



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

May 26, 2011

REPLY TO THE ATTENTION OF:

Mr. Thomas C. Richardson
Project Manager
International Paper
6400 Poplar Avenue
Memphis, Tennessee 38197

Mr. Greg Jeffries
Manager, Environmental Remediation
BNSF Railway Company
80 44th Avenue NE
Minneapolis, Minnesota 55421

Dear Mr. Richardson and Mr. Jeffries:

Pursuant to Paragraph 55 of Section X of the September 11, 2008 Administrative Settlement Agreement and Order on Consent for Feasibility Study (Docket V-W-08-C-912) the United States Environmental Protection Agency (EPA) approves the April 14, 2011 submission of the Feasibility Study (FS) Report for the St. Regis Paper Company Site with the following modifications. Please either incorporate these modifications in the final document text and resubmit the final document or incorporate this letter as an attachment to the document with responses and resubmit by June 8, 2011.

General Comments

In comments to Barr dated February 28, 2011, EPA stated that Institutional Controls and Five-Year Reviews are required for any site if the clean up goal does not allow for unrestricted use. EPA then discussed the Leech Lake Band's Hazardous Substance Control Act (HSCA) and its impact on Alternative 5. Barr rightly replied that EPA has not made a formal determination that the Band's HSCA is an ARAR for soil remediation at the St. Regis Site. Barr then states that there is no basis for the conclusion that property that exceeds the Tribal HSCA is not acceptable for unrestricted use if it has been remediated to risk-based PRGs. If the HSCA is determined to be an ARAR by EPA, then those risk-based standards become PRGs for the site. Therefore, Five-Year Reviews and Institutional Controls will be required for all of the soil remedy alternatives that either do not meet HSCA PRGs or do not allow for unrestricted use. This would include all alternatives listed in the FS Report, including Alternative 6A which would require ICs and Five-Year Reviews due to continued groundwater contamination and the on-site vault.

The Remedial Action Objective (RAO) to prevent the potential for future transfer of site-related Contaminants of Concern (COCs) in surface soil from presenting an unacceptable risk to human health through runoff and/or windblown dust to nearby residential property and roads should be modified to include OU2. OU2 is a part of the former operations area as described in the September 11, 2008, Administrative Order on Consent (FS-AOC). In addition, there are potential risks to workers digging in the OU3 contaminant plume area as well as the potential

risks from digging in the OU1 plume area. The OU3 RAOs should be modified to add potential future groundwater risks to construction workers from digging in the contaminant plume area.

As I discussed with Tom Mattison in a telephone conversation last week, EPA estimates that the use of the BNSF rail line to transport contaminated soil off-site would result in an estimated savings of 50% from the truck transportation costs of Alternative 6A. Please either confirm this figure or provide information that would justify the use of another figure.

EPA has continuing concerns regarding the calculation of background concentration. The background concentrations for LPAHs and HPAHs appear to have been calculated based on a reduced data set, however, the corresponding B(a)PE value for the same sample was apparently not identified as an outlier; and the B(a)PE background concentration of 1.6 mg/kg was apparently calculated based on the full data set of 18 results. Please confirm EPA's evaluation of the dataset and if so, explain why data was removed as outliers from only some COC background calculations.

Introduction

On page nine, the first paragraph, please edit to state that Barr received the data validation report for the Band's dioxin/furan data for the DRM property Brownfields Assessment.

Section 2.2

Please modify the RAO for OU2 to include prevention of runoff and windblown soil and dust contamination to nearby residential OU7 areas. OU2 was part of the former operations area as described in the FS-AOC. This change will modify alternative descriptions by making alternatives that do not include cover or excavation of OU2 to PRGs to prevent potential migration of COCs inconsistent with the RAO. In addition, add potential future groundwater exposure to workers digging in the OU3 plume area.

Section 5.2.2 Alt. 2 –Overall Protection of Human Health and the Environment

Based on the modification to the RAO for OU2, modify the second paragraph to state that this alternative is inconsistent with the RAO for OU2 to prevent migration of COCs to nearby residential properties via windblown dust or surface water erosion of soil.

Section 5.2.3 Alt.3 – Overall Protection of Human Health and the Environment

On page 62, bottom paragraph, EPA disagrees that covering areas that exceed the HSCA PCP clean up level in OU2 does not provide any additional protection to the environment. The application of cover to this area to the level of the HSCA further reduces the potential for exposure to residual levels of PCP to workers and ecological receptors. Please revise the paragraph.

Section 5.2.4 Alt. 4

The section title is labeled as "5.24". Please revise to "5.2.4"

Section 5.2.4 Alt. 4

On the bottom of page 65, the second sentence states that ICs are not needed for areas that exceed the Level 1 PRGs-R since these areas will be covered. This is not correct. ICs will be needed in order to ensure the protectiveness of the cover. Please revise the statement.

