



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: July 9, 2015

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Appendix B. Workplan 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 (NPDES Permit) adopted by the Central Valley Regional Water Quality Control Board (Regional Board) on December 9, 2010. The NPDES permit imposed new final effluent limitations for ammonia discharged by the Sacramento Regional Wastewater Treatment Plant (SRWTP) and new requirements for Title 22 or equivalent filtration and disinfection (and related effluent limitations for total coliform, turbidity, total suspended solids and biochemical oxygen demand). The NPDES Permit allowed for a period of up to 10 years to achieve compliance and further required the submittal of annual progress reports by February 1 of each year following approval of the Work Plan. The Regional Board approved the Work Plan on July 8, 2011.

On December 4, 2012, the State Water Resources Control Board adopted an order based on its review of Order R5-2010-0114. As relevant here, the State Water Board prescribed some changes in the final ammonia effluent limitations specified in the Regional Board's Order R5-2010-0114. The Regional Board incorporated the revised modified final effluent limitations for ammonia into the NPDES permit through Order No. R5-2013-0124, adopted on October 4, 2013, and those are the applicable final limitations.¹ In addition, the NPDES Permit contained new effluent limitations for nitrate. The SRWTP currently complies with the nitrate limitations, and the compliance activities below assume the need to comply with both the applicable ammonia and nitrate limitations.

In addition, the NPDES Permit required submittal of an Ammonia Pollution Prevention Plan, which was submitted on December 8, 2011. A Revised Ammonia Pollution Prevention Plan (Ammonia PPP) was submitted on November 15, 2012 to address Regional Board comments. The Regional Board approved the Ammonia PPP on May 17, 2013.

Since approval of the Work Plan, steps toward compliance have been made. Also, the Sacramento Superior Court has entered orders having the effect of shifting the "due date" for ultimate compliance and various steps toward compliance. The controlling order was issued by the Superior Court on May 6, 2013. The updated deadlines with respect to compliance are noted in Table 1 and 2 below. The annual progress report required by Provision VI.C.7.b and Reporting Requirement X.D.1 of the NPDES Permit (i.e., Compliance Schedule for Final Effluent Limitations for Ammonia), which was due by February 1 of each year, is now due by July 13 of each year. Also in 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

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The Regional Board also amended Order R5-2010-0114 in 2011, by Order R5-2011-0083, and in 2014 by Order R5-2014-0122. None of these amendments in the Orders related to compliance schedules for final ammonia or nitrate effluent limitations, and Title 22 equivalent requirements.

completion of the nutrient reduction facilities has occurred. Previous progress reports posted on Regional San’s website on or before February 1 provided a status of only the nutrient reduction facilities. Future progress reports required before February 1 will also include an update on the Title 22 or Equivalent Disinfection Requirements in addition to the nutrient reduction facilities.

Further, the annual progress report required by Provision VI.C.7.a and Reporting Requirement X.D.1 of the NPDES Permit (i.e., Compliance Schedule for Title 22 or Equivalent Disinfection Requirements) that was due by February 1 of each year is now due on July 9 of each year starting on July 9, 2014. Since progress reports for both requirements are due within a few days of each other, only one progress report will be submitted to satisfy the reporting requirements for both the Final Effluent Limitations for Ammonia and Title 22 or Equivalent Disinfection Requirements Work Plan and PPP.

The Title 22 or equivalent requirements of the permit were subject to a legal challenge. The Regional Board amended the NPDES permit in 2014 by Orders R5-2014-0102 and R5-2014-0103 resulting in the Title 22 or equivalent requirements applying seasonally and settlement of the case. The applicable NPDES permit requirements and schedules are all reflected in Order R5-2010-0114-3.

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 Workplan/Schedule	Due Date: 9 June 2011 Date Submitted: 9 June 2011 Date Approved: 8 July 2011
ii. Ammonia PPP	Due Date: 9 December 2011 Date Submitted: 8 December 2011 Revised Plan Submitted: 15 November 2012 Date Approved: 17 May 2013
iii. Progress Reports	Progress report required by permit due 13 July, annually ¹
iv. Begin CEQA process for Compliance Project	Due Date: 19 May 2015 Process Initiated: 22 August 2012 Date EIR Approved: 24 September 2014
v. Begin Construction of Compliance Project	Due Date: 19 May 2018
vi. Submit Operations Plan	Due Date: No later than 30 days prior to the first day of discharge.
vii. Full Compliance	Due Date: 11 May 2021

