UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5
77 W. JACKSON BOULEVARD
CHICAGO, ILLINOIS 60604-3590

Reply to the Attention Of: SR-6J

September 15, 2006

Via E-mail and Hard Copy

Mr. Ed Roberts
Conestoga-Rovers & Associates
651 Colby Drive
Waterloo, Ontario
Canada N2V 1C2
Fax: 519.884.0525

RE: Engineering Evaluation/Cost Analysis
Marina Cliffs/Northwestern Barrel Site (13 acre site), South Milwaukee, Wisconsin

Dear Mr. Roberts:

EPA and has reviewed the *Engineering Evaluation/Cost Analysis for Marina Cliffs/Northwestern Barrel Site (the Properties), South Milwaukee, Wisconsin*, dated August 4, 2006 (EE/CA). EPA finds that the document completes the requirements of the EE/CA Work Plan, as it presents sufficient remedial alternatives. Therefore, EPA approves the EE/CA as a final document, with the incorporation of the minor modifications described in this letter.

However, in approving this EE/CA with modifications, EPA does not approve or adopt the characterizations and editorial comments concerning the risk assessment process or the current conditions at the site. Attached are some examples of parts of the EE/CA where CRA's characterizations may be overstated and are not necessary to the evaluation of either the site conditions or the cleanup alternatives. Because these differences in interpretation don't alter the basic factual premises or the evaluation of risks and cleanup alternatives, and the section which presents the remedial alternatives is sufficient and is not editorialized, EPA will approve the EE/CA with modifications and not pursue further revision of the document at this time.

Section 2.6.6.1 of the EE/CA discusses the exposure risks to current residents based upon surface soil contaminants. The Hazard Index for the surface soil is above 1. This score is driven by the presence of arsenic, iron and manganese. Iron and manganese are at high levels at background concentrations, so the slightly elevated levels for these elements found in a small number of samples has raised the Hazard Index above 1. Further, these elevated levels may be attributable

to non-site related anthropogenic sources like automobile emissions as the two locations, with high levels of contaminant, in the 0"-6" horizon of soil, occur along roadways.

EPA can use its discretion as it makes risk management decisions in regards to non-site related contamination from anthropogenic sources or potentially hazardous elements that have high background concentrations. This is based upon EPA guidance on background data as it relates to risk evaluation and management. EPA has considered the current data on the iron, manganese, and arsenic levels at the Properties and does not feel that the performing parties need to address those elements at this time.

The following modifications are incorporated, by EPA, in the final, approved EE/CA:

1) EPA requires greater detail on the Intuitional Controls (ICs) that will be employed as a part of the cleanup at the Properties. EPA expands the description of the IC's within Section 4.5 to say:
    - "The institutional controls at the site will accomplish the following:
        i. Excavation at the areas of concern, deeper than 3 feet below the ground surface, requires there to be a health and safety plan that addresses the risks identified in this EE/CA.
        ii. Workers, excavating soil in the areas of concern, at depths of 10 feet or greater, must wear the appropriate level of personal protection against the risks posed by the area of concern.
        iii. Monitoring wells can not be removed or disturbed without approval from EPA.

2) EPA adds the following to section 4.3:

    - "As a part of any in situ treatment at the Properties, either chemical oxidation or enhanced bioremediation activity, there will be a sampling plan that will effectively monitor the results of the treatment. The results will be evaluated to determine the degree of success of the treatment."

Please do not hesitate to me at the below-listed number if you have any questions regarding this letter or require any clarification.

Sincerely,

Michael Berkoff

Michael Berkoff
Remedial Project Manager
U.S EPA, Superfund Division
(312) 353-8983

Attachment: Excerpts from EE/CA

cc via email: Andrew Boettcher, WDNR
M. Mankowski, U.S. EPA
T. Krueger, U.S. EPA
Ed Roberts, CRA

ATTACHMENT:

EXCERPTS FROM AUGUST 4, 2006
ENGINEERING EVALUATION/COST ANALYSIS

Page 47: Section 2.6.2.3: "In accordance with the risk assessment guidance, the approach used in determining the various exposure scenarios was conservative, and, *as such may have resulted in the exaggeration of stated exposures*, as well as higher risk and hazard estimates than are likely to occur." The redundancy, within this sentence, editorialize the risk assessment methods in a way that EPA does not approve.

Page 73-74: Section 2.6.6.4: "As discussed in Appendix H, the VOC emissions and ultimately the estimated non-cancer hazard indices and lifetime cancer risks from potential construction/utility worker exposure, were calculated using and *overly* conservative USEPA default excavation rate." The subjective description of the excavation rate is not appropriate. It adds editorial to what should be a technical and objective document.

Appendix D: Tables D6 and D7: EPA disagrees with the use of the word "obsolete" in reference to the data. Though the data may no longer represent current conditions at the site, EPA does not consider it to be obsolete.