Section 5.2.4 Alt. 4 – Overall Protection of Human Health and the Environment

The bottom of the first paragraph states that applying a cover to residential properties in this alternative is inconsistent with the results of the technology screening in Table 3-4. EPA disagrees with this statement and the limitations and screening comment in Table 3-4 that a cover should be excluded from consideration for residential properties. For residual levels of contamination on residential properties between HSCA clean up levels and the Level 2-PRGs-R, EPA considers a cover to be protective of human health when incorporated with proper ICs. Please revise this paragraph and the table.

Section 5.2.5 Alt. 5 – Long-term Effectiveness and Permanence

Please revise the statement made in paragraph one that 5-Year Reviews and ICs will not be required. As stated earlier, Five Year Reviews will be required for any remedy that does not allow for unrestricted use.

Section 5.2.5 Alt. 5 – Cost

On page 75 the bottom paragraph states that when excavation and restoration are complete there will be no 5-Year Reviews. Please revise this in the same manner as EPA's previous comment.

Section 5.3 Overall Protection of Human Health and the Environment

Modify the third bulleted RAO to add OU2. In addition, remove the last sentence of the paragraph following the bullets. Excavation and covering of soil exceeding residential PRGs in OU2 is consistent with the modified RAO for OU2.

On page 90, please delete the last sentence of the second paragraph regarding EPA's conclusion on site-wide averaging. In the fourth paragraph on this page please modify the second sentence to state: "With the exception of Alternative 1, all alternatives provide for possible future industrial/commercial development in the industrial/commercial areas..."

On page 92, please modify the first sentence of the page to include Alternative 5 to the list of Alternatives that will require ICs. Please delete the last sentence of the fourth paragraph. Cover to meet the LLBO HSCA clean up value for PCP provides a higher level of protection of human health and the environment by reducing exposure to residual levels of PCP.

Section 5.2.8 Alt. 8 – Long-term Effectiveness and Permanence Please revise this paragraph to state that if the LLBO HSCA is determined by EPA to be an ARAR for the site, 5-Year Reviews will be required.

Section 6.1 Summary Introduction

Please correct the Level 3 industrial/commercial PRG for BaP_e from 4.1 mg/kg to 41 mg/kg.

Section 6.3 Summary of Major Conclusions

On page 101, modify the first sentence of the second full paragraph to include Alternative 5 to the list of alternatives that will require ICs if the LLBO HSCA is determined to be an ARAR for the site.

Section 6.2 Remedial Action Objectives and Evaluated Alternatives

Modify the third bullet on page 98 to add OU2 (see previous comments).

Tables

Table G-1: Please revise this table to address the fact that ICs will be required on all alternatives, at a minimum, due to the on-site vault and the presence of groundwater contamination. In addition, please edit the footnotes to replace “U.S. EPA/MPCA” in all places with “U.S. EPA and all appropriate governmental entities”.

Appendix B, Section 4.1, Pages 4-1 and 4-2

Section 4.1 describes the approach taken to calculate site-specific background concentrations. Table 4 presents sample-specific results for TEQ_{df}, B(a)PE, LPAHs, and HPAHs. The background concentrations, calculated as 95th percentiles according to the method of Hyndman and Fan (1996), appear to be correct for TEQ_{df}, LPAHs, and HPAHs. It should be noted, that while not explicitly stated in Section 4.1, the background concentrations for LPAHs and HPAHs appear to have been calculated based on a trimmed or reduced data set. Specifically, the LPAH (2.6 mg/kg) and HPAH (15 mg/kg) values for the sample REF-06-(4-12) appear to have been identified as outliers and removed from the data set prior to calculating background concentrations. However, the corresponding B(a)PE value (1.9 mg/kg) for this same sample was apparently not identified as an outlier; and the B(a)PE background concentration of 1.6 mg/kg was apparently calculated based on the full data set of 18 results.

The approach taken regarding identification, documentation, and consideration of outliers as part of the background concentration calculation must be discussed and documented as part of Appendix B. Specifically, the basis for retaining PAH results which contributed directly to the calculation of a B(a)PE concentration for the sample REF-06-(4-12) which were apparently removed as outliers as part of the LPAH and HPAH background calculation.

Please feel free to contact me if you have any questions on EPA's approval of the FS Report or on these modifications at (312) 353-4367 or at drexler.timothy@epa.gov.

Sincerely,

A handwritten signature in black ink, appearing to read 'Tim Drexler', with a long horizontal flourish extending to the right.

Tim Drexler
Remedial Project Manager

cc: J. Persell, LLBO
S. Johnson, MPCA
T. Mattison, Barr