¹Regional 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 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 13 will 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 Workplan/Schedule	Due Date: 9 June 2011 Date Submitted: 9 June 2011 Date Approved: 8 July 2011
ii. Progress Reports	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
iv. Begin Construction of Compliance Project	Due Date: 16 May 2020
v. Full Compliance	Due Date: 9 May 2023

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 operator training - In planning
- Establishment of the Program Management Office (PMO) - Completed
- Select treatment technologies for environmental review, design, and implementation - Completed
- Design full-scale treatment systems - In progress
- Environmental Analysis - Completed
- Construction Phase – In progress
- Startup and Commissioning - In planning

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 Phase 2 Pilot Study Implementation

The goal of the Phase 2 Pilot Study is to further refine the design criteria for the BNR, filtration, and disinfection processes to optimize full-scale facilities. The Phase 2 pilot system

was operated over 10 to 12 months and was completed in December 2014. A final report is due in July 2015.

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. 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 respectively as systems. 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	22 Feb 2013	07 Apr 2016	14 Jan 2021
Flow Equalization	28 Aug 2013	25 Feb 2015	11 Apr 2018
Primary Effluent Pumping Station	23 Oct 2013	Combined with BNR	-
RAS Pumping System	13 Nov 2013	08 Jun 2016	16 Apr 2019
Building Relocations	25 Sep 2013	19 Mar 2015	29 Feb 2016
Site Preparation	11 Dec 2013	25 Feb 2015	02 Sep 2016
Main Electrical Substation Expansion	In House Design	12 Aug 2015	05 Jul 2016
Disinfection Chemical Storage	11 Dec 2013	22 Jul 2015	23 Nov 2016
Nitrifying Sidestream Treatment	26 Mar 2014	13 Jan 2016	09 Mar 2018
Tertiary Treatment Facilities (formerly Filtration and Disinfection Contact Basin)	27 May 2015	06 Aug 2018	09 Nov 2022

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 treatment facilities was initiated in March 2015 for three of the major projects required for the ammonia and nitrate and Title 22 or Equivalent treatment facilities.

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 to ensure stable process operation. Regional San is defining full compliance as completion of this phase of the last project (the Tertiary Treatment Facilities). This phase is anticipated to be completed by November 2022.

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 the measure of full 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.

The measured average influent ammonia concentration was 35 micrograms per liter ($\mu\text{g/L}$) for the period June 2014 to May 2015, which is the same as the average for the previous twelve months.

Regional San continues to monitor industrial ammonia and total Kjeldahl nitrogen contributions from permitted users through its pretreatment program pollutant accounting activities. Industrial point sources remain a relatively insignificant source of ammonia. Also, no new point source discharges have been identified in the last year. Regional San will continue to monitor existing point source dischargers of ammonia and will screen potential new point source dischargers for the presence of ammonia in their discharge.

Further, Regional San has continued the implementation of interim operational changes, namely the cessation of solids storage basin (SSB) flushing since May 2009, which has resulted in reductions in effluent ammonia discharged to the river by approximately 10 percent. Regional San is committed to continuing those interim operational changes as long as feasible, pending any process concerns that may develop due to algal blooms, odor generation or struvite accumulation. Short-term sporadic flushing may be implemented during winter when impacts to the aquatic life are minimal.

4.0 Schedule

Regional San has been making progress and is on schedule to meet the compliance dates for ammonia and nitrate and Title 22 or equivalent permit requirements. Designs have been completed or are under way for all of the projects required to construct the necessary treatment facilities. Construction has been initiated on three major projects. The current schedule indicates that full system commissioning of the nutrient reduction facilities is on schedule to be accomplished before May 2021. The design consultant contract for the Title 22 or Equivalent treatment facilities was awarded on May 27, 2015 and preliminary design is underway. Regional San staff continues to identify and evaluate means by which compliance can be accelerated without unacceptable risks or costs.

A Program schedule 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 schedule provided is a Program wide schedule that was last updated April 2015. The dates shown in Table 3 may

reflect more current schedule information that has been developed through the design process since the last Program schedule update.

Appendices

- A. Status of Ammonia and Nitrate Reduction and Title 22 or Equivalent Projects
- B. Workplan 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

The design consultant was given notice to proceed (NTP) on February 22, 2013. Design work is in progress and final design is expected to be completed in November 2016. Construction is scheduled to start in April 2016. The project is on schedule to meet this milestone.

