

APPENDIX C

SQO CRITERIA SUMMARY TABLES

**Table C-1.
Sediment Chemistry LOE Categorization**

Sediment Chemistry Index		Chemistry LOE Category
CA LRM	CSI	
< 0.33	< 1.69	Minimal Exposure
≥ 0.33 – ≤ 0.49	≥ 1.69 – ≤ 2.33	Low Exposure
> 0.49 – ≤ 0.66	> 2.33 – ≤ 2.99	Moderate Exposure
> 0.66	> 2.99	High Exposure

**Table C-2.
Sediment Toxicity LOE Categorization for Whole Sediment Survival Test using the
Amphipod *Eohaustorius estuarius***

% Survival of <i>E. estuarius</i>		Toxicity LOE Category
If Significantly Different than Control	If Not Significantly Different from Control	
90 – 100	82 – 100	Nontoxic
82 – 89	59 – 81	Low Toxicity
59 – 81	NA	Moderate Toxicity
< 59	< 59	High Toxicity

**Table C-3.
Sediment Toxicity LOE Categorization for the Bivalve Embryo Development
Sediment-Water Interface Test using *Mytilus galloprovincialis***

% Normal Development in <i>M. galloprovincialis</i>		Toxicity LOE Category
If Significantly Different than Control	If Not Significantly Different from Control	
80 – 100	77 – 100	Nontoxic
77 – 79	42 – 76	Low Toxicity
42 – 76	NA	Moderate Toxicity
< 42	< 42	High Toxicity

Table C-4.
Benthic Community LOE Categorization for Southern California Marine Bays

Benthic Index				Benthic Index Category
BRI	IBI	RBI	RIVPACS	
< 39.96	0	> 0.27	> 0.90 – < 1.10	Reference
≥ 39.96 – < 49.15	1	> 0.16 – ≤ 0.27	> 0.74 – ≤ 0.90 or ≥ 1.10 – < 1.26	Low Disturbance
≥ 49.15 – ≤ 73.26	2	> 0.08 – ≤ 0.16	> 0.32 – ≤ 0.74 or ≥ 1.26	Moderate Disturbance
> 73.26	3 or 4	≤ 0.08	≤ 0.32	High Disturbance

**Table C-5.
Severity of Biological Effects Categorization**

Benthic Condition LOE Category	Toxicity LOE Category	Severity of Biological Effects Category
Reference	Nontoxic	Unaffected
Reference	Low Toxicity	Unaffected
Reference	Moderate Toxicity	Unaffected
Reference	High Toxicity	Low Effect
Low Disturbance	Nontoxic	Unaffected
Low Disturbance	Low Toxicity	Low Effect
Low Disturbance	Moderate Toxicity	Low Effect
Low Disturbance	High Toxicity	Low Effect
Moderate Disturbance	Nontoxic	Moderate Effect
Moderate Disturbance	Low Toxicity	Moderate Effect
Moderate Disturbance	Moderate Toxicity	Moderate Effect
Moderate Disturbance	High Toxicity	Moderate Effect
High Disturbance	Nontoxic	Moderate Effect
High Disturbance	Low Toxicity	High Effect
High Disturbance	Moderate Toxicity	High Effect
High Disturbance	High Toxicity	High Effect

Table C-6.
Potential for Chemically Mediated Effects Categorization

Sediment Chemistry Category	Toxicity LOE Category	Potential for Chemically Mediated Effects Category
Minimal Exposure	Nontoxic	Minimal Potential
Minimal Exposure	Low Toxicity	Minimal Potential
Minimal Exposure	Moderate Toxicity	Low Potential
Minimal Exposure	High Toxicity	Moderate Potential
Low Exposure	Nontoxic	Minimal Potential
Low Exposure	Low Toxicity	Low Potential
Low Exposure	Moderate Toxicity	Moderate Potential
Low Exposure	High Toxicity	Moderate Potential
Moderate Exposure	Nontoxic	Low Potential
Moderate Exposure	Low Toxicity	Moderate Potential
Moderate Exposure	Moderate Toxicity	Moderate Potential
Moderate Exposure	High Toxicity	Moderate Potential
High Exposure	Nontoxic	Moderate Potential
High Exposure	Low Toxicity	Moderate Potential
High Exposure	Moderate Toxicity	High Potential
High Exposure	High Toxicity	High Potential

