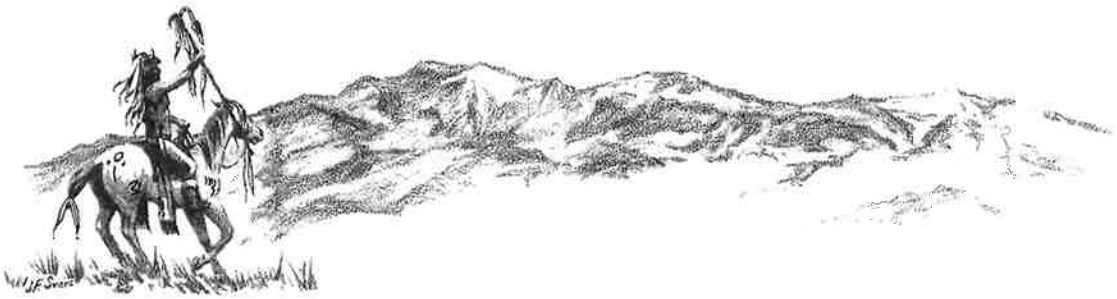


***Please Note Meeting Day Change***
**COLORADO CITY METROPOLITAN DISTRICT**
**PUBLIC NOTICE**
**BOARD OF DIRECTORS REGULAR MEETING**

A regular meeting of the Board of Directors of the Colorado City Metropolitan District will be held **Wednesday**, May 9, 2018 at 6:00 p.m.

1. CALL TO ORDER.
2. PLEDGE OF ALLEGIANCE.
3. QUORUM CHECK.
4. APPROVAL OF AGENDA.
5. APPROVAL OF MINUTES.

Regular Meeting April 11, 2018

6. BILLS PAYABLE
7. READING BY CHAIRPERSON OF THE STATEMENT OF CONDUCT AND DEMEANOR.
8. CITIZENS INPUT.
9. AGENDA ITEMS:

   **a.** Discussion / Approval:
   Colorado City Metropolitan District Waste Water Utility Plan

   **b.** Discussion:
   Water Utility System

10. ATTORNEYS REPORT.
11. NEW BUSINESS.
12. OLD BUSINESS.
13. CORRESPONDENCE.
14. ADJOURNMENT.

The meeting will be held at the Administration Building located at 4497 Bent Brothers Blvd., Colorado City, CO. 81019. Alternate location if so needed will be at the Recreation Center located at 5000 Cuerno Verde, Colorado City, CO. 81019. The public is invited to attend.

Posted May 4, 2018
Board of Directors

# COLORADO CITY METRO DISTRICT/TOWN OF RYE
# WASTEWATER UTILITY PLAN

Supplement for

Pueblo County and Pueblo Area Council of Governments

PACOG 2012 Water Quality Management Plan

Adopted December 2012

May 2018

**Prepared by:**

**JDS-Hydro Consultants, Inc.**

**545 E. Pikes Peak Ave. Suite 300**

**Colorado Springs, CO 80903**

**719-227-0072**

**Colorado City Metropolitan District/Town of Rye Wastewater Utility Plan**
**Table of Contents**

## List of Figures



## List of Tables

## 1.0 Facility Summary

Colorado City Metropolitan District (CCMD) and the Town of Rye are located in southwestern Pueblo County, Colorado. The wastewater facility is located within the district boundaries of CCMD. The community of both municipalities consists mostly of residences, ranches, and few commercial properties. In addition, the Town of Rye also features the local high school and grade school (both of which serve Rye and Colorado City students). One regional wastewater treatment facility (WWTF) is responsible for the treatment of wastewater for both communities under discharge permit #CO0021121. The CCMD WWTF is located at 3160 Applewood Drive, Colorado City, CO 81019 and is owned and operated by Colorado City Metropolitan District. The coordinates for the facility are 37° 57' 02" latitude N, 104° 48' 21" longitude W. The lagoon wastewater treatment facility for Rye was decommissioned by Colorado Department of Public Health and Environment in 2010 and a metered connection was constructed between the Town of Rye and CCMD to send wastewater to the CCMD WWTF.

**Figure 1 – Colorado City Metropolitan District Wastewater Treatment Facility**


### 1.1 Colorado City Metropolitan District

Colorado City Metropolitan District was established in 1963 as the Colorado City Development Company and is located about 25 miles southwest of Pueblo, CO. The 2010 Census states the population in Colorado City to be 2193 residents. CCMD has seen growth annually from 3 – 10% since 2010 with the largest increases experienced in 2016 and 2017. The majority of the water provided to the city comes from Greenhorn Creek and is stored in Beckwith Reservoir and then treated at the water plant on the east side of the reservoir. The Cold Spring well can be used to augment supply water on an as needed basis. The water system can produce up to 2.3 MGD which is sufficient to supply the current population's peak water demands within the District. CCMD provides many municipal services to its residents including water and wastewater services. Service lines, water mains, collection manholes, collection lines, water plants, wells, as well as the WWTF are all operated and maintained by employees of CCMD. There are approximately 69 miles of gravity collection pipe within the District boundaries. While some of the gravity lines have been replaced, many of the heavily populated areas within the District are

still served by the original clay pipes. Currently there are no lift stations within the CCMD district boundary.

The wastewater treatment facility that serves both the Town of Rye and CCMD is located within the CCMD and is operated by CCMD employees. Currently, the plant is rated for 0.4 MGD and with current flows reaching 0.4 MGD according to the EPA's ECHO system. This plant was upgraded from a lagoon system to a sequencing batch reactor system (SBR) in 2005. The facility is permitted to discharge to Greenhorn Creek through permit #CO 0021121 issued September 2014 and set to expire October 31, 2019. Treated effluent from the WWTF is discharged to Greenhorn Creek then flows 19 miles to the Saint Charles River which then flows approximately 12 miles to join the Arkansas River slightly northwest of Vineland, CO.

## 1.2 Town of Rye

Incorporated in 1937, the Town of Rye is located approximately 35 miles southwest of Pueblo, CO and directly west of Colorado City. The population of Rye, based on the 2010 US Census, consists of approximately 160 residents as well as two schools with approximately 600 students. Minimal to negative growth is expected in this town due to land and water limitations. Water is supplied to Rye from Greenhorn Creek through the use of a water treatment plant where it is filtered and then disinfected before distribution. The Town of Rye can produce 75,000 gpd which is sufficient to supply water to all the residents and students during peak demand.

Central sewer service is provided to residents within the Town of Rye. All sewer lines within the Town of Rye flow by gravity to the CCMD collection system. There are no lift stations located within the Town of Rye collections system. All manholes and sewer lines are maintained by Town of Rye staff. The metered interconnect between Rye and Colorado City is located at the Colorado City service area boundary seen in **Figure 2**. Of note, the accuracy of the meter employed at the sewer connection between Rye and Colorado City has come into question. Mediation between CCMD and the Town of Rye is currently in progress as to the accuracy of the meter and the quantity of wastewater sent to the CCMD WWTF. Both parties anticipate a resolution in the near future.

