



# CITY OF PORTLAND ENVIRONMENTAL SERVICES



## Tryon Creek Wastewater Treatment Plant

195 SW Foothills Road, Bldg 310, Lake Oswego, Oregon 97034 ■ Mingus Mapps, Commissioner ■ Michael Jordan, Director

February 13, 2021

State of Oregon  
DEQ Northwest Region Office  
700 NE Multnomah Street, Suite 600  
Portland, Oregon 97232

### Tryon Creek Wastewater Treatment Plant Discharge Monitoring Report – January 2021

Please find the enclosed January 2021 DMR for the City of Portland's Tryon Creek Wastewater Treatment Plant (TCWTP).

High flows on January 12, 2021 resulted in a daily E. coli of 600 which exceeded our daily limit of 406. Resample results of 3300, 180, 32, 38 and 5 resulted in a geomean of 81.5. The disinfection improvement project currently underway is expected to improve the reliability of this system.

On January 26, 2021 the daily E. coli of 770 exceeded daily limit of 406. Resample results 11, 13, 37, 14, and 7 resulted in a geomean of 13.8. After investigation it appeared this event was caused by minor process upset resulting from a failed DO probe in the aeration basin. The equipment has been serviced and is functioning properly.

On January 12 and 13, 2021 daily flows exceeded 16.6 MGD. Per the permit, reporting of mass loading is not required, however the mass loading on these dates were within permit limitations.

Feel free to call me at 503-823-8681 if you have any questions.

Sincerely,

**Lisa McBride**

Wastewater O&M Supervisor  
Tryon Creek Wastewater Treatment Plant  
Phone: 503-823-8681  
Email: [lisa.mcbride@portlandoregon.gov](mailto:lisa.mcbride@portlandoregon.gov)

# State of Oregon Discharge Monitoring Report

City of Portland - Tryon Creek WWTP  
195 Foothills Road  
Lake Oswego, OR 97034-3163

**Reporting Month: January 2021**  
Plant Type: Activated Sludge  
Treatment System: Class IV  
Collection System: Class IV

Major Basin: Willamette  
Receiving Stream: Willamette  
County: Clackamas

Population Equivalent: 44,138  
Permit Number: 101614  
File Number: 70735  
Expiration: 9/30/2009

