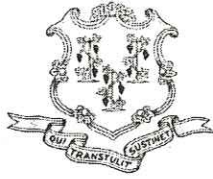


STATE OF CONNECTICUT

DEPARTMENT OF PUBLIC HEALTH



Raul Pino, M.D., M.P.H.
Commissioner

Dannel P. Malloy
Governor
Nancy Wyman
Lt. Governor

Environmental Health Section

To: Maura Esposito, Director of Health, Chesprocott Health District
From: Meg Harvey, Site Assessment and Chemical Risk Unit *MH*
Thru: Brian Toal, EOHA Program Supervisor *BT*
Date: August 10, 2018

Based on my review of the Indoor Air Summary for the former Ball and Socket Manufacturing Company prepared by Fuss and O'Neill (F&O) and dated August 1, 2018, CT DPH has the following comments.

1. Overall, we agree with F&O's conclusion that the areas marked on Figure 1 for facility walk-throughs do not have air concentrations that would pose a health concern to members of the public who participate in the public tours.
2. F&O's report includes no statement about the building conditions prior to air testing. Was the building closed up or ventilated prior to air testing?
3. Figure 1 has two locations marked AS-03 and none marked AS-05.
4. We disagree with F&O's statement that use of Target Air Concentrations (TACs) to determine health risks is not appropriate and instead occupationally-related standards are appropriate. Occupational standards are appropriate for use in occupational settings where workers may be exposed to hazardous chemicals they are using in the workplace, not from exposures they receive because of pollution present in their workplace. The industrial/commercial TACs are appropriate values for evaluating exposures to workers from pollution-related exposures. The residential TACs are appropriate for evaluating members of the general public. Residential TACs (which are based on exposures of 24 hours/day, 7 days/week) can be adjusted to account for exposures to the general public that are less than continuous.

In assessing whether air concentrations would pose a health concern to members of the public who participate in the tours, we looked at air sampling results from locations



Phone: (860) 509-xxxx • Fax: (860) 509-xxxx
Telecommunications Relay Service 7-1-1
410 Capitol Avenue, P.O. Box 340308
Hartford, Connecticut 06134-0308
www.ct.gov/dph

Affirmative Action/Equal Opportunity Employer



within the planned path highlighted on Figure 1 and compared them with residential TACs.

5. It is important to note that the area marked as closed to visitors (where sample AS-04 was taken) has air concentrations of trichloroethylene (6.61 ug/m³) and tetrachloroethylene (277 ug/m³) that exceed industrial/commercial TACs (5 ug/m³ and 11 ug/m³, respectively). The industrial/commercial TACs are based on 8 hours exposure per day, 5 days per week. Presumably, if workers are accessing this space, they are entering periodically and are not present for 8 hours per day, 5 days per week. Nevertheless, it should be noted that in the future, indoor air levels need to be reduced if this space is used by workers) for extended periods of time. Concentrations also exceed residential TACs so air levels in the “closed” area would be unacceptable for the general public as well.
6. F&O states that that air concentrations are generally comparable between the 2015 and 2018 sampling events. It is worth noting that the maximum concentration of vinyl chloride measured in 2018 (0.72 ug/m³) is double the maximum concentration measured in 2015 (0.37 ug/m³). Given that vinyl chloride is a breakdown product of trichloroethylene and PERC, vinyl chloride indoor air concentrations could continue to rise over time. Similarly, concentrations of cis-1,2-Dichloroethene (also a breakdown product) were higher in 2018 than 2015.
7. For any future air sampling rounds, F&O should confirm that their reporting limits/detection limits are sufficiently low given that the appropriate comparison values for the data are TACs and not occupational standards. F&O should also be aware that while the TACs in the Remediation Standard Regulations are the current regulatory values, they are based on very old toxicity data from 1995. The Department of Energy and Environmental Protection has issued newer TACs for some chemicals (2003 draft Volatilization Criteria and 2015 Additional Polluting Substances) that should be used in place of the 1995 values.

If you have any questions, please contact me at 860-209-7748,

cc: Sandy Brunelli, DEEP