



Victor Valley Wastewater Reclamation Authority

A Joint Powers Authority and Public Agency of the State of California

20111 Shay Road, Victorville, CA 92394
Telephone: (760) 246-8638
Fax: (760) 246-2895
e-mail: mail@vvwra.com

March 23, 2021

Ms. Patty Z. Kouyoumdjian, Executive Officer
Lahontan Regional Water Quality Control Board
15095 Amargosa Rd., Bldg 2 - Suite 210
Victorville, CA 92394

Subject: **Annual Recycled Water Report for 2020**
General Order WQ 2016-0068-DDW
Recycled Water Order No. R6V-2003-028
WDID No. 6B360207001

This report is submitted in compliance with State Water Resources Control Board Order WQ 2016-0068-DDW, Water Reclamation Requirements for Recycled Water Use (General Order) and Water Recycling Requirements Order No. R6V-2003-028, WDID No. 6B360207001.

The Victor Valley Wastewater Reclamation Authority (VVWRA) received a “Notice of Applicability” for the General Order on January 11, 2017. Recycled water production at the Regional Water Reclamation Plant (WRP) is regulated by Order No. R6V-2020-0028. Recycled water distribution and use is regulated by the General Order and Order No. R6V-2003-0028.

The 2020 Annual Report is submitted in accordance with Attachment B of the General Order (Monitoring and Reporting Program, MRP), and includes the following required information:

Report Section Title	Required by MRP Section A	Page
Recycled Water Users	Summary table of all recycled water users and use areas	2
Inspections and Enforcement	Summary of all inspections and enforcement actions, discussion of compliance and corrective actions taken	6
Performance Evaluation	Evaluation of performance of the facility, including discussion of issues, problems, and flow forecast	8
Monitoring Summary	Tabular and graphical summaries of all monitoring data collected during the year	10 Att A
Contact Information and Certification	Name and contact information for responsible recycled water operator and certification statement	14

RECYCLED WATER USERS

A list of the current permitted recycled water users is provided in **Table 1**. All recycled water described in this Annual Report was produced at the Regional Water Reclamation Plant (Regional WRP). The Apple Valley Subregional WRP began operations on October 1, 2018 (regulated under Order No. R6V-2013-0004) and the Hesperia Subregional WRP began operations on March 15, 2019 (regulated under Order R6V-2013-0005). However, all recycled water produced by the Apple Valley and Hesperia WRPs to-date has been discharged to the sanitary sewer and sent to the Regional WRP for treatment and disposal.

Table 1. Recycled Water Users

Permitted User (VVWRA Permit No.)	Use Area	Recycled Water Supervisor	Permitted Uses
American Organics/Athens Services Permit AO-RW-001 (2/6/19 – 11/2/23)	20055 Shay Rd, Victorville, CA 92394 Figure 1	Soknaka Soun (760) 246-7946	Industrial use, specifically grading and dust control at the composting facility.
City of Victorville Permit COVV-RW-001 (11/1/18 – 11/1/23)	Victorville Storage Pond ^[a] 18003 Westwind Rd, Victorville, CA 92394 Figure 2	Steven Ashton (760) 559-8170	Supply for a 600,000 gallon recycled water storage pond. After storage, the recycled water is distributed by the City of Victorville under its own permit to various users in the Southern California Logistics Airport (SCLA) area.
High Desert Power Project Permit HDPP-RW-001 (11/1/18 – 11/1/23)	19000 Perimeter Rd, Victorville, CA 92394 Figure 3	Jon Boyer (760) 530-2303	Turbine cooling via cooling tower. ^[b]
City of Hesperia Permit COH-RW-001 (11/1/18 – 11/1/23)	Hesperia, CA ^[c] Figure 4	Jeremy McDonald (760) 947-7742	Irrigation at the Hesperia golf course, school district, and parks & recreation district. ^[d]
Town of Apple Valley Permit TOAV-RW-001 (11/1/18 – 11/1/23)	Apple Valley, CA ^[e] Figure 5	Mike Molinari (760) 240-7000	Irrigation of turf and greens at the Apple Valley golf course. ^[d]

[a] This is called the Westwinds Golf Course Storage Pond in the permit COVV-RW-001, as recycled water was historically delivered to the storage pond and then used to irrigate the Westwinds Golf Course. However, the Westwinds Golf Course has been closed for many years (during which time it has received no recycled water), so the pond is now referred to as the Victorville Storage Pond.

[b] Recycled water is supplied by the City of Victorville.

[c] Anticipated use areas include the Hesperia golf course, Community Park, Smoketree Street, and Sultana High School.

[d] No recycled water was used in 2020.

[e] Anticipated use areas include the Apple Valley golf course.



