



THE CITY OF SAN DIEGO
PUBLIC UTILITIES
DEPARTMENT

City of San Diego On-Site Wastewater Treatment and Reuse Project Review and Permitting Guideline

February 13, 2015



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Introduction

Purpose: The purpose of this document is to provide an overview of the submittal and permitting process for private on-site wastewater treatment and reuse projects in the City of San Diego. The project's source of influent, the treatment and reuse systems shall all be located on the same site and shall be under the control of the site owner. Projects that include sewer mining (extraction of wastewater from a publicly owned sewer) for plant influent shall not be considered under these guidelines. A project which included sewer mining would be in conflict with some of the City's sewer and water bond covenants and could impact the ability of the City to finance sewer and/or water projects.

Background: The document was prepared by the Public Utilities Department with input from numerous additional departments. Stakeholder input was requested through a working group meeting held on August 19, 2014 where in the draft document was presented and discussed. Comments on the draft document were submitted and addressed.

Regulatory Responsibility: The regulatory responsibility for an on-site wastewater treatment and reuse project is divided among several governmental entities. In general, the regulatory responsibilities are as presented below:

City of San Diego: Facility compliance with development regulations and building codes, recycled water run-off and for industrial waste discharge permit for any discharges into the publicly owned wastewater collection system.

State of California Water Resources Control Board, Division of Drinking Water: Treated water quality requirements, treatment process approval and monitoring of treatment performance.

County of San Diego Department of Environmental Health: Permitting and monitoring of recycle water application sites.

Organization: This document is divided into 8 sections as follows:

- Introduction
- Step 1 – Project Preliminary Review
- Step 2 – Final Project Application Review
- Step 3 – Detailed Design
- Step 4 – Project Construction
- Step 5 – Start-Up
- Step 6 – Full Operation
- Useful Reference Documents and Web Addresses

Abbreviations, Web Addresses and Telephone Nos.

DSD: City of San Diego Development Services Department
www.sandiego.gov/development-services/ 619-446-5000

PUD: City of San Diego Public Utilities Department

www.sandiego.gov/publicutilities/ 619-515-3500

TSWD: City of San Diego Transportation and Strom Water Department
www.sandiego.gov/tsw/ 619-235-1000

RWQCB: San Diego Regional Water Quality Control Board
www.waterboards.ca.gov/sandiego/ 619-516-1990

SWRCB: State Water Resources Control Board-Division of Drinking Water
www.waterboards.ca.gov/drinking_water/

DEH: San Diego County Department of Environmental Health
www.sandiegocounty.gov/deh/ 619-607-8351

Disclaimer: This document is meant to be an aid to the Project Owner and staff of the City of San Diego in the review and permitting process of On-Site Wastewater Treatment and Reuse systems. It cannot be relied upon to be all inclusive, complete or to be a representation of the State, County or City laws, regulations or policies.

Step 1 – Project Preliminary Review

Project Owner:

- A. Prepares and submits the Project Preliminary Review Application with initial data to DSD.
- B. Provides initial project application to State and County Regulatory Agencies as required.
- C. Provides required initial fee deposits to establish a project review accounts with City and Regulatory Agencies as they work under a “fee for service basis”.

City:

- A. DSD notifies owner of required initial fee deposit and on receipt establishes project review account and distributes the Project Preliminary Review Application to all relevant City Departments for review
- B. Departments review and provide comments to DSD concerning the following
 - a. DSD: Zoning Requirements, determination of required environmental documentation.
 - b. PUD: Impact on downstream City sewer facilities, applicable industrial waste discharge requirements.
 - c. DSD: potential impacts on local storm water runoff quality.
- C. DSD compiles and transmits comments to Project Owner.

Regulatory Agency:

- A. Notifies Project Owner of required initial fee deposit and on receipt, establishes review account.
- B. Reviews and provide comment on the initial project notification.
- C. SWRCB determines product water quality requirements based on proposed uses of recycled water.

Step 2 – Final Project Application Review

Project Owner:

- A. Prepares Title 22 Engineering Report in compliance with SWRCB requirements (See Note 1).
- B. Prepares environmental documents to comply with the California Environmental Quality Act (CEQA), if required.
- C. Includes an Appendix in Engineering Report to address City comments and requirements.
- D. Submits Engineering Report to DSD and RWQCB, SWRCB, DEH.
- E. Addresses comments from City and Regulatory Agencies, updates and submits Final Engineering Report as needed.

City:

- A. DSD distributes the Draft Engineering Report to relevant City Departments for review and comment:
 - a. DSD: Zoning Requirements, information usually included in a standard sewer study and environmental documentation
 - b. PUD: Impact on downstream City sewer facilities, applicable industrial waste discharge requirements.
 - c. DSD: Impact on local storm water runoff quality.
- B. DSD compiles comments and transmits them to the Project Owner. Provides a copy to the Regulatory Agencies.
- C. DSD reviews and distributes to PUD the final updated Engineering Report, environmental documentation and comment responses. DSD approves City portions of Engineer Report and environmental documentation.

Regulatory Agencies:

- A. RWQCB, SWRCB and DEH review the Engineering Report and environmental documentation for compliance with their requirements. Submits comments to the Project Owner. Generally RWQCB will review the Title 22 Engineering Report and DEH will review the Title 22 Report and plans for irrigation and cooling towers.

Note 1: Useful references include: “Guidelines for the Preparation of an Engineering Report for the Production, Distribution and Use of Recycled Water” (March 2001), by the California Department of Health Services (now the State Water Resources Control Board-Division of Drinking Water); “Alternative Treatment Technology Report for Recycled Water (September 2014) by California State Water Resources Control Board; and “Recycled Water Plan Check and Inspection Manual” (2001) by Department of Environmental Health.

