ITEM 7, SUPPORTING DOCUMENT NO. 7

ERRATA SHEET
TENTATIVE ORDER NO R9-2012-0012, NPDES PERMIT NO. CA0107417
SAN JUAN CREEK OCEAN OUTFALL

The following changes have been made to Tentative Order No. R9-2012-0012.

1. **On page 25, the following requirement has been added as paragraph "k" to Reopener Provision, Section VI.C.1:**

   k. This Order may be re-opened and modified to revise effluent limitations, compliance locations, or other provisions to conform to future amendments to the California Ocean Plan.

2. **On page 28, the following requirement has been added as paragraph "e" to Special Studies, Technical Reports and Additional Monitoring Requirements, Section VI.C.2:**

   e. Treatment Feasibility Study

   The Discharger shall conduct a Treatment Feasibility Study for the GRF brine discharge to assess the costs of providing additional treatment to meet the California Ocean Plan's Table A technology-based effluent limitations at Monitoring Location M-001F, prior to commingling with other dischargers for 0.60 MGD reverse osmosis brine flow. The study shall also identify the amounts and characteristics of the pollutants in the discharge and the degree of pollutant reduction attainable through the application of best practicable control technology. Factors relating to the assessment of best practicable control technology shall include the age of equipment and facilities involved; the process employed; the engineering aspects of applying various types of treatment control techniques for the source water, brine, or combination of both; process changes; the cost of achieving such effluent reduction; non-water quality environmental impact (including energy requirements); and such other factors as the San Diego Water Board deems appropriate. A technical report containing the results of the Treatment Feasibility Study shall be submitted to the San Diego Water Board within six months of the effective date of this Order.

3. **On page 33, the following requirement has been added as paragraph "f" to Special Provisions for Wastewater Facilities (POTW Only) , Section VI.C.5.:**

   f. Fats, Oils, Grease, or Food Processing Wastes

   If the Discharger receives fats, oils, grease, or food processing wastes for injection into an anaerobic digester, the Discharger shall develop and implement standard operating procedures (SOPs) for this activity. The SOPs shall address spill prevention; spill response; introduction of materials that could cause interference, pass through, or upset of the treatment processes; vector control; and operation and maintenance. The Discharger shall provide

training to its staff on the SOPs and shall maintain records on site for a minimum of 3 years for each load received, describing the hauler, waste type, and amount.

4. **On page E-7, Table E-4 shall be modified as follows** (Changes below are shown in bold and underline/strikeout format to indicate added and removed language, respectively.):

Table E-4. Effluent Monitoring at M-001

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method
Flow	MGD	Recorder/Totalizer	Continuous	--
Temperature	°F	Grab	1/Week	1
Dissolved Oxygen	mg/L	Grab	1/Week	1
Total Suspended Solids[17]	mg/L	24-hr Composite	1/Month	1
Oil and Grease[17]	mg/L	Grab	1/Month	1
Settleable Solids[17]	ml/L	Grab	1/Month	1
Turbidity[17]	NTU	Grab	1/Month	1
pH[17]	standard units	Grab	1/Month	1
Conductivity	mmhos/cm	Grab	1/Month	1
TABLE B PARAMETERS FOR PROTECTION OF MARINE AQUATIC LIFE				
Arsenic, Total Recoverable	µg/L	24-hr Composite	2/Year[2,3]	1
Cadmium, Total Recoverable	µg/L	24-hr Composite	2/Year[2,3]	1
Chromium (VI), Total Recoverable[4]	µg/L	24-hr Composite	2/Year[2,3]	1
Copper, Total Recoverable	µg/L	24-hr Composite	2/Year[2,3]	1
Lead, Total Recoverable	µg/L	24-hr Composite	2/Year[2,3]	1
Mercury, Total Recoverable	µg/L	24-hr Composite	2/Year[2,3]	1
Nickel, Total Recoverable	µg/L	24-hr Composite	2/Year[2,3]	1
Selenium, Total Recoverable	µg/L	24-hr Composite	2/Year[2,3]	1
Silver, Total Recoverable	µg/L	24-hr Composite	2/Year[2,3]	1
Zinc, Total Recoverable	µg/L	24-hr Composite	2/Year[2,3]	1
Cyanide, Total Recoverable	µg/L	24-hr Composite	2/Year[2,3]	1,5
Chlorine, Total Residual	µg/L	Grab	1/Day[2,6]	1
Ammonia Nitrogen, Total (as N)	mg/L	24-hr Composite	1/Month[2,3]	1
Phenolic Compounds (nonchlorinated)[7]	µg/L	Grab	2/Year[2,3]	1
Phenolic Compounds (chlorinated)[8]	µg/L	Grab	2/Year[2,3]	1
Endosulfan[9]	µg/L	Grab	2/Year[2,3]	1
Endrin	µg/L	Grab	2/Year[2,3]	1