Table C-7.
Final Integrated Station Level Assessment Decision Matrix

Severity of Biological Effects Category	Potential for Chemically Mediated Effects Category	Station Level Assessment
Unaffected	Minimal Potential	Unimpacted
Unaffected	Low Potential	Unimpacted
Unaffected	Moderate Potential	Likely Unimpacted
Unaffected	High Potential	Inconclusive
Low Effect	Minimal Potential	Likely Unimpacted
Low Effect	Low Potential	Likely Unimpacted
Low Effect	Moderate Potential	Possibly Impacted or Inconclusive
Low Effect	High Potential	Likely Impacted
Moderate Effect	Minimal Potential	Likely Unimpacted
Moderate Effect	Low Potential	Possibly Impacted
Moderate Effect	Moderate Potential	Likely Impacted
Moderate Effect	High Potential	Clearly Impacted
High Effect	Minimal Potential	Inconclusive
High Effect	Low Potential	Possibly Impacted
High Effect	Moderate Potential	Likely Impacted
High Effect	High Potential	Clearly Impacted

Table C-8.
Final Integrated Station Level Assessment Using MLOE

Chemistry LOE: Sediment Chemistry Exposure	Benthic LOE: Benthic Community Condition	Toxicity LOE: Sediment Toxicity	Station Assessment (Site Condition)
Minimal	Reference	Nontoxic	Unimpacted
Minimal	Reference	Low	Unimpacted
Minimal	Reference	Moderate	Unimpacted
Minimal	Reference	High	Inconclusive
Minimal	Low	Nontoxic	Unimpacted
Minimal	Low	Low	Likely unimpacted
Minimal	Low	Moderate	Likely unimpacted
Minimal	Low	High	Possibly impacted
Minimal	Moderate	Nontoxic	Likely unimpacted
Minimal	Moderate	Low	Likely unimpacted
Minimal	Moderate	Moderate	Possibly impacted
Minimal	Moderate	High	Likely impacted
Minimal	High	Nontoxic	Likely unimpacted
Minimal	High	Low	Inconclusive
Minimal	High	Moderate	Possibly impacted
Minimal	High	High	Likely impacted
Low	Reference	Nontoxic	Unimpacted
Low	Reference	Low	Unimpacted
Low	Reference	Moderate	Likely unimpacted
Low	Reference	High	Possibly impacted
Low	Low	Nontoxic	Unimpacted
Low	Low	Low	Likely unimpacted
Low	Low	Moderate	Possibly impacted
Low	Low	High	Possibly impacted
Low	Moderate	Nontoxic	Likely unimpacted
Low	Moderate	Low	Possibly impacted
Low	Moderate	Moderate	Likely impacted
Low	Moderate	High	Likely impacted
Low	High	Nontoxic	Likely unimpacted
Low	High	Low	Possibly impacted
Low	High	Moderate	Likely impacted
Low	High	High	Likely impacted

Table C-8.
Final Integrated Station Level Assessment Using MLOE (continued)

Chemistry LOE: Sediment Chemistry Exposure	Benthic LOE: Benthic Community Condition	Toxicity LOE: Sediment Toxicity	Station Assessment (Site Condition)
Moderate	Reference	Nontoxic	Unimpacted
Moderate	Reference	Low	Likely unimpacted
Moderate	Reference	Moderate	Likely unimpacted
Moderate	Reference	High	Possibly impacted
Moderate	Low	Nontoxic	Unimpacted
Moderate	Low	Low	Possibly impacted
Moderate	Low	Moderate	Possibly impacted
Moderate	Low	High	Possibly impacted
Moderate	Moderate	Nontoxic	Possibly impacted
Moderate	Moderate	Low	Likely impacted
Moderate	Moderate	Moderate	Likely impacted
Moderate	Moderate	High	Likely impacted
Moderate	High	Nontoxic	Possibly impacted
Moderate	High	Low	Likely impacted
Moderate	High	Moderate	Likely impacted
Moderate	High	High	Likely impacted
High	Reference	Nontoxic	Likely unimpacted
High	Reference	Low	Likely unimpacted
High	Reference	Moderate	Inconclusive
High	Reference	High	Likely impacted
High	Low	Nontoxic	Likely unimpacted
High	Low	Low	Possibly impacted
High	Low	Moderate	Likely impacted
High	Low	High	Likely impacted
High	Moderate	Nontoxic	Likely impacted
High	Moderate	Low	Likely impacted
High	Moderate	Moderate	Clearly impacted
High	Moderate	High	Clearly impacted
High	High	Nontoxic	Likely impacted
High	High	Low	Likely impacted
High	High	Moderate	Clearly impacted
High	High	High	Clearly impacted