sediment LELs as well as SELs are based on observed community-level impacts in the field), I am unaware of any documentation that supports the proposed assignments of individual vs. population/community level impacts.

I may be contacted at 6-7195 if you have questions or comments. Please fill out the attached evaluation form and return it to Larry Schmitt, SR-6J. The information is used to assess and improve our services.

cc: Larry Schmitt, Section Chief, RRS #1

ATTACHMENT 4

217/782-6762

October 29, 2001

Mr. Michael Ribordy
U.S. EPA Region 5
77 West Jackson Boulevard (SR-6J)
Chicago, Illinois 60604-3590

Re: 1631215032 St. Clair County
Sauget Area 2 Site
Superfund/Technical
Administrative Order by Consent dated November 24, 2000
Support Sampling Plan Revision 2

Dear Mr. McAteer:

The Illinois Environmental Protection Agency ("Illinois EPA") received the Support Sampling Plan Revision 2 on September 21, 2001. The Support Sampling Plan Revision 2 consists of Volume 1 Addendum, Revised Volume 2A, Revised Volume 2B, Volume 3 Addendum, Volume 4 Addendum, Response to Comments Volumes 5A, 5B, 5C.

Listed below are my comments on the Support Sampling Plan Revision 2. I have limited my review to Volume 1 and Volume 2A.

1. Volume 1 Addendum, Section 6.0 Waste, Soil, And Stormwater Sampling Plan
At Site Q, the locations of two proposed leachate monitoring wells are to be selected in the field with the concurrence of EPA following the reconnaissance survey. At least one leachate well is to be located directly adjacent to the East Pond, to be representative of any impacts of waste materials that may be present in the pond. While the Illinois EPA does not disagree with this approach generally, we would like to stress the need for the leachate monitoring wells to be of adequate number and locations so as to document leachate characteristics throughout Site Q. To accomplish this task, the Illinois EPA had previously recommended at least three leachate monitoring wells to be installed in an area just south of the southwest corner of Site R, north of the Site Q 1999-2000 Removal Action, and the former fly ash disposal area (letter Sandra Bron to Michael McAteer, June 19, 2001). Illinois EPA again recommends three monitoring wells at the noted locations during the field determination of leachate monitoring well numbers and locations because of expected variations in waste from these areas and variations in leachate generated from the waste.

However, the historical sample data must be used along with any new data generated for Site Q under the RI.

9. Volume 2A, Section 5.3.1.6 Leachate Samples and Figure 7.
Same comment as number 1 above.

10. Volume 2A, Section 5.3.6. Seep Investigation
Same comment as number 3 above.

11. Volume 2A, Section 5.4.1.5 Leachate Samples and Figure 9.
Illinois EPA had previously recommended that one additional leachate monitoring well should be installed near the northwest corner of Site R (letter Sandra Bron to Michael McAteer June 19, 2001). However, due to the previous site investigative work which has already been conducted at Site R, the Illinois EPA will not require an additional leachate monitoring well at the northwest corner of Site R. The historical sample data must be used along with any new data generated for Site R under the RI.

Should you have any questions or comments on the contents of this letter, please feel free to contact me at 217/557-3199.

Sincerely,

Sandra Bron, Remedial Project Manager
National Priorities List Unit
Federal Site Remediation Section
Bureau of Land

Cc: Mike Henry, IDNR
Kevin de la Bruere, USFWS
Terry Ayers, Manager, NPL Unit