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method
HCH[10]	µg/L	Grab	2/Year[2,3]	[1]
Radioactivity	pCi/L	24-hr Composite	2/Year[2,3]	[1]
TABLE B PARAMETERS FOR PROTECTION OF HUMAN HEALTH – NONCARCINOGENS				
Acrolein	µg/L	Grab	2/Year[2,3]	[1]
Antimony, Total Recoverable	µg/L	24-hr Composite	2/Year[2,3]	[1]
Bis (2-chloroethoxy) Methane	µg/L	Grab	2/Year[2,3]	[1]
Bis (2-chloroisopropyl) Ether	µg/L	Grab	2/Year[2,3]	[1]
Chlorobenzene	µg/L	Grab	2/Year[2,3]	[1]
Chromium (III), Total Recoverable	µg/L	24-hr Composite	2/Year[2,3]	[1]
Di-n-butyl Phthalate	µg/L	Grab	2/Year[2,3]	[1]
Dichlorobenzenes[11]	µg/L	Grab	2/Year[2,3]	[1]
Diethyl Phthalate	µg/L	Grab	2/Year[2,3]	[1]
Dimethyl Phthalate	µg/L	Grab	2/Year[2,3]	[1]
4,6-dinitro-2-methylphenol	µg/L	Grab	2/Year[2,3]	[1]
2,4-dinitrophenol	µg/L	Grab	2/Year[2,3]	[1]
Ethylbenzene	µg/L	Grab	2/Year[2,3]	[1]
Fluoranthene	µg/L	Grab	2/Year[2,3]	[1]
Hexachlorocyclopentadiene	µg/L	Grab	2/Year[2,3]	[1]
Nitrobenzene	µg/L	Grab	2/Year[2,3]	[1]
Thallium, Total Recoverable	µg/L	24-hr Composite	2/Year[2,3]	[1]
Toluene	µg/L	Grab	2/Year[2,3]	[1]
Tributyltin	µg/L	24-hr Composite	2/Year[2,3]	[1]
1,1,1-trichloroethane	µg/L	Grab	2/Year[2,3]	[1]
TABLE B PARAMETERS FOR PROTECTION OF HUMAN HEALTH – CARCINOGENS				
Acrylonitrile	µg/L	Grab	2/Year[2,3]	[1]
Aldrin	µg/L	Grab	2/Year[2,3]	[1]
Benzene	µg/L	Grab	2/Year[2,3]	[1]
Benzidine	µg/L	Grab	2/Year[2,3]	[1]
Beryllium, Total Recoverable	µg/L	24-hr composite	2/Year[2,3]	[1]
Bis (2-chloroethyl) Ether	µg/L	Grab	2/Year[2,3]	[1]
Bis (2-ethlyhexyl) Phthalate	µg/L	Grab	2/Year[2,3]	[1]
Carbon Tetrachloride	µg/L	Grab	2/Year[2,3]	[1]
Chlordane	µg/L	Grab	2/Year[2,3]	[1]
Chlorodibromomethane	µg/L	Grab	2/Year[2,3]	[1]
Chloroform	µg/L	Grab	2/Year[2,3]	[1]
DDT[12]	µg/L	Grab	2/Year[2,3]	[1]
1,4-dichlorobenzene	µg/L	Grab	2/Year[2,3]	[1]
3,3'-dichlorobenzidine	µg/L	Grab	2/Year[2,3]	[1]