Flow Equalization

Design work was completed in December 2014 and the project advertised for bids. A construction contract was awarded on February 25, 2015 and construction has been initiated. Construction is scheduled to be completed by April 2018. The project is on schedule to meet this date.

Primary Effluent Pumping Station

A contract for design services was awarded on October 23, 2013. Design work is in progress and is expected to be completed by November 2016. The project is on schedule to meet this milestone. Construction of this project has been combined with the Biological Nutrient Removal project.

RAS Pumping System

A contract for design services was awarded on November 13, 2013. Design work is in progress and design is scheduled to be completed by January 2016. The project is on schedule to meet this milestone.

Building Relocations

Final design was completed in August 2014 and advertised for bids. A construction contract was awarded on March 19, 2015 and construction is underway. The project is scheduled to be completed by February 29, 2016 and is on schedule to meet this date.

Site Preparation

Final design was completed in February 2015 and advertised for bids. A construction contract was awarded on February 25, 2015 and construction is underway. The project is scheduled to be completed by September 2016 and is on schedule to meet this date.

Main Electrical Substation Expansion

This project is being designed by Regional San staff. Final design has been completed and the project was advertised for bids. A construction contract is expected to be awarded on August 12, 2015. The project is on schedule to meet this milestone.

Disinfection Chemical Storage

A design contract was awarded on December 11, 2013. Final design was completed in July 2015 and advertised for bids. A construction contract is expected to be awarded on July 22, 2015. The project is on schedule to meet this milestone.

Nitrifying Sidestream Treatment

A design contract was awarded on March 26, 2014. Design is in progress and is scheduled to be completed in September 2015 with construction starting in January 2016. The project is on schedule to meet these milestones.

Tertiary Treatment Facilities

The Filtration and Influent Pumping Station and the Disinfection Contact Basin projects have been combined into a single project called the Tertiary Treatment Facilities. A design contract was awarded on May 27, 2015 and preliminary design is underway. A draft preliminary design report is scheduled to be completed by February 2016. The project is on schedule to meet this milestone.

Filtration and Filter Influent Pump Station

This project has been combined with the Disinfection Contact Basin project and is now called the Tertiary Treatment Facilities project (see above).

Disinfection Contact Basin

This project has been combined with the Filtration and filter Influent Pumping Station project and is now called the Tertiary Treatment Facilities project (see above).

Appendix B

Workplan Schedule for Compliance

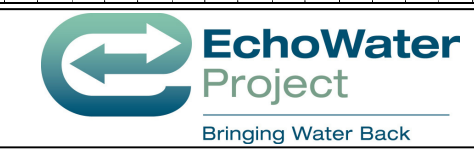
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■ Remaining Level of Effort ■ Remaining Work ◆ Milestone
■ Actual Level of Effort ■ Critical Remaining Work ◆ Gates
■ Actual Work ▾ Summary



