

STATE OF NEVADA
Department of Conservation & Natural Resources
DIVISION OF ENVIRONMENTAL PROTECTION

Jim Gibbons, Governor
Allen Biaggi, Director
Leo M. Drozdoff, P.E., Administrator

June 14, 2010

Matt Paque
Tronox LLC
PO BOX 268859
Oklahoma City, OK 73134


Re: **Tronox LLC (TRX)**
NDEP Facility ID #H-000539
Nevada Division of Environmental Protection (NDEP) Response to:
Proposed Indoor Air Sampling Locations, Tronox Facility Henderson, Nevada,
Supplement to Indoor Air Quality Investigation Work Plan, April 22, 2010
Dated: June 3, 2010

Dear Mr. Paque:

The NDEP has received and reviewed TRX's above-identified Deliverable and provides comments in Attachment A. Please revise and resubmit the Deliverable by **June 28, 2010**.

Please contact the undersigned with any questions at glovato@ndep.nv.gov or (775) 687-9373.

Sincerely,



Greg Lovato, P.E.
Supervisor, Remediation Branch
Bureau of Corrective Actions
Fax: 702-486-5733

GL:gl

EC: Jim Najima, Bureau of Corrective Actions, NDEP
Shannon Harbour, Bureau of Corrective Actions, NDEP
Mike Skromyda, Tronox LLC
Michael J. Foster, Tronox LLC
Keith Bailey, Environmental Answers LLC
Deni Chambers, Northgate Environmental
Brian Rakvica, McGinley and Associates
Teri Copeland, Neptune and Company, Inc.
Kurt Fehling, The Fehling Group, LLC
Joanne Otani,
Barry Conaty, Holland & Hart LLP
Brenda Pohlmann, City of Henderson
Mitch Kaplan, U.S. Environmental Protection Agency, Region 9



Matt Paque, Tronox LLC

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Ebrahim Juma, Planning Manager, Air Quality and Environmental Management

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Rick Kellogg, BRC

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Craig Wilkinson, TIMET

Kirk Stowers, Broadbent & Associates

George Crouse, Syngenta Crop Protection, Inc.

Nick Pogoncheff, PES Environmental

Lee Erickson, Stauffer Management Company

Michael Bellotti, Olin Corporation

Curt Richards, Olin Corporation

Paul Sundberg, Montrose Chemical Corporation

Joe Kelly, Montrose Chemical Corporation of CA

Jeff Gibson, AMPAC

Larry Cummings, AMPAC

CC: Susan Crowley, C/O Tronox LLC, PO Box 55, Henderson, NV 89009

Attachment A

1. Page 1, second paragraph, the NDEP assumes that, during the building evaluation (and therefore determination of sample locations), TRX documented and considered information regarding current activities that may involve use and or release of VOCs, as well as building dimensions, building layout (including known and potential conduits), and potential outdoor sources of VOCs. No response is required for this comment, however, this issue should be explicitly addressed in the final report.
2. Page 1, fourth paragraph, due to variability in indoor air sample results, one sample per building does not provide adequate data for evaluation of representativeness of exposure point concentrations for a particular building. A minimum of two samples should be taken per building. We also note that seasonal variability in indoor air VOC concentrations is typical and TRX should consider periodic resampling to address these variations. If there are sub-areas within the building that are unique in regard to indoor air conditions and/or key receptor locations, additional samples should be collected to represent those sub-areas.
3. Page 2, first full paragraph, it is recommended that at least two downwind outdoor samples be taken each day that indoor sampling occurs.
4. Page 2, second complete paragraph, TRX states "Several buildings were excluded from the air sampling program because building structural characteristics, occupancy, and/or low concentrations of chloroform in the subsurface result in a lack of receptors or an incomplete exposure pathway..." This statement addresses current exposures, but not potential future exposures. In addition, areas identified solely based on soil gas concentrations of chloroform do not account for cumulative exposures to multiple VOCs. It may be worth considering collecting indoor air data for current buildings that may be present in the future even if current exposures do not exist for those buildings. Please consider and discuss these issues in the revised Deliverable.
5. Page 2, second paragraph, the NDEP assumes that soil vapor data and modeling will suffice for current buildings that are not included in the indoor air program, as well as for all potential future building scenarios. No response is required for this comment, however, this should be explicitly discussed in the final report.
6. Page 2, third paragraph, the NDEP assumes that the TO-15 analysis is limited to chloroform, TCE and carbon tetrachloride because the results of the soil vapor data and modeling indicate that a Tier 1 (model-based) analysis is adequate for current and future indoor air pathway exposure assessment for the other TO-15 analytes. Because there is no mention of select ion mode (SIM) analysis, we assume that only the full scan TO-15 method will be employed. Please clarify.
7. Figure 1 shows chloroform isopleths. The legend indicates health-based Johnson & Ettinger (J&E) screening limits ($501 \mu\text{g}/\text{m}^3$ and $2,040 \mu\text{g}/\text{m}^3$, lower and upper limit, respectively). We were unable to locate the basis behind these values (the back-up documentation and modeling output) in the Deliverable. Please reference the source of these values or provide the back-up documentation.
8. Figure 1, Please show previous soil gas sampling locations relative to the proposed sampling locations for the indoor air quality assessment.