

APPENDIX C. Risk Quotient (RQ) Method and Levels of Concern (LOCs)

Table 1. Categories of Toxicity for Aquatic Organisms

LC ₅₀ (ppm)	Toxicity Category
< 0.1	Very highly toxic
> 0.1 - 1	Highly toxic
> 1 - 10	Moderately toxic
> 10 - 100	Slightly toxic
> 100	Practically nontoxic

Table 2. Categories of Toxicity for Terrestrial Organisms

Oral dose LD ₅₀ (mg/kg-bw)	Toxicity Category
< 10	Very highly toxic
10 - 50	Highly toxic
51 - 500	Moderately toxic
501 - 2000	Slightly toxic
> 2000	Practically nontoxic
Dietary LC ₅₀ (ppm)	Toxicity Category
< 50	Very highly toxic
50 - 500	Highly toxic
501 - 1000	Moderately toxic
1001 - 5000	Slightly toxic
> 5000	Practically nontoxic

Table 3. Categories of Toxicity for Bee

Bee Acute Contact LD ₅₀ (µg/bee)	Toxicity Category
<2	Highly toxic
2 – 10.99	Moderately toxic
≥ 11	Practically nontoxic

Table 4. Levels of Concern for Terrestrial and Aquatic Organisms

Taxa	Acute LOC	Chronic LOC
Avian ¹ (terrestrial phase amphibians)	0.1	1
Mammalian ²	0.1	1
Terrestrial ³ and Aquatic plants ⁴	1	
Aquatic Animals ⁵ (aquatic phase amphibians)	0.05	1
Insects ⁶	0.05	1

Used in RQ calculations:

¹ LD₅₀ and estimated NOEL

² LD₅₀ and NOEC

³ EC25

⁴ EC50

⁵ LC/EC₅₀ and estimated and reproductive NOEC

⁶ LD₅₀ per EFED's CRLF Steering Committee