Figure 1. American Organics



Figure 2. Victorville Storage Pond and Use Areas



Figure 3. High Desert Power Project

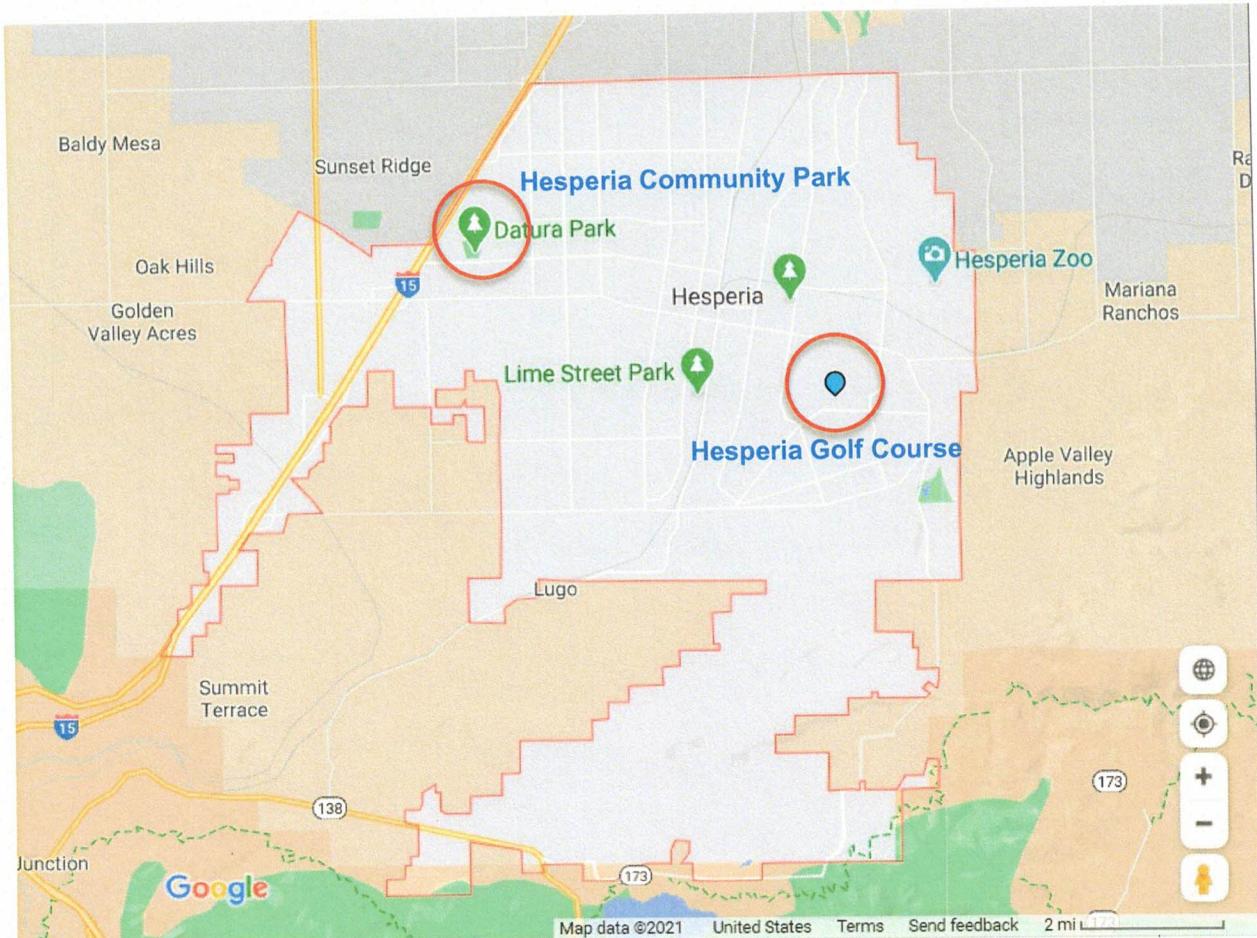


Figure 4. City of Hesperia and Use Areas

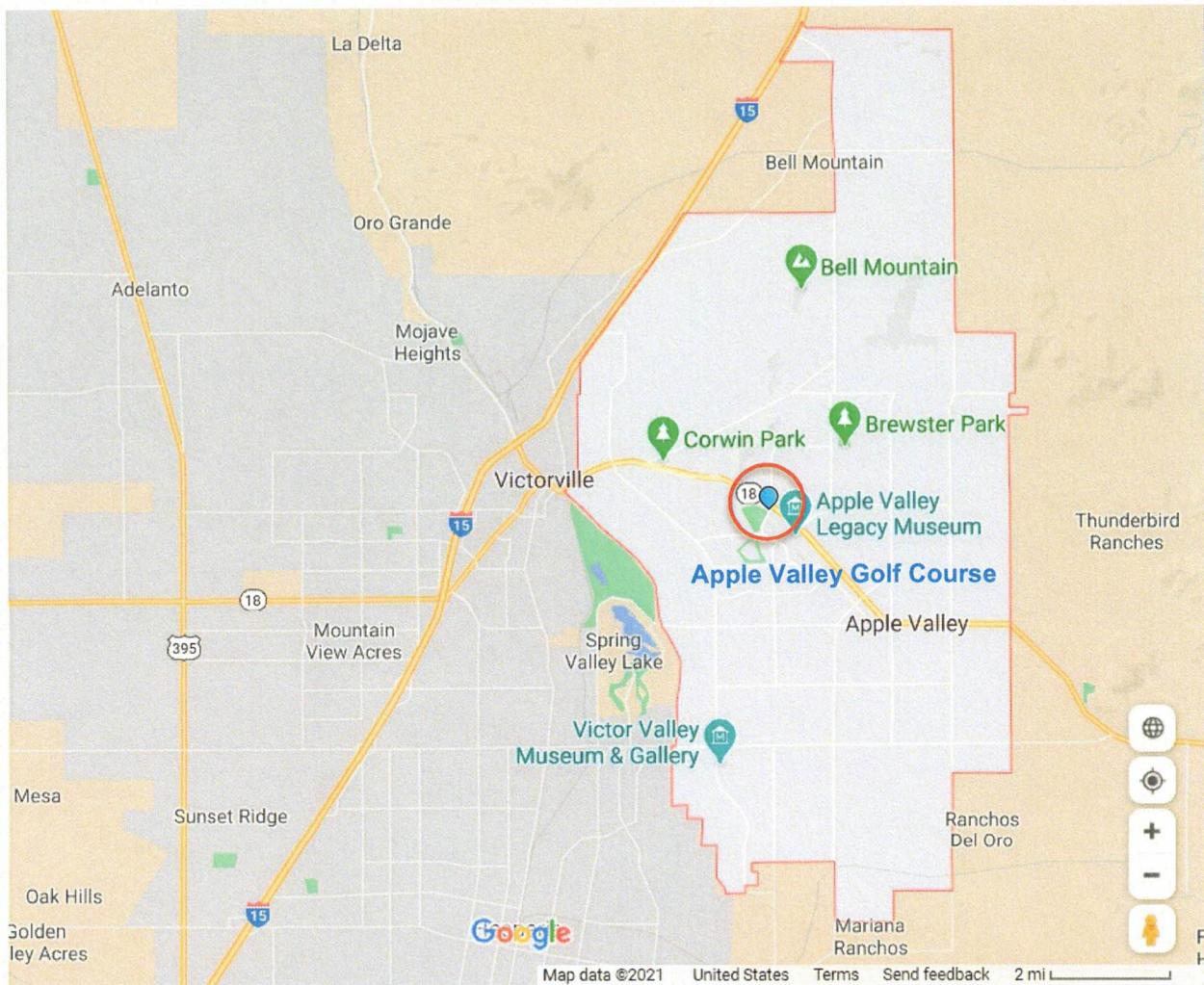


Figure 5. Town of Apple Valley and Use Areas

INSPECTIONS AND ENFORCEMENT

This section includes a summary of the inspections and enforcement activities undertaken during 2020. VVWRA conducts inspections of the American Organics facility and self-monitoring reports are submitted to VVWRA from all permitted users.

The 2020 inspection results and corrective actions are summarized in **Table 2**. No enforcement actions were necessary, as there were no operational issues of concern related to recycled water use. The inspection results were reported in self-monitoring reports which specify date of inspection, the sites used, the estimated amount of recycled water applied to each site, whether any of the following issues were identified, and corrective actions as needed:

- Cross-connections
- Changes in recycled water use
- Evidence of runoff
- Odors present that are related to recycled water use
- Ponding of recycled water

- Evidence of mosquitoes
- Properly posted signage
- Leaks or breaks in the distribution system
- Evidence of overflows, leaks, or dike erosion

No cross-connections were identified at the use sites.

American Organics receives drinking water from the VVWRA potable well. VVWRA conducted annual backflow prevention device testing at the well as required by CCR Title 17 Section 7605.

Table 2. Inspections and Enforcement in 2020

Permitted User/ Use Area	Inspection Dates	Inspection Results	Corrective Actions
American Organics	4/29/2020	No issues were reported.	A slope repair was made on the west side of Shay Road. No seepage occurred.
	5/28/2020		
	6/25/2020		
City of Victorville	1/28/2020	No issues were reported.	None needed
	2/20/2020		
	3/25/2020		
	4/24/2020		
	5/27/2020		
	6/30/2020		
	7/27/2020		
	8/26/2020		
	9/25/2020		
	10/20/2020		
High Desert Power Project	11/6/2020	No recycled water was used during the first quarter (January – March 2020). The plant was shut down during April and May 2020. No issues were reported.	None needed
	12/17/2020		
	4/24/2020		
	5/26/2020		
	6/25/2020		
	7/30/2020		
	8/21/2020		
	9/11/2020		
City of Hesperia	10/21/2020	No recycled water use.	None needed
	11/24/2020		
Town of Apple Valley	12/22/2020	No recycled water use.	None needed

PERFORMANCE EVALUATION

This section contains an evaluation of the performance of the Regional WRP, including discussion of capacity issues, system problems, and a forecast of the flows anticipated in the next year.

During 2020, there were no Regional WRP performance issues and all systems performed correctly. The recycled water met all permit requirements for turbidity¹ and total coliform² for CCR Title 22 disinfection compliance, with the exception of an exceedance of the total coliform 7-day median limit of 2.2 MPN/100mL in April 2020. The turbidity and total coliform monitoring data³ are shown in **Figure 6** and **Figure 7**.

The 7-day median total coliform result exceeded the 7-day median limit of 2.2 MPN/100mL on three days (April 16, 17, and 18), with a result of 4.5 MPN/100mL on each day. The total coliform results that caused the violations occurred between April 10 and 15 in UV Channel 2. During this time, normal maintenance routines at the Regional WRP were upset due to unanticipated circumstances caused by the newly issued Statewide COVID-19 safety requirements. With very little notice, VVWRA was holding planning meetings and developing procedures necessary to comply with distancing requirements while performing plant maintenance. Ordinary UV Channel cleaning requires six maintenance personnel in close proximity, and VVWRA was developing procedures to perform it safely and legally. Samples continued to be sent to the analytical laboratory for testing, however the laboratory was also coping with the new requirements and changes in staff availability, and sample results which had previously been returned to VVWRA within two days were inevitably taking longer. By the time the laboratory notified VVWRA of the first high coliform result in Channel 2, more than the usual number of days had passed. Upon notification of the high coliform result, VVWRA switched the disinfection system to UV Channel 1, and total coliform returned to compliance levels. VVWRA subsequently developed COVID-19 compliant maintenance plans and procedures, and channel cleaning was performed at normal intervals during the rest of 2020. No other coliform limit exceedances occurred during 2020.

The pH and dissolved oxygen of effluent sent to the Victorville Storage Pond during 2020 complied with the limits set forth in the 2003 Water Recycling Requirements (pH between 6.0 and 9.0, dissolved oxygen greater than 1.0 mg/L), as shown in **Figure 8** and **Figure 9**. The total flow of recycled water to the storage pond did not exceed pond capacity, as the lowest freeboard level measured during 2020 was 2.4 feet. Water delivery volumes from the Regional WRP in 2021 are expected to be similar to volumes delivered in 2020.

