

1 Low and high EHQs for total uranium, based on the generic and Labrot et al. (1999) BCFs,
2 respectively, are provided for the Hanford scenario and background (Figure I.14) and the Hanford plus
3 background scenario (Figure I.15) for the carp (and largescale/mountain sucker and smallmouth bass) in
4 each alternative group in the 2500- to 10,000-year time period. Results are provided for only those waste
5 volumes that yielded maximal risk (i.e., Hanford Only and Lower Bound waste volumes for the No
6 Action Alternative and the Upper Bound waste volume for all other alternative groups).

7
8 The high carp (and largescale/mountain sucker and smallmouth bass) EHQs were approximately three
9 to four orders of magnitude greater than the low EHQs (Figure I.14). Neither the high nor the low carp
10 EHQs exceeded 1 for the Hanford (Figure I.14), or the Hanford plus background (Figure I.15) scenarios,
11 except for Alternative Group B, in which the high EHQ was just slightly above 1 (Figures I.14 and I.15).
12 Consequently, only a negligible risk of uranium chemical toxicity to these fish receptors exists under all
13 the alternative groups, except Alternative Group B, because the entire range of EHQs for these three
14 species falls below 1. There may be a slight risk of chronic uranium chemical toxicity to these fish
15 receptors under Alternative Group B, although this is unlikely for the following reasons. First, the
16 groundwater modeling of contaminants in the hypothetical well along the river and in the river was
17 conservative (see Appendix G). Second, simultaneous exposure to maximum contaminant concentrations
18 that do not always occur concurrently in time and space was assumed for this risk assessment (see
19 Section I.3.1).

20
21 Carp (and largescale/mountain sucker and smallmouth bass) EHQs were virtually the same for all
22 alternative groups, except for Alternative Groups A and B, which were approximately one-third to three-
23 quarters of an order of magnitude, respectively, higher than the other alternative groups (Figures I.14
24 and I.15). Consequently, except for Alternative Groups A and B, risk of uranium chemical toxicity to fish
25 receptors does not appear to be an important discriminator among the other alternative groups.

26
27 All other aquatic animal receptors had EHQs that were less than those of carp, largescale/mountain
28 sucker, and smallmouth bass. Therefore, only a negligible risk of uranium chemical toxicity to these
29 receptors exists under all the alternative groups.

30 31 **I.4 Consultations**

32
33 DOE consults with the National Marine Fisheries Service and the U.S. Fish and Wildlife Service
34 regarding potential actions that may affect sensitive habitats or species on the Hanford Site. Copies of the
35 DOE consultation letters and agency responses are included in Attachment B to this appendix.

