



Sacramento Regional County Sanitation District Sacramento Regional Wastewater Treatment Plant

Progress Report Method of Compliance Work Plan and Schedule for Ammonia Effluent Limitations and Title 22 or Equivalent Disinfection Requirements

Submitted: February 1, 2020

Contents

1.0 Introduction	1
2.0 Overall Compliance Schedule	1
3.0 Progress towards Compliance	3
3.1 Pilot Study Implementation	3
3.2 Design of Treatment Systems	3
3.3 Environmental Analysis.....	4
3.4 Construction Phase	4
3.5 Startup and Commissioning.....	4
3.6 Regional San Project Acceptance	4
3.7 Ammonia Pollution Prevention.....	5
3.8 Schedule.....	5

Tables

Table 1. Compliance Schedule for Ammonia Final Effluent Limitations	1
Table 2. Compliance Schedule for Title 22 or Equivalent Treatment Requirements	2
Table 3. Major EchoWater Projects.....	4

Appendices

- Appendix A. Status of Ammonia and Nitrate Reduction and Title 22 or Equivalent Projects
- Appendix B. Work Plan Schedule for Compliance

Sacramento Regional County Sanitation District Contact Information

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1.0 Introduction

On June 9, 2011, the Sacramento Regional County Sanitation District (Regional San) submitted a Method of Compliance Work Plan and Schedule for Ammonia Effluent Limitations and Title 22 or Equivalent Treatment Requirements (Work Plan). This submittal was required by the compliance schedule contained in the waste discharge requirements Order No. R5-2010-0114 (2010 NPDES Permit¹) adopted by the Central Valley Regional Water Quality Control Board (Regional Board) on December 9, 2010 for the Sacramento Regional Wastewater Treatment Plant (SRWTP). The 2010 NPDES Permit imposed new final effluent limitations for ammonia and nitrate (requiring nutrient reduction facilities) and new requirements for Title 22 or equivalent disinfection requirements (requiring tertiary treatment facilities). The 2010 NPDES Permit required the submittal of annual progress reports following approval of the Work Plan. The Regional Board approved the Work Plan on July 8, 2011.

As a component of a Partial Settlement Agreement, Regional San stated that it will post on its website a second progress report on or before February 1 of each year until completion of the nutrient reduction facilities. At Regional San’s discretion, these progress reports will also include an update on the tertiary treatment facilities in addition to the nutrient reduction facilities.

On April 21, 2016, Regional Board adopted Order R5-2016-0020 (2016 NPDES Permit) for the SRWTP which rescinds and replaces the 2010 NPDES Permit. The 2016 Permit also requires compliance with final effluent limitations for ammonia and nitrate and Title 22 or equivalent disinfection. The applicable requirements and schedules are reflected in the 2016 Permit and Tables 1 and 2 below.

2.0 Overall Compliance Schedule

The following compliance schedules for Ammonia Effluent Limitations and Title 22 or Equivalent treatment requirements are listed below in Table 1 and Table 2, respectively:

Table 1. Compliance Schedule for Ammonia Final Effluent Limitations

Task	Relevant Dates
i. Submit Method of Compliance Work Plan/Schedule	Due Date: 9 June 2011 Date Submitted: 9 June 2011 Date Approved: 8 July 2011 Status: Complete
ii. Submit and Implement Pollution Prevention Plan (PPP) for Ammonia ¹	Due Date: 9 December 2011 Date Submitted: 8 December 2011 Revised Plan Submitted: 15 November 2012 Date Approved: 17 May 2013 Status: Complete
iii. Progress Reports ²	Progress report required by permit due 9 July, annually ³
iv. Begin CEQA process for Compliance Project	Due Date: 19 May 2015 Process Initiated: 22 August 2012

¹ The 2010 NPDES Permit was amended several times. All the amendments were incorporated into Regional Board Order No. R5-2010-0114-04

Method of Compliance Work Plan For Ammonia

Task	Relevant Dates
	Date EIR Approved: 24 September 2014 Status: Complete
v. Begin Construction of Compliance Project	Due Date: 19 May 2018 Status: Complete; Biological Nutrient Removal Notice to Proceed-April 27, 2016
vi. Full Compliance	Due Date: 11 May 2021

¹The Discharger shall continue to implement the PPP.

