

**Benzene VCCEP Tier 1 Submission**  
**Errata**  
**June 13, 2006**

Section 6 – Hazard Assessment

Page 83, under **Hematological Effects**: In the first sentence, the reference “IRIS 1998” should be changed to “USEPA 2003a”. In the second sentence, “10, and 30” should be inserted after 1.0 and before 300. In the third sentence, “(days 14–19)” should be changed to “(days 14-91)”.

Page 85, the current paragraph under **Hematological Effects**: The entire paragraph should be replaced with:

“In the rat, dose-related leukopenia was observed in both sexes. After 60 days of treatment, leukopenia and lymphocytopenia were observed in both sexes at 143 and 429 mg/kg/day. After 17 weeks of treatment, leukopenia and lymphocytopenia was seen in females at 18 mg/kg/day and above, and lymphocytopenia in males at 286 mg/kg/day. Lymphoid depletion of B-cells in the spleen was observed in all animals exposed to 429 mg/kg/day for 60 days or 17 weeks.

LOAEL (female) = 18 mg/kg/day – lowest dose tested

LOAEL (male) = 143 mg/kg/day

In the mouse, no leukopenia or lymphocytopenia was observed in either sex after 60 days treatment at either dose level. After 17 weeks treatment, leukopenia and lymphocytopenia was seen in male mice at 36 mg/kg/day and above, and in females lymphocytopenia only was seen at 286 and 429 mg/kg/day.

LOAEL (male) = 36 mg/kg/day

LOAEL (female) = 286 mg/kg/day”

These hematological effects in the subchronic NTP studies were also observed in the chronic NTP studies (see Section 6.2.5.2), but the original submission did not provide all the subchronic details.

Section 7 - Exposure Assessment

AT Values in Several Dose Tables

In the following tables (listed below), the total ADDs in the “1 to <2 year old” and “2 to <6 year old” columns are correct; however, the averaging time (AT) variables as shown in those columns are incorrect. The AT for the 1 to <2 year old should be 365 days and the AT for the 2 to <6 should be 1460. When these correct ATs are used, the ADDs on these tables compute. All other age specific variables in these tables are correct. The

doses on these tables match the summary dose tables used in the Risk Assessment and there is no impact to the risk calculations.

Page 107 – Table 7.8

Page 108 – Table 7.9

Page 116 – Table 7.13

Page 117 – Table 7.14

Page 120 – Table 7.18

Page 131 – Table 7.31

Page 141 – Table 7.39

Page, 108, Table 7.9 (Total ADDs for Exposure to Benzene in Ambient Air), the ADDs for the “1 to <2 yr old” and “2 to <6 yr old” groups are incorrect. The correct values are provided in the summary table, Table 7.49 for Ambient Outdoor Air – Total, and these correct dose values were used in the Risk Assessment so this correction does not impact the risk calculations or results.

Page 134, “ET” is missing from the equation at the top of the page and the definition of terms below the equation. However, it is included in the table and is included in the actual calculation of ADD.

Page 134, The inhalation rate (IR) variable, as shown is incorrect. The IR should be 0.6, not 0.5. However, the correct IR was used in the ADD calculations and the ADDs in Table 7.34 are correct. There is no impact on the risk calculations.

Page 141, CF should be removed from the equation.

Page 179, the footnote, “Average daily doses are summarized in Table 7.53,” should refer to Table 7.49, as there is no Table 7.53.