¹ 24-hour average of 2 NTU, not to exceed 5 NTUs more than 5% of the time within a 24-hour period, and 10 NTU as an instantaneous maximum.

² 2.2 MPN/100mL as a 7-day median, not to exceed 23 MPN/100mL in more than one sample in any 30-day period, and 240 MPN/100mL at any time.

³ Measured at the recycled water monitoring location EFF-003, a point downstream of filtration prior to disinfection (for turbidity), and a point downstream of the UV system before recycled water is delivered for use (for bacteria), as defined in NPDES Permit Order No. R6V-2020-0028 (NPDES permit).

VVWRA operational staff and managers are trained on recycled water program operation, regulatory requirements, and safety precautions. Follow-up training is provided every two years (or more often as needed). Recycled water managers conduct use site inspections.

The Apple Valley and Hesperia Subregional WRPs began producing recycled water in October 2018 and March 2019, respectively. All water produced by the Apple Valley and Hesperia Subregional WRPs in 2020 was sent to the Regional WRP via the sanitary sewer because process operations at both Subregional WRPs are still undergoing evaluation and stabilization. Therefore, no recycled water was delivered from either facility.

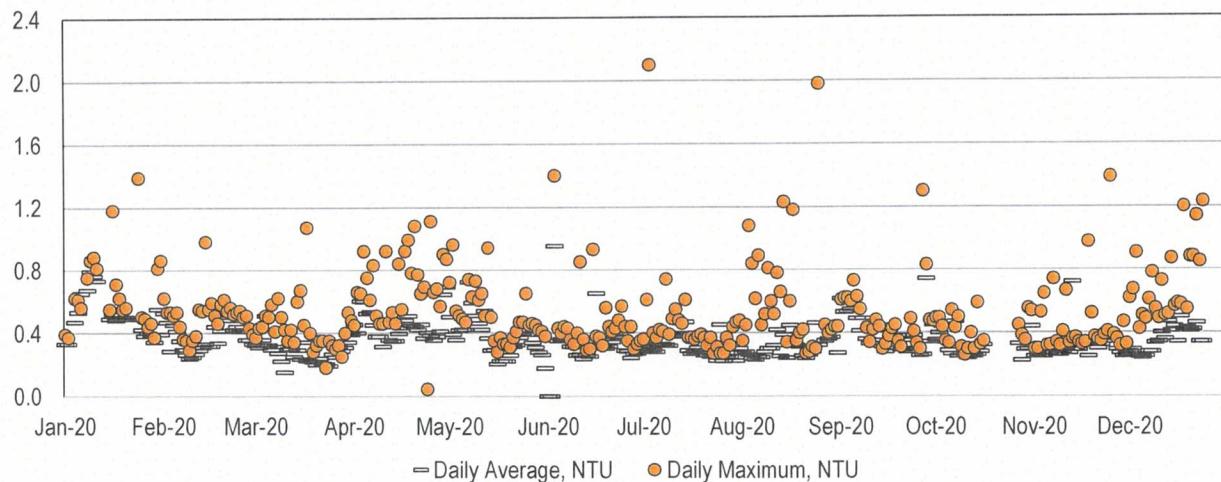


Figure 6. Disinfection Monitoring Results – Turbidity, NTU

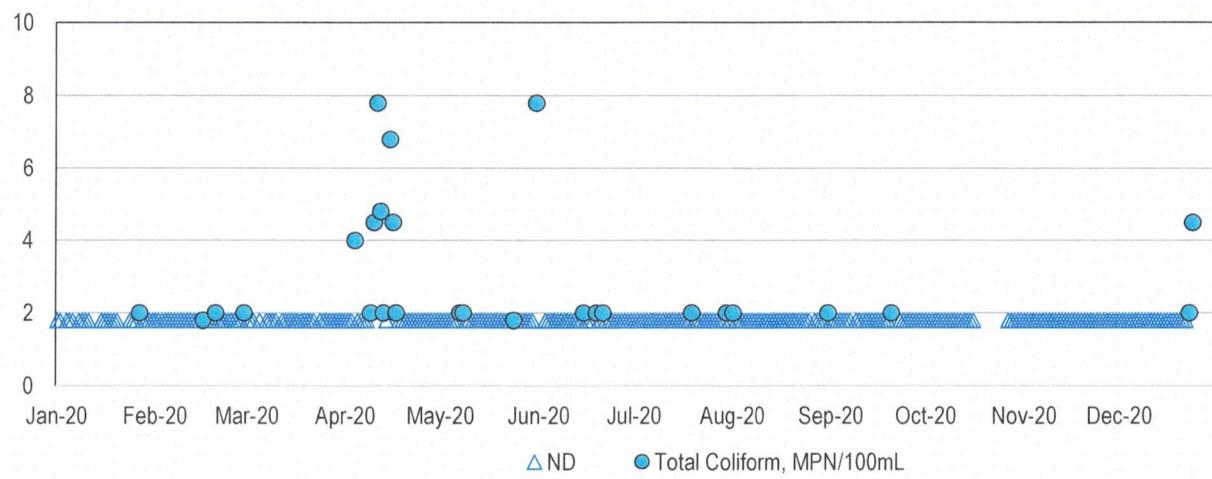


Figure 7. Disinfection Monitoring Results – Total Coliform, MPN/100mL

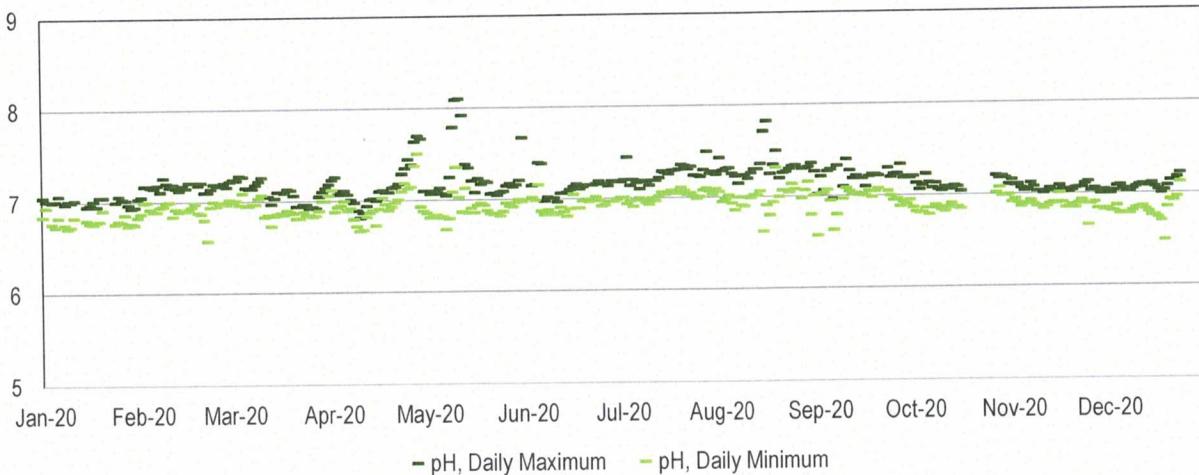


Figure 8. Recycled Water Monitoring – pH, S.U.

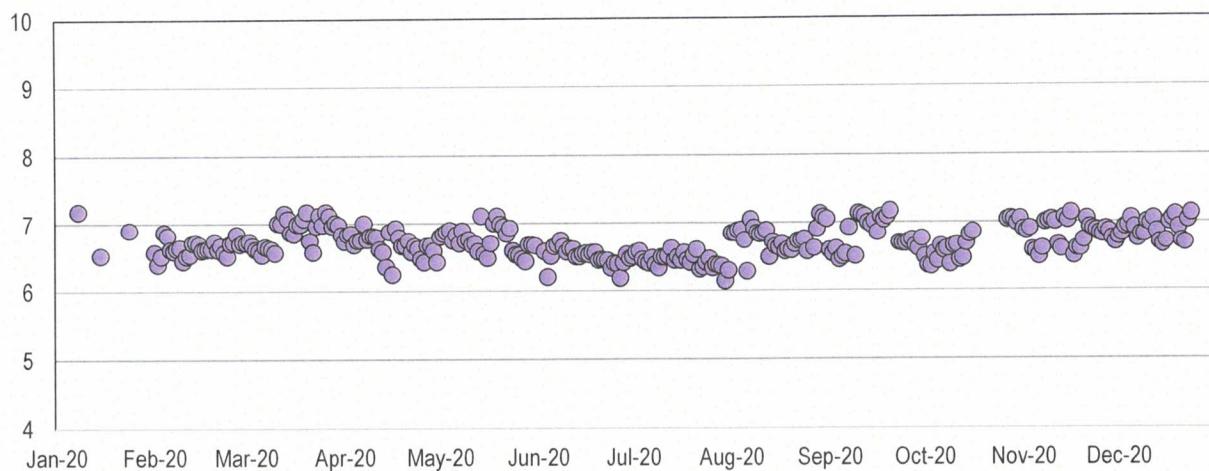


Figure 9. Recycled Water Monitoring – Dissolved Oxygen, mg/L

MONITORING SUMMARY

Tabular summaries of all recycled water data collected at the Regional WRP during 2020 are provided in **Attachment A**.

