## WASTE DISCHARGE REQUIREMENTS FOR DISCHARGES FROM IRRIGATED AGRICULTURAL LANDS ORDER NO. R4-2023-0353

## **APPENDIX 4**

## STANDARD WATER QUALITY BENCHMARKS

Constituent	Units	Water Quality Benchmark
Temperature	۴	(a) <sup>1</sup>
рН	pH units	(a) <sup>1</sup>
Dissolved Oxygen (DO)	mg/L	(a) <sup>1</sup>
Turbidity	NTU	(a) <sup>1</sup>
Trash	Observations <sup>2</sup>	(a) <sup>1</sup>
Total Suspended Solids	mg/L	(a) <sup>1</sup>
Total Dissolved Solids	mg/L	(a) <sup>1</sup>
Chloride	mg/L	(a) <sup>1</sup>
Nitrate-Nitrogen	mg/L	(a) <sup>1</sup>
Ammonia-Nitrogen	mg/L	(a) <sup>1</sup>
Sulfate	mg/L	(a) <sup>1</sup>
Copper <sup>3</sup>	μg/L	$CCC = 0.960e^{[(0.8545(ln(hardness) + (-1.702)]]}$
Chlordane <sup>3</sup>	μg/L	0.00059
4,4'-DDT <sup>3</sup>	μg/L	0.00059
4,4'-DDD <sup>3</sup>	μ <b>g/L</b>	0.00084
DDE <sup>3</sup>	μg/L	0.00059
Dieldrin <sup>3</sup>	μg/L	0.00014
Toxaphene <sup>3</sup>	μ <b>g/L</b>	0.00075
Chlorpyrifos <sup>4</sup>	μg/L	0.025
Diazinon <sup>4</sup>	μ <b>g/L</b>	0.10
Bifenthrin <sup>5</sup>	µg/L	0.0006
Toxicity <sup>6</sup>	Pass/Fail & %	Pass
E. coli <sup>7</sup>	cfu/100mL	320 (STV)
Enterococci <sup>7</sup>	cfu/100mL	110 (STV)

<sup>1</sup> Water Quality Benchmarks shall be based on the surface water objectives currently contained in the Water Quality Control Plan Los Angeles Region (Basin Plan) or other applicable water quality standards established for the Los Angeles Region.

<sup>2</sup> Methods used in previously approved MRPs under Order No. R4-2016-0143, R4-2021-0045-A01 or adopted Trash TMDLs may be used. The assessment methodology should produce consistent results across watersheds and across counties.

<sup>3</sup> The water quality benchmarks are based on the CTR criteria.

<sup>4</sup> The water quality benchmarks are based on numeric targets in the Calleguas Creek Watershed and Mugu Lagoon Toxicity, Chlorpyrifos, and Diazinon TMDL (Resolution No. R05-009).

<sup>5</sup> The Water Quality Benchmark is based on the numeric target in the Oxnard Drain No. 3 Pesticides, PCBs and Sediment Toxicity TMDL.

<sup>6</sup> Results obtained from toxicity tests shall be reported as either a "pass" or a "fail," and the percent effect at the Instream Waste Concentration (IWC) for each endpoint

<sup>7</sup> The water quality benchmarks are based on the State Water Boards Bacterial Objectives adopted in 2018.