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method
1,2-dichloroethane	µg/L	Grab	2/Year[2,3]	[1]
1,1-dichloroethylene	µg/L	Grab	2/Year[2,3]	[1]
Dichlorobromomethane	µg/L	Grab	2/Year[2,3]	[1]
Dichloromethane	µg/L	Grab	2/Year[2,3]	[1]
1,3-dichloropropene	µg/L	Grab	2/Year[2,3]	[1]
Dieldrin	µg/L	Grab	2/Year[2,3]	[1]
2,4-dinitrotoluene	µg/L	Grab	2/Year[2,3]	[1]
1,2-diphenylhydrazine	µg/L	Grab	2/Year[2,3]	[1]
Halomethanes[13]	µg/L	Grab	2/Year[2,3]	[1]
Heptachlor	µg/L	Grab	2/Year[2,3]	[1]
Heptachlor Epoxide	µg/L	Grab	2/Year[2,3]	[1]
Hexachlorobenzene	µg/L	Grab	2/Year[2,3]	[1]
Hexachlorobutadiene	µg/L	Grab	2/Year[2,3]	[1]
Hexachloroethane	µg/L	Grab	2/Year[2,3]	[1]
Isophorone	µg/L	Grab	2/Year[2,3]	[1]
N-nitrosodimethylamine	µg/L	Grab	2/Year[2,3]	[1]
N-nitrosodi-N-propylamine	µg/L	Grab	2/Year[2,3]	[1]
N-nitrosodiphenylamine	µg/L	Grab	2/Year[2,3]	[1]
PAHs[14]	µg/L	Grab	2/Year[2,3]	[1]
PCBs[15]	µg/L	Grab	2/Year[2,3]	[1]
TCDD equivalents[16]	µg/L	Grab	2/Year[2,3]	[1]
1,1,2,2-tetrachloroethane	µg/L	Grab	2/Year[2,3]	[1]
Tetrachloroethylene	µg/L	Grab	2/Year[2,3]	[1]
Toxaphene	µg/L	Grab	2/Year[2,3]	[1]
Trichloroethylene	µg/L	Grab	2/Year[2,3]	[1]
1,1,2-trichloroethane	µg/L	Grab	2/Year[2,3]	[1]
2,4,6-trichlorophenol	µg/L	Grab	2/Year[2,3]	[1]
Vinyl Chloride	µg/L	Grab	2/Year[2,3]	[1]

[1] As required under 40 CFR Part 136.

[2] The Discharger shall calculate and report the MER of the constituent for each sample taken. The MER shall be calculated in accordance with section VII.I.2.d of this Order.

[3] The Discharger shall monitor quarterly, except ammonia, which shall be twice per month, if any analysis for this constituent yields a result higher than the applicable effluent limitation or performance goal specified in this Order. The increased minimum frequency of monitoring shall remain in effect until the results of a minimum of four consecutive analyses for this constituent are below all applicable effluent limitations or performance goals specified in this Order.

[4] The Discharger may, at their option, apply this performance goal as a total chromium performance goal.

[5] If a Discharger can demonstrate to the satisfaction of the San Diego Water Board (subject to USEPA approval) that an analytical method is available to reliably distinguish between strongly and weakly complexed cyanide, effluent limitations for cyanide may be met by the combined measurement of free cyanide, simple alkali metals cyanides, and weakly complexed organometallic cyanide complexes. In order for the analytical method to be acceptable, the recovery of free cyanide from metal complexes must be comparable to that achieved by the approved method in 40 CFR Part 136, as revised May 14, 1999.

[6] Monitoring of total chlorine residual is not required on days when none of the treatment units that are subject to this Order

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method

use chlorine for disinfection. If only one sample is collected for total chlorine residual analysis on a particular day, that sample must be collected at the time when the concentration of total chlorine residual in the discharge would be expected to be greatest. The times of chlorine discharges on the days that samples are collected, and the time at which samples are collected, shall be reported.

7 Non-chlorinated phenolic compounds represent the sum of 2,4-dimethylphenol, 4,6-dinitro-2-methylphenol, 2,4-dinitrophenol, 2-methylphenol, 4-methylphenol, 2-nitrophenol, 4-nitrophenol, and phenol.

