



COLORADO
Department of Public
Health & Environment

Victoria Simonsen, Town Admin
Lyons Town of
PO Box 49
Lyons, CO 80540
vsimonsen@townoflyons.com

MEMORANDUM

TO: Lyons Town of

FROM: Debbie Jessop, 303-692-3590, Debbie.Jessop@state.co.us
Kontessa Rodriguez-Chavez, 303-692-3531, kontessa.rodriguez-chavez@state.co.us
Joseph Sturgeon, 303-691-4019, Joseph.Sturgeon@state.co.us

DATE: June 8, 2021

RE: Notice of Termination of Permit to Discharge
Lyons WWTF
Permit No: CO0020877 converted to COG589156

As a follow-up to your request for termination of the permit referenced above, this letter is an official notice of termination of Colorado Discharge Permit Number CO0020877. The Division has reviewed the information provided and has determined that eligibility requirements for permit termination have been met. This determination is based on the information provided in the Termination Application, and, as applicable, other information available to the Division. The Division has not verified all of the information contained in your application and has relied upon your signed certification to determine that the information is true, accurate, and complete.

This permit termination has been issued on 6/8/2021. The effective date of the termination will be 7/1/2021. You must complete and submit any reports required by the permit, such as discharge monitoring reports and annual reports, for full or partial monitoring/reporting periods prior to the termination effective date.

Should you need discharge authorization in the future, you will have to obtain new permit coverage.





Dedicated to protecting and improving the health and environment of the people of Colorado

Victoria Simonsen, Town Admin
Town of Lyons
PO Box 49
Lyons, CO 80540

Memorandum

TO: Lyons Town of

FROM: Jon Wallace, jon.wallace@state.co.us, 303-692-3609

DATE: 5/12/2021

**RE: Certification, Colorado Discharge Permit System - Domestic Wastewater Treatment Facilities that Discharge to Waters that are Unclassified; Use Protected; Reviewable; Or Are Designated Threatened And Endangered Species Habitat, Permit Number COG589000. Certification Number: COG589156
Conversion of C00020877 to General Permit COG589156**

ATTACHMENTS:

Certification COG589156
CDPS General Permit for Domestic Wastewater Treatment Facilities that Discharge to Waters that are Unclassified; Use Protected; Reviewable; Or Are Designated Threatened And Endangered Species Habitat

The Water Quality Control Division (the Division) has reviewed the application submitted for the Lyons WWTF facility and determined that it qualifies for coverage under the CDPS General Permit for Domestic Wastewater Treatment Facilities that Discharge to Waters that are Unclassified; Use Protected; Reviewable; Or Are Designated Threatened And Endangered Species Habitat.

Attached is your certification to discharge under which was issued under the Colorado Water Quality Control Act. **Please read the enclosed permit, fact sheet and certification as well as this letter, which outline the requirements under this permit, and the explanation of how certain limitations were developed.** The Division holds the permittee legally liable for all permit requirements.

Facility Information:

- **Treatment Facility Description**

The facility consists of preliminary treatment (screening & grit removal), activated sludge sequencing batch reactor (SBR) and equalization tanks, UV disinfection, aerated sludge holding tanks, and dewatering centrifuge.

Pursuant to Section 100.5.2 of the Water and Wastewater Facility Operator Certification Requirements, this facility will require a certified operator. If the facility has a question on the level of the certified operator it needs, then the facility will need to contact the Engineering Section of the Division.

The hydraulic and organic capacities, applicable to Part I.C. of the general permit, are 0.3065 MGD (0.47 cfs) and 1,535 lbs BOD5/day, respectively. These values are based on Site Approval number 4289 for this WWTF.





- Chemical Usage**

The application identified the following chemicals which are added during or after the treatment process. The MSDS documents for these chemicals were provided in the permit application. The MSDS sheets have been reviewed and the following chemicals are approved for use.

List of Chemicals		
Chemical Name	Purpose	Constituents of Concern
Magnesium Hydroxide	pH Control	pH

Chemicals deemed acceptable for use in waters that will or may be discharged to waters of the State are acceptable only when used in accordance with all state and federal regulations, and in strict accordance with the manufacturer’s site-specific instructions.

- Lift Stations**

The table below summarizes the information provided in the renewal application for the lift stations in the service area.

Lift Station Summary			
Station Name/#	Firm Pump Capacity (gpm)	Peak Flows (gpd)	% Capacity (based on peak flow)
Stone Canyon (behind Clark’s)	2 @ 230	50,000	7.5
Eagle Canyon (Hwy 36) at CDOT	1 @ 200 & 1 @ 250	21,000	3.2
Lyons Valley Park (McConnel Drive)	2 @ 230	27,600	4.2

- Compliance Review**

A review of the previous permit monitoring history from November 1, 2014 to November 30, 2020, indicates exceedances of the following permit limits:

- Ten daily maximum and eleven 30-day average potentially dissolved copper exceedances
- Two instantaneous maximum and two 30-day average total residual chlorine exceedances
- One pH exceedance
- Three max 7-day average and three 30-day average TSS exceedances
- Two TSS percent removal exceedances
- Three 7-day average *E coli* exceedances
- Seven daily maximum total inorganic nitrogen exceedances
- Two 30-day average ammonia exceedance
- Numerous non-receipt violations

The facility also had violations of the following terms and conditions:

Activities to meet the MWAT and potentially dissolved copper final limit, as well as numerous non-receipt violations.

In accordance with 40 CFR Part 122.41(a), any permit noncompliance constitutes a violation of the Clean Water Act and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or denial of a permit renewal application.