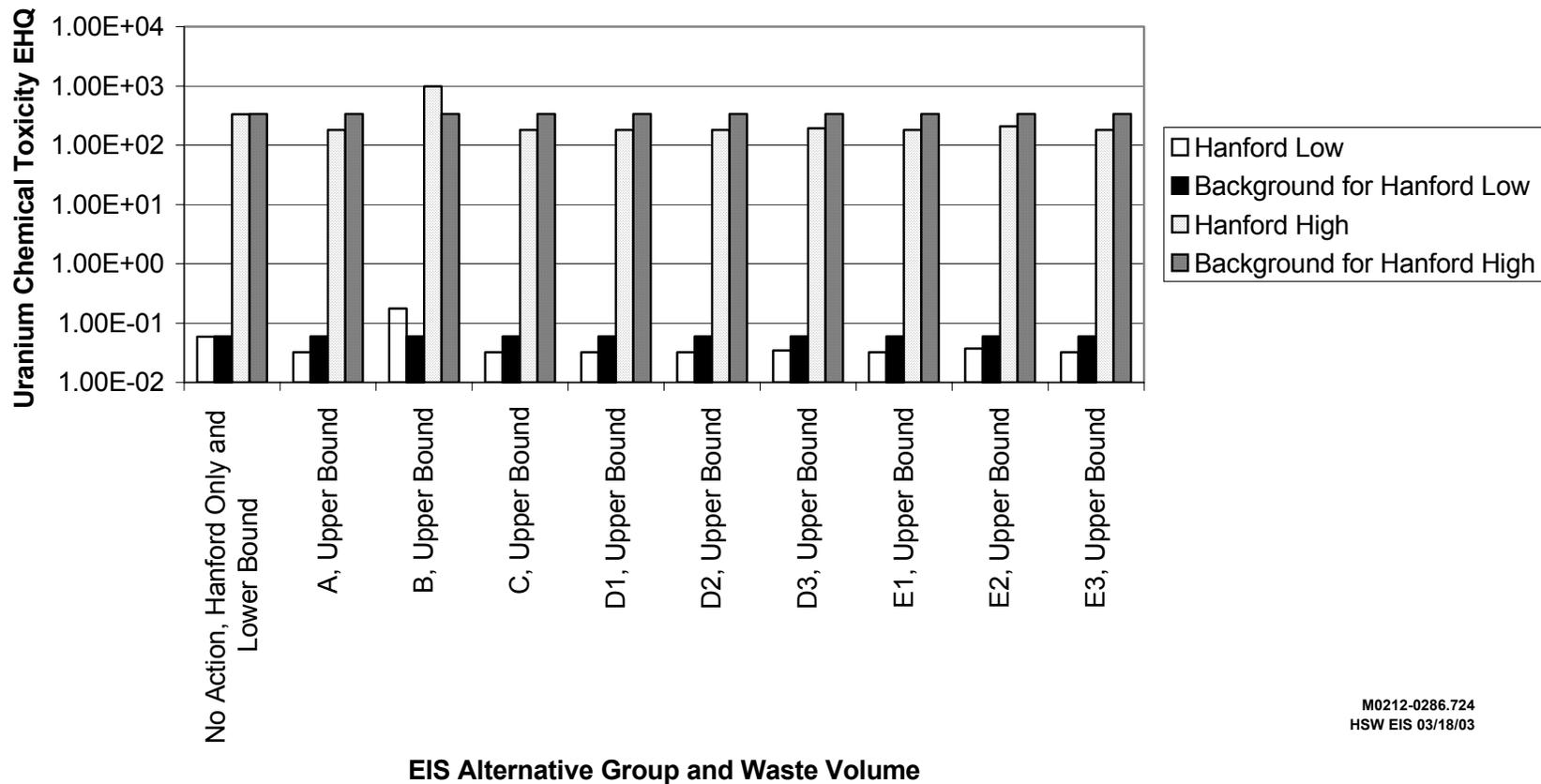
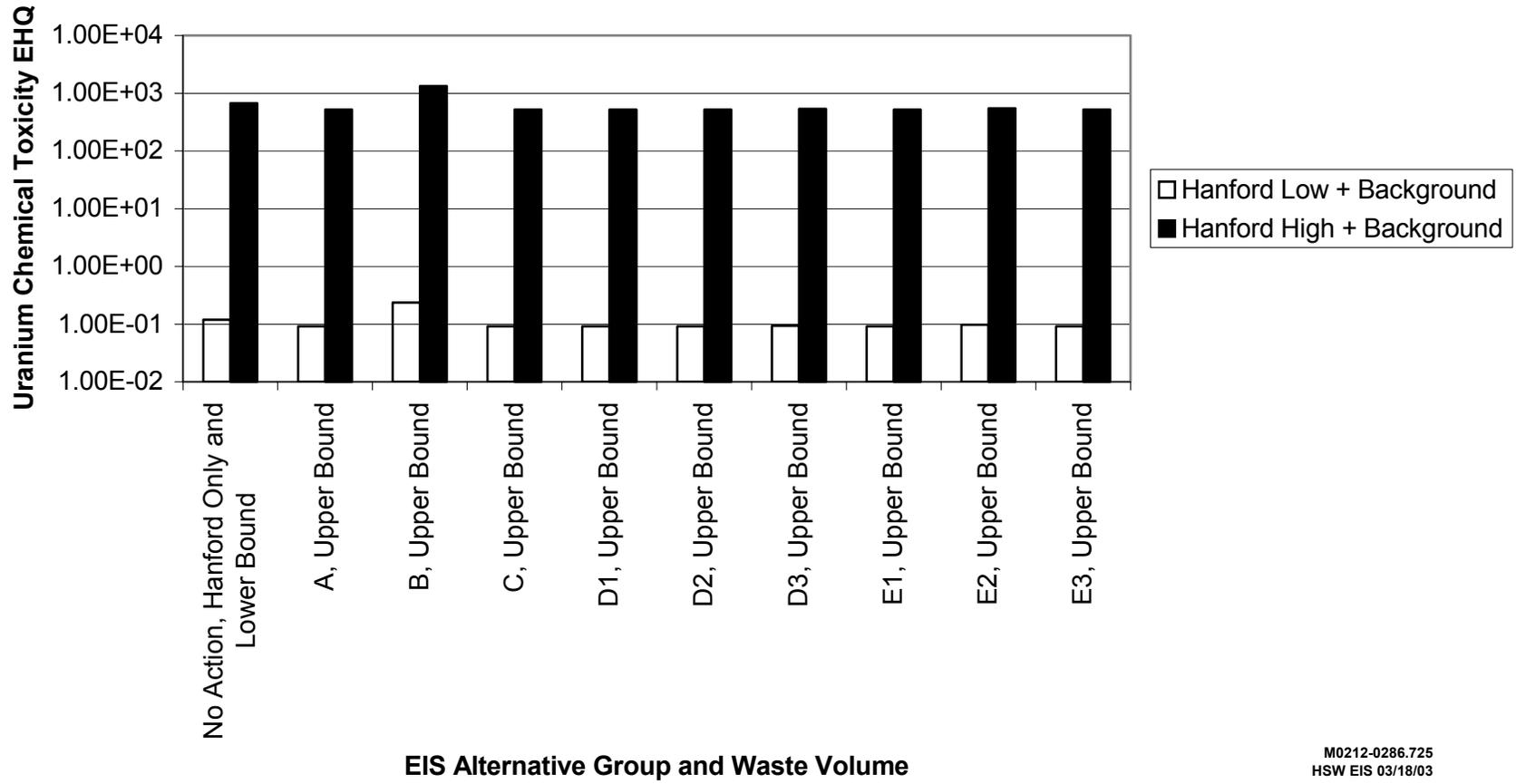


