

APPENDIX A STATE WATER RESOURCES CONTROL BOARD REQUIREMENTS FOR PROJECT REPORTS

STATE REVOLVING FUND LOAN PROGRAM COMPLIANCE

The State Revolving Fund (SRF) loan program was created by the 1987 Amendments to the Federal Clean Water Act and replaces the previous federal grant program. The SRF loan program provides low interest loans for many public works projects, including construction of publicly-owned treatment works.

As discussed in the *Palmdale Water Reclamation Plant 2025 Facilities Plan and Environmental Impact Report* (PWRP 2025 Plan and EIR), County Sanitation District No. 20 of Los Angeles County (District No. 20) is planning to upgrade and expand wastewater treatment and effluent management facilities at the Palmdale Water Reclamation Plant (PWRP) in order to meet the projected future wastewater service demands of District No. 20 and to comply with all regulatory requirements. To help finance costs incurred during design and construction of facilities, District No. 20 will seek funding for the recommended project of the PWRP 2025 Plan and EIR under the SRF loan program. The PWRP Stage V and Stage VI expansions are currently listed together on the SRF five-year project priority list.

The SRF loan program is administered by the State Water Resources Control Board (SWRCB). The purpose of this appendix is to facilitate review of the project report requirements by the SWRCB. The project is documented in the PWRP 2025 Plan and EIR, of which the Environmental Impact Report (EIR) was prepared for District No. 20 by the environmental consulting firm Environmental Science Associates in conformance with the California Environmental Quality Act.

PROJECT REPORT REQUIREMENTS

The SRF Policy published by the SWRCB (as amended January 22, 2003) contains a list of items that a project report must contain, as appropriate. Applicable items addressed in the PWRP 2025 Plan and EIR are as follows:

- 1. A statement of project needs and benefits, including a discussion of the water quality benefits of the project and the public health or water quality problems to be corrected.***

The statement of project needs and benefits is found in Chapter 1, *Need for Project*. The discussions of water quality benefits of the project and the water quality problems to be corrected are contained in Chapter 14, entitled Hydrology and Water Quality.

- 2. A cost-effectiveness evaluation of alternatives over a twenty (20) year planning period. The evaluations presented must include an evaluation of the alternative of upgrading operation and maintenance of the existing facility to improve effluent quality.***

The costs associated with the recommended project are discussed in Chapter 7, *Project Cost and Revenue Program*, and presented in Tables 7-4 and 7-5. The alternative of upgrading operation and maintenance of the existing facility to improve effluent quality is addressed in Chapter 6.

3. *An evaluation of alternative methods for reuse or ultimate disposal of treated wastewater and sludge material resulting from the treatment process.*

The alternatives for reuse and ultimate disposal of treated wastewater and sludge material are discussed in Chapter 6, §*Analysis of Wastewater Treatment and Effluent Management Alternatives*, and Chapter 4, §*Solids Processing and Biosolids Management*, respectively.

For wastewater treatment projects producing sludge material, the following information needs to be identified and compared:

a. All landfills within a 100 mile radius that accept sewage sludge.

All landfills within at least a 100-mile radius that accept sewage sludge are identified in Chapter 4 and shown in Table 4-3.

b. Any composting facilities within a 100 mile radius accepting sewage sludge.

All composting facilities within at least a 100-mile radius that accept sewage sludge are identified in Chapter 4 and shown in Table 4-3.

c. The potential for dedicated land disposal.

Solids from the PWRP are stockpiled and then disposed of in a batch procedure, as discussed in Chapter 4, §*Solids Processing and Biosolids Management*. In general, biosolids management follows a diversified management program that actively seeks out alternative biosolids disposal methods.

d. Conversion of sludge to biosolids for distribution as soil amendment or as another agricultural product.

The sludge material from the PWRP is anaerobically digested, becoming biosolids, and is dried at the plant on drying beds. Solids handling at the PWRP is discussed in Chapter 4, §*Solids Processing and Biosolids Management*. In 2004, biosolids were transported to San Joaquin Composting, Inc., in Kern County for processing into soil amendment and fertilizer for agricultural purposes.

e. Ultimate disposal methods approved by the RWQCBs.

Disposal methods for solids generated at the PWRP are discussed in Chapter 4, §*Solids Processing and Biosolids Management*. All facilities have been approved by the Regional Water Quality Control Board with local oversight responsibility.

