

1 temporal exposure pattern, the duration of the Bornhausen study, the number and size of the
2 four groups used in the Bornhausen study, or the extent of occurrence of effects.

3 59. The Court finds that the additional calculation performed by Dr. Rice to
4 convert the Burbacher NOEL, which was identical to the Bornhausen NOEL, to a human
5 NOEL was improper under section 12803. Section 12803 does not require adjustments to
6 NOELs derived from animal studies, nor are there any guidelines in the regulations
7 governing calculations to adjust an animal NOEL to a human NOEL. Indeed, OEHHA has
8 used animal studies for *every* published MADL except for lead and ethylene oxide, and has
9 *never* adjusted an animal LOEL or NOEL to a human NOEL. The OSHA PELs used for the
10 lead and ethylene oxide MADLs have NOEL surrogates, and therefore comply with section
11 12803.

12 60. The Court finds that Dr. Rice improperly relied on the Faroe Islands study to
13 calculate a NOEL for methylmercury under section 12803. The suitability of
14 epidemiological studies under section 12803(a)(2) requires that a study have exposed and
15 reference groups. TX 2, p. 200.5 (Cal. Health & Safety Code § 12803(a)(2)). The Faroe
16 Islands study had neither. The Faroe Islands researchers were also unable to obtain reliable
17 ascertainment of exposure to methylmercury because they did not document the amount of
18 methylmercury consumed by the pregnant women. The Faroe Islands study also failed to
19 measure pre- and postnatal exposure to PCBs and DDT, and to account for the confounding
20 effects that exposure to these chemicals will have on the results of the Boston Naming Test.
21 The Faroe Islands study did not identify and quantify confounding factors and did not have
22 complete follow-up of all children in the study. The Court is particularly troubled by the fact
23 that when the researchers controlled for PCB exposure, there was no statistically significant
24 correlation between methylmercury and performance on the Boston Naming Test, which
25 served as the basis for Dr. Rice's MADL.

26 61. The Court also finds that the State improperly relied on a BMD from the
27 Faroe Islands study as a substitute for a NOEL or a LOEL under section 12803. The
28 benchmark dose calculations of Dr. Rice that seek to model a dose response relationship do