The Town of Rye has no obligations or responsibilities for the operation and maintenance of the CCMD WWTF. The Town of Rye pays a fee to CCMD based upon the amount of wastewater delivered from Rye to CCMD but has no other responsibilities for the CCMD's collection, treatment or discharge of the wastewater treated by the CCMD WWTF.

## 1.3 Utility Plan Document Structure

The Colorado City Metropolitan District/Town of Rye Wastewater Utility Plan contains the type of information that may be used in the Colorado Site Application Process (Guidance Document for the Site Location and Design Approval Regulations, For Domestic Wastewater Treatment Works. Regulation Number 22, November 2007). This utility plan is a stand-alone supplement to the PACOG 2012 Water Quality Management Plan (PACOG 2012 Guidance Plan, December 2012).

The Colorado City Metropolitan District/Town of Rye Wastewater Utility Plan addresses the utility service area for the existing wastewater treatment works. This WWUP provides basic information for the wastewater treatment works plan related to:

1. Treatment works information to assist in preparing site application amendments or discharge permits;

2. Available water quality data and assessments. Generally, this information will mirror available water quality assessment reports developed by the Water Quality Control Division and may include, but is not limited to:

    a. Preliminary Effluent Limits (PELs),
    b. Copy of issued permit limits,
    c. Summary of the WQCD Water Quality Assessment (WQA) analysis,
    d. Low flow analysis,
    e. Pollutants of concern,
    f. 305(b) listings,
    g. Monitoring and Evaluation listing,
    h. Temporary modifications,
    i. Recommended or adopted total maximum daily loads (TMDLs),
    j. Local or PACOG studies and water quality analysis, and
    k. Permittee generated technical memorandums and recommendations.

3. Wastewater management strategies for a treatment works, including collection systems;

4. Facility information to assist in preparing total maximum daily loads, waste-load allocations and/or other watershed planning efforts, as appropriate or necessary;

5. Assurance that adjacent utility plans do not overlap and provides a regional consistency statement.

6. Existing demographic or updated population information.

7. Service area map and/or any expected future expansions of service area.

The Colorado City Metropolitan District/Town of Rye Wastewater Utility Plan is referenced in the PACOG 2012 Water Quality Management Plan. The Colorado City Metropolitan District/Town of Rye Utility plan is maintained by the utility for planning and permitting purposes and can be amended by the utility as necessary and appropriate. As such, the PACOG 2012 Plan may not be updated when a utility plan is amended and the most current utility plan remains the controlling document for site application and permitting purpose as referenced. This process is intended to facilitate the timely processing of this utility plan.

A common table of contents has been established for all wastewater utility plans that are designated as supplements to the PACOG 2012 Water Quality Management Plan (December 2012). As such, there may not be any available information for a specific table of content topic and the utility plan will simply note that no information is available or in some cases un-necessary for a given topic.

This wastewater utility plan contains available information and engineering or other water quality documents, or summaries from the Colorado wastewater discharge permit. Not all information

generally required for the site application process may be available in this document. The utility plan is designed to be updated and amended by the utility or community as necessary.

1.4 Certification of Consistency with 208 Plan

The Colorado City Metropolitan District/Town of Rye Wastewater Utility Plan has been reviewed and found consistent with the PACOG 2012 Water Quality Management Plan as approved by PACOG on December 6, 2012. The consistency review determined that the Colorado City Metropolitan District/Town of Rye wastewater utility plan is not in conflict with any adjacent wastewater utility plans, service area and this document meets the intent of a 208 Plan. This wastewater treatment facility has been responsible for treating both Colorado City Metropolitan District and the Town of Rye wastewater since consolidation in 2010. There are no other entities that are to be included at the CCMD WWTF through the planning horizon of 2037.

1.5 Facility Name and Location

Colorado City Metropolitan District Wastewater Treatment Facility, located in the NE 1/4 of the NW 1/4 of S20, T24S, R66W; 3160 Applewood Drive, Colorado City, CO 81019; at 37° 57' 02" latitude North and 104° 48' 21" longitude west, is authorized to discharge to Greenhorn Creek under permit number CO0021121. The treated effluent from the WWTF is discharged to Greenhorn Creek then flows 19 miles to the Saint Charles River which then flow approximately 12 miles to join the Arkansas River slightly northwest of Vineland, CO.

1.5.1 Colorado City Metropolitan District Contact List

**Table 1 – Colorado City Metropolitan District Contact List**

| | |
|---|---|
| District Manager | David Valdez (colocitymanager@ghvalley.net)<br>4497 Bent Brothers Blvd.<br>Colorado City, CO 81019<br>**Phone** (719) 676-3172 |
| Certified Operator in Responsible Charge | David Lewis, CWP<br>PO Box 863<br>Firestone, CO 80520<br>**Phone** (303) 619-7692 |
| Wastewater Plant Operator | Gary Golladay (colocityww@ghvalley.net)<br>3160 Applewood Drive<br>Colorado City, CO 81019<br>**Phone Cell** (719) 676-3396 |
| Administrative Office | Karen Davis (colocityreception@ghvalley.net)<br>4497 Bent Brothers Blvd.<br>Colorado City, CO 81019<br>**Phone** (719) 676-3172 |
| Director of Public Works | Donny Schied (colocityutil@ghvalley.net)<br>4497 Bent Brothers Blvd.<br>Colorado City, CO 81019<br>**Phone** (719) 676-3172 |

### 1.5.2 Town of Rye Contact List

**Table 2 - Town of Rye Contact List**

| | |
|---|---|
| Mayor | Mickey Smith (Mayormls325@gmail.com)<br>PO Box 236<br>Rye, CO 81069<br>**Cell Phone** (719) 214-9662 |
| Town Clerk | Deb Decker (rye.town.clerk@gmail.com)<br>**Phone** (719) 489-2011 |
| Board Trustees | Sonny Jackson (windjam22@aol.com)<br>Marty Rahl (ryerahl1948@gmail.com)<br>Kirstin Nelson (ryenelson16@gmail.com)<br>Sam Serracino (swhomesam@yahoo.com) |