Activity ID	Activity Name	Original Duration	Remaining Duration	Start	Finish	Total Float	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				
							Gantt Chart (Summary of Effort Levels)																																															
SM-Site Preparation Closeout		525	525	10-Apr-15	15-Sep-16	2246	SM-Site Preparation Closeout																																															
Misc Small Buildings (MSB)		602	583	08-Apr-15 A	29-Nov-16	2353	Misc Small Buildings (MSB)																																															
Misc Small Buildings Design		115	96	08-Apr-15 A	31-Jul-15	2839	Misc Small Buildings Design																																															
Misc Small Buildings Bid & Award		176	176	27-Apr-15	19-Oct-15	2760	Misc Small Buildings Bid & Award																																															
Misc Small Buildings Construction		271	271	19-Oct-15	31-Oct-16	1561	Misc Small Buildings Construction																																															
Misc Small Buildings Commissioning		11	11	31-Oct-16	15-Nov-16	1561	Misc Small Buildings Commissioning																																															
Misc Small Buildings Closeout		10	10	15-Nov-16	29-Nov-16	1681	Misc Small Buildings Closeout																																															
Fiber Optic Network Replacement (FOR)		433	194	10-Jun-14 A	04-Feb-16	1350	Fiber Optic Network Replacement (FOR)																																															
Fiber Optic Network Replacement Design		194	0	10-Jun-14 A	30-Jan-15 A		Fiber Optic Network Replacement Design																																															
Fiber Optic Network Replacement Bid & Award		73	0	11-Feb-15 A	11-May-15	80	Fiber Optic Network Replacement Bid & Award																																															
Fiber Optic Network Replacement Construction		146	146	11-May-15	30-Nov-15	1350	Fiber Optic Network Replacement Construction																																															
Fiber Optic Network Replacement Commissioning		70	70	19-Oct-15	22-Jan-16	1351	Fiber Optic Network Replacement Commissioning																																															
Fiber Optic Network Replacement Closeout		8	8	25-Jan-16	04-Feb-16	1350	Fiber Optic Network Replacement Closeout																																															
Flow Equalization (FEQ)		2187	1128	16-Apr-12 A	11-Apr-18	1855	Flow Equalization (FEQ)																																															
Flow Equalization Planning		395	0	16-Apr-12 A	23-Oct-13 A		Flow Equalization Planning																																															
Flow Equalization Design		418	3	28-Aug-13 A	29-Apr-15	2095	Flow Equalization Design																																															
Flow Equalization Contractor Prequalification Process		165	0	23-Apr-14 A	09-Dec-14 A		Flow Equalization Contractor Prequalification Process																																															
Flow Equalization Bid and Award		121	0	09-Dec-14 A	27-Apr-15	2935	Flow Equalization Bid and Award																																															
Flow Equalization Construction		1128	1128	11-Mar-15 A	11-Apr-18	1855	Flow Equalization Construction																																															
Flow Equalization Commissioning		680	680	11-Mar-16	19-Jan-18	1937	Flow Equalization Commissioning																																															
Flow Equalization Closeout		82	82	19-Jan-18	11-Apr-18	1127	Flow Equalization Closeout																																															
ESB-D Rehabilitation		1077	881	25-Jul-14 A	10-Sep-18	1217	ESB-D Rehabilitation																																															
ESB-D Rehabilitation Planning		306	110	25-Jul-14 A	25-Sep-15	1090	ESB-D Rehabilitation Planning																																															
ESB-D Rehabilitation Design		598	598	28-Sep-15	10-Jan-18	1090	ESB-D Rehabilitation Design																																															
ESB-D Rehabilitation Bid and Award		87	87	11-Jan-18	11-May-18	1090	ESB-D Rehabilitation Bid and Award																																															
ESB-D Rehabilitation Construction		547	547	03-Aug-16	07-Sep-18	1218	ESB-D Rehabilitation Construction																																															
ESB-D Rehabilitation Commissioning		5	5	04-Sep-18	10-Sep-18	1056	ESB-D Rehabilitation Commissioning																																															
BNR (w PEPS Construction)		3226	2096	16-Mar-12 A	14-Jan-21	847	BNR (w PEPS Construction)																																															
BNR Planning		294	0	16-Mar-12 A	03-May-13 A		BNR Planning																																															
BNR Design		1206	354	24-Jan-13 A	07-Apr-16	0	BNR Design																																															
BNR/PEPS Bid and Award		261	198	23-Sep-15	07-Apr-16	-17	BNR/PEPS Bid and Award																																															
BNR/PEPS Construction		1771	1771	10-Mar-16	14-Jan-21	847	BNR/PEPS Construction																																															
BNR/PEPS Commissioning		605	605	20-May-19	14-Jan-21	665	BNR/PEPS Commissioning																																															
BNR/PEPS Acceptance & Closeout		0	0	14-Jan-21	14-Jan-21	475	BNR/PEPS Acceptance & Closeout																																															
Primary Effluent Pump Station (PEPS) (Plan & Design Only)		1425	347	14-May-12 A	07-Apr-16	2589	Primary Effluent Pump Station (PEPS) (Plan & Design Only)																																															
Primary Effluent PS Planning		413	0	14-May-12 A	16-Dec-13 A		Primary Effluent PS Planning																																															
Prim Effluent PS Design		897	347	24-Oct-13 A	07-Apr-16	2589	Prim Effluent PS Design																																															
Prim Effluent PS Bid and Award		178	178	13-Oct-15	07-Apr-16	15	Prim Effluent PS Bid and Award																																															
Return Activated Sludge Pump Station (RAS)		2986	1908	14-May-12 A	17-Jul-20	1028	Return Activated Sludge Pump Station (RAS)																																															
RAS PS Planning		447	0	14-May-12 A	31-Jan-14 A		RAS PS Planning																																															
RAS PS Design		669	293	15-Nov-13 A	08-Jun-16	1805	RAS PS Design																																															
RAS PS Bid and Award		167	167	27-Jan-16	11-Jul-16	2494	RAS PS Bid and Award																																															
RAS PS Construction		1709	1709	23-Jun-15	26-Feb-20	1170	RAS PS Construction																																															
RAS PS Commissioning		1025	1025	14-Aug-17	04-Jun-20	1071	RAS PS Commissioning																																															
RAS PS Closeout		43	43	04-Jun-20	17-Jul-20	846	RAS PS Closeout																																															
Filter Influent Pump Station (FIPS) (Planning Only)		686	17	28-Sep-12 A	19-May-15	2081	Filter Influent Pump Station (FIPS) (Planning Only)																																															
Filt Influent Pump Station Planning		686	17	28-Sep-12 A	19-May-15	2081	Filt Influent Pump Station Planning																																															
Tertiary Treatment Facilities (TTF) (Filtration, FIPS, DCB)		2746	1983	21-May-12 A	30-Nov-22	115	Tertiary Treatment Facilities (TTF) (Filtration, FIPS, DCB)																																															
Tertiary Treatment Facilities Planning (TTF)		816	53	21-May-12 A	08-Jul-15	2045	Tertiary Treatment Facilities Planning (TTF)																																															
Tertiary Treatment Facilities (TTF) Design		704	704	28-May-15	06-Feb-18	1371	Tertiary Treatment Facilities (TTF) Design																																															
Tertiary Treatment Facilities (TTF) Bid and Award		129	129	07-Feb-18	06-Aug-18	0	Tertiary Treatment Facilities (TTF) Bid and Award																																															
Tertiary Treatment Facilities (TTF) Construction		937	937	07-Aug-18	09-Mar-22	0	Tertiary Treatment Facilities (TTF) Construction																																															
Tertiary Treatment Facilities (TTF) Commissioning		175	175	10-Mar-22	09-Nov-22	0	Tertiary Treatment Facilities (TTF) Commissioning																																															

