

Appendix C

Responsive Summary

This document summarizes public comments received on the Draft Final Damage Assessment Plan (Plan) for Jasper and Newton Counties dated May 2008 and provides the Trustees' responses to the comments.

The plan was released for public review and comment on June 29, 2008. A public meeting was held on July 10, 2008, at Missouri Southern State University in Joplin, Missouri. The public meeting served as a means of introducing the plan to the area residents and providing an opportunity for questions and answers. In attendance at the public meeting were state, county and city government officials and members of the public. Two extensions for the public comment period were granted pursuant to a request from a potentially responsible party. The ending date for the final extension was September 4, 2008.

Additionally, notification regarding the availability of the Plan for review was posted in two local daily papers, the Joplin Globe and Neosho Daily News. Copies of the Plan were sent to the Records Manager for the U.S. Environmental Protection Agency, Webb City Public Library, Granby City Hall, Joplin Public Library and Carl Junction City Hall. Lastly, an information sheet discussing the site histories, the NRDA history, and current status of the NRDA process was included with the Plan to the Records Managers as well as available at the public meeting.

One written set of comments was received. The comments received during the public meeting did not specifically pertain to the Plan, but other issues within Southwest Missouri. One written set of comments was received. Below is a The responsive summary to the written comments is provided as Appendix C of the Plan.

General Comments

One commenter encouraged the Trustees to revise the Plan and delay its issuance in light of the comments regarding the content and timing of the Plan.

See also, response to #1 below.

Specific Comments

Comment:

1. One commenter noted that the Plan does not comply with the Department of the Interior ("DOI") Regulations for Type B Assessments and the Trustees should not be entitled to the rebuttable presumption under CERCLA¹.

¹ Section 107(f)(1) of the Comprehensive Environmental Response, Compensation and Liability Act, 42 U.S.C. Section 9607(f)(1); 43 C.F.R. 11.11.

Specifically the commenter noted:

- (a) *The Plan is deficient because it lacks sufficient detail to determine whether the assessment approach is cost effective.*

Response:

The DOI natural resource damage assessment (NRDA) regulations provide that assessment methodologies be planned and systematic, cost-effective, and conducted at a reasonable cost as these terms are used in the regulations. The Trustees believe that the studies described in the Plan are cost-effective, given (as described in Chapter 4) the heavy reliance on the analysis of existing data. Given the substantial geographic and temporal extent of contamination and adverse impacts, the Trustees specifically elected a carefully planned iterative approach to natural resource damage assessment that is also the least costly approach (see pp. 50, 57). The Trustees will consider focus, design, scale and associated costs of any additional, potential assessment activities in light of the results and preliminary evaluations of restoration/compensation needs identified through studies described in the Plan. Specifically, when two or more activities provide the same or a similar level of benefits, the least costly activity providing that level of benefits will be selected. *See* 43 CFR 11.14, 11.30, 11.31. Further, as part of the Trustees commitment to pursue NRDA activities in a cost-effective manner, the Trustees are carefully coordinating assessment activities with relevant actions of other governmental agencies such as the U.S. Environmental Protection Agency (EPA), and with activities conducted at other sites within the Tri-State Mining District. (see pp. 52, 57)

- (b) *The Plan does not specify sampling locations, the number and types of samples to be collected or information on methodologies that will be used. See 43 CFR 11.31 and 11.64.*

Response:

Where new studies are to be undertaken as part of the damage assessment process, a study plan will be completed prior to the initiation of any work. These study plans will be approved by the Trustees. Such study plans will include a Quality Assurance Plan (QAP), which describes the anticipated data generation and acquisition activities. Among other information, this QAP will describe the types and numbers of samples required. Each study plan will be released for public review and comment.

- (c) *The Plan's scope of work will not enable the Trustees to demonstrate that a specific potentially responsible party ("PRP") has caused an injury. See 42 U.S.C. 9607(a)(4)(C); see also 43 CFR 11.23(e).*

Response:

The plan, as drafted, is designed to determine and quantify injuries to natural resources, and to conduct pathway analyses and damages determination.

Comment:

2. One commenter noted that the Plan is too general and does not provide the opportunity to provide meaningful comment.

Specifically, the commenter noted:

(a) The Plan does not provide sufficient detail to evaluate what additional work is intended to be performed in order to determine and quantify injuries. The Plan contains very little of the information required by 43 CFR 11.31(a)(2) (e.g., sampling locations, sample types and numbers, analyses to be performed and methodologies to be used). In addition, the Plan does not identify the reference stations and control areas intended to be used. Rather than providing necessary detail, the Plan simply identifies resources that might be assessed, information that might be reviewed, and studies that might be conducted. These generalities seemingly provide the Trustees with the latitude to conduct a variety of future studies of unknown scope, complexity, benefit or cost. This lack of essential detail renders the Plan inconsistent with the DOI regulations and prevents the Companies and the public from (1) providing more substantive and meaningful comments or (2) determining whether an NRDA conducted under the Plan would be cost-effective or adequate. This lack of detail is particularly troublesome because there appears to be an inappropriate bias in the interpretation of the existing data, which overstates the contribution of mining activities and potentially understates the impact of naturally-elevated levels of minerals in groundwater and other environmental media at the Sites.