### 1.6 Summary Table from 208 Plan

**Table 3 - 208 Plan Summary Report (As Updated)**

| **Colorado City Metro District** | |
|---|---|
| **TYPE OF PERMIT** | Domestic - Major Municipal, Mechanical Plant, Seventh Renewal |
| **Permit Number:** | CO-0021121 |
| **Permit Issue Date** | 29-Sep-14 |
| **Site Approval** | 4628 |
| **Permit Expire Date** | 31-Oct-19 |
| **Facility Location:** | 3160 Applewood Drive, Colorado City, CO |
| **SIC Code:** | 4952 Sewerage Systems |
| **Facility Classification:** | Class B |
| **Facility Hydraulic Capacity:** | 0.4 MGD |
| **Facility Organic Capacity:** | 721 lbs $BOD_5$/day |
| **Major Changes from Last Renewal** | • Permittee is required to sample for pretreatment pollutants annually. The Division added metals, total phenols, and cyanide sampling analysis requirements in this permit (Part 1.A.2). For reporting purposes, the Division added a limit set "P" to indicate that these parameters are associated with the pretreatment program and for data entry into EPA's ICIS database.<br>• An industrial user (IU) survey requirement has been added to the permit.<br>• An inflow and infiltration (I/I) reduction requirement has been added to the permit. |
| **Treatment Works:** | Influent auger for screenings removal, low functioning cyclone type grit removal, influent flow measuring device with a capacity of 5 MGD, three SBR basins, three secondary effluent EQ basins, ultra-violet disinfection system, three aerated digester basins (two in operation) |

| Colorado City Metro District | |
|---|---|
| **Lift Stations:** | There are no lift stations in the area. |
| **Chemical Usage** | None |
| **Biosolids Treatment and Disposal** | Biosolids are treated in the aerobic digesters and removed weekly by Veris. |
| **Compliance Schedules** | No compliance schedules were included in the most recent permit. However, two special studies were initiated as requirements for the new permit, listed as follows:<br>• An industrial user (IU) survey requirement has been added to the permit.<br>• An inflow and infiltration (I/I) reduction requirement has been added to the permit. |
| **Infiltration/Inflow (I/I)** | Evaluation of system was initiated in 2015 and will be complete by 2019. |
| **Service Area:** | Colorado City Metropolitan District and Town of Rye are serviced at the WWTF. Total service area is approximately 39 square miles (CCMD = 34 square miles / Town of Rye = 5 square miles) |
| **2010 Service Area Population Estimate:** | Colorado City = 2,193<br>Rye = 160 |
| **2017 Septic Systems (OWTS) within CCMD and Rye** | 40 – CCMD; 4 - Rye |
| **Accepts septage from OWTS systems** | No |
| **2037 Service Area Population Estimate:** | 3960 with 3% growth for CCMD, 0% for Rye |
| **2037 Septic Systems within District** | 100 – CCMD; 4 - Rye |
| **Persons Per Sewer Tap:** | 1.78 |
| **Per Capita Wastewater Flow Estimates:** | 185 gallons per person per day (high per CDPHE standards) |
| **2017 Average Daily Effluent Treated:** | Minimum 3-mo flow = 0.29 MGD, Maximum 3-mo flow = 0.40 MGD |
| **Plant Expansion:** | Plant expansion planning to begin in 2019 |
| **Discharge Point:** | 001A / 001P following disinfection and prior to entering Greenhorn Creek 37°57'02"N, 104°48'21" |
| **Waterbody Identification:** | *COARMA09 Greenhorn Creek* |
| **Receiving Water Designation:** | *COARMA09 Greenhorn Creek.* Use Protected |
| **Receiving Water Classification:** | *COARMA09 Greenhorn Creek* Aquatic Life Warm 2, Recreation Class E, Agriculture |
| **303(d) Listing Regulation #93** | The final receiving stream to which the Colorado City Metropolitan District WWTF discharges is not listed on the State's 303(d) list. This stream is listed for monitoring and evaluation for dissolved selenium. |

| Colorado City Metro District | |
|---|---|
| | According to the Division standard procedure, the Division's Environmental Data Unit investigates issues of water quality standard exceedances. If it is determined that the water body is impaired, the segment will be added to the 303 (d) list. |
| **Temporary Modifications** | Total Recoverable Arsenic Chronic=Hybrid until 12/31/21 |
| **Water Quality Pollutants of Concern** | Total Residual Chlorine, *E. coli,* and the following pollutants to identify potential industrial users (TOTAL for all compounds): Arsenic, Cadmium, Chromium, Copper, Lead, Mercury, Molybdenum, Nickel, Selenium, Silver, Zinc, Cyanide, Phenols |

## 1.7 Existing Wastewater Treatment Facility

### 1.7.1 Treatment Process

This facility consists of a headworks facility featuring an auger and pista grit for the purpose of screening and grit removal. Following the headworks is an in-channel flume with associated ultrasonic level monitor to provide real-time reading and recording of inflows. After flow monitoring incoming wastewater flows into a splitter box that diverts into three sequencing batch reactors. These reactors are automated using a PLC timer to aerate, settle, and then decant every 80 minutes. The decanted effluent is drained into an equalizing basin and then pumped over to the UV disinfection building. Effluent is then disinfected, flow monitored through another ultrasonic level read Parshall flume, and then discharged into Greenhorn Creek. The solids from the bottom of the SBR basins are pumped into one of three digester tanks where the solids are gravity settled. The centrate from the digester tanks is pumped back to the headworks and the liquid solids are hauled separated and hauled approximately every 18 days. This facility has not modified or improved any processes since Site Approval 4628 in 2005. According to Site Approval 4628, the hydraulic design capacity of the facility was estimated to be 0.6 MGD (0.93 cfs). However, there is an amendment to the site application dated November 4, 2005 specifying that the design capacity was reduced to 0.4 MGD due to lack of available funds during construction. This is referenced in another letter from the Division to the Colorado City Metropolitan District dated November 5, 2004. See **Figure 3** for a schematic of the existing treatment processes at the existing WWTF. Note that the legend states the plant is rated for 0.6 MGD, however, due to financial restrictions, the plant was only completed to 0.4 MGD daily average.

### 1.7.2 Discharge Point

Colorado City Metropolitan District is authorized to discharge from the Colorado City Metropolitan District WWTF (located at 37° 57' 03" latitude N, 104° 48' 22" longitude W) at the following discharge point - 37° 57' 02" latitude N, 104° 48' 21" longitude W according to the CCMD WWTF Discharge Permit Fact Sheet. The WWTF discharges to Greenhorn Creek, which ultimately discharges to the Saint Charles River 19 miles downstream. There are occasions where Greenhorn Creek is a dry stream upstream of the WWTF discharge point, which represents the low flow condition in the Water Quality Assessment completed by CDPHE's Water Quality Control Division. See **Figure 5** discharge location into Greenhorn Creek and **Figure 6** for confluence of Greenhorn Creek and Saint Charles River.

**Figure 4 – CCMD WWTP Effluent Outfall**

**Figure 5 – Effluent Discharge to Greenhorn Creek**

**Figure 6 – Confluence Greenhorn Creek and Saint Charles River**


1.8 20-year Capacity

Based on the November 4, 2005 amendment to the Site Approval 4628, the design capacity of the domestic wastewater treatment works as 0.4 million gallons per day for the 30-day hydraulic flow and 721 pounds $BOD_5$ per day for organic loading (30-day average). According to documented flows to the WWTF the CCMD facility is currently at its rated capacity.