Basis of Certification Limitations:

- **Stream Segment Information**

The discharge is to the St Vrain River, within Segment 02b of the St. Vrain Creek Sub-basin, South Platte River Basin, found in the Classifications and Numeric Standards for the River Basin (Regulation No. 38. Segment COSPSV02b is reviewable and is classified for the following beneficial uses: Recreation Class E, Aquatic Life - Class 1 Cold, Water Supply, and Agriculture.

- **Low Flow Determination**

The Colorado Regulations specify the use of low flow conditions when establishing water quality based effluent limitations, specifically the acute and chronic low flows. The acute low flow, referred to as 1E3, represents the one-day low flow recurring in a three-year interval, and is used in developing limitations based on an acute standard. The chronic low flow, 30E3, represents the 30-day average low flow recurring in a three-year interval, and is used in developing limitations based on a chronic standard.

To determine the low flows available to the Lyons WWTF, a flow gage measurement immediately upstream of the discharge location should be used. Daily flows from the Colorado DWR gage SVCLYOCO (St. Vrain Creek at Lyons, CO), located 0.2 miles upstream from the discharge location, were obtained and the annual 1E3 and 30E3 low flows were calculated using U.S. Environmental Protection Agency (EPA) DFLOW software. The output from DFLOW provides calculated acute and chronic low flows for each month.

To estimate the low flows at the Lyons WWTF discharge point, the St. Vrain Supply Canal and the Highland Ditch, which are both located between the DWR Gage Station (formerly USGS 06724000) and the facility discharge had to be considered.

Daily diversion flow data for the St. Vrain Supply Canal and the Highland Ditch was obtained from DWR Colorado Decision Support Systems. To determine low flows above the facility, daily flows from the St. Vrain Supply Canal were added to the flows at DWR Gage Station SVCLYOCO (St. Vrain Creek at Lyons, CO) and then Highland ditch daily flows were subtracted. Note that daily canal/ditch flows were not available prior to 2006 and there were several months between 2006 and 2015 where no data were available. For days where daily flow data were not available (except during the 2013 flood, where no data was used due to extremely high flows), the division used the design flow (0.59 cfs) as the daily effluent flow as a conservative approach.

Note that March 2003, November 2003, March 2004, March 2005, and March 2008 had several consecutive days that, using the method described above, yielded negative values. For those time frames, flow data from the 2008 TMDL document "Modeling and Analysis of Projected Ammonia and Nitrate Concentrations in the St. Vrain Creek Drainage, including Boulder Creek and Coal Creek" was referred to. For those timeframes, the acute DFLOW for Highland ditch was subtracted from the sum of the acute DFLows for USGS gage-Lyons and the St. Vrain supply on page 32 of the TMDL report. So for the above listed March timeframes, 0.5 cfs was used for the daily flow data and 0.6 cfs was used for the November timeframe and used in the DFLOW calculations.

Flow data from October 1, 2000 through September 30, 2015 were available from the gage station. The gage station and time frames were deemed the most accurate and representative of current flows for this certification and were therefore used in this analysis.

Future flow analysis based on updated flow data may or may not provide dilution in the future. The division recommends the permittee evaluate installing a flow gage upstream of the discharge location to provide direct upstream flow data for future renewal permits.

Based on the low flow analysis described previously, the upstream low flows available to the Lyons WWTF were calculated and are presented in the table below.



Low Flows for St Vrain River at the Lyons WWTF													
Low Flow (cfs)	Annual	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1E3 Acute	0.3	0.5	0.8	0.3	0.8	17	95	76	39	46	1.6	0.6	0.3
7E3 Chronic	0.4	0.6	0.6	0.4	0.6	17	91	91	51	46	1.6	0.4	0.4
30E3 Chronic	0.8	1.5	0.8	0.8	0.8	17	106	91	71	46	1.6	0.8	0.8

During the months of February, April, May, September, and October, the acute low flow calculated by DFLOW exceeded the chronic low flow. In accordance with Division standard procedures, the acute low flow was thus set equal to the chronic low flow for these months.

This leads to a 30E3: Design Flow dilution ratio of 1.7:1.

- Ambient Water Quality Determination for Total Residual Chlorine, *E. coli*, Total Recoverable Arsenic, and Total Inorganic Nitrogen**

There are no point sources discharging total residual chlorine within one mile of the Lyons WWTF. Because chlorine is rapidly oxidized, in-stream levels of residual chlorine are detected only for a short distance below a source. Ambient chlorine was therefore assumed to be zero.

There are no point sources discharging *E. coli* within one mile of the Lyons WWTF. Thus, WQBELs were evaluated individually for this certification. Ambient stream levels for *E. coli* were determined from WQCD Station 5521 (South St. Vrain Creek near mouth) located upstream of the facility on South St. Vrain Creek. *E. coli* data were available from November 2008 through June 2011. This ambient *E. coli* level was found to be 7 CFU/100 ml.

Ambient stream levels for total recoverable arsenic and TIN were determined from Northern Colorado Water Conservancy District station SVSC-SVD (St. Vrain Creek downstream of St. Vrain Supply Canal) from June 2014 to September 2018. The ambient total recoverable arsenic was found to be 0.36 µg/l. The ambient TIN was found to be 0.42 mg/l.

- Technology Based Standards**

The limitations for BOD₅, oil and grease and total suspended solids are from Regulation 62, which apply to all discharges that would be covered under this General Permit. Additionally, the percent removal requirements for BOD₅ and TSS apply as noted in Part I(B) of the general permit.

