November 7, 2023

### SCV WATER

ITEM NO. 6.1

# Transport and disposal of 2,800 tons of surface water treatment by-products

### **Regular Board Meeting**





### SCV WATER SURFACE WATER TREATMENT OPERATIONS

As part of SCV Waters commitment to delivering reliable, high-quality water. SCV Water operates two surface water treatment plants to treat State Water Project water from Castaic Lake



### SCVW WATER SURFACE WATER TREATMENT PLANTS

**Earl Schmidt Filtration Plant – 56 MGD** 



#### **Rio Vista Water Treatment Plant – 66 MGD**





# Solids Removal is a key treatment process

- Accomplished by Up-flow Contact Clarifiers and Deep Mono-Media Filters
- Suspended solids and contaminants are removed
- Removal is accomplished through chemical and mechanical processes



# TREATMENT PLANTCLARIFIERS&&FILTERS





**ESFP 10 Clarifiers** 

**RVWTP 12 Clarifiers** 





**ESFP 10 Filters** 

**RVWTP 12 Filters** 

- Removes majority of suspended solids and contaminants
- Typically backwashed after 24 hours of operation.
- Generates approximate 800 pounds of treatment by-product per day of operation

- Removes remaining suspended solids and contaminants.
- Typically backwashed after 72 hours of operation
- Generates approximate 200 pounds of treatment by-product per day of operation



### FILTER BY-PRODUCTS LIFE CYCLE





## LABORATORY TESTING

- Dried sludge is analyzed to determine if below or above DTSC regulatory Total Threshold Limit (TTLC).
- If sludge is above the TTLC material must be disposed at a hazardous waste landfill, If below TTLC a Soluble Threshold Limit Concentration (STLC) test must be performed to access leachability.
- If STCL results are below STLC the material may be disposed at a local landfill
- If above STLC, a Toxicity Characteristic Leaching Procedure (TCLP) analysis is required to determine if additional treatment is required before disposal at a hazardous waste landfill.



### FINANCIAL CONSIDERATIONS

Item	Cost per Unit	Quantity	Waste Management
Waste Approvals Standards	\$125.00	1	\$125
Cost of Disposal at Kettleman Hills Landfill	\$51.16	2,800 tons	\$142,248
Cost to Transport Sludge to Kettleman Hills Landfill	\$65.55	2,800 tons	\$183,540
E-Manifest Charges	\$25.00	108 trucks	\$2,700
Certificate of Disposal cost	\$40.00	108 trucks	\$4,320
Kings County Tax	10%		\$14,224.80
Energy Standard Disposal Energy Fee	8.32%		\$11,835.03
Waste Water Management Fee	14.50%		\$20,625.96
Total Cost			\$379,618.79



## RECOMMENDATION

Staff Recommends that the Board of Directors authorize the General Manager to enter into contract with Waste Management Services, to transport and dispose of 2800 tons of filter by-products in the amount of \$380,000.