²The progress reports shall detail the steps implemented towards achieving compliance with waste discharge requirements, including studies, construction progress, evaluation of measures implemented, and recommendations for additional measures as necessary to achieve full compliance by the final compliance date.

³Regional San will prepare an additional report annually, to be posted on the Regional San's website on or before February 1 of each year, beginning in 2014. This additional report is not required by the 2016 NPDES Permit, but is a report the Partial Settlement Agreement states that Regional San will prepare. Both reports will be posted on Regional San's website, but only the report required by July 9 is required to be transmitted directly to the Regional Board.

Table 2. Compliance Schedule for Title 22 or Equivalent Treatment Requirements

Task	Relevant Dates
i. Submit Method of Compliance Work Plan/Schedule	Due Date: 9 June 2011 Date Submitted: 9 June 2011 Date Approved: 8 July 2011 Status: Complete
ii. Progress Reports ¹	Progress report required by permit due 9 July, annually
iii. Begin CEQA process for Compliance Project	Due Date: 16 May 2017 Process Initiated: 22 August 2012 Date EIR Approved: 24 September 2014 Status: Complete
iv. Begin Construction of Compliance Project	Due Date: 16 May 2020 Status: Complete; Tertiary Treatment Facility Notice to Proceed-April 11, 2018
v. Submit Seasonal Operations Plan ²	No later than 30 days prior to full compliance
vi. Full Compliance	Due Date: 9 May 2023

¹The progress reports shall detail the steps implemented towards achieving compliance with waste discharge requirements, including studies, construction progress, evaluation of measures implemented, and recommendations for additional measures as necessary to achieve full compliance by the final compliance date.

²The plan shall incorporate as a goal to reasonably limit the amount of unfiltered discharge and describe anticipated operations of the Facility when flows in excess of filter design capacity occur considering influent flows to the entire Facility, available storage, river flows, impending meteorological conditions, and any other relevant operational considerations. This plan will be periodically updated, as necessary, based on accumulated operating data experience.

Installation of advanced treatment technologies is needed to meet the new discharge permit requirements. To construct the required treatment facilities, Regional San identified other major activities needed to achieve compliance with the NPDES Permit requirements, including:

- Treatment Technology Identification - Completed
- Pilot Study Implementation
 - ❖ Phase 1 - Treatment Technology Selection - Completed
 - ❖ Phase 2 - Design Criteria Optimization - Completed
 - ❖ Phase 3 - Process optimization and additional operator training - In planning (but not required to operate nutrient reduction or tertiary treatment facilities)

- Establishment of the Program Management Office (PMO) - Completed
- Select treatment technologies for environmental review, design, and implementation - Completed
- Design full-scale treatment systems - Completed
- Environmental Analysis - Completed
- Construction Phase - In progress (for nutrient reduction, Title 22 or equivalent, and related facilities)
- Startup and Commissioning - In planning for nutrient reduction, Title 22 or equivalent, and related facilities. In progress for some related facilities (i.e. Channel Air Blowers and Flow Equalization facilities), and completed for other related facilities. See Appendix A for status of all the individual projects.

3.0 Progress towards Compliance

The following is a summary of the various activities associated with complying with the Ammonia Effluent Limitations and Title 22 or Equivalent requirements. The summary provided here is the information required as part of the permit requirements.

3.1 Pilot Study Implementation

The Phase 2 Pilot System was completed in December 2014. A final report was completed in December 2015.

The goal of the Phase 3 Pilot Study is to further optimize the biological process and provide training to operators. This phase is not required to successfully commission the new facilities.

3.2 Design of Treatment Systems

Design consultants have been procured to provide pre-designs and final designs of various individual treatment systems and project features. Designs for all major projects have been completed. Table 3 lists the major projects required to meet nutrient-related (i.e., final ammonia and nitrate) limitations and Title 22 or Equivalent treatment requirements. Major design projects, as defined in the Partial Settlement Agreement, are those with a design contract in excess of \$1 million. Dates in bold are actual dates of accomplishment. Other dates are planned dates. Regional San has determined that construction completion will be designated as when nutrient reduction facilities and the Title 22 or Equivalent treatment facilities are commissioned as a combined system instead of separate facilities. Additional project information is included in Appendix A.