WQCC Regulation No. 85, the new Nutrients Management Control Regulation, includes technology based effluent limitations for total inorganic nitrogen and total phosphorus that currently, or will in the future, apply to many domestic wastewater discharges to State surface waters. These effluent limits for dischargers are to start being implemented in permitting actions as of July 1, 2013. All permit actions based on this Fact Sheet will occur after the July 1, 2013 permit implementation date of Reg. 85. Therefore, total inorganic nitrogen and total phosphorus effluent limitations potentially imposed because of Reg. 85 must be considered. However, also based on Reg. 85, there are direct exemptions from these limitations for smaller domestic facilities that discharge less than or equal to 1 million gallons per day (MGD), or are a domestic facility owned by a disadvantaged community. The Town of Lyons WWTF is an existing WWTF, as it was discharging and permitted prior to May 31, 2012. Also, since the design capacity of the Town of Lyons WWTF is 0.3065 MGD, the facility is not currently required to address the new technology based effluent limits as of 7/1/2013.

- Water Quality Standards**

The limitations for Total Ammonia, Total Residual Chlorine (TRC), and *E. coli* for this certification were determined as outlined in the tables of Part I(B) of the general permit.





For Total Recoverable Arsenic, the WQBEL will be effective following the expiration of the temporary modification (12/31/2024), on 1/1/2025. A monitoring requirement for total recoverable arsenic will be added to the permit to collect data for any future permitting actions.

According to the *Rationale for Classifications, Standards and Designations of the South Platte River*, stream segment COSPSV02b is designated a water supply. An evaluation of the Division of Water Resources Colorado’s Decision Support System indicates that there is at least one drinking water well and/or surface water intake identified on the segment that are used for water supply located downgradient from the facility discharge location. Thus, the nitrate standard is further evaluated as part of this permit. An acute nitrate standard of 10 mg/l is assigned to these segments. Because nitrite and ammonia can also form nitrate, compliance with the nitrate standard is achieved through implementation of a Total Inorganic Nitrogen (T.I.N.) limit. T.I.N. effectively measures nitrate and its precursors including nitrite and ammonia.

Using the mass-balance equation, the acute and chronic low flows, ambient water quality, and the in-stream standards, the WQBEL is calculated. The data used and the resulting WQBEL, M_2 , is set forth in the table below for the acute TIN WQBEL.

Lyons WWTFs Acute TIN WQBEL						
Parameter	Q_1 (cfs)	Q_2 (cfs)	Q_3 (cfs)	M_1	M_3	M_2
Total Inorganic Nitrogen as N (mg/l)	0.3	0.47	0.77	0.42	10	16

Temperature: A WQBEL for temperature can only be calculated if there is representative data, in the proper form, to determine what the background Maximum Weekly Average Temperature and Daily Maximum ambient temperatures are. Also, the receiving stream to which the Lyons WWTF discharges is currently listed on the State’s 303(d) list for development of TMDLs for temperature. As temperature data is not available at this time to determine WQBELs, a report requirement will be included in the permit and effluent temperature requirements will be revisited in the future when representative temperature data becomes available. The ambient monitoring location included in this permit, feature UST1A, is the same monitoring location as was used in the previous Lyons WWTF individual permit (CO0020877). As this general permit is for a discharge location downstream of the previous permit, the data collected may not be representative of ambient temperature upstream of the current discharge and may not be used in subsequent renewals of this general permit. Relocating the ambient monitoring location in proximity of the new discharge will ensure that ambient data can be used for calculating assimilative capacity of the receiving water.

- **Antidegradation**

Because the receiving water is reviewable, an antidegradation evaluation must occur. The facility is entitled to use the discharge requirements (effluent loading to stream) that were occurring because of this discharge as of September 30, 2000. The facility is also allowed to have antidegradation based (AD) limits from the tables in Part I(B) of the general permit. The facility will be given the less stringent of these requirements, as part of the determination of AD effluent limits for the discharger under this certification.

For total residual chlorine, total ammonia, and E. coli, the limitations as of September 2000 were used in the evaluation of new or increased impacts. In accordance with the Division’s practice regarding E. coli, an implicit limit for E. coli is determined as 0.32 times the permit limit for fecal coliform.

For T.I.N, data prior to 2000 were not available. Therefore, DMR data from November 2014 through November 2016 were determined to be adequate and were used to determine the implicit limitations.

The design flow of this facility as of September 30, 2000 was 0.286 MGD. The new design flow of this facility is 0.3065 MGD. To determine if new or increased impacts are to occur, the September 2000 permit concentrations need to be adjusted for this new design flow. The equations are shown below.





$$\text{September 2000 permit load} = M_{\text{permitted}} \times Q_{\text{permitted}} \times 8.34$$

$$\text{Non Impact Limit (NIL)} = \text{September 2000 permitted load} \div \text{New Design Flow} \div 8.34$$

Where,

- $M_{\text{permitted}}$ = September 2000 permit limit or implicit limit (mg/l)
- $Q_{\text{permitted}}$ = September 2000 design flow (mgd)
- Q_2 = new or current design flow (mgd)
- 8.34 = Unit conversion factor

The table below shows the results of these calculations and the determination of a new or increased impact.