Groundwater Monitoring

Groundwater monitoring results and associated analytical methods were previously submitted by VVWRA in the *2020 Annual Groundwater Monitoring Results, VVWRA Percolation Pond and Biosolids Waste Units* (submitted via GeoTracker under permit R6V-2012-0058 on January 22, 2021) and by the City of Victorville in the *2020 Annual Compliance Report for Percolation Pond No. 14 WDID No. 6B360911001*.

Recycled Water Monitoring

Priority pollutant monitoring of the Regional WRP effluent is performed annually according to requirements specified by the Regional WRP's NPDES permit (Order No. R6V-2020-0028). The results are included in VVWRA's *Annual Facility Monitoring Report for 2020*, February 25, 2021, submitted via CIWQS.

Disinfection System Monitoring

Filtered effluent turbidity and recycled water total coliform concentrations were monitored at EFF-003⁴ as required by the NPDES permit and General Order. The monitoring data are shown in **Attachment A** and graphically in **Figure 6** and **Figure 7**. All water quality analyses were performed by Babcock Laboratories, Inc. Babcock Laboratories is certified through NELAP Accreditation (Certificate #4035-001), CDPH Environmental Laboratory Program (Certificate #2698), and with the American Association for Laboratory Accreditation (Certification #3232.01).

Pond System Monitoring

During 2020, recycled water was pumped from the Regional WRP to the Victorville Storage Pond using two 250-HP 4-stage pumps with variable frequency drive units and fully automated controls. Recycled water was held in the storage pond prior to distribution by the City of Victorville to the High Desert Power Project (HDPP) and other users within in the SCLA area. The storage pond is located on the Westwinds Golf Course property (as shown in **Figure 2**). Maintenance and operation of the pond are the responsibility of the City of Victorville, as defined by Item III.L of Board Order No. R6V-2003-0028A2, WDID No.6B360207001, amending Water Recycling Requirements for City of Victorville and Westwinds Golf Course.

The General Order requires quarterly monitoring of freeboard and observations of odors and berm condition. Order R6V-2003-0028A2 requires quarterly storage pond monitoring of total dissolved solids. The results are shown in **Table 3**. No abnormal odors or berm conditions were observed during 2020.

Table 3. 2020 Victorville Storage Pond System Monitoring Results

Monitoring Period	Minimum Freeboard, inches ^[a]	Total Dissolved Solids, mg/L
Quarter 1	28.8	350
Quarter 2	66.0	340
Quarter 3	82.8	470
Quarter 4	74.4	580

[a] Daily monitoring results are available upon request.

⁴ For turbidity, at a point downstream of filtration prior to disinfection. For bacteria, at a point downstream of the UV system before recycled water is delivered for use.

Use Area Monitoring

The City of Victorville is responsible for conducting use area monitoring for recycled water distributed⁵ from the Victorville Storage Pond and reports this information in a separate recycled water report to the Lahontan Regional Water Quality Control Board (Regional Water Board).

During 2020, the Regional WRP produced 10.61 million gallons of recycled water, of which 8.67 million gallons went to American Organics and 3.37 million gallons to the Victorville Storage Pond. The monthly average flows sent to these users per day and per month are shown in **Table 4**. American Organics obtained an additional minor quantity of recycled water via truck access to the VVWRA recycled water hydrant. This volume is included in the total volumes summarized in **Table 4**. Daily flow data are shown in **Attachment A** and by graphical representations in **Figure 10** through **Figure 12**.

The HDPP is responsible for implementing CCR Title 22, section 60306(c) requirements under Order No. R6V-2009-0138.

Table 4. Monthly Summary of Recycled Water Delivered in 2020

Month	Total Recycled Flow		Flow to American Organics		Flow to Victorville Storage Pond	
	Average GPD	Total MG	Average GPD	Total MG	Average GPD	Total MG
Jan	10,100	0.31	6,519	0.20	6,465	0.20
Feb	33,724	0.98	33,910	0.98	5,379	0.16
Mar	20,755	0.64	19,077	0.59	5,826	0.18
Apr	13,240	0.40	11,793	0.35	3,817	0.11
May	24,761	0.77	22,897	0.71	4,384	0.14
Jun	26,633	0.80	26,140	0.78	5,033	0.15
Jul	38,287	1.19	37,435	1.16	6,781	0.21
Aug	32,903	1.02	31,916	0.99	6,574	0.20
Sep	35,040	1.05	34,423	1.03	3,570	0.11
Oct	27,171	0.84	28,600	0.89	3,426	0.11
Nov	75,550	2.27	21,247	0.64	57,330	1.72
Dec	11,226	0.35	10,771	0.33	2,619	0.08
<i>Total</i>	10.61		8.67		3.37	

⁵ Including the number of acres applied, the application rate, soil saturation/ponding, nuisance odors/vectors, and offsite discharge information.