1.8.1 Timing of Expansion

As recently as April 2017 the WWTF has experienced flows at or above the rated WWTF's capacity of 0.4 MGD. At 80% hydraulic capacity or organic loading of permitted levels, the Colorado Department of Public Health and Environment requires the managing agency to begin evaluation and design of capacity expansion. The Colorado City Metropolitan District currently is evaluating the impact of potential I/I issues on influent flows to the WWTF. Calculated flows per capita (being as high as 185 gpdpc) and recorded high inflows to the WWTF during high rainfall events would seem to indicate that I/I levels may have an impact on elevated inflows, especially during high run off and rain events. However, the CCMD service area has recently experienced both residential and commercial growth which may also be contributing to the elevated influent flows to the WWTF. It is likely that both conditions are contributing factors to the increasing flows at the WWTF, and CCMD may need to consider an expansion to their WWTF in the near future. CCMD is currently in discussions with the WQCD regarding this very topic. As mentioned above, CCMD and the Town of Rye are currently in mediation regarding wastewater quantities being transferred to CCMD and what relative costs should be allocated to Rye for the collection and processing of the waste from the Town of Rye. Ultimately plant expansion will require that both entities are in agreement as to the expense to each for such expansion.

1.8.2 Implementation and Scheduling

As mentioned in Section 1.8.1. the CCMD WWTF is currently experiencing inflows at or above its rated capacity of 0.4 MGD for a variety of reasons. Whether CCMD / Rye can address these elevated flows through reductions in I/I exclusively, or if the municipalities must proceed with a WWTF expansion is a topic of conversation which CCMD is currently having with the WQCD. The implementation and timing of a proposed expansion may ultimately be determined through input provided by the WQCD through a compliance schedule.

Other factors which may impact a proposed WWTF expansion might involve Regulation No. 85 and Regulation No. 31. WQCC Regulation No. 85, the new interim nutrients management control regulation, includes technology based effluent limits for total inorganic nitrogen and total phosphorus that currently, or will in the future, apply to many domestic wastewater dischargers to state surface waters. These effluent limits for dischargers are to start being implemented in permitting actions as of July 1, 2013.

Based on Regulation No. 85, there are direct exemptions from these limitations for smaller facilities that discharge less than 1 million gallons per day (MGD) or a domestic facility owned by a disadvantaged community. Since the design capacity of the CCMD WWTF is 0.4 MGD, the facility is not currently required to address the new technology based effluent limits. However, CCMD will continued to conduct effluent nutrient monitoring independent from discharge permit limits per the requirements of Regulation No. 85.

The Commission has adopted a new Section 31.17 in the Basic Standards and Methodologies for Surface Water (known as Regulation No. 31) to address nutrients in the future. Section 31.17 establishes interim numerical values for phosphorus, nitrogen, and chlorophyll a that are deemed to be suitable for the protection of identified categories and subcategories of constituents of classified uses of Colorado surface waters. These numerical values identify levels that the current available scientific information indicates would be protective of the corresponding categories of beneficial use. Of note, the commission is still deliberating on the final effluent limits to be associated with Regulation #31 at the writing of this Utility Plan. However, the Commission has elected to delay the implementation of Regulation #31 nutrients limits from 2022 to 2027. It is anticipated that the implementation of Regulation No. 31 nutrients limits into the Arkansas Basin will have some impact on the CCMD WWTF.

In anticipation of the pending Regulation No. 31 effluent limits, the Colorado City Metropolitan District is eligible for certain incentives in their upcoming discharge permit(s) / compliance schedules if they are able to meet certain nutrient effluent limit milestones prior to Reg. 31 incorporation dates. For every month a WWTF of any size meets a median TP of $\leq 0.7$ mg/L and TIN of $\leq 7$ mg/L, the facility will earn 1 month extension to institute tertiary treatment at the facility for a discharge permit renewal after 2027. To begin to accumulate these credits, a Nutrient Reduction Plan Report must be filed with CDPHE by 12/31/19, samples of both nutrients attained each month, and an annual report filed with CDPHE beginning in 2020. The maximum compliance schedule extension that can be attained per nutrient is 7 ½ years or a total of 10 years for both

nutrients. Both nutrients must be reduced to receive a compliance schedule extension for both nutrients. If only one nutrient can be reduced, a compliance schedule extension will only be applied for the reduced nutrient.

## 2.0 General Planning

### 2.1 Management Agency

Both the Colorado City Metropolitan District (CCMD) and the Town of Rye are Water Quality Management agencies as designated by the Governor to implement the PACOG 2012 Plan. CCMD and the Town of Rye have the legal, institutional, managerial, and financial capacity necessary to carry out its management agency responsibilities. CCMD and the Town of Rye can implement six authorities and responsibilities:

- Implement policies and recommendations and assure implementation of the PACOG 2012 Plan and the CCMD wastewater utility plan.
- Effectively manage wastewater treatment and oversee operating and collection agencies within the service area of the Town of Rye and CCMD.
- Accept and utilize grants, loans, and funds from other sources for water quality management purposes.
- Raise revenues, including the assessment of appropriate fees and charges, and incur short- and long-term indebtedness.
- Where applicable, accept industrial wastewater for treatment and manage pretreatment programs.
- Develop and maintain wastewater utility plans for designated operating agencies, if appropriate.

### 2.2 Regional Water Quality Policy

A source water protection plan for the Greenhorn Valley (which includes Colorado City Metropolitan District, Town of Rye, San Isabel and the surrounding community) was completed by the Colorado Rural Water Association in 2014. This report documents the water sources for the communities in the Greenhorn Valley as well as how best to protect these sources from pollution. Possible contamination sources are listed as well as ways to protect the community from the pollutants effecting the regional water quality. Both communities of Rye and CCMD obtain the majority of their drinking water from the surface waters of Greenhorn Creek. It is in the best interest of both communities to protect this water source for immediate consumption as well as protecting this source for generations to come. This document is to be reviewed every 3-5 years.

### 2.3 Population and Demographics

#### 2.3.1 Population Forecast for 208 Plan

A component of the PACOG 2017 Wastewater Utility Plan is a set of population projections that extends out to the planning horizon of 2037. Of note, the last set of

population projections prepared for CCMD and the Town of Rye were developed in the 2001 Site Application Amendment and Engineering Report for the Colorado City Metropolitan District Wastewater Treatment Plant Improvements Project. In this report, ultimate EQR's (Equivalent Residential Units) are estimated for both Colorado City and Rye so that an ultimate hydraulic capacity for the WWTF improvements could be developed. From the 2001 Site Application Amendment an assumed EQR growth of 50 EQR's per year was assumed. From 2001 to 2010 this estimate was relatively accurate as there were roughly this many EQR's existing within CCMD boundaries at this time. Though this estimate may be on the aggressive side it does reflect the potential commercial and residential growth that the District is experiencing right now and corroborates the estimated flows generated at the WWTF. The assumed growth for Rye of 6 EQR's over 20-years is probably accurate. The EQR growth potential from that report is shown below in Table 3.