8 Chlorinated phenolic compounds represent the sum of 4-chloro-3-methylphenol, 2-chlorophenol, pentachlorophenol, 2,4,5-trichlorophenol, and 2,4,6-trichlorophenol.

9 Endosulfan represents the sum of alpha-endosulfan, beta-endosulfan, and endosulfan sulfate.

10 HCH (hexachlorocyclohexane) represents the sum of the alpha, beta, gamma (Lindane), and delta isomers of hexachlorocyclohexane.

11 Dichlorobenzenes represent the sum of 1,2- and 1,3-dichlorobenzene.

12 DDT represents the sum of 4,4'DDT; 2,4'DDT; 4,4'DDE; 2,4'DDE; 4,4'DDD; and 2,4'DDD.

13 Halomethanes represent the sum of bromoform, bromomethane (methyl bromide), and chloromethane (methyl chloride).

14 PAHs (polynuclear aromatic hydrocarbons) represent the sum of acenapthalene; anthracene; 1,2-benzanthracene; 4,5-benzofluoranthene; benzo[k]fluoranthene; 1,12-benzoperylene; benzo[a]pyrene; chrysene; dibenzo[a,h]anthracene; fluorene; indeno[1,2,3-cd]pyrene; phenanthrene; and pyrene.

15 PCBs (polychlorinated biphenyls) represent the sum of chlorinated biphenyls whose analytical characteristics resemble those of Aroclor-1016, Aroclor-1221, Aroclor-1232, Aroclor-1242, Aroclor-1248, Arolclor-1254, and Arcolor-1260.

16 TCDD equivalents represent the sum of concentrations of chlorinated dibenzodioxins (2,3,7,8-CDDs) and chlorinated dibenzofurans (2,3,7,8-CDFs) multiplied by their respective toxicity factors, as shown by the table below. USEPA Method 8280 may be used to analyze TCDD equivalents.

Isomer Group	Toxicity Equivalence Factor
2,3,7,8 – tetra CDD	1.0
2,3,7,8 – penta CDD	0.5
2,3,7,8 – hexa CDD	0.1
2,3,7,8 – hepta CDD	0.01
octa CDD	0.001
2,3,7,8 – tetra CDF	0.1
1,2,3,7,8 – penta CDF	0.05
2,4,5,7,8 – penta CDF	0.5
2,3,7,8 – hexa CDFs	0.1
2,3,7,8 – hepta CDFs	0.01
Octa CDF	0.001

17 **<u>These parameters are for measuring compliance with the SCWD GRF Effluent Limitations (Table 13 of Order No. R9-2012-0012)</u>**

5. **On page F-19-21, section IV.B.2.b has been modified as follows** (Changes below are shown in bold and underline/strikeout format to indicate added and removed language, respectively.):

   b. Ocean Plan. The Ocean Plan is applicable, in its entirety, to point source discharges to the ocean. Therefore, the discharge of wastewater to the Pacific Ocean at Discharge Point No. 001 is subject to the Ocean Plan.

   The Ocean Plan establishes water quality objectives, general requirements for management of waste discharged to the ocean, effluent quality

requirements for waste discharges, discharge prohibitions, and general provisions. Further, Table A of the Ocean Plan establishes TBELs for POTWs and industrial discharges for which Effluent Limitation Guidelines have not been established pursuant to Sections 301, 302, or 306 of the federal CWA.

Order No. R9-2006-0054, established numeric effluent limitations based on Table A of the Ocean Plan applicable to each of the contributing municipal wastewater treatment plants. As the TSS percent removal requirement and standards under 40 CFR Part 133 for POTWs, however, are more stringent than the Ocean Plan requirement, the more stringent TSS requirements were included in Order No. R9-2006-0054 for the discharges from the SOCWA J.B. Latham WP, the SMWD Chiquita WRP, the MNWD 3A RP (currently SOCWA 3A RP), and the City of San Clemente WRP. These same requirements remain applicable, and the effluent limitations are carried over to this Order.