Response:

The Plan provides for a planned, cost-effective method to identify the nature and extent of natural resource injuries through the evaluation of already existing data, or data developed in the future by others (e.g., state agency, other federal agency, universities, etc). A substantial amount of metals contamination data in the environment has been collected as part of the Superfund process, ongoing monitoring work by Missouri state agencies, academic research, and other processes and programs. In instances where existing information is not sufficient to evaluate injury, more extensive data gathering, including developing injury data, may be required. As the Plan states, it is a living document. For studies that entail substantial new data development, detailed study plans will be developed in coordination with the principal investigator(s) responsible for each proposed study and be released for public review and comment.

The level and impact of naturally occurring minerals in groundwater and other environmental media at the Jasper and Newton County Sites (the Sites) will be taken into consideration in determining the baseline condition.

(b) The Companies object to any and all determinations by the Trustees that additional investigations of injuries to other natural resources may be pursued in the future because such an approach is unreasonable and/or not cost-effective. If the Trustees intend to investigate additional resources and/or injuries, the most cost-effective approach is to revise the Plan and collect necessary additional information as part of the Plan.

Response:

The Trustees selected certain trust natural resources identified in the Plan for assessment because of the existence of data that indicates contaminant exposure and/or injury to these resources, and due to the availability of information on the sensitivity of these resources to the contaminants of concern. Should additional information become available that suggests other resources are injured as a result of mining related releases of hazardous substances, the Plan acknowledges the Trustees right to modify it. Specific study plans are included in Appendix B to this Plan. This iterative approach to assessing natural resource damages is consistent with the DOI regulations requirement that the Plan assessment methodologies be planned, systematic and cost-effective.

(c) The Companies object to characterizations of “fish” or “plant” quality and/or quantity because such characterizations are overly vague. Without reference to specific species, commenters are unable to determine whether the referenced species are representative of the species located at the Sites.

Response:

The Plan identifies specific species of trust resources present at the Sites in Chapters 2 and 4 and Appendix A. The Trustees primary focus is to gather and review data. Where it is determined that additional significant data is needed, study plans will be developed in coordination with the principal investigator(s) responsible for each proposed study, and released for public review and comment.

Comment:

3. One commenter noted that heavy reliance on existing data is misplaced.

Specifically, the commenter noted:

(a) While the Trustees have chosen to rely on such existing data as a means of conducting the NRDA in a cost-effective manner (See Plan, Page 50), a large portion of this data, including the Dames and Moore remedial investigation report referenced most often in the Plan, was

collected in the mid-1990s. In other sections of the Plan, reports issued in the 1960s and 1970s are cited. This data may be too old to provide a reliable assessment of current conditions.

Response:

In addition to data referenced in the Plan, the Trustees are also relying on other data developed since the remedial investigation and/or data developed by other entities over the past 15 years. Further, NRDA allows for consideration of past, current, and future injuries, and therefore all data is relevant to the assessment.

(b) Further, the results of the past studies do not take into consideration what changes have occurred from the remedial actions taken to date at the Sites and certainly will not take into consideration the changes that will take place when planned and anticipated remedial design and remedial actions are fully implemented. For example, the remedy for Operable Unit ("OU") #1 (mine and mill waste) is currently being conducted by EPA. Remedial efforts regarding OU #2 and OU #3 (residential yard soil) have addressed historic impacts at many properties, and actions regarding OU #4 (groundwater) have provided alternate water supplies. In addition, response actions have already been planned for other areas of the Sites. It is estimated that as much as ten years may pass before remedial actions at the Sites are completed. Significant changes and improvements will be realized during that timeframe.

Response:

Response activities, whether current or planned, will be taken into account by the Trustees in determining appropriate compensation (natural resource damages or restoration) for injuries to trust resources and the services those resources provide.

See also, response to 3(a).

(c) Assessing injuries and calculating damages at this time is premature. Any data collected now will be outdated by the time many remedial actions at the Sites are completed. The Companies believe that the appropriate time to assess natural resource damages is after the remedial work is completed and the alleged injuries are calculated using more accurate data.