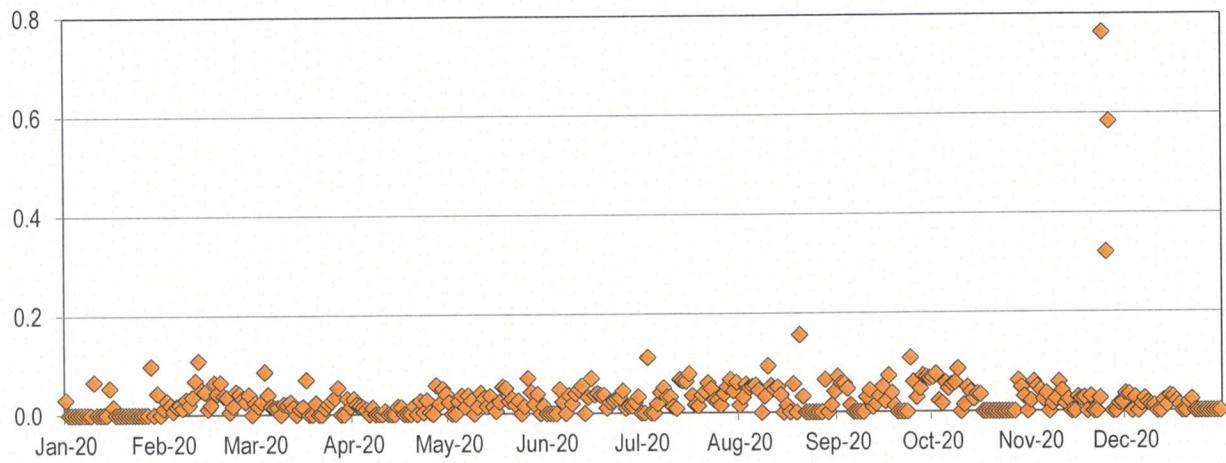


Figure 10. Recycled Water Produced at the Regional WRP, MGD

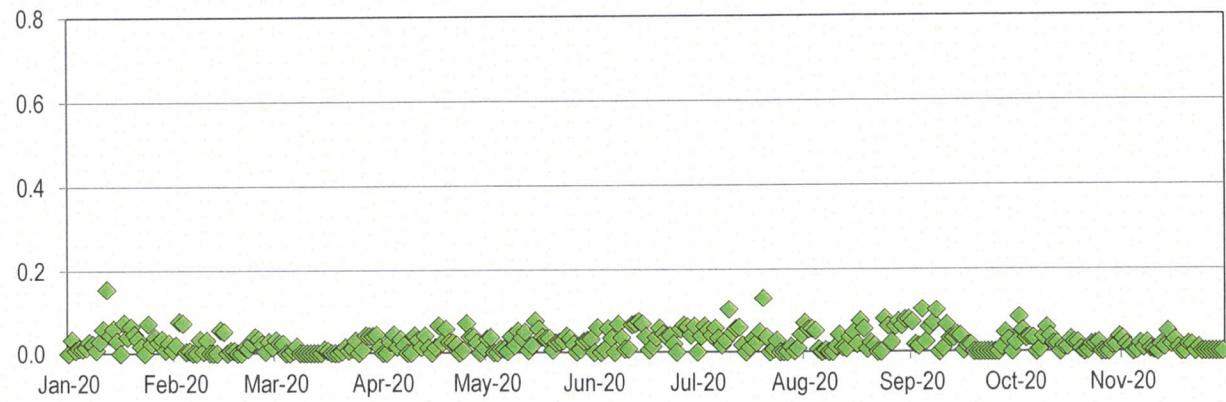


Figure 11. Recycled Water Distribution to American Organics, MGD

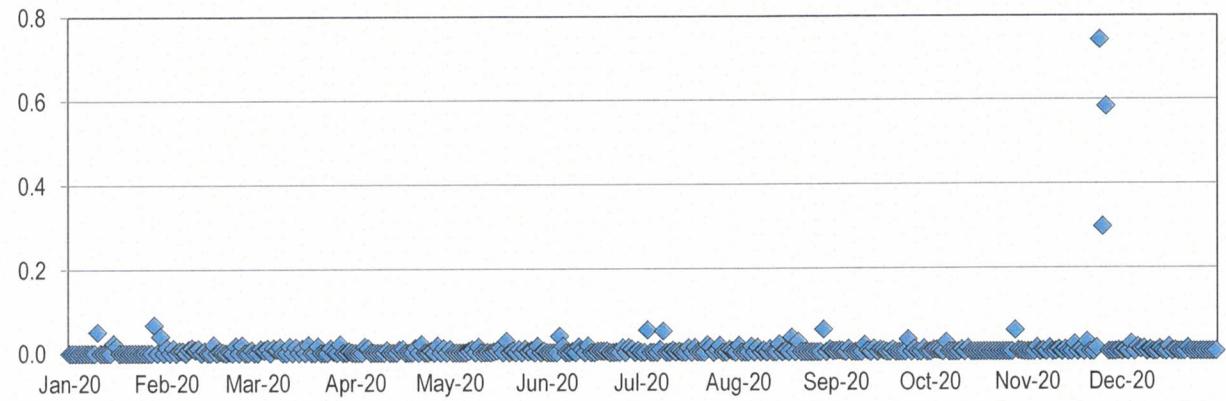


Figure 12. Recycled Water Distribution to Victorville Storage Pond, MGD

CONTACT INFORMATION AND CERTIFICATION

Brad Adams, General Manager and Plant Superintendent, is responsible for the operation and maintenance of the Regional WRP and for recycled water system monitoring. Latif Laari is responsible for enforcing the terms and conditions of all individual users' recycled water permits. Brad can be reached at (760) 553-0357, and Latif can be reached at (760) 954-5083.

I certify under penalty of law that this document and all attachments are prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who managed the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Sincerely,



Brad Adams
Plant Superintendent

Attachment A. 2020 Daily Recycled Flow and Water Quality Data

Attachment A. 2020 Daily Recycled Water Flow and Water Quality Data

Table A-1. 2020 Total Daily Recycled Water Flow, MGD

Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.0307	0.013	0.024	0.0318	0.0237	0	0	0.016	0.073	0.0702	0.022	0.036
2	0	0.028	0.018	0.0204	0	0	0	0.032	0.0586	0.077	0.061	0.0345
3	0	0.02	0.026	0.0171	0	0	0.1134	0.058	0.0581	0.0228	0.051	0
4	0	0.007	0.087	0.0149	0.0259	0	0	0.051	0.0481	0.0174	0.043	0.028
5	0	0.017	0.041	0.0106	0.0375	0.0497	0	0.0539	0.015	0.0597	0.0252	0
6	0	0.02	0.017	0	0.0148	0.024	0.019	0.0561	0	0.0475	0.0368	0.015
7	0	0.014	0.014	0.0138	0.0375	0	0.042	0.046	0	0.056	0	0.026
8	0	0.03	0.015	0	0.027	0.0372	0.0514	0	0	0.0595	0.016	0.017
9	0	0.02	0	0	0	0.02	0.0335	0.033	0	0.0874	0.026	0.0121
10	0.0673	0.036	0.022	0	0.0142	0.0403	0.0329	0.095	0.0304	0	0.06	0.0112
11	0	0.069	0.021	0.0067	0.0429	0.0492	0.013	0.055	0.0443	0.014	0.0426	0
12	0	0.11	0.025	0	0.032	0.0562	0.009	0.0482	0.01	0.05	0.0158	0
13	0	0.051	0.015	0	0.0151	0	0.069	0.0522	0.017	0.04	0.0243	0.022
14	0	0.046	0	0	0.036	0.033	0.066	0.0362	0.033	0.0259	0	0.012
15	0.0553	0.012	0.011	0.0158	0.015	0.072	0.0648	0	0.052	0.0363	0	0.031
16	0.0165	0	0.016	0.0144	0.005	0.038	0.0798	0.015	0.0217	0.035	0.0292	0.0288
17	0	0.066	0.071	0	0.024	0.041	0.0354	0	0.0741	0	0.026	0.0203
18	0	0	0	0	0.055	0.0372	0.017	0.058	0.0392	0	0.0279	0.012
19	0	0.066	0.013	0	0.052	0.0376	0.015	0	0.013	0	0.0002	0
20	0	0.039	0.011	0.0165	0.0259	0.011	0.036	0.1571	0	0	0.0303	0
21	0	0.036	0	0	0.0302	0.023	0.044	0.0325	0	0	0	0.0181
22	0	0.006	0	0.027	0.0192	0.026	0.0616	0	0	0	0	0.024
23	0	0.017	0.013	0.0031	0.027	0.03	0.0497	0	0	0	0.027	0
24	0	0.047	0.021	0.0283	0	0.0326	0.0264	0	0.1103	0	0.763	0
25	0	0.042	0.028	0.0041	0.015	0.0459	0.026	0	0.0616	0	0.321	0
26	0	0.034	0.035	0	0.073	0.0101	0.016	0	0.03	0	0.5842	0
27	0	0.027	0.054	0.0593	0.0441	0.014	0.039	0	0.048	0	0	0
28	0.0992	0.041	0	0.0211	0.0196	0.015	0.053	0.0668	0.074	0.0632	0	0
29	0	0	0	0.0514	0.04	0.022	0.0676	0	0.071	0.0493	0.016	0
30	0.0441	0.032	0.0409	0	0.034	0.0443	0.015	0.0688	0.0311	0.018	0	0
31	0	0.032	0	0.016	0.0621	0.043	0	0	0	0	0	0