Currently, water and sewer service are provided only to those properties that are connected to the existing system. The original development of Colorado City did not include the construction of water or sewer mains to future lots or development. Currently, if a prospective property buyer wants to purchase a property within the CCMD service boundary they must pay for the extension of any water or sewer mains in the area, plus the physical taps for both services. This arrangement has proven to restrict substantial residential growth in the past. However, due to Colorado City's policy on marijuana use, there is elevated interest in establishing "grow facilities" for commercial development within the city limits with the potential for 5 such facilities moving into the Colorado City service area within the next 5 years.

**Table 4 – Colorado City / Rye EQR Projections Used in 2001 Site Application Amendment**

| | 2001 | 2007 | 2011 | 2016 | 2021 | 2031 | 2037 |
|---|---|---|---|---|---|---|---|
| **Colorado City[1]** | 910 | 1208 | 1410 | 1535 | 1660 | 1910 | 2060 |
| **Rye[2]** | 75 | 76 | 78 | 79 | 80 | 83 | 85 |

Note 1 – At an assumed growth rate of 50 EQR / YR
Note 2 – At an assumed growth rate of 6 ERs over 20-years

## 2.4 Service Area Designation and Maps

### 2.4.1 Colorado City Metropolitan District

The area representing Colorado City Metro District covers approximately 34 square miles and consists mostly of residential and farm property. Most of the property is west of I-25 on the north and south sides of highway 165. Approximately 5 square miles of the District lie just east of I-25 and are only served by CCMD with water, but no central wastewater service. See **Figure 2** for a representation of the boundaries of service area and where water and sewer services are provided. As mentioned above, the original Colorado City development did not extend water or sewer mains beyond those areas which were immediately developed in 1963. While there are currently only 2,193 people and 1,410 EQRs in 2010, there are 1000s available lots for development. However, extension of water mains and collection lines are the responsibility of the prospective homeowners, not the District. Lago Vista is the only development currently in progress.

These lots are connected to the water system and are allowed septic systems for waste due to the inability to connect to the collection system by gravity feed.

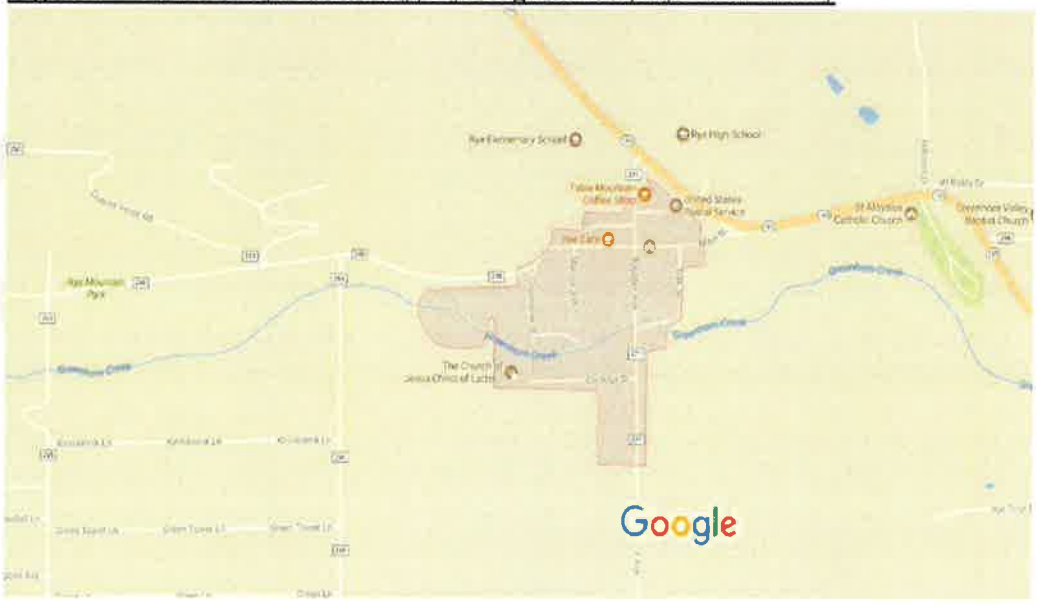
The collection system for CCMD is all gravity fed with the WWTF at the lowest elevation within the collection basin. There are approximately 650 man-holes within the service area and 69 miles of gravity sewer lines, much of which is original vitrified clay lines. Some of the old clay pipe service lines and mains have been replaced, though much of the original system still remains and consists of old clay pipe backfilled with shale. Some of this old clay pipe may be contributing to the I/I issue discussed in previous sections, especially those constructed near Greenhorn Creek.

A map of CCMD wastewater collection system can be seen in **Figure 2**.

### 2.4.2 Town of Rye

The Town of Rye serves approximately 150 water taps and provides wastewater service to those taps as well. The incorporated boundary of Rye, (approximately 0.09 square miles) represents only a small fraction of the service area the town actually provides wastewater service. The incorporated town boundaries of Rye can be seen in Figure 6. Rye High School and Rye Elementary School with 270 and 350 students respectively, are also included in the wastewater collection area. The sewage from Rye is consolidated just east of the town's boundary into one sewer main and gravity fed over approximately 3 miles to a metered interconnect into the CCMD wastewater collection system.

**Figure 7 – Town of Rye Boundary, Rye High School, Rye Elementary**




### 2.4.3 Regional Facility

The Colorado City Metropolitan District (CCMD) WWTF is considered a Regional Facility. In 2010, the Town of Rye decommissioned its wastewater lagoons and entered into an intergovernmental agreement (IGA) with CCMD to send wastewater to the

CCMD WWTF for treatment. The Town of Rye has a metered interconnect with the CCMD connections system, which CCMD uses to measure and bill Rye for transferred flows into the Regional CCMD WWTF.

## 2.5 Preferred Wastewater Service Strategies

### 2.5.1 Wastewater Reuse

Neither the Colorado City Metropolitan District nor the Town of Rye employ any wastewater reuse policies. Neither entity plans to employ any reuse policies in the future.