4. *An evaluation of the non-existence or possible existence of excessive infiltration/inflow (I/I) in the existing sewer system. If the average daily flow during periods of sustained high groundwater is*

less than 120 gallons per capita per day (gpcd), a Sewer System Evaluation Survey (SSES) is not required. If it is above 120 gpcd, the applicant must perform an SSES to determine whether it is cost-effective to treat or correct the I/I. If an SSES is not submitted, funding will be limited to 120 gpcd. If the peak flow during a storm event (highest three-hour average) exceeds 275 gpcd, an SSES must be completed or funding will be limited to the peak flow amount of 275 gpcd. Cost-effective corrections under these criteria are eligible for funding.

The non-existence of excessive I/I is discussed in Chapter 5, *§Infiltration and Inflow*. The average daily flow to the PWRP during the winter of 2002-03, a period of excessive rainfall and sustained high groundwater, was found to be 92 gpcd, while the highest peak flow during that same period was found to be 129 gpcd, both of which are below the respective maxima noted above. Therefore, an SSES is not required.

5. *Information on total capital costs, annual operation and maintenance costs, as well as the estimated annual or monthly costs to residential and industrial users for all of the alternatives.*

Total capital cost, annual operation and maintenance (O&M) cost, and total annual cost for the project alternatives are provided in Chapter 6, *§Cost Effectiveness*. Total capital cost, annual O&M cost, total annual cost, and the estimated cost to users for implementing the recommended project are provided in Chapter 7, *§Project Cost and Revenue Program*.

6. *A discussion of the existing population, flows, and loadings, and projections of the same, used to estimate the twenty (20) year capacity needs for treatment facilities and collection systems and forty (40) year capacity needs for interceptors and outfalls.*

Existing and projected population values are presented in Chapter 5, *§Population Projections*. Existing and projected flows are discussed in Chapter 5, *§Projected Wastewater Flow for the District No. 20 Collection System*. Wastewater characteristics, from which loadings can be calculated, are presented in Chapter 5, *§Influent Quality*. Conveyance system needs (interceptors, outfalls, etc.) are generally checked biennially and are briefly discussed in Chapter 4, *§Trunk Sewers*.

Based on routine monitoring, the 35th East and 35th East Extension and the 45th Street East Trunk Sewers require relief and are currently under construction or under design. Other sewers that have been identified as potential candidates for relief through monitoring include Avenue 'P-8' and Trunk 'A' Trunk Sewers. These sewers are monitored more frequently to determine at what point design and construction of relief sewers will be necessary.

7. *A discussion of the anticipated eligible capacity for the project and how that capacity was derived (see Section IX.F. of the SRF Policy).*

The anticipated eligible capacity and its derivation is identified in Chapter 5, *§Wastewater Flow Projections*.

8. A description of the Best Practicable Wastewater Treatment Technology. (For more information see 40 CFR 35.2005(b) (7).)

The majority of existing facilities at the PWRP, as described in Chapter 4, already meet these requirements. The secondary and tertiary wastewater treatment facilities planned for construction were found to be superior relative to a wide range of alternatives. The evaluation process is described in Chapter 6, §*Analysis of Wastewater Treatment and Effluent Management Alternatives*. The planned facilities are described in Chapter 7, §*Wastewater Treatment Facilities*.

9. A summary of public participation.

Public participation summaries are provided in Chapter 6, §*Public Input* and Part III of the PWRP 2025 Plan and EIR.

10. The following must be submitted for the selected alternative:

a. A detailed description of the selected alternative and the complete waste treatment system of which it is a part.

The description of the selected alternative is presented in Chapter 7 and the complete wastewater treatment system of which it is a part is presented in Chapters 4 and 7. In addition, a description of the complete sewerage system of which the PWRP is a part of is described in Chapter 1.

b. A summary of relevant design criteria (i.e., design flow, peak flows, daily BOD loadings, daily suspended solids loadings, overflow rates, detention times, sludge production, etc.).

Design criteria for the selected alternative are provided in Chapter 7, §*Summary of Design Criteria for the Palmdale Water Reclamation Plant*, Table 7-1.

c. The estimated construction and annual operation and maintenance costs and a description of the anticipated manner in which all the costs will be financed.

These items are covered in Chapter 7, §*Project Cost and Revenue Program*.

d. A summary of the cost impacts on wastewater system users.

A summary is included in Chapter 7, §*Project Cost and Revenue Program*.

e. A summary of the significant environmental impacts of the selected project and any proposed mitigation measures.