Figure I.12. Woodhouse’s Toad Tadpole Low and High Uranium Chemical Toxicity EHQs for Each Alternative Group in the 2500- to 10,000-Year Time Period for Background and the Hanford Scenario



M0212-0286.725
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Figure I.13. Woodhouse’s Toad Tadpole Low and High Uranium Chemical Toxicity EHQs for Each Alternative Group in the 2500- to 10,000-Year Time Period for the Hanford Plus Background Scenario

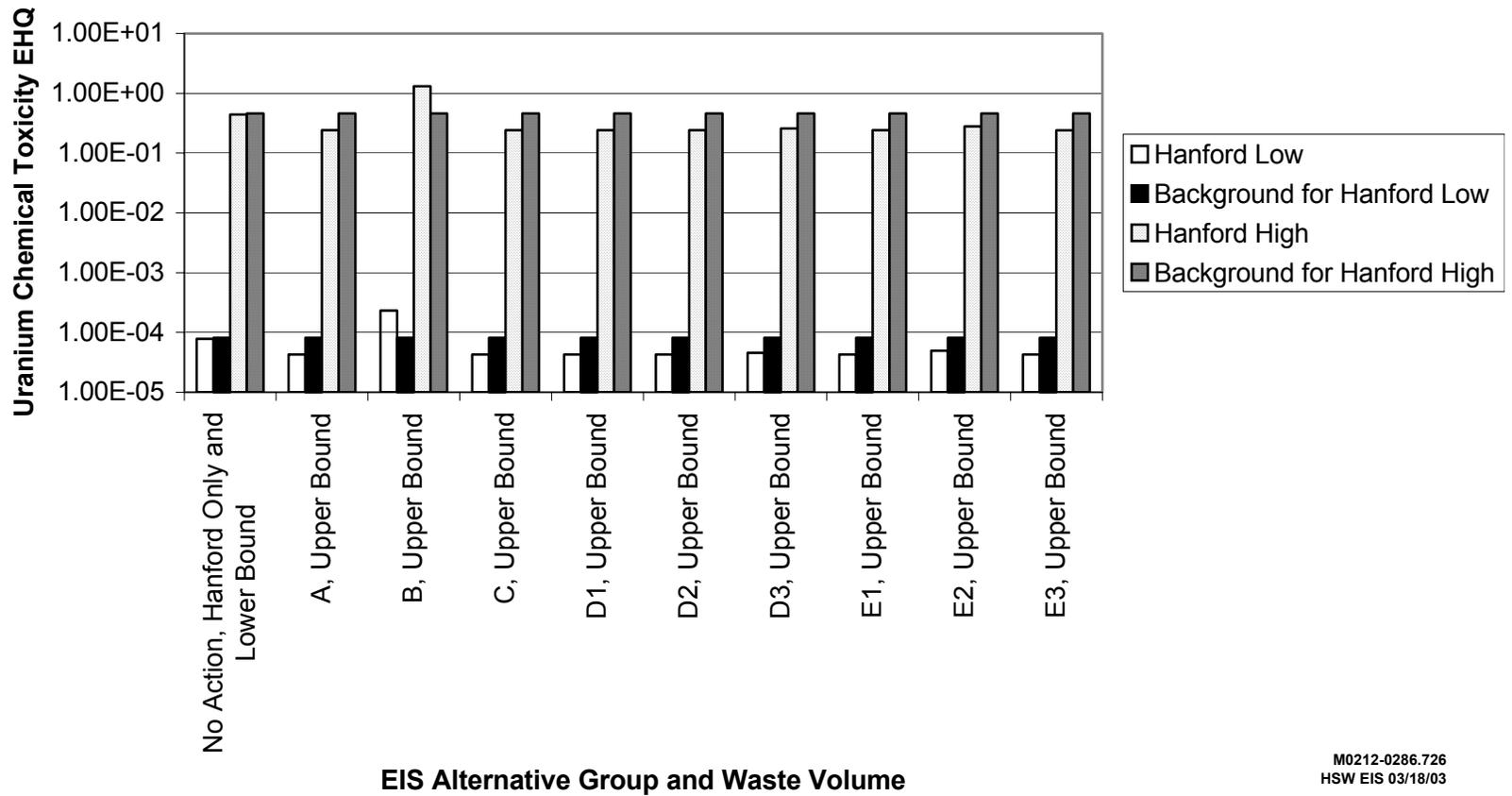


Figure I.14. Carp Low and High Uranium Chemical Toxicity EHQs for Each Alternative Group in the 2500- to 10,000-Year Time Period for Background and the Hanford Scenario