### 2.5.2 Water Quality or Wastewater Components Evaluated

The Colorado Water Quality Control Division (WQCD) identified the following pollutants of concern to be evaluated for the Colorado City Metropolitan District (CCMD) WWTP in the 2014 Water Quality Assessment (WQA) for Greenhorn Creek:

- Total Residual Chlorine
- E. Coli
- Ammonia

Of note, there are no other existing public water supply uses for the CCMD WWTF's receiving stream. With the downstream segment COARMAC6b being over 18 miles away, the nitrate standard was not considered as part of the WQA. However, the Division did indicate in its 2014 discharge permit rationale that it is concerned with certain DMR excursions of E. coli and ammonia. Because of the nature of some of the violations by Colorado City there is concern that some of the constituents related to commercial may meet the criteria of an Industrial User Survey (IUS). The results of the IUS may necessitate pretreatment sampling and ultimately a pretreatment program. The Division has mandated once per year sampling and analysis of the following pollutants to identify, characterize, and control sources of pollutants to the WWTF:

| | |
|---|---|
| Total Arsenic | Total Nickel |
| Total Cadmium | Total Selenium |
| Total Chromium | Total Silver |
| Total Copper | Total Zinc |
| Total Lead | Total Cyanide |
| Total Mercury | Total Phenols |
| Total Molybdenum | |

### 2.5.3 Water Quality Control Commission Stream Classifications and Standards

Greenhorn Creek (Middle Arkansas Segment 9) is classified by the WQCC for Aquatic Life Warm 2, Recreation Class E, Water Supply and Agriculture. The next stream segment, COARMA06b, is over 18 miles downstream from the Colorado City WWTF, with numerous streams that flow into Greenhorn Creek prior to the confluence with the Saint Charles River. Thus, no additional TMDLs are currently being considered outside of the basin-specific numeric standards adopted for particular stream segments adopted by the WQCC. Of note, there is a temporary modification for chronic arsenic standards as As (Ch) = hybrid until 12/31/21. While the segment is not currently listed in Colorado's Section 303(d) list of impaired waters, it is listed in the Monitoring and

Evaluation List for dissolved selenium. If it is determined that the water body is impaired for dissolved selenium the segment will be added to the 303 (d) list.

2.5.4 The Colorado Division of Water Resources administers water rights throughout the state. However, neither the Colorado Division of Water Resources or the United States Geological Service operates or maintains a stream gauge on Greenhorn Creek. To estimate low flows on Greenhorn Creek for its Water Quality Assessment the Division has asked Colorado Metro District staff to obtain manual flow data. According to CCMD wastewater staff, Greenhorn Creek is an intermittent stream with the WWTF discharge comprising almost 100% of the flow in the dry stream bed as some junctures. Greenhorn Creek's low flow value is subsequently zero (0) as the receiving stream can go dry at certain seasonal junctures.

## 3.0 Wastewater Characterization

### 3.1 2014 Certification by WQCD

The Water Quality Control Division (the Division) has reviewed the permit renewal application for the Colorado Center Metropolitan District (CCMD) WWTF and granted the facility a permit to discharge treated wastewater from the above said facility. As noted above in Section 2.5.4. Greenhorn Creek low flows are considered to be zero (0). Thus, the ratio of the low flow of Greenhorn Creek to the Colorado City Metropolitan District WWTF design flow was estimated to be 0:1. Subsequently, due to the in-stream low flow of zero the assimilative capacities during times of low flow are not affected by nearby contributions, nor were considered in the WQA modeling.

#### 3.1.1. Facility Information

Treatment Facility Description: The CCMD WWTF treatment process consists of the following elements: (obtain from CCMD site visit). Pursuant to Section 100.5.2. of the Water and Wastewater Facility Operator Certification Requirements, this facility will require a Class C certified operator. As mentioned in Section 1.7.1. previously, the design capacity of the facility is 0.60 MGD (0.93 cfs). However, there is an amendment to the site application dated November 4, 2005. The amendment specifies that the design capacity was reduced to 0.40 MGD due to the lack of available funds. This is referenced in another letter from the Division to the Colorado City Metropolitan District dated November 5, 2004.

Chemical Usage – The permittee did not specify any chemicals for use in wastewater effluent that may be discharged. On this basis, no chemicals are approved under this permit. Prior to use of any additional chemicals, the permittee must submit a request for approval that includes the most current Material Safety Data Sheet (MSDS) for that chemical. Until approved, use of any chemical in waters that may be discharged could result in a discharge of pollutants not authorized under the permit.

Lift Stations – There are no lift stations in the service area.

Compliance Review – a review of the CCMD monitoring history between January 2009 through July 2017 revealed apparent violations of the permit. A summary of these violations includes the following:

**Table 5 – Summary of Permit Violations (influent / effluent parameters)**
**January 2009 through July 2017**

| Constituent | Limit (Avg/Max/AD) | Number of Excursions |
|---|---|---|
| Influent Flow (MGD) | Report/Report | |
| Effluent Flow (MGD) | 0.4/NA | 3 |
| pH (su) | 6.5 min / 9.0 max | 1 |
| E.coli (#/100 ml) | 126/252 | 13 |
| TRC (mg/L) | 0.011/0.019 | 0 |
| NH3 as N, Tot (mg/L) | NA/NA | 0 |
| NH3 as N, Tot (mg/L) Jan | 5/24.9 | 1 |
| NH3 as N, Tot (mg/L) Feb | 5.2/25.2 | 0 |
| NH3 as N, Tot (mg/L) Mar | 4.9/26.8 | 1 |
| NH3 as N, Tot (mg/L) Apr | 4.5/26.5 | 2 |
| NH3 as N, Tot (mg/L) May | 4.2/28.5 | 1 |
| NH3 as N, Tot (mg/L) Jun | 3.1/22.9 | 1 |
| NH3 as N, Tot (mg/L) Jul | 2.9/26.2 | 0 |
| NH3 as N, Tot (mg/L) Aug | 2.9/26.2 | 0 |
| NH3 as N, Tot (mg/L) Sep | 3/24.9 | 0 |
| NH3 as N, Tot (mg/L) Oct | 3.4/23.6 | 0 |
| NH3 as N, Tot (mg/L) Nov | 4/22.6 | 0 |
| NH3 as N, Tot (mg/L) Dec | 4.9/25.8 | 0 |
| BOD5, Influent (mg/l) | Report | 0 |
| BOD5, Influent (lb/day) | Report | 0 |
| BOD5, Effluent (mg/l) | 30/45 | 0 |
| BOD5 (% removal) | 85/NA | 1 |
| TSS, influent (mg/l) | Report | 0 |
| TSS, effluent (mg/l) | 30/45 | 0 |
| TSS (% removal) | 85/NA | 0 |
| Oil and Grease (mg/l) | Visual | 0 |

The Colorado City Metropolitan District has been in contact with the WQCD regarding the variety of excursions experienced at the WWTF over the years. For the various excursions experienced, CCMD has provided the information summarized below:

Effluent Flow – the CCMD WWTF has experienced elevated flows through the WWTF which have approached or exceeded the design capacity of the WWTF on a few different occasions since 2014. The WQCD has noted these elevated flows, as well as the fact that the average influent flow per capita entered in the discharge permit application exceeded the state average (120 gallons per day per capita). One potential source of the abnormally high inflow per capita is suspected infiltration and inflow (I/I). The Division subsequently directed CCMD to conduct a special study in the 2014 discharge permit for the purpose of completing an I/I study by 2019.