<i>Determination of New or Increased Impacts</i>						
<i>Pollutant</i>	<i>Sept 2000 Permit Limit</i>	<i>Sept 2000 Permit Load (lbs/day)</i>	<i>NIL</i>	<i>New WQBEL</i>	<i>New WQBEL Load (lbs/day)</i>	<i>New or Increased Impact</i>
E. coli (#/100 ml)*	1,920	4,580	1,792	242	619	No
TRC (mg/l)	0.12	0.29	0.112	0.022	0.056	No
Total Inorganic Nitrogen (mg/l)**	40.65	97	37.9	16	41	No
NH ₃ , Tot as N (mg/l) Jan	20	48	19	5.1	14	No
NH ₃ , Tot as N (mg/l) Feb	17	41	16	4.4	12	No
NH ₃ , Tot as N (mg/l) Mar	11	26	10	3.4	12	No
NH ₃ , Tot as N (mg/l) Apr	14	33	13	3.4	12	No
NH ₃ , Tot as N (mg/l) May	19	45	18	24	77	Yes
NH ₃ , Tot as N (mg/l) Jun	103	246	96	50	128	No
NH ₃ , Tot as N (mg/l) Jul	68	162	63	50	128	No
NH ₃ , Tot as N (mg/l) Aug	34	81	32	50	128	Yes
NH ₃ , Tot as N (mg/l) Sep	13	31	12	48	128	Yes
NH ₃ , Tot as N (mg/l) Oct	11	26	10	6.1	22	No
NH ₃ , Tot as N (mg/l) Nov	8	19	7.5	4.6	15	No
NH ₃ , Tot as N (mg/l) Dec	14	33	13	4.1	11	No
*Note that loading for E. coli cannot be calculated; but, for comparison purposes, the approach is sufficient.						
**For TIN, NILs were calculated using maximum effluent concentrations and the previous design capacity.						

As shown in the table, there are no new or increased impacts to the receiving stream based on the new WQBELS for *E. coli*, total residual chlorine, nitrate, total ammonia (Jan-Apr, Jun, Jul, Oct-Dec), and for these parameters the AD evaluation is complete and the WQBELs are the final result.

For ammonia (May, August, and September) there are new or increased impacts and in accordance with regulation, the permittee has the option of choosing either the NILs or ADBACs. Because the ADBACs are generally more stringent than NILs, the Division assumes that the permittee will choose NILs rather than ADBACs, and therefore the Division will stop the AD evaluation at this point and assign the NILs to the permit for ammonia (May, August, and September).

- **Antibacksliding**

As the receiving water is designated Reviewable, and the Division has performed an antidegradation evaluation, in accordance with the Antidegradation Guidance, the antibacksliding requirements in Regulation 61.10 have been met.





- **TMDL**

The receiving stream to which the Lyons WWTF discharges is currently listed on the State's 303(d) list for development of TMDLs for temperature and arsenic. However, the TMDLs have not yet been finalized. This permit establishes monitoring requirements for the future development of temperature WQBELs. Consistent with Division practice, this permit also establishes monitoring requirements for arsenic until such time as the TMDL is complete and waste load allocations have been determined. The permit may be reopened to include limitations based upon a finalized TMDL.

- **Narrative Standards**

Section 31.11(1)(a)(iv) of The Basic Standards and Methodologies for Surface Waters (Regulation No. 31) includes the narrative standard that State surface waters shall be free of substances that are harmful to the beneficial uses or toxic to humans, animals, plants, or aquatic life.

- **Whole Effluent Toxicity**

The Water Quality Control Division has established the use of WET testing as a method for identifying and controlling toxic discharges from wastewater treatment facilities. WET testing is being utilized as a means to ensure that there are no discharges of pollutants "in amounts, concentrations or combinations which are harmful to the beneficial uses or toxic to humans, animals, plants, or aquatic life" as required by Section 31.11 (1) of the Basic Standards and Methodologies for Surface Waters. The requirements for WET testing are being implemented in accordance with Division policy, Implementation of the Narrative Standard for Toxicity in Discharge Permits Using Whole Effluent Toxicity (Sept 30, 2010).

For this facility, chronic WET testing has been determined to be applicable based on the instream waste concentrations calculated below. A delayed effective date is implemented in the permit for outfalls 001A to give the facility time to evaluate the discharge and ensure compliance with the limit.

A qualitative RP has been made as this is a domestic wastewater treatment facility and may contain ammonia, total residual chlorine, and metals in its effluent.

The permittee should read the WET testing section of Part I of the permit carefully, as this information has been updated in accordance with the Division's updated policy, Implementation of the Narrative Standard for Toxicity in Discharge Permits Using Whole Effluent Toxicity (Sept 30, 2010). The permit outlines the test requirements and the required follow-up actions the permittee must take to resolve a toxicity incident. The permittee should also read the above mentioned policy which is available on the Permit Section website. The permittee should be aware that some of the conditions outlined above may be subject to change if the facility experiences a change in discharge, as outlined in Part II.A.2. of the permit. Such changes shall be reported to the Division immediately.

In-Stream Waste Concentration (IWC) - Where monitoring or limitations for WET are deemed appropriate by the Division, the chronic in-stream dilution is critical in determining whether acute or chronic conditions shall apply. In accordance with Division policy, for those discharges where the chronic IWC is greater than 9.1% and the receiving stream has a Class 1 Aquatic Life use or Class 2 Aquatic Life use with all of the appropriate aquatic life numeric standards, chronic conditions will normally apply. Where the chronic IWC is less than or equal to 9.1, or the stream is not classified as described above, acute conditions will normally apply. The chronic IWC is determined using the following equation:

$$IWC = [Facility\ Flow\ (FF) / (Stream\ Chronic\ Low\ Flow\ (annual) + FF)] \times 100\%$$

The flows and corresponding IWC for the appropriate discharge point are:





Permitted Feature	Chronic Low Flow, 30E3 (cfs)	Facility Design Flow (cfs)	IWC, (%)
001A	0.8	0.3065	37

The IWC for this permit is 37%, which represents a wastewater concentration of 37% effluent to stream 63% receiving stream. This IWC correlates to chronic WET testing. The permit will contain additional information regarding the type of WET testing applicable to this facility.