Table 3. Major EchoWater Projects

Major Project	Design Contract Award	Construction Contract Award	Construction Completion
Biological Nutrient Removal (BNR)	22 Feb 2013	27 Apr 2016	19 Jul 2023 ¹
Flow Equalization	28 Aug 2013	25 Feb 2015	29 May 2020
RAS Pumping System	13 Nov 2013	25 May 2016	31 Oct 2019
Building Relocations	25 Sep 2013	19 Mar 2015	29 Feb 2016
Site Preparation	11 Dec 2013	25 Feb 2015	11 Nov 2016
Main Electrical Substation Expansion	In House Design	01 Jan 2016	30 Dec 2016
Disinfection Chemical Storage	11 Dec 2013	22 Jul 2015	16 Nov 2017
Nitrifying Sidestream Treatment	26 Mar 2014	13 Jan 2016	01 Oct 2019
Tertiary Treatment Facilities (TTF)	27 May 2015	11 April 2018	08 Nov 2022
Channel Air Blowers	11 Nov 2016	23 May 2018	13 Apr 2020

¹ Contractor’s submitted schedule. See Section 3.8 Schedule for additional information.

3.3 Environmental Analysis

The CEQA process was initiated on August 22, 2012 and the Final Environmental Impact Report (EIR) was certified by the Regional San Board of Directors on September 24, 2014.

3.4 Construction Phase

Construction of major projects supporting the key ammonia and nitrate and Title 22 or Equivalent treatment facilities was initiated in February 2015. Four major projects have been completed as of December 31, 2018. There are currently six major projects under construction. The key project needed to meet ammonia and nitrate treatment requirements is the Biological Nutrient Removal project which is under construction. The key project needed to meet the Title 22 or equivalent requirements is the Tertiary Treatment Facilities project which is also under construction.

3.5 Startup and Commissioning

Startup and commissioning for each project will occur as major treatment processes are completed and existing processes are cut over as required. Additional time is required to start up and commission the new facilities together (i.e., Biological Nutrient Removal and Tertiary Treatment) to ensure stable overall process operation. Regional San is defining full compliance of the Title 22 or Equivalent treatment facilities as completion of the last project (the Tertiary Treatment Facilities). This phase is anticipated to be accomplished by May 2023.

3.6 Regional San Project Acceptance

This milestone of the project is a contractual step to formally close out the construction project and is subject to Regional San Board action. Treatment facilities will have already been commissioned and will be fully operational. This date is subject to the nearest Board meeting after all contractual issues have been resolved and is not related to permit compliance.

3.7 Ammonia Pollution Prevention

As stated in the November 2012 revised Ammonia PPP, domestic waste contributes the majority of ammonia in the treatment plant influent. Most of the ammonia found in domestic waste is derived from urea, which breaks down rapidly to ammonia in the wastewater conveyance system. Therefore, the primary source of ammonia to the sewer system is considered uncontrollable.

From June 1 to December 2019, the average daily influent ammonia concentration was 33 milligrams per liter (mg/L), and the average daily effluent ammonia concentration was 30 mg/L. Regional San is in compliance with the interim maximum daily, average weekly, and average monthly effluent limitations for ammonia.

Industrial point sources remain a relatively insignificant source of ammonia, contributing about 1% of the influent load. Potential influent ammonia concentration reduction from source control of industrial users will be negligible. Regional San will continue to identify and screen potential new significant ammonia point source dischargers.

Ammonia removal will take place through two different treatment processes, the Nitrifying Sidestream Treatment (NST) and the Biological Nutrient Removal (BNR). Commissioning of the NST process started in March 2019 and it is operational, removing approximately 15% of the ammonia. NST reduces ammonia from the solids storage basin and biosolids recycling facility return flows prior to their discharge into the plant influent. As of December 31, 2019, NST has removed approximately 1.7 million pounds of ammonia. The BNR process is still in construction.