The Ocean Plan Table A effluent limitations were also applied to the industrial discharges to the ocean through the SJCOO, including discharges from the San Clemente Segunda Deshecha Runoff Plant and the City of San Juan Capistrano GTP. Table A of the Ocean Plan requires dischargers to, as a monthly average, achieve a percent removal of 75 percent for suspended solids from the influent stream before discharging wastewater to the Pacific Ocean, except that the effluent limitation to be met shall not be less than 60 mg/L. The discharges generated at the San Clemente Segunda Deshecha Runoff Plant and the City of San Juan Capistrano GTP are considered industrial discharges and are subject to Table A limits prior to commingling at the SJCOO. Therefore an effluent TSS limitation of 60 mg/L is appropriate.

The Table A limits apply to the discharge from the SCWD GRF under this Order; however, compliance monitoring for the Table A parameters for the GRF discharge will be conducted at a location where representative samples of commingled effluent from all contributors to the SJCOO can be obtained. The 2006 permit established compliance monitoring for the Table A parameters for the GRF discharge at a location within the individual GRF discharge prior to commingling with effluent from all contributors to the SJCOO. After the GRF experienced exceedances of the 2006 permit limits resulting in imposition of mandatory minimum penalties, the San Diego Water Board expressed to the State Water Board its concern and frustration with failure of the California Ocean Plan to provide a distinct classification for brine discharges separate from the broader "industrial" category of discharges. Waste brine discharges from desalination processes have been regulated through a default classification as an industrial waste under both the Clean Water Act and the California Ocean Plan because they do not provide specific regulatory distinction for waste byproducts from desalination facilities. While TBELs are appropriate for pollutants associated with industrial wastes, the

constituents of concern in brine waste are primarily mineral salts and turbidity, which present a far less significant threat to the ocean than most industrial wastes that are regulated through TBELs. The State Water Board has recognized that amendment of the California Ocean Plan is an appropriate means to address issues affecting desalination facilities throughout the state. The State Water Board's 2005 California Ocean Plan Triennial Review and Workplan (State Water Board Resolution No. 2005—2008) identified brine discharges from desalination as a high priority issue and the State Water Board **is currently in the process of developing amendments to the California Ocean Plan to address discharges of brine waste from desalination facilities.** ~~has publicly indicated its intent "to pursue amendments to the Water Quality Control Plan for Ocean Waters in California (Ocean Plan) that would separately address issues associated with desalinization, including brine line discharges. This forum will allow the State Water Board to carefully consider the changes in regulatory approach proposed by the petition and help ensure statewide consistency on this important topic." (SWRCB/OCC File A-2072, Dismissal Letter from Tom Howard to Patricia Chen and Steven Hoch, March 4, 2011.)~~

Against this backdrop, the State Water Board**'s Chief Deputy Director stated in a letter** ~~recommends~~ to the San Diego Water Board's Executive Officer**, dated March 8, 2012,** that the San Diego Water Board **could** consider**, on an interim basis,** moving the compliance point for SCWD's GRF brine discharge in this permit reissuance from the independent GRF discharge point to a point within the commingled waste streams discharged through the San Juan Creek Ocean Outfall to the Pacific Ocean. Once the State Water Board completes its Ocean Plan amendment process, **this permit may be reopened if it is necessary to revise the compliance point for SCWD's GRF** ~~the appropriate compliance point established for Ocean brine discharges in individual permits, including SOCWA's San Juan Creek Ocean Outfall permit can be revisited as necessary~~ to conform to the **amended** Ocean Plan. **The Chief Deputy Director also stated that the San Diego Water Board should require SOCWA to collect performance data for the purposes of determining the SCWD's GRF existing treatment capability, and submit a feasibility study that assesses the costs of providing additional treatment to comply with Table A of the California Ocean Plan prior to commingling.** ~~The State Water Board's recommendation recognizes that there are differences in brine waste pollutants as compared to typical industrial pollutants and finds support in policy considerations associated with the ever-increasing focus on water reuse and desalination to meet drinking water supply and reliability needs in California. It also recognizes the practical resource limitations that prevent the State Water Board from acting to address brine disposal issues on a statewide basis prior to the San Diego Water Board's reissuance of SOCWA/SCWD's Order No. R9-2006-0054.~~