The Lyons WWTF has commercial or non-domestic users, such as a brewery and distillery discharging to the facility. The addition of chronic WET testing to the permit will help the facility monitor industrial users discharging to its facility and ensure that the industrial users are not posing a risk to aquatic life in the receiving stream.

- Biosolids Treatment and Disposal**

Biosolids are treated in an aerobic digester. The facility has two aerobic digesters, but currently use one. Liquid is removed in a centrifuge, and then the biosolids are hauled weekly by McDonald Farms for offsite disposal.

1. EPA General Permit

EPA Region 8 issued a General Permit (effective October 19, 2007) for Colorado facilities whose operations generate, treat, and/or use/dispose of sewage sludge by means of land application, landfill, and surface disposal under the National Pollutant Discharge Elimination System. All Colorado facilities are required to apply for and to obtain coverage under the EPA General Permit.

2. Biosolids Regulation (Regulation No. 64, Colorado Water Quality Control Commission)

While the EPA is now the issuing agency for biosolids permits, Colorado facilities that land apply biosolids must comply with requirements of Regulation No. 64, such as the submission of annual reports as discussed later in this rationale.

General Information:

- **Permit Action Fees:** The Annual Fee for this certification is \$2,733 [Category 22, Subcategory 21 for Domestic Wastewater per CRS 25-8-502] and is invoiced every July. Do Not Pay This Now.
- **Changes to the Certification** - Any changes that need to be made to the certification page - changes in outfalls, monitoring requirements, etc., must be submitted using the “Permit and Certification Modification form” available on our website: coloradowaterpermits.com, and signed by the legal contact.
- **Discharge Monitoring Report (DMR)** forms will be mailed out within the next month. Reports must be submitted **monthly** as long as the certification is in effect. The permittee shall provide the Division with any additional monitoring data on the permitted discharge collected for entities other than the Division. This will be supplied to the Division within 48 hours of the receipt of the data by the permittee. If forms have not been received, please contact the Division at 303-692-3517.
- **Sampling Requirements** Sampling shall occur at a point after treatment, or after the implementation of any Best Management Practices (BMPs). If BMPs or treatment are not implemented, sampling shall occur where the discharge leaves control of the permittee, and prior to entering the receiving stream or prior to discharge to land. Samples must be representative of what is entering the receiving stream.
- **Termination requirements** This certification to discharge is effective long term, even though construction and dewatering discharge are only expected for approximately three months. For termination of permit coverage, the





permittee must initiate this by sending the “CDPS Permits and Authorization Termination Form.” This form is also available on our web site and must be signed by the legal contact.

- **Certification Records Information** The following information is what the Division records show for this certification.

For any changes to Contacts - Legal, Local, Billing, or DMR - a “Notice of Change of Contacts form” must be submitted to the Division. This form is also available on our web site and must be signed by the legal contact.

Facility: Lyons WWTF
Industrial Activities

BoulderCounty
SIC Code 4952

Legal Contact *Receives all legal documentation, pertaining to the permit certification. [including invoice; is contacted for any questions relating to the facility; and receives DMRs.]*

Victoria Simonsen, Town Admin
Lyons Town of
PO Box 49
Lyons,CO 80540

Phone number:
vsimonsen@townoflyons.com
Email: vsimonsen@townoflyons.com

Facility Contact *Contacted for general inquiries regarding the facility*

Victoria Simonsen, Town Admin
Lyons Town of
PO Box 49
Lyons CO 80540

Phone number: 303-823-6622
Email: vsimonsen@townoflyons.com

Billing Contact

Deb Anthony Town Clerk
Lyons Town of
PO Box 49
Lyons, CO 80540

Phone number: 303-823-6622
Email: ldanthy@townoflyons.com

DMR Contact

R Wayne Ramey, Operator 5225
Ramey Environmental Compliance Inc
PO Box 99
Firestone, CO 80520

Phone number 303-833-5505
Email: wayner@recinc.net

-
- **DIVISION USE ONLY PERMIT WRITER** select what reports will be expected from the permittee

G04	Sewage Sludge/Biosolids Annual Program Reports
G07	Pretreatment Program Reports
G09	Sewer Overflow/Bypass Event Reports
G3A	DMRs: Regular Submission Frequency
G8B	SIU Compliance Reports (State is Control Authority)





**CERTIFICATION TO DISCHARGE UNDER CDPS GENERAL PERMIT COG589000
MINOR DOMESTIC WASTEWATER TREATMENT FACILITIES THAT DISCHARGE
TO RECEIVING WATERS THAT ARE: UNCLASSIFIED; USE PROTECTED; REVIEWABLE; OR
ARE DESIGNATED THREATENED AND ENDANGERED SPECIES HABITAT**

Certification Number: **COG589156**

This Certification to Discharge specifically authorizes:

**Lyons Town ofto discharge from the facility identified as
Lyons WWTF to: St Vrain River**

Facility Type: Mechanical System
Facility Address: 198 2nd Ave Lyons, CO 80540 Boulder County
Facility Latitude/Longitude: 40.219811 Latitude -105.264167 Longitude

Permitted Features:

Permitted Feature 001A External Outfall	40.215278 Latitude -105.259444 Longitude following the chlorination and the sand filter and prior to entering the St Vrain River
Permitted Feature 300I Influent Structure	At a representative location prior to chemical, physical, or biological treatment
Permitted Feature UST1A Instream Ambient	40.218719 Latitude -105.262356 Longitude Upstream from the facility discharge to collect continuous ambient temperature data

The hydraulic and organic capacities, in this certification, are 0.3065 MGD and 1,535 lbs BOD5/day, respectively. These values are based on Site Approval number 4289 for this WWTF.