E.coli – according to CCMD through correspondence with the WQCD, E.coli violations during the months of February, March, and April 2014 were due to the presence of an unknown toxic discharge into the influent that was hindering the nitrification process and

pathogen destruction process. CCMD indicated in letters attached to DMR reports that they had taken treatment steps to mitigate these exceedances. Continued exceedances of E.coli have occurred on occasion through July 2017. CCMD has submitted explanations of these exceedances attributing them to the continuing presence of an unknown toxic substance in the influent. CCMD suspects unpermitted discharges into the collections system and is further investigating this. The WQCD is not pursuing enforcement action at this time. However, the Division required CCMD to conduce another special study in the 2014 discharge permit requiring CCMD to identify all significant industrial users by sending out survey forms to all suspected dischargers. From the results of the study CCMD has initiated a pretreatment program for a select number of commercial dischargers.

Ammonia – CCMD also identified the toxic discharges into the collections system as a reason for elevated ammonia levels in February, March, and April 2014. However, the CCMD WWTF has not encountered any excursions in 30-day average or daily maximum ammonia limits at the WWTF since June 2014.

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

3.1.2. Basis of Certification Limitations:
Stream Segment Information – please see Section 2.5.2.

Technology Based Standards – Effluent limitations for secondary treatment standards were derived out of Regulation No. 62 and apply to all discharges of wastewater to State waters. Specific to the CCMD WWTF, effluent limits for $BOD_5$, Total Suspended Solids, Total Residual Chlorine, pH, and Oil and Grease were developed from Regulation No. 62.

Water Quality Standards – Effluent limits defined by the receiving water quality standards were derived out of the Water Quality Assessment specific to the Greenhorn Creek receiving stream segment COARMA09. In regards to the CCMD WWTF discharge permit monthly effluent limits for ammonia were developed according to the maximum assimilative capacity of the receiving stream.

Anti-degradation – As the receiving stream segment is designated as Use Protected, an anti-degradation evaluation is not necessary.

Anti-backsliding – As the receiving stream segment is designated as Use Protected, the anti-backsliding requirements in Regulation 61.10 have been met.

TMDL – The receiving stream to which the CCMD WWTF discharges is not currently listed on the State's 303(d) list for impaired waters. However, the stream segment is listed for monitoring and evaluation for dissolved Selenium. According to Division standard procedure, the Division's Environmental Data Unit investigates issues of water quality standard exceedances. If it is determined that the water body is impaired, the

segment will be added to the 303(d) list. At a minimum, the permit may contain monitoring requirements to support future TMD if the segment is listed.

Narrative Standards – Section 31.11(1)(a)(iv) of the Basic Standards and Methodologies for Surface Water (Regulation No. 31) includes that 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 were no discharges of pollutants "in amounts, concentrations, combinations which are harmful to the beneficial uses or toxic to humans, animals, plants, or aquatic life" as mentioned in the Narrative Standards above. The requirements for WET testing have been implemented in accordance with Division policy, Implementation of the Narrative Standard for Toxicity in Discharge Permits Using Whole Effluent Toxicity. 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 In-Stream Wastewater Concentration is greater than 9.1% of the receiving stream and has a Class 1 or 2 Aquatic Life use with all of the appropriate aquatic life numeric standards, chronic conditions will normally apply. In the case of Greenhorn Creek (where chronic low flows are less than zero) chronic conditions will apply.

Biosolids Treatment and Disposal Biosolids from this facility qualify as Class B biosolids. The biosolids are treated in a covered two stage aerobic digester. The biosolids are removed weekly by the contractor Veris, LLC.

*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.*

3.1.3. General Information

Permit Action Fees – The Annual Fee for this certification is $2,240 (Category-Subcategory 21-4 for Domestic Wastewater Mechanical Plants per CRS 25-8-502) and is invoiced every July. These fees are paid at the time of permit renewal.

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 the CDPHE Permits website: www.coloradowaterpermits.com, and then signed by the legal contact.

Discharge Monitoring Reports – starting in 2016 CDPHE issued the National Pollutant Discharge Elimination System (NPDES) Electronic Reporting Rule for the submittal of Discharge Monitoring Reports (DMR's). DMR's still have to 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. However, rather than submit DMR information on pre-developed forms which much be mailed, CDPHE will require all DMR information be submitted electronically. Electronically submitted DMR's can be submitted through the Net DMR web-based tool. The CDPHE website provides sufficient training through links and documents to all dischargers.

Sampling Requirements – Sampling shall occur at a point after treatment. Effluent samples must be representative of what is entering the receiving steam.

Termination Requirements – This certification to discharge is effective long term. However, if the permittee wishes to terminate the permit the permittee must initiate 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.

3.1.4. Wastewater Treatment Facility Certification

Colorado Center Metropolitan District certifies that the following conditions exist at the domestic wastewater treatment plant:

- The treatment plant is a domestic wastewater treatment plant as defined in Regulation No. 22 (CCR 1002-22): Site Location and Design Approval Regulations for Domestic Treatment Works.
- Currently, the domestic wastewater treatment plant is not required to develop an industrial pretreatment program. However, the facility has been directed to conduct an industrial survey of all commercial users on the collection system to identify all Significant Industrial Users. In addition, the facility must conduct annual sampling of industrial constituents at the facility to gauge potential industrial impact. This

information will be used by the Division to determine if an industrial pretreatment program is to be implemented pursuant to either Section 307 of the federal Clean Water Act or Section 63.9 of Regulation No. 63 (5 CCR 1002-63): Pretreatment Regulations. At the writing of this report, CCMD has initiated a pretreatment inspection program for a select group of commercial users and has obtained input from EPA region 8 for its implementation.