Table A-2. 2020 Daily Recycled Water Flow to American Organics, MGD

Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.0417	0	0.0245	0.0316	0.0145	0.0332	0.0319	0	0.0701	0.0782	0.0222	0.0364
2	0.0048	0.0327	0.0082	0.0235	0	0.0366	0	0.0379	0.0541	0.0724	0.0836	0.0311
3	0	0.0076	0.0195	0.023	0	0.0007	0.0594	0.0622	0.0557	0.0177	0.0513	0.0175
4	0	0.0125	0.0758	0	0.0264	0	0	0.0533	0.0511	0.0138	0.0326	0.0095
5	0	0.0111	0.0725	0	0.0439	0.0097	0.007	0.0402	0.0067	0.1037	0.0358	0
6	0	0.0148	0.0045	0.0065	0.0149	0.0082	0.0572	0.0576	0	0.0244	0.0336	0.0035
7	0	0.0267	0.0055	0.0163	0.0332	0.0033	0.0345	0.0339	0.0045	0.0606	0	0.0202
8	0	0.0218	0.0006	0	0.0184	0.038	0	0.0166	0	0.0698	0.0067	0.0095
9	0	0.0078	0.0005	0	0	0.0167	0.0673	0.028	0	0.1014	0.0363	0.0216
10	0.0158	0.0283	0.0326	0	0	0.0516	0.0352	0.1038	0.0133	0	0.0587	0.007
11	0	0.0578	0.005	0	0.0423	0.0353	0.008	0.0465	0.0413	0.0089	0.0375	0.0042
12	0.0035	0.1562	0.0317	0	0.0313	0.0491	0.0077	0.0565	0.011	0.0656	0.0199	0
13	0.0005	0.0446	0.0007	0	0.0137	0.0056	0.0661	0.059	0.0086	0.0324	0.019	0.0161
14	0	0.0586	0	0	0.0413	0.0168	0.069	0.0169	0.0351	0.0336	0	0.0107
15	0.0315	0.0299	0	0.0085	0.0124	0.076	0.0733	0	0.0468	0.0416	0.013	0.0489
16	0	0	0.0555	0.0052	0	0.0568	0.0686	0.0108	0.0183	0.0393	0.0115	0.0181
17	0	0.073	0.0513	0.0005	0.013	0.0371	0.0379	0.0315	0.0744	0.0043	0.0297	0.0284
18	0	0.0391	0	0	0.0654	0.033	0.0052	0.0221	0.056	0.0148	0.0232	0.0088
19	0	0.0642	0.0069	0	0.0241	0.0342	0.0139	0.0479	0.0073	0.0171	0.0225	0
20	0	0.0454	0.0069	0.0045	0.0577	0.0069	0.0349	0.1313	0.0225	0	0.0063	0
21	0.0351	0.0336	0	0.0143	0.026	0.0233	0.0582	0.0357	0.015	0	0	0.0172
22	0	0.0169	0	0.0059	0.0243	0.0251	0.0437	0	0	0	0.0037	0.0157
23	0	0	0.0145	0.0108	0.0188	0.0285	0.037	0.0064	0	0	0.0177	0
24	0	0.0708	0.0106	0.0295	0	0.0395	0.0398	0.0274	0.0799	0	0.0189	0.0095
25	0	0.0234	0.0238	0	0.0058	0.0338	0.02	0	0.0626	0	0.0222	0
26	0	0.0381	0.0391	0.008	0.0704	0.0205	0	0	0.0231	0	0	0
27	0	0.0267	0.0334	0.0419	0.0382	0.0022	0.0557	0	0.0618	0	0	0
28	0.0312	0.0339	0.0218	0.0402	0.0381	0.007	0.0645	0.0125	0.0731	0.0113	0	0
29	0.027	0.0079	0.004	0.0404	0.0242	0.0263	0.0608	0.0024	0.063	0.0461	0.0153	0
30	0.0035	0.0279	0.0432	0	0.0292	0.0408	0.0083	0.0774	0.0291	0.0162	0	0
31	0.0075	0.0141	0.0115			0.0629	0.0407		0.0005		0	

Table A-3. 2020 Daily Recycled Water Flow to Victorville Storage Pond, MGD

Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0	0.0129	0	0.0002	0.0092	0	0	0.016	0.0029	0	0	0
2	0	0	0.0098	0	0	0	0	0	0.0045	0.0046	0	0.0034
3	0	0.0122	0.0067	0	0	0	0.054	0	0.0024	0.0051	0	0
4	0	0	0.0114	0.0149	0	0	0	0	0	0.0036	0.0104	0.0185
5	0	0.006	0	0.0106	0	0.04	0	0.0137	0.0083	0	0	0
6	0	0.0056	0.0122	0	0	0.0158	0	0	0	0.0231	0.0032	0.0115
7	0	0	0.0084	0	0.0043	0	0.0075	0.0121	0	0	0	0.0058
8	0	0.0091	0.0141	0	0.0086	0	0.0514	0	0	0	0.0093	0.0075
9	0	0.0125	0	0	0	0.0033	0	0.005	0	0	0	0
10	0.0515	0.0077	0	0	0.0142	0	0	0	0.0171	0	0.0013	0.0042
11	0	0.0115	0.0155	0.0067	0.0006	0.0139	0.005	0.0085	0.003	0.0051	0.0051	0
12	0	0	0	0	0.0007	0.0071	0.0013	0	0	0	0	0
13	0	0.0061	0.0139	0	0.0014	0	0.0029	0	0.0084	0.0076	0.0053	0.0059
14	0	0	0	0	0	0.0162	0	0.0193	0	0	0	0.0013
15	0.0238	0	0.0112	0.0073	0.0026	0	0	0	0.0052	0	0	0
16	0.0165	0.0201	0	0.0092	0.005	0	0.0112	0.0042	0.0034	0	0.0177	0.0107
17	0	0	0.0198	0	0.011	0.0039	0	0	0	0	0	0
18	0	0.0042	0	0	0	0.0042	0.0118	0.0359	0	0	0.0047	0.0032
19	0	0.0022	0	0	0.0279	0.0034	0.0011	0	0.0057	0	0	0
20	0	0	0.0162	0.012	0	0.0041	0.0011	0.0258	0	0	0.024	0
21	0	0.0023	0	0	0.0042	0	0	0	0	0	0	0.0009
22	0	0	0	0.0211	0	0.0009	0.0179	0	0	0	0	0.0083
23	0	0.0172	0	0	0.0082	0.0015	0.0127	0	0	0	0.0093	0
24	0	0	0.0108	0	0	0	0	0	0.0304	0	0.7441	0
25	0	0.0004	0.021	0.0174	0.0059	0.0118	0	0	0	0	0	0
26	0	0.0189	0.0037	0.0041	0.0092	0.0121	0.006	0	0.0543	0.0009	0.0519	0
27	0	0.0071	0	0	0.008	0	0.0068	0	0.008	0.0032	0.0007	0
28	0.068	0	0	0.011	0.0158	0	0.016	0	0.0069	0	0.002	0.0018
29	0	0	0	0	0	0.0048	0.0035	0.0067	0	0.002	0	0
30	0.0406	0	0.0043	0	0	0.0045	0	0.0023	0	0	0	0
31	0	0	0.0016	0	0	0	0	0	0	0	0	0

Table A-5. 2020 Daily Effluent pH (Daily Maximum), S.U.^[a]

Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	7.05	7.05	7.24	7.23	7.10		7.18	7.43	7.02	7.21	7.16	7.00
2	7.01	7.17	7.23	7.26	7.07		7.20	7.29	7.21	7.13	7.10	7.00
3	7.17	7.28	7.07	7.07	7.15		7.31	7.06	7.06	7.11	7.03	
4	7.00	7.16	7.27	7.11	7.10		7.14	7.32	7.27	7.11	7.07	7.08
5	7.01	7.15	7.15	7.11	7.13		7.40	7.20	7.26	7.29	7.23	7.04
6	7.07	7.18	7.14	7.07	7.07		7.39	7.17	7.23	6.97	7.14	7.05
7	7.11	7.14	7.01	7.05	6.98		7.10	7.15	7.33	7.08	7.12	7.02
8	6.98	7.26	7.18	6.98	7.25		7.02	7.19	7.24		7.13	7.08
9	7.01	7.20	7.22	6.89	7.79		7.01	7.18	7.24	7.10	7.06	7.03
10	7.00	7.16	7.26	6.81	8.09		7.01	7.14	7.20	7.40	7.05	7.03
11	7.02	7.19	7.05	6.87	8.10		6.97	7.19	7.26	7.28	7.09	7.01
12	7.15	7.05	6.94	7.92	7.06		7.19	7.30	7.19	7.06	7.03	7.10
13	7.12	6.97	7.01	7.39	7.06		7.22	7.30	7.22	7.06	7.06	7.09
14	7.17	7.03	7.02	7.35	7.07		7.29	7.36	7.19	7.10	7.03	7.08
15	6.95	7.15	7.10	7.00	7.21		7.10	7.28	7.71	7.19	7.09	7.03
16	6.97	7.21	7.10	7.10	7.08		7.13	7.26	7.82	7.10	7.04	7.09
17	7.01	7.21	7.09	7.11	7.23		7.16	7.30	7.25	7.21		7.04
18	6.95	7.21	7.13	7.09	7.17		7.11	7.30	7.35	7.23		7.00
19	7.05	7.18	7.12	7.09	7.20		7.13	7.31	7.50	7.23		7.03
20	7.05	7.21	7.06	7.14	7.19		7.15	7.36	7.20	7.22		7.04
21	7.10	6.94	7.15	7.06	7.15		7.35	7.26			7.05	7.00
22	7.10	6.94	7.18	7.07	7.15		7.31	7.27			7.02	7.03
23	7.14	6.96	7.29	7.05	7.16		7.34	7.30			7.05	7.04
24	7.00	7.19	6.96	7.35	7.08		7.19	7.25	7.33		7.20	
25	7.06	7.17	6.92	7.45	7.09		7.16	7.24	7.34		7.23	
26	7.03	7.18	6.93	7.39	7.15		7.16	7.23			7.24	
27	7.02	7.20	6.92	7.64	7.17		7.14	7.30	7.30		7.34	
28	6.97	7.16	7.05	7.70	7.14		7.19	7.50	7.31		7.19	
29	6.93	7.22	7.10	7.67	7.16		7.18	7.26	7.32		7.21	
30	6.94	7.14	7.10	7.21	7.19		7.28	7.36	7.19		7.18	
31	7.03	7.18		7.67			7.25	7.27			7.11	

[a] Analyzed by Analytical Standard Method SM 4500H+B.