Permit Limitations and Monitoring Requirements apply as outlined in the Permit Part I (B)(1) for Classified Waters, that are Use Protected; Reviewable; Or Are Designated Threatened And Endangered Species Habitat

Mechanical Facilities With Design Flows Of Greater Than 0.25 MGD and Less Than 1.0 MGD

Permitted Feature ID: 001A

Permitted Feature Type: External Outfall for Mechanical WWTF > 0.25 MGD and Less Than 1.0 MGD

Limit Set: 6

Mechanical Facilities with Design Flows Greater Than 0.25 MGD and Less Than 1.0 MGD						
ICIS Code	Parameter	Limitation			Sampling	
		30-day Avg.	7-day Avg.	Daily Max	Frequency	Type
50050	Flow, MGD	0.3065 ¹		Report	Continuous ³	Recorder ³
00010	Temp DM (°C)			Report	Continuous	Recorder
00010	Temp MWAT (°C)		Report		Continuous	Recorder
00310	BOD ₅ , mg/l	30	45		Weekly	Composite
81010	BOD ₅ , percent removal ²	85% (min)			Weekly	Calculated
00530	Total Suspended Solids, mg/l	30	45		Weekly	Composite
81011	TSS, percent removal ²	85% (min)			Weekly	Calculated
50060	Total Residual Chlorine, mg/l	0.022		0.019	Weekly	Grab
00640	Total Inorganic Nitrogen, mg/l			16	Weekly	Composite
00610	Total Ammonia, mg/l as N January	5.1		10	Monthly	Grab
00610	Total Ammonia, mg/l as N February	4.4		8.6	Monthly	Grab
00610	Total Ammonia, mg/l as N March	3.4		4.9	Monthly	Grab
00610	Total Ammonia, mg/l as N April	3.4		7.2	Monthly	Grab
00610	Total Ammonia, mg/l as N May	18		47	Monthly	Grab



00610	Total Ammonia, mg/l as N June	50		50	Monthly	Grab
00610	Total Ammonia, mg/l as N July	50		50	Monthly	Grab
00610	Total Ammonia, mg/l as N August	32		50	Monthly	Grab
00610	Total Ammonia, mg/l as N September	12		50	Monthly	Grab
00610	Total Ammonia, mg/l as N October	6.1		13	Monthly	Grab
00610	Total Ammonia, mg/l as N November	4.6		10	Monthly	Grab
00610	Total Ammonia, mg/l as N December	4.1		6.0	Monthly	Grab
00400	pH, s.u.			6.0-9.0	Daily	Grab
84066	Oil and Grease, mg/l			Report	Daily	Visual
03582	Oil and Grease, mg/l			10	Contingent	Grab
51040	<i>E. coli</i> , no/100 ml	242	484		Weekly	Grab
00978	As, TR (µg/l)	Report			Monthly	Composite
	WET, chronic until March 31, 2022					
TKP6C	Static Renewal 7 Day Chronic <i>Pimephales promelas</i>			Report	Quarterly	3 Composites ⁴ / Test*
TKP3B	Static Renewal 7 Day Chronic <i>Ceriodaphnia dubia</i>			Report	Quarterly	3 Composites ⁴ / Test
	WET, chronic beginning April 1, 2022					
TKP6C	Static Renewal 7 Day Chronic <i>Pimephales promelas</i>			NOEC or IC25 \geq IWC ⁵	Quarterly	3 Composites ⁴ / Test*
TKP3B	Static Renewal 7 Day Chronic <i>Ceriodaphnia dubia</i>			NOEC or IC25 \geq IWC ⁵	Quarterly	3 Composites ⁴ / Test

- 1 The 30-day average effluent limitation for flow as identified in this certification, is based on the hydraulic capacity of the facility as outlined in the most recent site approval, and is enforceable under this permit.
- 2 The % removal is based on the arithmetic mean of the BOD5 and TSS concentrations for effluent samples collected during the DMR reporting period, and shall demonstrate a minimum of eighty-five percent (85%) removal of both BOD5 and TSS, as measured by dividing the respective difference between the mean influent and effluent concentrations for the DMR monitoring period by the respective mean influent concentration for the DMR monitoring period, and multiplying the quotient by 100.
- 3 The monitoring frequency and sample type for effluent flow is specified in the certification and is fully enforceable under this permit. This treatment facility is required to have an effluent flow measuring and recording device.
- 4 Composite = 24 hour Composite
- 5 IWC (Instream Waste Concentration) = 37%. See Fact Sheet for more information.

Permitted Feature ID: 300I

Permitted Feature Type: Influent Structure for Mechanical WWTF > 0.25 MGD and Less Than 1.0 MGD

Limit Set: 2

Mechanical Facilities With Design Flows Of Greater Than 0.25 MGD and Less Than 1.0 MGD						
ICIS Code	Parameter	Influent Monitoring			Monitoring Frequency	Sample Type
		30-Day Avg.	7-Day Avg.	Daily Max.		
50050G	Flow, MGD	Report		Report	Continuous ¹	Recorder ¹
00180G	Facility Capacity (% of Hydraulic Capacity) ²	Report			Monthly	Calculated ²
00310G	BOD ₅ , mg/l	Report	Report		Weekly	Composite
00310G	BOD ₅ , lbs/day	Report	Report		Weekly	Calculated
00180G	Facility Capacity (% of Organic Capacity) ²	Report			Monthly	Calculated ²
00530G	Total Suspended Solids, mg/l	Report	Report		Weekly	Composite

- 1 This treatment facility is required to have an influent flow measuring and recording device.
- 2 The % capacity is to be reported against the listed capacities for the hydraulic capacity and for the organic capacities as noted in the Site Approval and as listed in this certification. The percentage should be calculated using the 30-day average values divided by the corresponding capacity, times 100.