3.8 Schedule

Regional San has been making good faith efforts to meet the compliance dates for ammonia and nitrate final effluent limitations, and for Title 22 or equivalent treatment requirements. Construction for all of the projects required to provide the necessary treatment facilities to meet the permit requirements is in progress or has been completed.

The schedule provided by the BNR contractor in December 2019 shows BNR construction completion in July 2023 and that necessary BNR facilities are not on schedule to be completed in time to comply with the final effluent limits for ammonia and nitrate by May 2021 as contained in the NPDES permit. Notably, the contractor's schedule and BNR construction completion pertains specifically to "facility completion," which is not necessarily reflective of Regional San's anticipated date of compliance with the final ammonia and nitrate effluent limits as contained in the NPDES permit. Regional San anticipates complying with ammonia and nitrate removal requirements in phases, as requisite facilities are commissioned into service, with full compliance well ahead of the construction completion date of July 2023 as shown in the contractor's schedule. Further, Regional San believes that there is a degree of uncertainty in the contractor's schedule. Regional San staff continues to closely monitor construction activities and will be able to provide a more accurate date of anticipated compliance with final ammonia and nitrate effluent limits when the next Progress Report is

submitted in six months. In the meantime, Regional San will continue to work closely with the contractor to identify and evaluate means by which compliance can be met without unacceptable risks or costs.

The construction contractor for the treatment facilities needed to meet the Title 22 or equivalent requirements (Tertiary Treatment Facilities) was issued a notice to proceed on April 30, 2018. The contractor continues to make good progress with concrete placements on all structures. The contractor's schedule currently shows a completion date that will allow Regional San to meet the May 9, 2023 compliance date.

A Program schedule (updated as of December 2019) is included in Appendix B showing the major projects as well as other projects and work efforts required to comply with the final effluent limitations for ammonia and nitrate limitations and for Title 22 or equivalent requirements. The high level schedule shown in Table 3 reflects more recent updates to key project milestones.

Appendices

- A. Status of Ammonia and Nitrate Reduction and Title 22 or Equivalent Projects
- B. Work Plan Schedule for Compliance

Appendix A

Status of Ammonia and Nitrate Reduction and Title 22 or Equivalent Projects

Status of Ammonia and Nitrate Reduction and Title 22 or Equivalent Projects

Biological Nutrient Removal

A construction contract was awarded on April 27, 2016 and Notice to Proceed was issued on May 27, 2016. Construction continues to progress and a detailed commissioning schedule has been developed and integrated into the construction schedule. This effort shows that the contractor will not complete all construction by May 11, 2021. See Section 3.8 Schedule for additional information about the schedule for construction.

Tertiary Treatment Facilities

The contract was awarded on April 11, 2018. Notice to Proceed was issued on April 30, 2018. Construction is progressing with concrete placement on all structures. The contractor's schedule shows construction complete by November 8, 2022. The project is on schedule to meet this date but due to the complex construction activities, there is very little to no float in the construction schedule.

Nitrifying Sidestream Treatment

The contract was awarded on January 13, 2016 and Notice to Proceed was issued on February 19, 2016. Construction was completed in October 2019 and the process is functioning, however reliability testing of the entire system remains to be done pending replacement of non-compliant piping documents required for operation and maintenance. Reliability testing is expected to be fully completed by March 30, 2020.

Channel Air Blowers

The contract was awarded on May 23, 2018 and Notice to Proceed was issued on September 4, 2018. Construction has progressed well and the project is expected to be completed by April 13, 2020. The project is on schedule to meet this date.

Flow Equalization

A construction contract was awarded on February 25, 2015 and Notice to Proceed was issued on March 4, 2015. The contractor is experiencing delays from the wash-down system vendor who defaulted on his contract, however the basins can be used without the automated wash-down system. The prime contractor has assumed control of the remaining work and is making progress to complete the automated wash-down system. Construction is expected to be completed by May 31, 2020.

RAS Pumping System

A construction contract was awarded on May 25, 2016 and Notice to Proceed was issued on June 15, 2016. Commissioning was completed October 31, 2019 and all work on December 31, 2019. The project is now in the administrative closeout phase.

Building Relocations

Construction was completed on February 29, 2016 and final acceptance was issued on July 13, 2016.