Table A-6. 2020 Daily Effluent pH (Daily Minimum), S.U.^[a]

Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	6.84	6.87	7.00	7.12	6.86	7.01	7.06	6.57	6.87	6.92	6.94	6.84
2	6.94	6.99	7.01	6.88	6.81	7.01	6.95	7.03	6.82	6.95	6.91	6.81
3	7.00	6.96	6.93	6.82	7.02	6.94	6.98	7.03	6.81	6.91	6.91	6.81
4	6.76	6.92	7.09	6.95	6.84	6.99	6.97	7.02	7.07	6.81	6.87	6.87
5	6.73	6.89	6.95	7.00	6.81	7.16	6.91	6.93	6.95	6.86	6.90	6.78
6	6.83	6.89	6.95	6.89	6.82	6.87	6.98	6.86	6.63	6.79	6.90	6.79
7	6.94	6.97	6.92	6.68	6.83	7.00	7.00	6.80	6.86	6.93	6.78	
8	6.75	6.95	6.97	6.80	6.80	6.88	6.98	6.91	6.89	6.89	6.89	6.78
9	6.71	6.99	7.03	6.72	7.09	6.85	6.95	6.90	6.97	6.87	6.87	6.81
10	6.73	7.00	7.07	6.67	7.36	6.83	6.93	7.00	7.09	6.84	6.87	6.84
11	6.83	6.84	6.83	6.68	7.03	6.84	7.00	6.99	7.05	6.82	6.84	6.85
12	6.92	6.85	6.82	6.87	6.91	6.97	7.02	7.02	7.02	6.87	6.87	6.86
13	6.89	6.73	6.87	7.13	6.86	7.02	7.02	7.02	7.03	6.91	6.89	6.83
14	6.90	6.84	6.89	6.86	6.81	7.06	7.06	7.06	7.01	6.86	6.91	6.80
15	6.80	6.90	6.86	6.73	6.91	6.89	7.04	6.62	7.02	6.87	6.90	6.76
16	6.77	6.92	6.87	6.91	6.86	7.05	7.05	6.91	7.01	6.85	7.01	6.76
17	6.76	6.94	6.85	7.03	6.94	6.90	7.08	6.80	7.05	6.82	6.84	6.85
18	6.78	6.98	6.90	6.96	6.96	6.90	7.06	6.94	6.99	6.85	6.70	
19	6.79	6.88	6.88	6.89	6.94	6.98	7.05	7.32	7.05	6.86	6.49	
20	6.91	6.87	6.87	6.93	6.88	6.99	7.11	7.00	7.08	6.88	6.85	
21	6.80	6.81	6.98	6.85	6.97	7.08	7.07			6.85	6.93	
22	6.57	6.81	7.01	6.84	6.98	7.04	7.07			6.90	6.92	
23	6.94	6.88	7.10	6.85	7.02	7.05	7.05			6.93	6.96	
24	6.76	7.00	6.85	7.19	6.82	6.98	7.02			6.89	7.12	
25	6.79	6.95	6.85	7.13	6.87	6.92	6.99			6.66		
26	6.78	6.97	6.83	7.15	6.96	6.93	7.01			6.89		
27	6.86	6.99	6.84	7.38	6.93	6.97	7.08			7.02	6.91	
28	6.74	6.97	6.89	7.51	6.92	6.97	7.10			7.08	6.84	
29	6.76	7.02	7.00	6.93	6.97	6.97	7.07			6.99	6.84	
30	6.75	7.00	6.88	7.00	6.99	7.03	6.80			6.99	6.82	
31	6.83	7.06			6.98		7.09			7.00		

[a] Analyzed by Analytical Standard Method SM 4500H+B.

Table A-7. 2020 Effluent Dissolved Oxygen, mg/l

Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	6.83	6.82	6.99	7.05	6.6	7.03	6.98	6.9	7.1	6.94		
2	6.66	6.85	7.06	7.15	6.65	7.88	6.8	6.729	7.12	7.035		
3	6.76	6.9	7.081	7.18	7.04	6.72	7.04	6.84	6.64	7.16	7.186	
4	6.99	6.78	6.94	7.17	6.98	6.62	7.01	6.73	6.82	6.949	7.265	
5	7	7.797	7	7.13	7.15	6.57	6.908	6.81	6.76	6.822	7.34	
6	6.89	6.725	6.97	7.08	6.74	6.52	6.945	7	6.81	6.66	7.22	
7	6.82	6.74	7.163	6.95	6.78	6.38	7.13	7.1	6.834	7.15	7.06	
8	7.18	6.81	6.77	7.059	7.067	6.83	6.51	7.06	6.86	7.26	7.06	
9	6.79	6.77	7.04	7.04	6.78	6.51	7.01	6.95	6.76	7.26	7.2955	
10	6.799	7.21	7.04	6.98	6.71	6.61	6.96	7.3	6.76	7.3	7.334	
11	6.79	7.25	7.07	6.91	6.71	6.64	7	7.293	6.9	7.262	7.379	
12	6.829	7.15	6.88	6.96	6.73	6.64	7.03	7.25	6.75	7.338	7.45	
13	6.937	7.38	6.84	6.988	6.71	6.7	6.958	7.22	6.73	6.906	7.32	
14	6.92	7.31	6.78	7.21	6.69	6.69	6.87	7.12	6.87	7.2	7.01	
15	6.52	6.9	7.14	7.06	7.06	6.77	6.64	6.95	7.17	7.042	7.23	7.13
16	6.85	7.08	6.78	6.74	6.7	6.64	7.1	7.13	6.924	7.24	7.252	
17	6.82	7.23	7.189	7	6.79	6.718	6.83	7.192		6.68	7.239	
18	6.79	7.28	7.13	7.15	6.69	6.69	6.76	7.15		6.739	7.32	
19	6.82	7.29	6.96	7.22	6.65	6.63	6.7	7.22				
20	6.9	7.315	6.97	7.21	6.64	6.71	7	7.28		7.03	7.2	
21	6.75	7.09	7.08	7.28	6.58	6.75	6.9			7.26	7.06	
22	6.8	6.89	7.06	7.308	6.58	6.767	6.95			7.15	7.1	
23	6.76	7.15	7.23	7.32	6.52	6.64	6.96	7.2		7.01	7.26	
24	6.9	6.74	7.26	7.004	7.12	6.56	6.62	6.92	6.988	7.08	7.25	
25	6.86	7.326	6.89	7.03	6.55	6.65	6.77	6.972		7.098		
26	7.08	7.342	6.81	6.84	6.56	6.62		7.02		6.97		
27	7.954	7.316	7.02	6.769	6.53	6.57	6.96	6.99	7.35	7.039		
28	6.88	7.22	7.07	6.701	6.54	6.61	7.4	6.92	7.25	7.02		
29	6.84	7.18	6.96	6.996	6.65	6.697	7.25	7	7.2	6.93		
30	7.25	6.85	7.12	6.61	6.568	7.25	6.97	7.477	6.95			
31	7.22		6.95		6.73	7.23		7.63				

Table A-8. 2020 Disinfection Monitoring Results – Total Coliform, MPN/100mL^[a]

Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	<1.8	<1.8	<1.8	<1.8	<1.8	-	<1.8	2	<1.8	<1.8	<1.8	<1.8
2	<1.8	<1.8	<1.8	<1.8	<1.8	-	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8
3	-	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8
4	<1.8	<1.8	-	4.0	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8
5	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8
6	<1.8	<1.8	-	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8
7	-	<1.8	<1.8	<1.8	2.0	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8
8	<1.8	<1.8	<1.8	<1.8	2.0	<1.8	<1.8	<1.8	-	<1.8	<1.8	<1.8
9	<1.8	<1.8	<1.8	2.0	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8
10	<1.8	<1.8	<1.8	4.5	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8
11	<1.8	<1.8	-	7.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8
12	-	<1.8	<1.8	4.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8
13	-	<1.8	<1.8	2.0	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8
14	-	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8
15	<1.8	<1.8	<1.8	6.8	<1.8	2.0	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8
16	<1.8	1.8	<1.8	4.5	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8
17	<1.8	<1.8	<1.8	2.0	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8
18	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8
19	<1.8	<1.8	<1.8	<1.8	<1.8	2.0	2.0	<1.8	<1.8	<1.8	<1.8	<1.8
20	<1.8	2.0	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	2.0	-	<1.8	<1.8
21	-	<1.8	<1.8	<1.8	<1.8	<1.8	2.0	<1.8	<1.8	-	<1.8	<1.8
22	-	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	-	<1.8	<1.8
23	-	<1.8	-	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	-	<1.8	-
24	<1.8	<1.8	<1.8	<1.8	1.8	<1.8	<1.8	<1.8	<1.8	-	<1.8	4.5
25	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	-	<1.8	-
26	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	-	<1.8	-	2.0
27	2.0	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	-	<1.8	-
28	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	-
29	<1.8	2.0	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	-
30	<1.8	-	<1.8	<1.8	<1.8	<1.8	<1.8	2.0	<1.8	<1.8	<1.8	-
31	<1.8	-	<1.8	-	7.8	-	<1.8	2.0	-	<1.8	-	-

[a] Analyzed by Standard Method 9221E at monitoring location EFFF-001.