Permitted Feature ID: UST1A*
 Permitted Feature Type: Ambient Monitoring Location
 Limit Set: A

ICIS Code	Parameter	Influent Monitoring			Monitoring Frequency	Sample Type
		30-Day Avg.	7-Day Avg.	Daily Max.		
00010	Temp DM (°C)			Report	Continuous	Recorder
00010	Temp MWAT (°C)		Report		Continuous	Recorder

*Feature UST1A is the same monitoring location as was used in the previous Lyons WWTF individual permit (C00020877). As this general permit is for a discharge location downstream of the previous permit, the data collected may not be representative of ambient temperature upstream of the current discharge and may not be used in subsequent renewals of this general permit. Relocating the ambient monitoring location upstream in proximity of the new discharge will ensure that ambient data can be used for calculating assimilative capacity of the receiving water.

1. Chronic WET Testing - Outfall(s): 001A

a. General Chronic WET Testing and Reporting Requirements

The permittee shall conduct the chronic WET test using *Ceriodaphnia dubia* and *Pimephales promelas*, as a static renewal 7-day test using three separate composite samples. The permittee shall conduct each chronic WET test in accordance with the 40 CFR Part 136 methods described in Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Water to Freshwater Organisms, Fourth Edition, October 2002 (EPA-821-R-02-013) or the most current edition.

The following minimum dilution series should be used: 0% effluent (control), IWC/4%, IWC/2%, IWC%, (IWC+100)/2%, and 100% effluent. If the permittee uses more dilutions than prescribed, and accelerated testing is to be performed, the same dilution series shall be used in the accelerated testing (if applicable) as was initially used in the failed test.

Tests shall be done at the frequency listed in Part I.A.2. Test results shall be reported along with the Discharge Monitoring Report (DMR) submitted for the end of the reporting period when the sample was taken. (i.e., WET testing results for the calendar quarter ending March 31 shall be reported with the DMR due April 28, etc.) The permittee shall submit all laboratory statistical summary sheets, summaries of the determination of a valid, invalid or inconclusive test, and copies of the chain of custody forms, along with the DMR for the reporting period.

If a test is considered invalid, the permittee is required to perform additional testing during the monitoring period to obtain a valid test result. Failure to obtain a valid test result during the monitoring period shall result in a violation of the permit for failure to monitor.

b. Violations of the Permit Limit, Failure of One Test Statistical Endpoint and Division Notification

A chronic WET test is considered a violation of a permit limitation when both the NOEC and the IC25, for the same sub-lethal endpoint are at any effluent concentration less than the IWC. This determination is made independently for each test species. The IWC for this permit has been determined to be 37% effluent.

A chronic WET test is considered to have failed one of the two statistical endpoints when either the NOEC or the IC25 are at any effluent concentration less than the IWC. Simultaneous failure of both the NOEC and IC25 for both sub-lethal endpoints, when tests are performed on identical split samples, constitutes only a single violation of the Daily Maximum Effluent Limitation for Chronic WET specified in Part I, §A-2 of this permit. The IWC for this permit has been determined to be 37% effluent.

In the event of a permit violation, or during a report only period when both the NOEC and the IC25 are at any effluent concentration less than the IWC, or when two consecutive reporting periods have resulted in failure of one of the two statistical endpoints (regardless of which statistical endpoints are failed), the permittee must provide written notification to the Division. Such notification should explain whether it was a violation or two consecutive failures of a single endpoint, and must indicate whether accelerated testing or a Toxicity Identification Evaluation or Toxicity Reduction Evaluation (TIE or TRE) is being



performed, unless otherwise exempted, in writing, by the Division. **Notification must be received by the Division within 14 calendar days of the permittee receiving notice of the WET testing results.**

c. Automatic Compliance Response

The permittee is responsible for implementing the automatic compliance response provisions of this permit when one of the following occurs:

- there is a violation of the permit limit (both the NOEC and the IC25 endpoints are less than the applicable IWC)
- during a report only period when both the NOEC and the IC25 are at any effluent concentration less than the IWC
- two consecutive monitoring periods have resulted in failure of one of the two statistical endpoints (either the IC25 or the NOEC) , including during a report-only period. This determination is made independently for each test species.
- the permittee is otherwise informed by the Division that a compliance response is necessary

When one of the above listed events occurs, the following automatic compliance response shall apply. The permittee shall either:

- conduct accelerated testing using the single species found to be more sensitive
- conduct a Toxicity Identification Evaluation (TIE) or a Toxicity Reduction Evaluation (TRE) investigation as described below.

i. Accelerated Testing

If accelerated testing is being performed, testing will be at least once every two weeks for up to five tests with only one test being run at a time, using only the IC25 statistical endpoint to determine if the test passed or failed at the appropriate IWC. Accelerated testing shall continue until; 1) two consecutive tests fail or three of five tests fail, in which case a pattern of toxicity has been demonstrated or 2) two consecutive tests pass or three of five tests pass, in which case no pattern of toxicity has been found. Note that the same dilution series should be used in the accelerated testing as was used in the initial test(s) that result in the accelerated testing requirement.

If accelerated testing is required due to failure of one statistical endpoint in two consecutive monitoring periods, and in both of those failures it was the NOEC endpoint that was failed, then the NOEC shall be the only statistical endpoint used to determine whether the accelerated testing passed or failed at the appropriate IWC. Note that the same dilution series should be used in the accelerated testing as was used in the initial test(s) that result in the accelerated testing requirement.