Site Preparation

Construction was completed on November 11, 2016 and final acceptance issued on October 11, 2017.

Main Electrical Substation Expansion

Construction was completed on December 30, 2016 and final acceptance was issued on February 22, 2017.

Disinfection Chemical Storage

Construction was completed on November 16, 2017 and final acceptance was issued on September 12, 2018.

Appendix B

Work Plan Schedule for Compliance

Activity ID	Activity Name	Original Duration	Remaining Duration	Start	Finish	2012-2023																																															
						2012				2013				2014				2015				2016				2017				2018				2019				2020				2021				2022				2023			
						Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4								
Sacramento Regional County Sanitation District						[Gantt bars for Sacramento Regional County Sanitation District]																																															
ECHO WATER PROJECT						[Gantt bars for ECHO WATER PROJECT]																																															
Program Summary						[Gantt bars for Program Summary]																																															
CEQA Clearance (CEQA)						[Gantt bars for CEQA Clearance (CEQA)]																																															
Design & Construction of Projects						[Gantt bars for Design & Construction of Projects]																																															
Dwight Road Extension (DRE)						[Gantt bars for Dwight Road Extension (DRE)]																																															
Dwight Road Extension Planning						[Gantt bars for Dwight Road Extension Planning]																																															
Preliminary Design						[Gantt bars for Preliminary Design]																																															
Design Submittal #1						[Gantt bars for Design Submittal #1]																																															
Design Submittal #2						[Gantt bars for Design Submittal #2]																																															
Final Design Submittal						[Gantt bars for Final Design Submittal]																																															
Bid and Award						[Gantt bars for Bid and Award]																																															
Dwight Road Extension Construction						[Gantt bars for Dwight Road Extension Construction]																																															
Dwight Road Extension Acceptance & Closeout						[Gantt bars for Dwight Road Extension Acceptance & Closeout]																																															
Bldg Relocation-PMO/CMID Building (PMO)						[Gantt bars for Bldg Relocation-PMO/CMID Building (PMO)]																																															
PMO/CMID Bldg Planning						[Gantt bars for PMO/CMID Bldg Planning]																																															
PMO/CMID Bldg Design						[Gantt bars for PMO/CMID Bldg Design]																																															
PMO/CMID Bldg Bid and Award						[Gantt bars for PMO/CMID Bldg Bid and Award]																																															
PMO/CMID Bldg Construction						[Gantt bars for PMO/CMID Bldg Construction]																																															
PMO/CMID Bldg Commissioning						[Gantt bars for PMO/CMID Bldg Commissioning]																																															
PMO/CMID Bldg Acceptance & Closeout						[Gantt bars for PMO/CMID Bldg Acceptance & Closeout]																																															
Bldg Relocation-Harvest Crew, Bufferlands Bldgs (BHC)						[Gantt bars for Bldg Relocation-Harvest Crew, Bufferlands Bldgs (BHC)]																																															
Harvest Crew, Bufferlands Bldgs Planning						[Gantt bars for Harvest Crew, Bufferlands Bldgs Planning]																																															
Harvest Crew, Buffer Bldgs Design						[Gantt bars for Harvest Crew, Buffer Bldgs Design]																																															
Bufferlands Bldg Bid and Award						[Gantt bars for Bufferlands Bldg Bid and Award]																																															
Bufferlands Bldg Construction						[Gantt bars for Bufferlands Bldg Construction]																																															