| Date   | Flow           |               |                | Plant Influent |          |          | Plant Effluent |          |               |            |         |              |          |               |            |         |              |             |               |              |              |          |          |                |
|--------|----------------|---------------|----------------|----------------|----------|----------|----------------|----------|---------------|------------|---------|--------------|----------|---------------|------------|---------|--------------|-------------|---------------|--------------|--------------|----------|----------|----------------|
|        | Inf. Total MGD | Inf. Peak MGD | Eff. Total MGD | pH             | BOD mg/L | TSS mg/L | pH             | BOD mg/L | BOD Wkly mg/L | BOD Rem. % | BOD LBS | BOD Wkly LBS | TSS mg/L | TSS Wkly mg/L | TSS Rem. % | TSS LBS | TSS Wkly LBS | Eff Temp °C | CL2 Res. mg/L | E.coli 100ml | Total P mg/L | TKN mg/L | NH3 mg/L | NO3 + NO2 mg/L |
| Jan-21 |                |               |                |                |          |          |                |          |               |            |         |              |          |               |            |         |              |             |               |              |              |          |          |                |
| 1st    | 6.54           | 10.89         | 5.98           | 7.0            |          |          | 6.9            |          |               |            |         |              |          |               |            |         |              | 13.5        | 0.35          | 6            |              |          |          |                |
| 2nd    | 13.93          | 16.49         | 8.55           |                |          |          |                |          | 9             |            |         | 390          |          | 6             |            |         | 274          | 13.4        | 0.29          |              |              |          |          |                |
| 3rd    | 16.46          | 22.22         | 14.38          |                | <60      | 23       |                | 5        |               | 92%        | 600     |              | <3       |               | 87%        | 360     |              | 12.6        | 0.61          |              |              |          |          |                |
| 4th    | 14.78          | 21.29         | 12.62          | 7.3            | 68       | 73       | 7.6            | 7        |               | 90%        | 737     |              | 7        |               | 90%        | 737     |              | 12.9        | 0.61          | 36           |              |          |          |                |
| 5th    | 11.80          | 15.72         | 10.27          | 7.1            | 114      | 115      | 6.8            | 4        |               | 96%        | 343     |              | <3       |               | 97%        | 257     |              | 12.6        | 0.63          | 44           |              |          |          |                |
| 6th    | 10.53          | 15.53         | 9.16           | 7.1            |          |          | 6.94           |          |               |            |         |              |          |               |            |         |              | 13          | 0.53          | 27           |              |          |          |                |
| 7th    | 10.45          | 13.86         | 9.03           | 7.1            | 123      | 110      | 6.8            | 8        |               | 93%        | 602     |              | 10       |               | 91%        | 753     |              | 12.9        | 0.45          | 32           |              |          |          |                |
| 8th    | 9.58           | 14.41         | 8.43           | 7.2            |          |          | 6.9            |          |               |            |         |              |          |               |            |         |              | 13.0        | 0.19          | 45           |              |          |          |                |
| 9th    | 8.53           | 14.00         | 7.43           |                |          |          |                |          | 6             |            |         | 570          |          | 6             |            |         | 527          | 12.8        | 0.48          |              |              |          |          |                |
| 10th   | 8.18           | 13.65         | 7.18           |                | 84       | 67       |                | 3        |               | 96%        | 180     |              | <3       |               | 96%        | 180     |              | 13.0        | 0.53          |              |              |          |          |                |
| 11th   | 7.50           | 12.89         | 7.02           | 7.0            | 141      | 130      | 7.1            | 5        |               | 96%        | 293     |              | 6        |               | 95%        | 351     |              | 13.1        | 0.40          | 8            |              |          |          |                |
| 12th   | 19.11          | 36.86         | 13.72          | 7.0            | 88       | 107      | 6.9            | 10       |               | 89%        | 1144    |              | 7        |               | 93%        | 801     |              | 13.1        | 0.43          | 600          |              |          |          |                |
| 13th   | 23.78          | 38.34         | 14.72          | 6.9            |          |          | 6.9            |          |               |            |         |              |          |               |            |         |              | 11.8        | 1.19          | 180          |              |          |          |                |
| 14th   | 14.01          | 17.88         | 10.87          | 7.1            | 92       | 87       | 6.9            | 12       |               | 87%        | 1088    |              | 17       |               | 80%        | 1541    |              | 12.3        | 1.41          |              |              |          |          |                |
| 15th   | 11.13          | 15.49         | 9.69           | 7.1            |          |          | 6.8            |          |               |            |         |              |          |               |            |         |              | 12.8        | 0.73          | 11           |              |          |          |                |
| 16th   | 9.41           | 14.33         | 8.89           |                |          |          |                |          | 8             |            |         | 676          |          | 8             |            |         | 718          | 12.8        | 0.58          |              |              |          |          |                |
| 17th   | 8.34           | 13.09         | 7.53           |                | 115      | 99       |                | 6        |               | 95%        | 377     |              | <3       |               | 97%        | 188     |              | 12.7        | 0.52          |              |              |          |          |                |