Table A-9. 2020 Disinfection Monitoring Results – Turbidity (Daily Average), NTU^[a]

Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.33	0.53	0.32	0.45	0.50	-	0.32	0.27	0.61	0.35	0.25	0.28
2	0.33	0.47	0.31	0.40	0.39	-	0.33	0.28	0.53	0.40	0.26	0.29
3	-	0.28	0.36	0.60	0.36	0.95	0.29	0.26	0.53	0.44	0.25	0.26
4	0.47	0.45	0.51	0.60	0.42	0.35	0.29	0.24	0.55	0.34	0.25	0.25
5	0.53	0.41	0.32	0.52	0.42	0.36	0.28	0.23	0.61	0.29	0.30	0.24
6	0.65	0.35	0.29	0.53	0.42	0.43	0.32	0.25	0.49	0.26	0.27	0.25
7	-	0.29	0.31	0.45	0.72	0.35	0.33	0.25	0.41	0.47	0.31	0.28
8	0.67	0.26	0.27	0.38	0.59	0.31	0.32	0.28	0.49	0.25	0.26	0.28
9	0.79	0.24	0.22	0.38	0.51	0.31	0.32	0.30	0.36	0.27	0.26	0.34
10	0.76	0.24	0.15	0.31	0.46	0.26	0.38	0.30	0.33	0.26	0.28	0.34
11	0.73	0.26	0.30	0.47	0.42	0.26	0.38	0.32	0.33	0.24	0.30	0.40
12	-	0.29	0.30	0.36	0.54	0.23	0.39	0.42	0.35	0.26	0.27	0.36
13	-	0.31	0.25	0.35	0.37	0.26	0.40	0.25	0.45	0.25	0.72	0.47
14	-	0.33	0.29	0.35	0.29	0.25	0.47	0.39	0.31	0.26	0.29	0.41
15	0.49	0.32	0.23	0.40	0.29	0.32	0.29	0.24	0.28	0.28	0.29	0.44
16	0.52	0.32	0.34	0.43	0.20	0.65	0.27	0.45	0.30	0.32	0.32	0.34
17	0.48	0.44	0.22	0.48	0.22	0.32	0.28	0.34	0.37	-	0.32	0.50
18	0.52	0.34	0.22	0.51	0.22	0.31	0.31	0.32	0.35	-	0.25	0.42
19	0.49	0.42	0.22	0.45	0.22	0.30	0.28	0.31	0.38	-	0.32	0.43
20	0.50	0.52	0.20	0.44	0.26	0.31	0.26	0.25	0.29	-	0.33	0.41
21	-	0.52	0.24	0.42	0.31	0.34	0.29	0.24	0.29	-	0.30	0.42
22	-	0.48	0.21	0.45	0.32	0.38	0.25	0.26	0.28	-	0.32	0.46
23	-	0.42	0.20	0.37	0.37	0.37	0.25	0.28	0.35	-	0.34	0.34
24	0.49	0.44	0.19	0.40	0.40	0.37	0.22	0.46	0.38	-	0.36	0.34
25	0.42	0.41	0.26	0.39	0.39	0.29	0.45	0.32	0.30	-	0.40	-
26	0.38	0.44	0.25	0.35	0.39	0.28	0.22	-	0.25	-	0.37	-
27	0.40	0.36	0.31	0.38	0.34	0.24	0.24	0.35	0.26	0.33	0.29	-
28	0.39	0.36	0.29	0.41	0.31	0.27	0.25	0.36	0.74	0.22	0.27	-
29	0.34	0.33	0.31	0.64	0.28	0.27	0.27	0.37	0.34	0.29	0.25	-
30	0.55	0.34	0.69	0.26	0.28	0.22	0.45	0.45	0.30	0.26	-	-
31	0.39	0.39	-	-	0.18	-	-	0.30	0.27	0.44	-	-

[a] Analyzed by Standard Method 2130B at monitoring location EFF-001.

Table A-10. 2020 Disinfection Monitoring Results – Turbidity (Daily Maximum), NTU^[a]

Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.39	0.62	0.37	0.45	0.72		0.36	0.35	0.61	0.50	0.30	0.62
2	0.37	0.53	0.43	0.66	0.96		0.61	0.45	0.62	0.50	0.30	0.67
3	0.53	0.44	0.65	0.54	1.40		2.10	1.08	0.62	0.44	0.53	0.91
4	0.62	0.51	0.51	0.92	0.51		0.43	0.40	0.84	0.60	0.35	0.65
5	0.61	0.53	0.50	0.75	0.49		0.40	0.37	0.62	0.73	0.34	0.32
6	0.56	0.44	0.58	0.61	0.47		0.44	0.42	0.89	0.63	0.54	0.32
7	0.36	0.41	0.83	0.74	0.43		0.41	0.45	0.55	0.43	0.74	0.61
8	0.75	0.35	0.62	0.51	0.63		0.36	0.74	0.52	0.50	0.34	0.78
9	0.86	0.29	0.50	0.46	0.73		0.33	0.39	0.81	0.43	0.31	0.32
10	0.88	0.35	0.42	0.46	0.61		0.40	0.49	0.60	0.34	0.26	0.41
11	0.81	0.38	0.35	0.92	0.65		0.85	0.55	0.52	0.42	0.30	0.67
12	0.55	0.42	0.47	0.51	0.36		0.48	0.78	0.48	0.40	0.34	0.51
13	0.54	0.34	0.53	0.94	0.29		0.46	0.66	0.44	0.30	0.37	0.52
14	0.98	0.60	0.46	0.50	0.30		0.61	1.23	0.30	0.59	0.37	0.73
15	0.55	0.55	0.67	0.84	0.35		0.93	0.37	0.34	0.33	0.34	0.57
16	1.18	0.59	0.45	0.55	0.28		0.38	0.37	0.60	0.38	0.35	0.33
17	0.71	0.51	1.07	0.92	0.37		0.37	0.36	1.18	0.43	0.34	0.58
18	0.62	0.46	0.40	0.99	0.33		0.32	0.38	0.35	0.45	0.98	1.20
19	0.55	0.58	0.28	0.78	0.33		0.56	0.39	0.40	0.35	0.52	0.55
20	0.56	0.61	0.32	1.08	0.31		0.44	0.37	0.42	0.31	0.38	0.88
21	0.54	0.35	0.77	0.37	0.41		0.32	0.27			0.36	0.88
22	0.56	0.35	0.65	0.41	0.43		0.37	0.28			0.35	1.14
23	0.52	0.18	0.69	0.47	0.48		0.27	0.31	0.49		0.39	0.85
24	1.39	0.53	0.35	0.05	0.47		0.57	0.31	0.30	0.41	0.41	1.23
25	0.50	0.54	0.32	1.11	0.65		0.44	0.27	1.98	0.34		1.39
26	0.49	0.50	0.30	0.66	0.45		0.35	0.27		0.30		0.39
27	0.44	0.51	0.32	0.68	0.46		0.44	0.37	0.45	1.30	0.45	0.36
28	0.46	0.43	0.25	0.57	0.45		0.30	0.32	0.40	0.83	0.39	0.32
29	0.37	0.39	0.40	0.90	0.42		0.33	0.44	0.42	0.48	0.36	0.47
30	0.81	0.53	0.87	0.41	0.35		0.47	0.44	0.48	0.56	0.33	
31	0.86		0.48		0.38			0.48	0.44		0.54	

[a] Analyzed by Standard Method 2130B at monitoring location EFF-001.