Bufferlands Bldg Commissioning						[Gantt bars for Bufferlands Bldg Commissioning]																																															
Bufferlands Bldg Closeout						[Gantt bars for Bufferlands Bldg Closeout]																																															
Bldg Relocation-Heavy Equip Maintenance (HEMB)						[Gantt bars for Bldg Relocation-Heavy Equip Maintenance (HEMB)]																																															
Bldg Relocation-Heavy Equip Maint Planning						[Gantt bars for Bldg Relocation-Heavy Equip Maint Planning]																																															
Bldg Relocation- Heavy Equip Maint Design						[Gantt bars for Bldg Relocation- Heavy Equip Maint Design]																																															
Bldg Relocation- Heavy Equip Maint Bid and Award						[Gantt bars for Bldg Relocation- Heavy Equip Maint Bid and Award]																																															
Bldg Relocation- Heavy Equip Maint Construction						[Gantt bars for Bldg Relocation- Heavy Equip Maint Construction]																																															
Bldg Relocation- Heavy Equip Maint Commissioning						[Gantt bars for Bldg Relocation- Heavy Equip Maint Commissioning]																																															
Bldg Relocation- Heavy Equip Maint Closeout						[Gantt bars for Bldg Relocation- Heavy Equip Maint Closeout]																																															
SM-Grit Landfill Clean Closure (GLC) (Plan & Design Only)						[Gantt bars for SM-Grit Landfill Clean Closure (GLC) (Plan & Design Only)]																																															
SM-Grit Landfill Clean Closure Planning						[Gantt bars for SM-Grit Landfill Clean Closure Planning]																																															
SM-Grit Landfill Clean Closure Design						[Gantt bars for SM-Grit Landfill Clean Closure Design]																																															
SM-Main Electrical Substation Expansion Project (MESE)						[Gantt bars for SM-Main Electrical Substation Expansion Project (MESE)]																																															
SM-Main Electrical Substation Expansion Planning B.3.2.2						[Gantt bars for SM-Main Electrical Substation Expansion Planning B.3.2.2]																																															
SM-Main Electrical Substation Expansion Design						[Gantt bars for SM-Main Electrical Substation Expansion Design]																																															
SM-Main Electrical Substation Expansion Bid and Award						[Gantt bars for SM-Main Electrical Substation Expansion Bid and Award]																																															
SM-Main Electrical Substation Expansion Construction						[Gantt bars for SM-Main Electrical Substation Expansion Construction]																																															
SM-Main Electrical Substation Expansion Commissioning						[Gantt bars for SM-Main Electrical Substation Expansion Commissioning]																																															
SM-Main Electrical Substation Expansion Acceptance & Closeout						[Gantt bars for SM-Main Electrical Substation Expansion Acceptance & Closeout]																																															
SM-Site Preparation (SP)						[Gantt bars for SM-Site Preparation (SP)]																																															
SM-Site Preparation Planning						[Gantt bars for SM-Site Preparation Planning]																																															
Site Preparation Design						[Gantt bars for Site Preparation Design]																																															
SM-Site Preparation Bid and Award						[Gantt bars for SM-Site Preparation Bid and Award]																																															
SM-Site Preparation Construction						[Gantt bars for SM-Site Preparation Construction]																																															
SM-Site Preparation Commissioning						[Gantt bars for SM-Site Preparation Commissioning]																																															
SM-Site Preparation Closeout						[Gantt bars for SM-Site Preparation Closeout]																																															