| 18th   | 7.40           | 11.02         | 6.52           | 7.0            | 99       | 68       | 7.4            | 5        |               | 95%        | 272     |              | <3       |               | 96%        | 163     |              | 13.1        | 0.39          | 8            |              |          |          |                |
| 19th   | 6.69           | 10.81         | 5.92           | 8.2            | 210      | 175      | 7.0            | 42       |               | 80%        | 2074    |              | 8        |               | 95%        | 395     |              | 12.9        | 0.40          | 6            |              |          |          |                |
| 20th   | 6.20           | 10.00         | 5.47           | 7.2            |          |          | 7.1            |          |               |            |         |              |          |               |            |         |              | 12.7        | 0.26          | 16           |              |          |          |                |
| 21st   | 5.99           | 10.39         | 5.32           | 7.2            | 208      | 198      | 7.1            | 8        |               | 96%        | 355     |              | 6        |               | 97%        | 266     |              | 12.9        | 0.44          | 5            |              |          |          |                |
| 22nd   | 5.63           | 10.97         | 5.12           | 7.3            |          |          | 7.1            |          |               |            |         |              |          |               |            |         |              | 12.9        | 0.34          | 4            |              |          |          |                |
| 23rd   | 5.39           | 11.19         | 4.79           |                |          |          |                |          | 15            |            |         | 769          |          | 5             |            |         | 253          | 12.6        | 0.40          |              |              |          |          |                |
| 24th   | 5.97           | 11.43         | 5.37           |                | 122      | 113      |                | 8        |               | 93%        | 358     |              | 4        |               | 96%        | 179     |              | 12.8        | 0.37          |              |              |          |          |                |
| 25th   | 6.04           | 9.96          | 5.34           | 7.4            | 220      | 200      | 7.1            | 7        |               | 97%        | 312     |              | 4        |               | 98%        | 178     |              | 12.8        | 0.32          | 7            |              |          |          |                |
| 26th   | 5.82           | 10.20         | 5.23           | 7.5            | 116      | 68       | 7.0            | 7        |               | 94%        | 305     |              | 3        |               | 96%        | 131     |              | 12.6        | 0.42          | 770          |              |          |          |                |
| 27th   | 7.27           | 11.54         | 6.46           | 7.3            |          |          | 6.9            |          |               |            |         |              |          |               |            |         |              | 12.6        | 0.50          | 11           |              |          |          |                |
| 28th   | 6.91           | 11.42         | 6.15           | 7.2            | 103      | 100      | 7.0            | 3        |               | 97%        | 154     |              | <3       |               | 97%        | 154     |              | 12.6        | 0.56          | 6            |              |          |          |                |
| 29th   | 6.32           | 10.16         | 5.82           | 7.3            |          | 92       | 7.0            |          |               |            |         |              | <3       |               | 97%        | 146     |              | 12.7        | 0.44          | 2            |              |          |          |                |
| 30th   | 6.76           | 11.39         | 6.08           |                |          |          |                |          | 6             |            |         | 282          |          | 3             |            |         | 158          | 12.9        | 0.49          |              |              |          |          |                |
| 31st   | 7.49           | 12.42         | 6.75           |                | 116      |          |                | 3        |               | 97%        | 169     |              |          |               |            |         |              | 12.9        | 0.47          |              |              |          |          |                |
| Min    | 5.4            | 10.0          | 4.8            | 6.9            | 60       | 23       | 6.8            | 3        | 6             | 80%        | 154     | 282          | <3       | 3             | 80%        | 131     | 158          | 11.8        | 0.19          | 2            |              |          |          |                |
| Max    | 23.8           | 38.3          | 14.7           | 8.2            | 220      | 200      | 7.6            | 42       | 15            | 97%        | 2074    | 769          | 17       | 8             | 98%        | 1541    | 718          | 13.5        | 1.41          | 770          |              |          |          |                |
| Avg    | 9.5            | 14.8          | 7.9            | 7.2            | 122      | 107      | 7.0            | 8        | 9             | 93%        | 551     | 538          | 5        | 6             | 94%        | 399     | 386          | 12.8        | 0.51          | 19           |              |          |          |                |
| Sum    | 293.9          |               | 245.8          |                |          |          |                |          |               |            |         |              |          |               |            |         |              |             |               |              |              |          |          |                |

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the persons who manage the system of 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.

**Name and Title: Lisa McBride, Plant Manager**  
**Certification #13818, Treatment Grade IV**

Signature: 

# State of Oregon Discharge Monitoring Report

Reporting Month: January 2021

## Notes

-1/12/2021 Daily E. coli of 600 exceeded daily limit of 406. Resample results 3300, 180, 32, 38 and 5 resulted in a geomean of 81.52.

-1/26/2021 Daily E. coli of 770 exceed daily limit of 406. Resample results 11, 13, 37, 14, and 7 resulted in a geomean of 13.8.

1/12 and 13/2021 Daily flows in excess of 16.6 MGD. Daily mass load limit suspended due to flows exceeding twice the design average dry weather flow.

All Digested and TWAS sludge's are hauled to Columbia Blvd WWTP.

During this reporting period, did all monitoring data and sampling frequencies meet permit requirements and limits? If no, explain.

☐ Yes ☒ No

During this reporting period, were there unanticipated bypasses or upsets which exceeded effluent limits? If yes, explain.

☐ Yes ☒ No

During this reporting period, were there any sewer system overflows? If yes, please explain.

☐ Yes ☒ No

Name and Title: Lisa McBride, Plant Manager

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Signature: 