6. **On page F-43, the first paragraph of section VI.B shall be modified as follows**(Changes below are shown in bold and underline/strikeout format to indicate added and removed language, respectively.)**:**

   Effluent monitoring is required to determine compliance with the permit conditions, to identify operational problems, to improve plant performance, and to conduct reasonable potential analyses for subsequent Orders. Effluent monitoring also provides information on wastewater characteristics for use in interpreting water quality and biological data. Effluent monitoring has been required for each of the discharges into the SJCOO collection system, prior to commingling with other discharges contributing to the SJCOO, to determine compliance with the applicable technology-based effluent limitations. **As described in section IV.B.2.b. of this Fact Sheet, effluent monitoring of commingled effluent will be used to determine compliance with the California Ocean Plan's technology-based effluent limitations for the SCWD's GRF, while effluent monitoring prior to commingling will be used to obtain treatment performance data for the SCWD's GRF.** Effluent monitoring to determine compliance with WQBELs is required at a location where representative samples of commingled effluent from all contributors to the SJCOO can be taken (Monitoring Location M-001; the sampling vault in the Doheny State Beach Park through a sampling port in the outfall pipe).

7. **On page F-48, the following section has been added as paragraph "d" to Attachment F, Section VII.B.2:**

   d. Treatment Feasibility Study

   In a letter dated March 8, 2012, from Jonathan Bishop, Chief Deputy Director of State Water Board, to David W. Gibson, Executive Director of the San Diego Water Board, Mr. Bishop requested that the Tentative Order include a feasibility study to assess the cost of providing additional treatment to meet TBELs at the GRF, if the compliance point for TBELs was temporarily moved for the GRF.

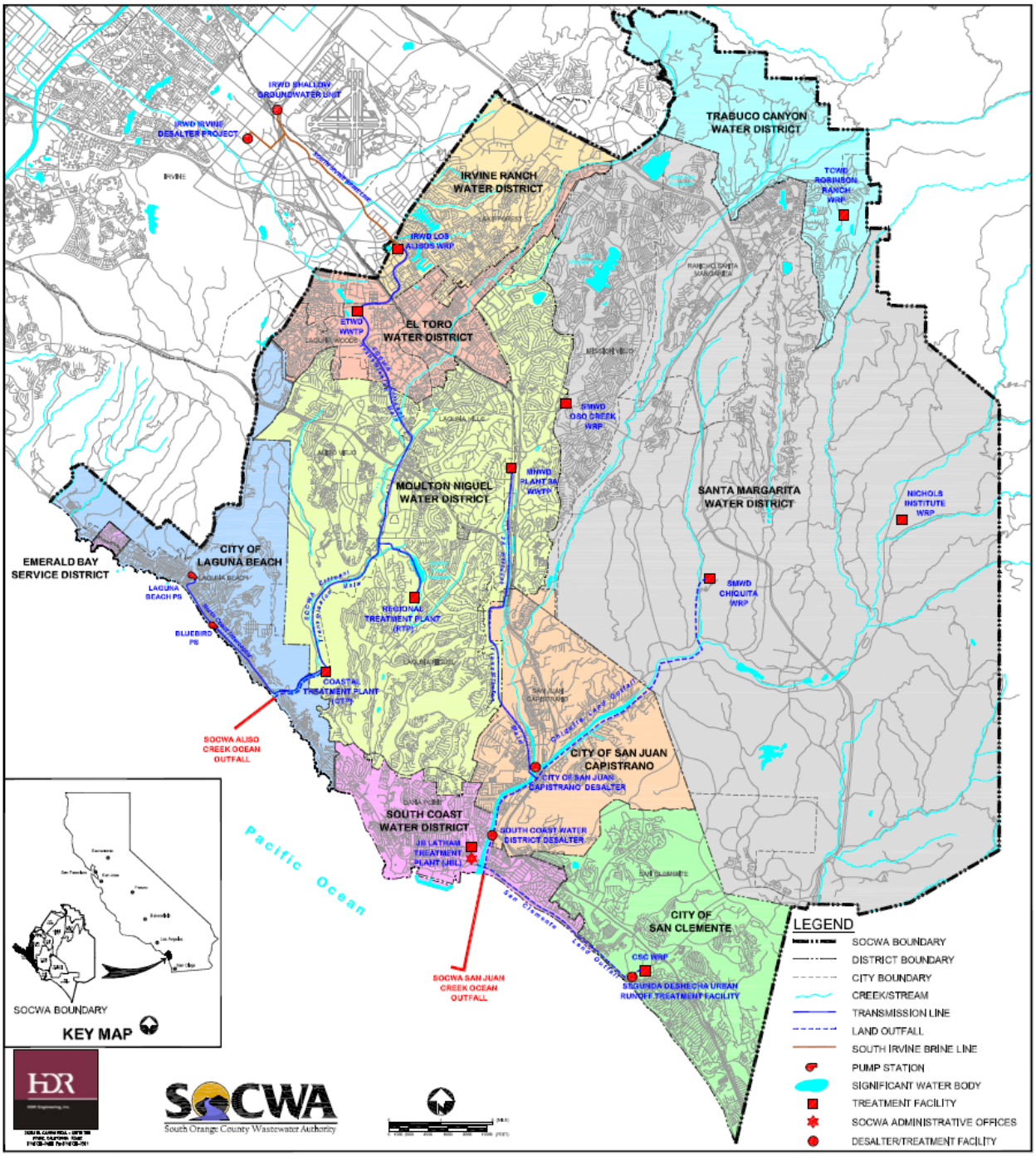
8. **On page F-50, the following section has been added as paragraph "f" to Attachment F, Section VII.B.5**