If no pattern of toxicity is found the toxicity episode is considered to be ended and routine testing is to resume. If a pattern of toxicity is found, a TIE/TRE investigation is to be performed. If a pattern of toxicity is not demonstrated but a significant level of erratic toxicity is found, the Division may require an increased frequency of routine monitoring or some other modified approach. The permittee shall provide written notification of the results within 14 calendar days of completion of the Pattern of Toxicity/No Toxicity demonstration.

ii. Toxicity Identification Evaluation (TIE) or Toxicity Reduction Evaluation (TRE)

If a TIE or a TRE is being performed, the results of the investigation are to be received by the Division within 180 calendar days of the demonstration chronic WET in the routine test, as defined above, or if accelerated testing was performed, the date the pattern of toxicity is demonstrated. A status report is to be provided to the Division at the 60 and 120 calendar day points of the TIE or TRE investigation. The Division may extend the time frame for investigation where reasonable justification exists. A request for an extension must be made in writing and received prior to the 180 calendar day deadline. Such request must include a justification and supporting data for such an extension.

Under a TIE, the permittee may use the time for investigation to conduct a preliminary TIE (PTIE) or move directly into the TIE. A PTIE consists of a brief search for possible sources of WET, where a specific



parameter(s) is reasonably suspected to have caused such toxicity, and could be identified more simply and cost effectively than a formal TIE. If the PTIE allows resolution of the WET incident, the TIE need not necessarily be conducted in its entirety. If, however, WET is not identified or resolved during the PTIE, the TIE must be conducted within the allowed 180 calendar day time frame.

The Division recommends that the EPA guidance documents regarding TIEs be followed. If another method is to be used, this procedure should be submitted to the Division prior to initiating the TIE.

If the pollutant(s) causing toxicity is/are identified, and is/are controlled by a permit effluent limitation(s), this permit may be modified upon request to adjust permit requirements regarding the automatic compliance response.

If the pollutant(s) causing toxicity is/are identified, and is/are not controlled by a permit effluent limitation(s), the Division may develop limitations the parameter(s), and the permit may be reopened to include these limitations.

If the pollutant causing toxicity is not able to be identified, or is unable to be specifically identified, or is not able to be controlled by an effluent limit, the permittee will be required to perform either item 1 or item 2 below.

- 1) Conduct an investigation which demonstrates actual instream aquatic life conditions upstream and downstream of the discharge, or identify, for Division approval, and conduct an alternative investigation which demonstrates the actual instream impact. This should include WET testing and chemical analyses of the ambient water. Depending on the results of the study, the permittee may also be required to identify the control program necessary to eliminate the toxicity and its cost. Data collected may be presented to the WQCC for consideration at the next appropriate triennial review of the stream standards;
- 2) Move to a TRE by identifying the necessary control program or activity and proceed with elimination of the toxicity so as to meet the WET effluent limit.

If toxicity spontaneously disappears in the midst of a TIE, the permittee shall notify the Division within 10 calendar days of such disappearance. The Division may require the permittee to conduct accelerated testing to demonstrate that no pattern of toxicity exists, or may amend the permit to require an increased frequency of WET testing for some period of time. If no pattern of toxicity is demonstrated through the accelerated testing or the increased monitoring frequency, the toxicity incident response will be closed and normal WET testing shall resume.

The control program developed during a TRE consists of the measures determined to be the most feasible to eliminate WET. This may happen through the identification of the toxicant(s) and then a control program aimed specifically at that toxicant(s) or through the identification of more general toxicant treatability processes. A control program is to be developed and submitted to the Division within 180 calendar days of beginning a TRE. Status reports on the TRE are to be provided to the Division at the 60 and 120 calendar day points of the TRE investigation.

If toxicity spontaneously disappears in the midst of a TRE, the permittee shall notify the Division within 10 calendar days of such disappearance. The Division may require the permittee to conduct accelerated testing to demonstrate that no pattern of toxicity exists, or may amend the permit to require an increased frequency for some period of time. If no pattern of toxicity is demonstrated through the accelerated testing or the increased monitoring frequency, the toxicity incident response will be closed and normal WET testing shall resume.

d. Toxicity Reopener

This permit may be reopened and modified to include additional or modified numerical permit limitations, new or modified compliance response requirements, changes in the WET testing protocol, the addition of both acute and chronic WET requirements, or any other conditions related to the control of toxicants.



Modification 1 issued 6/1/2021 **Effective** 6/1/2021

The limit set designations for permitted features 001A and 300I have been changed from limit set 1 to 6 and G to 2, respectively.

Originally issued 5/12/2021 **Effective** 5/13/2021

Expiration Date: This authorization expires upon effective date of the General Permit COG589000 renewal unless otherwise notified by the division.

ADMINISTRATIVELY CONTINUED

This certification under the permit requires that specific actions be performed at designated times. The certification holder is legally obligated to comply with all terms and conditions of the permit.

Approved by
Michelle DeLaria
Permits Unit Manager
Water Quality Control Division



Hi Aaron,

This is excellent news. If you would please submit a summary of the project/final report to address the final milestone for the Activities to meet Dissolved Copper Final Limits compliance schedule on letterhead via email (see milestone description below), we can get that closed out and have documentation in both permit files of the work completed.

At a minimum, the report/letter should include when effluent from the old outfall ceased and when effluent to the new outfall location commenced, as well as data comparing past copper results to the new effluent limit established in the new general permit (COG589156) to demonstrate the facility's ability to meet the limits. I also encourage you to highlight any ongoing source control efforts to address copper as well.

Please let me know if you have any questions or if I can be of further assistance.

Thank you;

Aly Ulibarri
Enforcement Specialist
Clean Water Enforcement