■ Remaining Level of Effort
 ■ Remaining Work
 ◆ Milestone
 ◆ Gates
■ Actual Level of Effort
 ■ Critical Remaining Work
 ◆ Gates
■ Actual Work
 ▬ Summary



Activity ID	Activity Name	Original Duration	Remaining Duration	Start	Finish	2012				2013				2014				2015				2016				2017				2018				2019				2020				2021				2022				2023			
						Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4				
Fiber Optic Network Replacement (FOR)						Fiber Optic Network Replacement (FOR)																																															
Fiber Optic Network Replacement Design						Fiber Optic Network Replacement Design																																															
Fiber Optic Network Replacement Bid & Award						Fiber Optic Network Replacement Bid & Award																																															
Fiber Optic Network Replacement Construction						Fiber Optic Network Replacement Construction																																															
Fiber Optic Network Replacement Commissioning						Fiber Optic Network Replacement Commissioning																																															
Fiber Optic Network Replacement Closeout						Fiber Optic Network Replacement Closeout																																															
Flow Equalization (FEQ)						Flow Equalization (FEQ)																																															
Flow Equalization Planning						Flow Equalization Planning																																															
Flow Equalization Contractor Prequalification Process						Flow Equalization Contractor Prequalification Process																																															
Flow Equalization Bid and Award						Flow Equalization Bid and Award																																															
Flow Equalization Construction						Flow Equalization Construction																																															
Flow Equalization Commissioning						Flow Equalization Commissioning																																															
Flow Equalization Closeout						Flow Equalization Closeout																																															
BNR (w PEPS Construction)						BNR (w PEPS Construction)																																															
BNR Planning						BNR Planning																																															
BNR Design						BNR Design																																															
BNR/PEPS Bid and Award						BNR/PEPS Bid and Award																																															
BNR/PEPS Construction						BNR/PEPS Construction																																															
BNR/PEPS Commissioning						BNR/PEPS Commissioning																																															
BNR/PEPS Closeout						BNR/PEPS Closeout																																															
Primary Effluent Pump Station (PEPS) (Plan & Design Only)						Primary Effluent Pump Station (PEPS) (Plan & Design Only)																																															
Primary Effluent PS Planning						Primary Effluent PS Planning																																															
Prim Effluent PS Design						Prim Effluent PS Design																																															
Prim Effluent PS Bid and Award						Prim Effluent PS Bid and Award																																															
Return Activated Sludge Pump Station (RAS)						Return Activated Sludge Pump Station (RAS)																																															
RAS PS Planning						RAS PS Planning																																															
RAS PS Design						RAS PS Design																																															
RAS PS Bid and Award						RAS PS Bid and Award																																															
RAS PS Construction						RAS PS Construction																																															
RAS PS Commissioning						RAS PS Commissioning																																															
RAS PS Closeout						RAS PS Closeout																																															
Tertiary Treatment Facilities (TTF) (Filtration, FIPS, DCB)						Tertiary Treatment Facilities (TTF) (Filtration, FIPS, DCB)																																															
Tertiary Treatment Facilities Planning (TTF)						Tertiary Treatment Facilities Planning (TTF)																																															
Tertiary Treatment Facilities (TTF) Design						Tertiary Treatment Facilities (TTF) Design																																															
Tertiary Treatment Facilities (TTF) Bid and Award						Tertiary Treatment Facilities (TTF) Bid and Award																																															
Tertiary Treatment Facilities (TTF) Construction						Tertiary Treatment Facilities (TTF) Construction																																															
Tertiary Treatment Facilities (TTF) Commissioning						Tertiary Treatment Facilities (TTF) Commissioning																																															
Tertiary Treatment Facilities (TTF) Closeout						Tertiary Treatment Facilities (TTF) Closeout																																															
Effluent Disinfection - Ph1 Chemical Storage (DCS)						Effluent Disinfection - Ph1 Chemical Storage (DCS)																																															
Disinfection Planning - Ph1 Chemical Storage						Disinfection Planning - Ph1 Chemical Storage																																															
Disinfection Design - Ph1 Chemical Storage						Disinfection Design - Ph1 Chemical Storage																																															
Disinfection Bid and Award - Ph1 Chemical Storage						Disinfection Bid and Award - Ph1 Chemical Storage																																															
Disinfection Construction - Ph1 Chemical Storage						Disinfection Construction - Ph1 Chemical Storage																																															
Disinfection Commissioning - Ph1 Chemical Storage						Disinfection Commissioning - Ph1 Chemical Storage																																															
Disinfection Closeout - Ph1 Chemical Storage						Disinfection Closeout - Ph1 Chemical Storage																																															
Nitrifying Sidestream Treatment (NST)						Nitrifying Sidestream Treatment (NST)																																															
Nitrifying Sidestream Planning						Nitrifying Sidestream Planning																																															
Nitrifying Sidestream Design						Nitrifying Sidestream Design																																															
Nitrifying Sidestream Bid and Award						Nitrifying Sidestream Bid and Award																																															
Nitrifying Sidestream Construction						Nitrifying Sidestream Construction																																															
Nitrifying Sidestream Commissioning						Nitrifying Sidestream Commissioning																																															
Nitrifying Sidestream Closeout						Nitrifying Sidestream Closeout																																															
Channel Air Blower System (CAB)						Channel Air Blower System (CAB)																																															

■ Remaining Level of Effort ■ Remaining Work ◆ Milestone
■ Actual Level of Effort ■ Critical Remaining Work ◆ Gates
■ Actual Work ▾ Summary