Response:

The Plan is being developed before completion of remedial work in order to integrate restoration of injured natural resources as quickly as possible. It is not required or necessary to wait until completion of remedial activities to assess injuries to natural resources, and it is not in the public's best interest to delay doing so. In fact, Congress intended that the EPA and the natural

resource trustees work together in order to coordinate site investigations and integrate restoration measures with the remedial action, where possible and appropriate. [See generally H.R. Rep. No. 253, 99th Cong., 1st Sess., at 21 (October 31, 1985) ("damages assessment at NPL sites should, whenever possible, take place while the [RI/FS] is underway [and] planning for any restoration or rehabilitation measures should, whenever possible, be integrated with the remedial action.").] Further, the likely effect of current or planned response actions on natural resource damages can reasonably be taken into account prior to completion of a remedial action, allowing for earlier restoration of injured resources and/or provision of the benefits of those resources to the public.

Comment:

4. One commenter noted that the chosen assessment methodologies do not account for naturally-occurring background conditions.

Specifically, the commenter noted:

(a) The evaluation approaches for many of the natural resources addressed in the Plan consist of comparing site data to standards (e.g., water quality criteria, drinking water standards) or conservative screening criteria (e.g., sediment, phytotoxicity) with no consideration of the naturally-elevated concentrations of minerals present at the Sites or the natural adaptations the flora and fauna have made to these naturally-elevated concentrations.

Response:

The Plan provides for the quantification of injuries identified by documenting the amount, severity and duration of adverse effects in terms of changes from baseline conditions (43 CFR §11.71(b)(2)). Baseline refers to the condition(s) that would have existed had the releases of hazardous substances not occurred (43 CFR §11.72(b)(1)). The present condition of, or the services provided by the injured natural resources, will be compared to baseline conditions and services to estimate the amount of restoration or service replacement required (43 CFR 11.72).

(b) Studies by the Cherokee County PRP Group (which were previously submitted to the agencies and are available upon request) have determined that, even without historic mining activities, groundwater would not have met drinking water standards. Similarly, the naturally-elevated concentrations of minerals at the Sites have most likely contributed to increased concentrations of the targeted constituents in most media at the Sites (e.g., surface water, soils, sediments), as well as the transport of these natural background levels up the food chain. It is clear that the standards and criteria proposed in the Plan cannot be used to distinguish and evaluate any such injuries related to mining activities.

Response:

See response to 2(a) above.

Comment:

5. One commenter noted that the chosen assessment methodologies do not account for other sources of contamination or causes of potential injury.

Specifically, the commenter noted:

(a) The Plan acknowledges many other sources of non-mining related contamination, such as fertilizer and explosives manufacturing, and the discharge of wastewater from sewage treatment plants and various industrial operations. However, the Plan does not specify how these other sources of contamination and injury will be segregated from potential injury attributable to alleged contamination from historic mining.

Response:

The Trustees will take into consideration other impacts on the natural resources in determining damages for injuries to trust resources.

(b) Historically the State of Missouri and the Counties of Jasper and Newton, purchased and used considerable quantities of chat for fill, road surfacing and other uses. Railroads purchased and used significant quantities of chat for ballast. Because of these uses, chat has been scattered over the Sites and this redistributed chat has been subsequently eroded and washed into streams. The Plan does not discuss how this redistributed chat and the injuries caused by this redistribution will be addressed in the assessment.

Response:

The purpose of an Assessment Plan is to ensure that the assessment of natural resource damages is done in a planned and systematic manner and at a reasonable cost. Through this process, the Trustees will determine appropriate damages for injuries to trust resources as a result of releases of hazardous substances at or from the Sites.

Comment:

6. One commenter noted that the Plan addresses the Sites as a whole and is not designed to assess injuries occurring on specific parcels.

The Companies object to the Plan because the Trustees do not have a reasonable probability of bringing a successful claim and will not be able to demonstrate that a specific PRP has caused an injury. See 42

U.S.C. 9607(a)(4)(C); see also 43 CFR 11.23(e). The Plan, as written, is intended to address an area covering 270 square miles, with numerous mining sites that have been operated by many separate entities over a period of 150 years. The remedial investigation data referenced in this Plan address broad geographic areas (e.g., drainage areas, vegetation communities) and are not parcel-specific. Accordingly, this data cannot be used to identify injuries caused by any specific PRP or to calculate damages resulting therefrom. Therefore, the overall approach of determining injuries by relying on existing data for a broad area is flawed. The Companies also object to the use of data that is not representative of their properties for purposes of identifying and quantifying injuries and calculating damages.

Response:

The Trustees determined that there is a reasonable probability of making a successful claim for natural resource damages in the Jasper County Preassessment Screen signed August 2002, and the Newton County Preassessment Screen signed January 2008.