STEP 3 – Detailed Design

Project Owner:

- A. Prepares detailed design documents (drawings, specifications, & Operation Maintenance manuals, etc.) based on the approved Engineering Report and environmental document, (approval from all agencies) and all applicable rules and regulations.
- B. Submits signed and sealed documents to DSD and other agencies for the plan check and issuing of the required permits (Grading and Right of Way, Building/Structural, Electrical, Plumbing, Mechanical and Signs).
- C. Addresses review comments and updated documents as necessary to achieve approval.
- D. Prepares and pays for all permitting fees and inspection deposit.
- E. Prepares and submits an application for a Waste Discharge Permit to RWQCB.

City:

- A. DSD receives and distributes the design documents to relevant City Departments for review & comment.
 - a. DSD: Code compliance
 - b. PUD: Cross connections and public utility interface requirements.
 - c. DSD: Storm water impacts
- B. DSD compiles comments and transmits them to the Project Owner. Provides a copy to the Regulatory Agencies.
- C. DSD and PUD review updated design documents and comment responses. DSD approves portions of design under City authority.
- D. Based on approved design documents from City and Regulatory Agencies, DSD issues needed permits for construction: Grading and Right of Way, Building/structural, Electrical, Plumbing, Mechanical, Signs.

Regulatory Agencies:

- A. Review project design documents to ensure conformance with approved Engineering Report and environmental documentation and transmits comments to Project Owner.
- B. Provide approval of design to project owner. Notifies DSD of Approval.
- C. Reviews waste discharge permit application from Project Owner.

Step 4 – Project Construction

Project Owner:

- A. Constructs the facilities according to the approved plans, specifications and permit requirements.
- B. Notifies City and Regulatory Agencies of construction progress.
- C. Requests and/or performs inspections as required by the permits.
- D. Tests equipment and systems for proper function.
- E. Informs City and Regulatory Agencies of construction changes and initiates review.
- F. Corrects all defects and non-conforming work.
- G. Provides a Construction Certification Letter to all agencies at completion stating that all facilities are constructed in accordance with the approved Engineering Report, permit requirements and approved plans and specifications.
- H. Performs and passes cross connection testing by certified specialist.

City

- A. DSD performs inspection. Notifies Project Owner of non-conforming work.
- B. DSD reviews Construction Certification Letter.
- C. DSD issues Final Inspection approval.

Regulatory Agencies:

- A. Perform inspections and certification reviews
- B. Provide Construction Completion Certificate.

STEP 5 – Start-up

Project Owner:

- A. As a prerequisite for initiating start-up, the facility operation and maintenance manuals and staffing must be approved by the Regulatory Agencies. In addition, the potable water backflow protection testing has been complete by PUD and the Temporary Certificate of Occupancy is issued by DSD.
- B. Initiates operation of the facility.
- C. Discharges recycled water to sewer until it consistently meets the standard required by the Regulatory Agencies.
- D. Makes necessary modifications if, required, to achieve permitted recycled water quality.
- E. Performs process and waste discharge sampling and testing in accordance with the Regulatory Agency and City requirements. Provides monthly reports.
- F. Initiates operation of the recycled water distribution systems after consistently meeting water quality standards and approval by Regulatory Agency.

City:

- A. PUD issues a short term Industrial User Discharge Permit allowing for start-up services. Term of permit will match Regulatory Agency permitted duration of start-up services.
- B. PUD reviews plant operating records and performs sampling and analysis of wastes discharged into the City sewer system for compliance with discharge permit and for initial billing parameters
- C. PUD issues a 4-year Industrial User Discharge Permit based approved successful commissioning by Regulatory Agencies. Permit will require monthly flow reporting of untreated wastewater, recycled water and sludge and COD and TSS analysis of sludge.

Regulatory Agencies:

- A. Issue short term start-up permit.
- B. Monitor and review Commissioning activities and reports from the Owner.
- C. Perform inspections of facility, recycled water system and application sites
- D. Issue approval for full operation when all requirements are met consistently for a period specified by the regulatory agency.

STEP 6 – Full Operation

Project Owner:

- A. Operates plant in accordance with permits and regulations.
- B. Prepares and submits operating reports as required by Regulatory Agencies and PUD.

City:

- A. PUD prepares invoices for discharges to the public sewer.
- B. PUD performs inspections and sampling to confirm Industrial Waste Discharge compliance.

Regulatory Agencies:

- A. Monitor facility operations and review operating reports.
- B. Perform inspections and sampling to confirm compliance.

Useful Reference Documents and Web Addresses

State Water Resources Control Board

- Preparation of an Engineering Report for the Production, Distribution and Use of Recycled Water (March 2001)
- Alternative Treatment Technology Report for Recycled Water (September 2014)
- http://www.waterboards.ca.gov/drinking_water/certlic/drinkingwater/RecycledWater.shtml

State Department of Public Health (Currently the State Water Resources Control Board, Division of Drinking Water)

- California Health Laws Related to Recycled Water
<http://www.cdph.ca.gov/certlic/drinkingwater/Documents/Recharge/Purplebookupdate6-01.PDF>

San Diego County Department of Environmental Health

- Recycled Water Plan Check and Inspection Manual (DEH 2001 Edition)
http://www.sandiegocounty.gov/content/sdc/deh/lwqd/lu_recycled_water.html

City of San Diego

- Industrial User Discharge Permit and Application
<http://www.sandiego.gov/mwwd/enviroment/iwcp/significant.shtml>