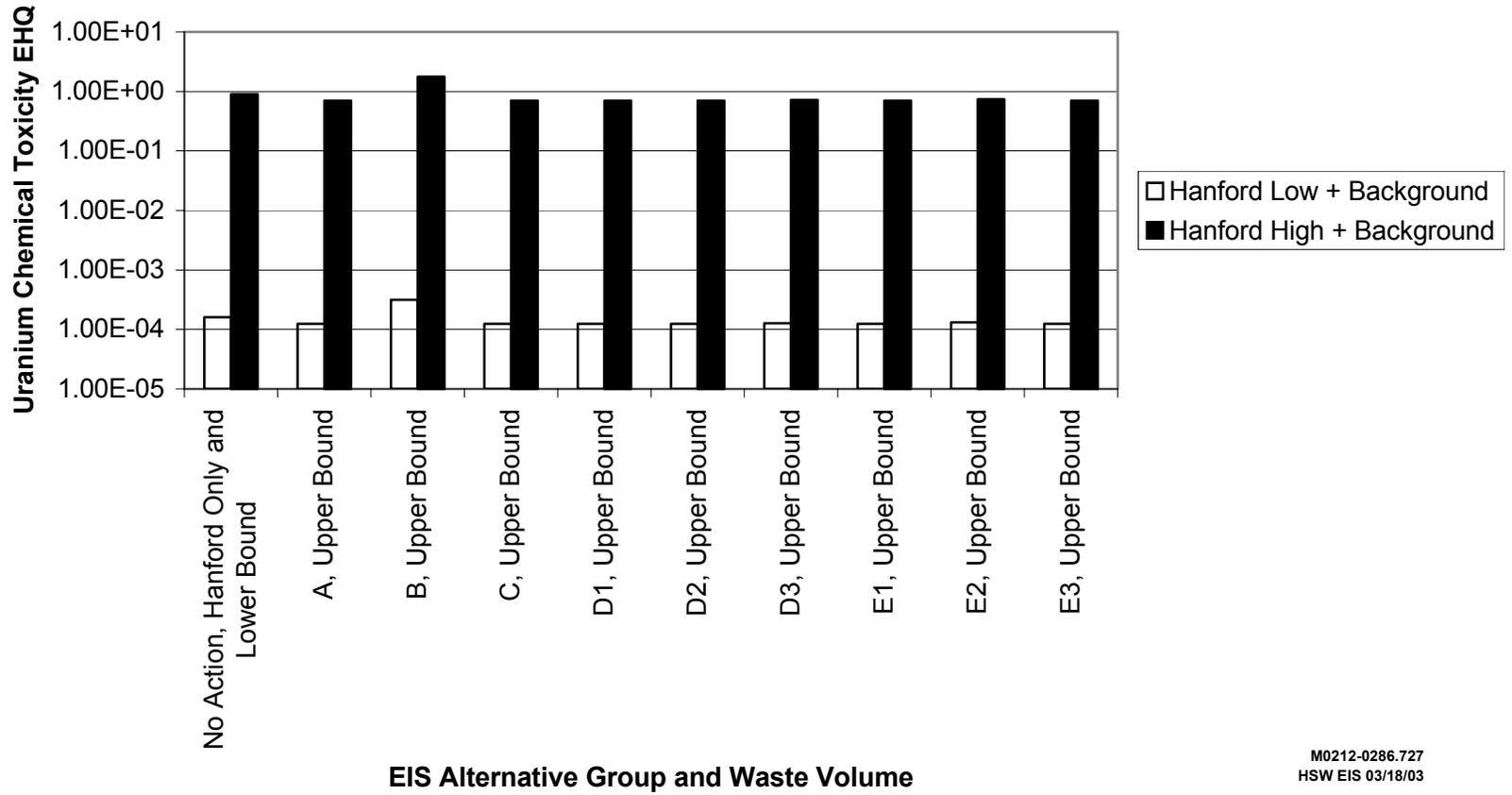


Figure I.15. Carp Low and High Uranium Chemical Toxicity EHQs for Each Alternative Group in the 2500- to 10,000-Year Time Period for the Hanford Plus Background Scenario

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