The Plan provides for the evaluation of information to identify the releases of hazardous substances and the evaluation of the fate and transportation of these substances through the environment.

See also, response to comment 1(c).

Comment:

7. One commenter noted that baseline is not properly defined and cannot be accurately determined.

[NOTE: RESPONSE TO (a), (b), AND (c) FOLLOW COMMENT (c).]

Specifically, the commenter noted:

- (a) One of the biggest shortcomings of the Plan is that its proposed methodologies will not adequately define baseline. Baseline is defined as “the condition or conditions that would have existed at the assessment area had the discharge of oil or release of hazardous substance under investigation not occurred.” 43 CFR 11.14(e). Without addressing this critical issue, the Plan is inadequate under the regulations, thereby rendering it incapable of supporting a NRDA or the rebuttable presumption. See 43 CFR 11.72. To accurately identify injuries and calculate damages attributable to each PRP, the following two types of baseline should be established: (1) the baseline for the Sites as a whole based on conditions that*

- occurred prior to any mining activities anywhere on the Sites; and (2) the baseline that existed immediately before a particular PRP took ownership of a parcel. Because in many cases, a parcel would change ownership several times and mining activities would be conducted by many operators, each owner's baseline is unique based on conditions at a particular parcel just before possession was taken.*
- (b) In addition, the baseline for parcels within the Sites cannot be assumed to be native grass prairies, and baseline studies designed to compare undisturbed reference or control areas to the Sites are not representative of true baseline. Mining in Jasper and Newton Counties, Missouri began in the early 1860s and considerable areas of the mineralized portions of these counties were undergoing active mining long before American Zinc (predecessor to Blue Tee) or Missouri Mining Company (predecessor to Gold Fields) were active in these areas. By the time American Zinc started mining in approximately 1905 or Missouri Mining in the early 1920s, most of the mineralized areas of these counties (i.e., subdistricts) would not have been native grass prairies (if they ever were). In fact, most of the properties on which American Zinc and all of the properties on which Missouri Mining Company mined were mined and heavily disturbed before these Companies operated on these properties. The Trustees should revise the Plan to accurately represent baseline such that (in light of complete failure to determine the baseline at the time each operator took possession of a property) baseline should be considered to be the same as the existing uses of the surrounding properties. For example, if the surrounding properties are used for agricultural production, it is unlikely that the parcels within the Sites would have been preserved as prairie, even if mining had not occurred. Therefore, in this example, injuries should be calculated based on losses relative to use as agricultural land, rather than use as a native grass prairie.*
- (c) With regard to baseline for groundwater and surface water, the Trustees have indicated that the process of dewatering the mines exposed the mineralization to oxygen and caused the harm to groundwater. The Companies do not agree with this theory. However, even assuming it is true, the Companies note that the groundwater was damaged when the mining areas were first dewatered, which again would have been before American Zinc or Missouri Mining Company activities. The water removed from the mines as part of dewatering was discharged directly to the streams draining the areas and this, along with the shallow mining in the vicinity of streams, would have caused degradation of the natural conditions of these streams prior to any activities by the Companies. In fact, activities to remine and remove historic mine wastes by the Companies would have improved the quality of the Sites rather than degrading it.*

The Trustees can only recover compensable value damages from the onset of the release through the recovery period. See 43 CFR 11.80 (b). The Companies object to any determination of baseline, and subsequent calculation of damages, that does not (1) establish conditions at each of the Companies' Properties at the time each respective Company took title; and (2) calculate any subsequent damages based on the baseline contamination at that time. Insofar as the Plan is not designed to develop this critical information, it is deficient under the relevant regulations.

Response:

The Trustees calculation of baseline will reflect conditions that would have been expected at the assessment areas had the releases of hazardous substances not occurred, taking into account both natural processes and those that are the result of human activities.

Comment:

8. One commenter noted that the Plan does not provide sufficient specifics regarding future studies.

The Companies object to the Plan to the extent that it does not specify the resources that will require the development of additional study plans or the content of such plans. Therefore, it is impossible to provide substantive and meaningful comment regarding the utility and cost-effectiveness of such plans. As such, the Companies are providing general comments to the Plan at this time. The Companies reserve the right to provide specific comments when the Plan is revised to include more substantive content.

Response:

All plans for studies that entail substantial new injury determination, and revisions or amendments to this Draft NRDA Plan will be released for public review and comment.

Concluding Comment:

As noted in detail above, the Plan is deficient because it is too vague to allow meaningful public comment, does not fulfill the requirements of the DOI regulations, and is premature in light of planned remedial actions. As such, the Plan will not develop the information necessary to support any claims against the Companies for any alleged natural resource damages.

Response:

The Trustees addressed these concerns previously in specific comments above.