



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 4

ATLANTA FEDERAL CENTER
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ATLANTA, GEORGIA 30303-8960

July 6, 2009

Mr. Mitchell Brouman, Environmental Manager
Beazer East Incorporated
One Oxford Centre, Suite 3000
Pittsburgh, PA 15219

Dear Mr. Brouman:

Thank you for the January 29, 2009, "Evaluation of Potential On-Site Human Health Risks Associated with Soils and Sediments – Koppers, Inc. Wood-Treating Facility, Gainesville, Florida." Our preliminary comments on the document are as follows:

1. *Cancer Slope Factor (CSF) for Dioxin.* Since the EPA toxicity assessment for dioxin is still under review, we requested review by EPA OSWER/ORD of the alternative slope factor proposed for the Koppers HHRA. OSWER recommends that in the interim, that only the HEAST cancer slope factor continue to be used (HEAST 1997). EPA notes that the proposal for an alternate cancer slope factor is based on work by Maruyama. OSWER/ORD review of the Maruyama paper indicates that the authors do not appear to be following EPA cancer guidelines in selecting data to model. Maruyama based the slope factor only on the hepatic adenomas in the NTP study, not the combined tumor incidence or even the carcinomas, both giving a higher risk. In addition, the Maruyama PBPK model has not been evaluated by EPA, so EPA cannot support it at this time. In conclusion, EPA cannot support the proposal for a dioxin cancer slope factor that is an alternate to the HEAST slope factor or the California EPA value. Please update the Risk Assessment (RA) and MEE model (MEE) inputs with the HEAST slope factor and re-submit the RA and MEE outputs to reflect this change. A discussion of possible alternative slope factors for dioxin can be included in the uncertainty section, but should not be in the body of the report (deterministic and MEE).
2. *3.2 discussion of homeless trespasser.* To increase the confidence in the conservative nature of the HHRA, text should added that even if a homeless trespasser were to infrequently visit the site now or in the future, his/her exposure would be less than that of the teenage trespasser assessed herein.
3. *3.5.1 Soil Ingestion Rate.* The Risk Assessment document uses a maximum soil ingestion rate of 50 mg/day based on a study by Dr. Calabrese from 2003. While the

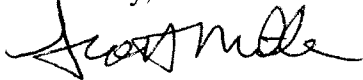
uncertainty in the soil ingestion rate value is recognized, EPA Superfund currently recommends the use of 100 mg/day as the upper bound (deterministic RA) and/or maximum (MEE) soil ingestion rate for an outdoor worker at the Koppers – Gainesville Site. The RA and MEE inputs should be updated to utilize an upper bound and maximum soil ingestion rate of 100 mg/day consistent with EPA guidance on this topic (EPA 2002).

4. *3.5.4 Body Weight.* It seems unlikely that a restrictive covenant limiting the sex of on-site Koppers workers or future commercial/industrial workers would be adopted or enforceable if it were adopted. The current scenario should assess the current worker population for the Koppers facility, using the body weight average by gender as appropriate. For the future site worker scenario, however, the RA should consider both male and female body weights in assessing possible site risks.
5. *3.5.9, Fraction of intake term.* Use of an FI term less than 1 for a worker must be accounted for by determining where the remaining incidental contact is coming from. Presumably on each workday, a site worker would be getting their total daily exposure from somewhere on the site; if, for example, 25% comes from the SWWA, the remaining 75% must be from another part of the site. For the trespasser in the current scenario, the FI term can be retained; for the future scenario, however, the FI should be increased based on the assumption that access will not be as restricted. (EPA 2000)
6. *3.5.11 Respirable Particulate Concentration.* The RA utilizes ambient monitoring data for analysis of possible effects to on-site Koppers workers. We understand that Koppers conducts specific air monitoring testing of workers on an annual basis pursuant to its contractual obligations to Beazer East. The RA should be updated to include data obtained on a Koppers-worker basis as opposed to ambient particulate monitoring data which does not likely realistically describe actual exposures of on-Site Koppers workers to Site soils.
7. *3.5.12 Relative Absorption Factors.* RAFs can be used to account for differences in matrix or vehicle effects. RAFs should not be used however, on the basis of physiological differences between humans and the test animal; these differences are already accounted for in the derivation of the toxicity value since these are human toxicity values.
8. *5.1.1 Potential Risks from Lead.* The text "...potential exposure to lead in on-Site soils are assumed to result in no risk of harm" is not quite accurate, and should be revised to read: "...potential exposure to lead in on-Site soils results in estimated risks that are acceptable to EPA."

9. *6.0 Uncertainty Assessment.* Some discussion of the newly published RAGS Part F should be included here. Since this HHRA was underway when Part F was finalized, we are not requiring its use; however, the potential effects of its omission (little or none since inhalation is not a quantitatively significant exposure route) should be briefly discussed.
10. *Recent Soil/Sediment Interim Remedial Measures.* Recent soil/sediment interim remedial actions would most likely have a positive effect (reduction) in contaminant levels in Site soils and sediments in the DD, SWWA, and the EAA areas. The soil solidification/stabilization in the South Lagoon along with DD excavation would serve to change Site soil/sediment baseline exposures. Beazer may want to consider updating the RA to take into account these efforts if sampling data is readily available that demonstrates this reduction in risk.
11. *Additional Soil Sampling in the Northern Inactive Area.* We understand that AMEC on behalf of Beazer has obtained several soil samples in Northern Inactive Area. We look forward to receiving those sampling results to better inform possible soil risk to future users in the NIA. We expect that these soil sampling results will require that the RA and the MEE will be updated to include soil sampling results usage.
12. *KI Worker versus default commercial/industrial worker.* We concur with FDEP, Alachua County EPD, and the City of Gainesville's comment that default commercial/industrial worker exposure assumptions/job tenure be used for a future worker exposure scenario in place of KI worker Site-specific exposure assumptions/job tenure since there is a high probability of Site reuse in the event that the Koppers facility ceases operation in the future. The KI worker Site-specific exposure assumptions can be retained for the current worker scenario.

For additional information on EPA's comments, please contact Kevin Koporec at (404) 562-8644 or Scott Miller at (404) 562-9120.

Sincerely,



Scott Miller
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Superfund Remedial Branch, Section C
Superfund Division

References:

EPA 1989. *Risk Assessment Guidance for Superfund, Volume I, Human Health Evaluation Manual, Part A*. Interim Final, EPA OERR, December 1989.

EPA 1998. *Approach for Addressing Dioxin in Soil at CERCLA and RCRA Sites*, Directive #9200.4-26, Office of Solid Waste and Emergency Response, April 13, 1998.

EPA 2000. Supplemental Guidance to RAGS: Region 4 Bulletins, Human Health Risk Assessment Bulletins. EPA Region 4, Website version last updated May 2000. [<http://www.epa.gov/region4/waste/oftecser/healthbul.htm>]

EPA 2002. *Supplemental Guidance for Developing Soil Screening Levels for Superfund Sites*, Office of Solid Waste and Emergency Response, OSWER 9355.4-24, USEPA, December 2002.

EPA 2004a. *Risk Assessment Guidance for Superfund, Volume I, Human Health Evaluation Manual, Part E, Supplemental Guidance for Dermal Risk Assessment*. EPA Office of Superfund Remediation and Technology Innovation (OSRTI), EPA/540/R/99/005, OSWER 9285.7-02EP, available on internet [<http://www.epa.gov/oswer/riskassessment/ragse/index.htm>] August 2004.

HEAST, 1997. Health Effects Assessment Summary Tables, FY 1997 Update, Office of Solid Waste and Emergency Response, USEPA, July 1997.