NEBRASKA HEALTH AND HUMAN SERVICES SYSTEM

:PARTMENT OF SERVICES • DEPARTMENT OF REGULATION AND LICENSURE
DEPARTMENT OF FINANCE AND SUPPORT

STATE OF NEBRASKA
MIKE JOHANNS, GOVERNOR

September 1, 2004

Chief, Program Evaluation
Records and Information Services Branch
ATSDR
1600 Clifton Road NE (MS E-60)
Atlanta, GA 30333

RE: Public Health Assessment for the Omaha Lead Refinery, Omaha, Nebraska. Prepared by the Agency for Toxic Substances and Disease Registry (ATSDR), June, 2004.

Dear Sir/Madam:

The Nebraska Health and Human Services System (NHHSS) has reviewed the above referenced document and would like to offer the following comments:

1. Page 5, Summary, second paragraph. The population of concern at this site is children under the age of seven, not "6 and younger". To be consistent with other information and assessments provided to the community, the population assessed in this report should include those between 72 - 84 months of age as well.

2. Page 5, Summary, third paragraph. ASARCO, lead-based paint, and leaded gasoline are listed as sources of the lead contamination at the site. Other business, such as Gould, should also be mentioned here, similar to the language at the top of page 9.

3. Page 9, Site History. Please include information here that states what initiated the investigation of the site (i.e., City Council request).

4. Page 11, third paragraph. Please include Don Bahnke's title and agency.

5. Page 11, Concerns about Blood Lead Levels in Children, last sentence. Please provide a table or figure to support this statement.

6. Page 12, Demographics. Please include information as to why these statistics (race, ethnicity, etc.) are included and how they are used in the assessment. Please also include information on the percentage of pre-1978 housing if available.

7. Page 12, Land Use and Natural Resource. The significance of this information is therefore, what? Please provide a conclusion or discussion as to how this information is utilized in the assessment.

8. Page 13, Data Used, third paragraph. Please include language explaining why "non-drip line" samples are used.

9. Page 13, Data Used, forth paragraph. Please include information on why metals other than lead were tested.

10. Page 14, Contaminant of Concern. Please identify the criteria for selecting contaminants of concern.

11. Page 14, Contaminant of Concern, second paragraph, last sentence. Please edit this sentence to state that lead is *not likely to* dissipate, biodegrade, etc.

12. Page 14, Contaminant of Concern, last paragraph, first sentence. This sentence should be edited to emphasize that only a fraction of the lead that an individual takes in is absorbed. It should also discuss the storage of lead in the body.

13. Page 14, Contaminant of Concern, last paragraph, last sentence. Not true. If exposure has ended but past exposure had occurred, blood lead levels may reflect the release of lead stores from bone. Therefore, measuring past rather than just "recent or ongoing exposure".

14. Page 16, first paragraph. Because this is a public document, language discussing the "dose-response" needs to be expanded and simplified so that it can be easily understood.

15. Page 16, second paragraph, second sentence. The word "subjects" should be replaced with the word, *animals* so that it is clear that the studies were performed on animals, not humans.

16. Page 16, third paragraph. Please include information on effects of lead between 10-20 ug/dL.

17. Page 17, top of the page. This sentence should read "was linked *to* a change of...".

18. Page 17, forth bullet. Please simplify this discussion so that it would be easier to understand by a member of the general public.

19. Page 17, paragraph following bullets, third sentence. Please edit this sentence to read "....mean observed (*measured*) and predicted *(modeled*) blood lead concentrations...".

20. Page 18, Current Standards, Regulations, and Recommendations for Lead. Please include the date for the "Lead-Based Paint Poisoning Prevention Act".

21. Page 19, Completed Exposure Pathways, second paragraph. Please include information on pre-1978 housing if available.

22. Figure 3. There is no reference in the text prior to this figure.

23. Page 21, Soil, first sentence. "Soil" is not a complete exposure pathway but the exposure medium. Incidental ingestion of soil should be listed as the exposure pathway.

24. Page 21, Soil, second sentence. This sentence should be removed. No one on the site has been exposed for this length of time and ASARCO is not the only source for the lead in site soil. Perhaps this sentence could read "lead contamination of site soil has likely occurred since the late 1800's from industrial smelting operations in the area".

25. Page 21, Soil, first paragraph. Please spell out the acronym, "RPM" since this is the first time it appears in the document.

26. Page 21, Soil, second paragraph. Please change the word "swallow" to the word *ingest.*

27. Page 21, ASARCO Refinery Emissions. Inhalation of airborne emissions from site smelting operations should not be listed as a complete exposure pathway. This exposure is no longer occurring. The second sentence in this paragraph should read *metal levels,* rather than "metals levels". The last sentence of this paragraph should be removed.

28. Page 22, Drinking Water, third paragraph. In this paragraph it states that "As previously discussed, high lead concentrations are present in the top few inches of surface soil". At no point in the

document is the depth of the contamination discussed. This sentence should be removed or soil data with depths presented to support this statement.

29. Page 28. Information on page 27 does not continue over onto this page.

30. Page 29, Conclusions, first paragraph, last sentence. This conclusion cannot be drawn from the information provided in the document. This statement could be changed to say that *ATSDR believes that the primary sources for the lead are lead-based paint and soil contaminated with lead emitted from historic smelting operations on the site.*

31. Page 30, first paragraph. What is "health outcome data"? Please elaborate. In addition, please refer to comment #24.

32. Page 30, Recommendations, third paragraph. The NHHSS Risk Assessment Program would not recommend this evaluation for several reasons: (1) To draw conclusions between cancer rates for individuals on the site and exposure to environmental lead would be a speculative at best. (2) Lead is relatively ubiquitous in the environment, and for adults, occupational exposure, smoking, and other issues would further complicate any attempt to link cancer rates to site smelter emissions. (3) To do a thorough study would be very time consuming, costly, and distract from the primary issue at this site, reducing blood lead levels in children. (4) Any conclusion drawn without a thorough site assessment would do nothing more than further alarm and confuse the public.

33. Page 31, #2. This statement should read that NHHSS has prepared cancer statistics for the site. No evaluation is currently being prepared or planned by our agency. ATSDR is the agency requesting the data for the site evaluation. Please remove last sentence since requested information has already been provided.

34. References. Please list the agency and title for all individuals sited in the reference section.

35. Appendix A – Exposure Pathways for Omaha Lead.

    Route of Exposure, Soil – Inhalation (should be inhalation of particulates) is listed as an exposure route but it is not discussed in the document.

    Route of Exposure, Drinking Water – Inhalation of lead during showering and direct contact with lead in water while showering would not be considered routes of potential exposure.

    Notes, Ingestion of Homegrown Produce – Community Gardens (City Sprouts) are present on the site in addition to residential gardens.

    Complete Exposure Pathway, Refinery Emissions – Only current and future exposure pathways should be considered as complete. Refinery Emissions should not be considered a complete pathway.

36. Appendix D, Glossary. Please limit the glossary to terms used in this report.

If you have any questions, please do not hesitate to call me at 402-471-8880.

Sincerely,

for M. Sue Semerena

Susan Dempsey, MS
Risk Assessor

xc: Dick Nelson, NHHSS
Bob Leopold, NHHSS
Sue Semerena, NHHSS
Mike Felix, NDEQ
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