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



Activity ID	Activity Name	Original Duration	Remaining Duration	Start	Finish	Total Float	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	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																																																																																												
Tertiary Treatment Facilities (TTF) Closeout							▼ Tertiary Treatm																																																																																																																																															
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 Chemical Storage - DS3 Construction Schedule_with Area 9							▼ Disinfection Chemical Storage - DS3 Construction Schedule_with Area 9																																																																																																																																															
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																																																																																																																																															
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Nitrifying Sidestream Closeout							▼ Nitrifying Sidestream Closeout																																																																																																																																															
Reliability Centered Design Analysis (RCD)							▼ Reliability Cente																																																																																																																																															
RCD Project Initiation							▼ RCD Project Initiation																																																																																																																																															
RCD Project Definition and Planning							▼ RCD Project Definition and Planning																																																																																																																																															
RCD Consultant Selection							▼ RCD Consultant Selection																																																																																																																																															
RCD Project Plan Development							▼ RCD Project Plan Development																																																																																																																																															
RCD Project Support							▼ RCD Project Support																																																																																																																																															
Plant Computer Control System (PCCS)							▼ PCCS Project Management																																																																																																																																															
PCCS Project Management							▼ PCCS Project Management																																																																																																																																															
PCCS Programming Standards & Guidelines							▼ PCCS Programming Standards & Guidelines																																																																																																																																															
PCCS Training for Programmers							▼ PCCS Training for Programmers																																																																																																																																															
PCCS Design Review							▼ PCCS Design Review																																																																																																																																															
PCCS Project Meetings							▼ PCCS Project M																																																																																																																																															
PCCS Programming							▼ PCCS Programming																																																																																																																																															
PCCS Bench Test Programs							▼ PCCS Bench Test Programs																																																																																																																																															
PCCS Field Test Programs							▼ PCCS Field Test Program																																																																																																																																															
PCCS Training & Documentation							▼ PCCS Training & Documenta																																																																																																																																															
Program Float							▼ Program																																																																																																																																															
Discharge Permit Compliance Ammonia (5/11/21)							▼ Discharge Permit Compliance Ammonia (5/11																																																																																																																																															
Discharge Permit Compliance Title 22 Equiv (5/11/23)							▼ Discharg																																																																																																																																															

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