Significant environmental impacts of the selected project and proposed mitigation measures are included in Chapters 9 through 21 and summarized in Table ES-8 of the Executive Summary of the PWRP 2025 Plan and EIR.

f. A copy of any proposed intermunicipal service agreements necessary for the project.

Not applicable to this project (no additional intermunicipal service agreements are required).

g. A statement that identifies and discusses the source(s) and the amount of unallocated potable water currently available in the project service area. If the amount of potable water is less than what is needed to serve the projected population for the proposed project, a plan identifying how that deficiency will be mitigated shall be presented.

Potable water supplies currently available in the project service area and water use are discussed in Chapter 5.

h. A discussion of facilities which were previously funded by federal/state grants or loans, if such facilities are to be repaired or replaced.

Facilities planned for repair or replacement are discussed in Chapter 7, §Stage V and shown in Table 7-1.

i. Applicants must comply with the Civil Rights Act of 1964. Where minority populations are included in the facilities planning area, the Project Report must show that such areas will be served or excluded from service only for reasons of cost-effectiveness (currently see 40 CFR Part 7).

District No. 20 is in compliance with the *Civil Rights Act of 1964* in that wastewater management services are provided in a cost-effective manner to all the residents within its service area, without regard to race, color, religion, sex, national origin, age, disability, ancestry, marital status, cancer-related medical condition, or status as a disabled veteran. Refer to Chapter 2, §Demographics, and to Chapter 20, *Population and Housing/Secondary Effects of Growth* of the PWRP 2025 Plan and EIR for a description of the socio-economic characteristics of the region.

j. A description of operation and maintenance requirements.

O&M requirements for existing and planned facilities are described in Chapters 4 and 7, respectively.

k. A demonstration that the selected alternative is consistent with any applicable approved water quality management plan.

The selected alternative will provide for continued compliance with all applicable effluent and receiving water standards in the *1994 Water Quality Control Plan for the Lahontan Region* (as amended January 2004). Refer to Chapter 3 for more details on water quality management in the region.

l. A summary of public participation.

Public participation summaries are contained in Chapter 6, §*Public Input* and Part III of the PWRP 2025 Plan and EIR.

m. A copy of the current adopted waste discharge requirements issued by the RWQCB for the wastewater facility or improvements/expansion to be constructed. If no current adopted permit exists, a copy of the tentative waste discharge requirements must be submitted. The waste discharge requirements, however, must be adopted by the RWQCB before the approval of either the plans and specifications or the Request for Design-Build Proposal (for Design-Build projects).

A copy of the current Waste Discharge Requirements issued by the Regional Water Quality Control Board, Lahontan Region, for the PWRP is included in Appendix B of the PWRP 2025 Plan and EIR.

STATE REVOLVING FUND WATER CONSERVATION REQUIREMENT

In order to comply with SRF requirements, District No. 20 must either (1) certify that 75 percent of the water connections in its service area are covered by adopted water conservation programs approved by the Division (where Division refers to the *Division of Clean Water Programs, the Division of Water Quality, SWRCB, or any other segment of the SWRCB authorized to administer the SRF Loan Program*) or (2) demonstrate that the water purveyor(s) have signed the *Memorandum of Understanding Regarding Urban Water Conservation in California* (MOU), September 1991, California Urban Water Conservation Council, covering at least 75 percent of the water connections within its sewer service area.

Section 10656 of the California Water Code requires urban water suppliers to prepare, adopt, and submit their Urban Water Management Plan to the Department of Water Resources to be eligible to receive SRF funding.

Palmdale Water District (PWD) acts as a retailer of water supplies for domestic, commercial, and industrial users. The primary function of the PWD is to provide municipal water service to the City of Palmdale and adjacent communities. In December 2000, the PWD completed an Urban Water Management Plan and submitted the document to the California Department of Water Resources.

Antelope Valley-East Kern Water Agency (AVEK) supplies water for municipal, industrial, and commercial users. AVEK contracts with the California State Water Project for an annual maximum entitlement of 138,400 acre-feet. A portion of District No. 20 is served by AVEK. AVEK submitted an Urban Water Management Plan to the California Department of Water Resources in December 2000.

Based on GIS analysis conducted by District No. 20, approximately 99 percent of the water connections within District No. 20 are served by PWD or AVEK-supplied retailers and are thereby covered by an adopted water conservation program. Therefore, District No. 20 satisfies the SRF Water Conservation Requirement.