   f. Fats, Oils, Grease, or Food Processing Wastes

   This provision implements an agreement between the State Water Board and CalRecycle, regarding the regulation of operations at POTWs that accept hauled waste fats, oils, and grease and inject this waste into anaerobic digesters. With the addition of a standard provision in NPDES permits that

requires the POTWs to develop and implement standard operating procedures from waste fats, oils, and grease acceptance and digestion operations, CalRecycle would exempt the operation from regulation under its requirements.

9. The following map replaces the map in Attachment B:


IRWD SHALLOW GROUNDWATER UNIT
IRWD IRVINE DESALTER PROJECT
IRVINE
IRVINE RANCH WATER DISTRICT
TRABUCO CANYON WATER DISTRICT
TCWD ROBINSON RANCH WRP
IRWD LOS ALISOS WRP
EL TORO WATER DISTRICT
ETWD WWTP
SMWD OSO CREEK WRP
MOULTON NIGUEL WATER DISTRICT
MNWD PLANT 3A WWTP
SANTA MARGARITA WATER DISTRICT
NICHOLS INSTITUTE WRP
SMWD CHIQUITA WRP
EMERALD BAY SERVICE DISTRICT
CITY OF LAGUNA BEACH
LAGUNA BEACH PS
BLUEBIRD PS
REGIONAL TREATMENT PLANT (RTP)
COASTAL TREATMENT PLANT (CTP)
SOCWA ALISO CREEK OCEAN OUTFALL
CITY OF SAN JUAN CAPISTRANO
CITY OF SAN JUAN CAPISTRANO DESALTER
SOUTH COAST WATER DISTRICT
JB LATHAM TREATMENT PLANT (JBL)
SOUTH COAST WATER DISTRICT DESALTER
Pacific Ocean
CITY OF SAN CLEMENTE
CSC WRF
SEGUNDA DESHECHA URBAN RUNOFF TREATMENT FACILITY
SOCWA SAN JUAN CREEK OCEAN OUTFALL
SOCWA BOUNDARY
KEY MAP
LEGEND
SOCWA BOUNDARY
DISTRICT BOUNDARY
CITY BOUNDARY
CREEK/STREAM
TRANSMISSION LINE
LAND OUTFALL
SOUTH IRVINE BRINE LINE
PUMP STATION
SIGNIFICANT WATER BODY
TREATMENT FACILITY
SOCWA ADMINISTRATIVE OFFICES
DESALTER/TREATMENT FACILITY
HDR
SOCWA
South Orange County Wastewater Authority