- The domestic wastewater treatment plant does not accept any hazardous waste as defined as Part 261 of the Solid and Hazardous Waste Commission's Regulation (6 CCR 1007-3) for treatment and discharge by truck, rail, or dedicated pipeline.
- Threatened and Endangered Species: The discharge does not go directly to a stream (including an area within the associated 100-year flood plain) that is designated as habitat for threatened or endangered fish by the U.S. Fish and Wildlife Service. Information on those designated waters is available on the Division's website.
- Antidegradation: Pursuant to Section 31.8(2)(b) of The Basic Standards and Methodologies for Surface Water, the discharge of pollutants does not result in significant degradation of reviewable waters because the receiving waters have been designated as Use Protected
- Design Capacity: The rated design capacity of the wastewater treatment works must be less than 1 Million Gallons per Day (MGD)

3.2 Historical Data EPA website – Discharge Permit CO0021121

The following link provides information on the compliance history of the CCMD WWTF since 2014 on the EPA ECHO website.
https://echo.epa.gov/detailed-facility-report?fid=110010054225

3.3 Wastewater Flow Projections

Please see Section 2.3.1. for more information on projected EQR's and wastewater flows to the CCMD WWTF through the planning horizon of 2037. Because potential I/I issues have such a large impact on the estimated hydraulic and organic loading per capita it is difficult to estimate a representative loading constant for both constituents. Thus, this WWUP estimates loading projections using the existing loading constants as estimated for the Discharge Permit Renewal and then offers a more traditional projection using accepted industry loadings rates. Conversely, because of the assumed presence of I/I, influent concentrations of BOD are actually low by industry standards (the 5-year influent BOD concentration of 250 mg/L is well below the industry standard of around 315 mg/L indicating the presence of I/I). Thus, two different loading projections were developed. One projection using documented loading constants while the other projection uses more accepted industry standards.

**CCMD WWTF documented loading rates**

Hydraulic Loading Rate = 185 gallons per capita per day (average 2011 thru 2016)
Influent Organic Concentration = 250 mg/L $BOD_5$

**Average Industry wastewater loading rates**

Hydraulic Loading Rate = 135 gallons per capita per day

Influent Organic Concentration = 315 mg/L $BOD_5$

**Table 6 – Recorded and Projected WWTF Flows and Loading**

Projections using documented loading rates – Average Annual Daily Values

| Year | 2014 | 2016 | 2020 | 2025 | 2030 | 2035 | 2037 |
|---|---|---|---|---|---|---|---|
| GPD | 275,833 | 330,000 | 343,472 | 388,088 | 432,527 | 477,000 | 494,850 |
| Lbs. $BOD_5$/day | 892 | 386 | 709 | 801 | 893 | 984 | 1,021 |

Projections using industry standard loading rates – Average Annual Daily Values

| Year | 2014 | 2016 | 2020 | 2025 | 2030 | 2035 | 2037 |
|---|---|---|---|---|---|---|---|
| GPD | 221,130 | 241,515 | 261,900 | 295,920 | 329,805 | 363,690 | 377,325 |
| Lbs. $BOD_5$/day | 580 | 634 | 688 | 777 | 866 | 955 | 991 |

From the estimated projections above a more standard per capita flowrate depicts hydraulic WWTF expansion occurring sometime after 2037, though organic plant expansion occurring sometime beyond 2020. However, according to current DMR data the WWTF has already experienced influent hydraulic and organic loading which exceeds it design capacities. It is safe to assume that both CCMD and Rye will be planning for a WWTF plant expansion to increase design hydraulic and organic capacities sometime in the near future.

3.4 Wastewater Self-Monitoring Data

Monthly, quarterly, and annual data are included in **Appendix 7.6** for the CCMD WWTF from January 2010 through July 2017.

3.5 Influent / Effluent Limits

The CCMD WWTF meets the requirements for certification as required as Part I.A.2. of the general permit. The effluent limitations and monitoring requirements are contained in **Table 7, 8, and 9**.

**Table 7 – Standard Effluent Parameters and Monitoring Requirements**

| ICIS Code | Effluent Parameter | Effluent Limitations Maximum Concentrations | | | Monitoring Requirements | |
|---|---|---|---|---|---|---|
| | | 30-Day Average | 7-Day Average | Daily Maximum | Frequency | Sample Type |
| 50050 | Effluent Flow (MGD) | 0.4 | | Report | Daily | Recorder |
| 00400 | pH (su) | | | 6.5-9 | Daily | Grab |
| 51040 | E. coli (#/100 ml) | 126 | 252 | | Weekly | Grab |
| 50060 | TRC (mg/l) | 0.011 | | 0.019 | 3 Days/Week | Grab |
| 00610 | Total Ammonia as N (mg/l) | | | | Weekly | Composite |
| | January | 4.5 | | 20 | Weekly | Composite |
| | February | 4.6 | | 20 | Weekly | Composite |
| | March | 4.7 | | 25 | Weekly | Composite |
| | April | 4.4 | | 24 | Weekly | Composite |

| | | | | | | |
|---|---|---|---|---|---|---|
| | May | 2.9 | | 15 | Weekly | Composite |
| | June | 3.1 | | 22 | Weekly | Composite |
| | July | 2.8 | | 24 | Weekly | Composite |
| | August | 2.6 | | 20 | Weekly | Composite |
| | September | 2.9 | | 22 | Weekly | Composite |
| | October | 3.3 | | 23 | Weekly | Composite |
| | November | 3.9 | | 22 | Weekly | Composite |
| | December | 4.3 | | 20 | Weekly | Composite |
| 00310 | BOD5, effluent (mg/l) | 30 | 45 | | Quarterly | Composite |
| 81010 | BOD5 (% removal) | 85 (min) | | | Quarterly | Calculated |
| 00530 | TSS, effluent (mg/l) | 30 | 45 | | Quarterly | Composite |
| 81011 | TSS (% removal) | 85 (min) | | | Quarterly | Calculated |
| 84066 | Oil and Grease (visual) | NA | | Report | Daily | Visual |
| 03582 | Oil and Grease (mg/l) | | | 10 | Contingent | Grab |
| 01323 | Se, PD (µg/l) | Report | | Report | Quarterly | Composite |

**Table 8 – Effluent Parameters and Monitoring Requirements for Industrial Polluters**

| ICIS Code | Effluent Parameter | Effluent Maximum Concentrations, Daily Max | Frequency* | Sample Type |
|---|---|---|---|---|
| 01002 | Total Arsenic, µg/l | Report | Annually | Composite |
| 01027 | Total Cadmium, µg/l | Report | Annually | Composite |
| 01034 | Total Chromium, µg/l | Report | Annually | Composite |
| 01042 | Total Copper, µg/l | Report | Annually | Composite |
| 01051 | Total Lead, µg/l | Report | Annually | Composite |
| 71900 | Total Mercury, µg/l | Report | Annually | Composite |
| 01062 | Total Molybdenum, µg/l | Report | Annually | Composite |
| 01067 | Total Nickel, µg/l | Report | Annually | Composite |
| 01147 | Total Selenium, µg/l | Report | Annually | Composite |
| 01077 | Total Silver, µg/l | Report | Annually | Composite |
| 01092 | Total Zinc, µg/l | Report | Annually | Composite |
| 00720 | Total Cyanide, µg/l | Report | Annually | Composite |
| 03604 | Total Phenols, µg/l | Report | Annually | Composite |

*Monitoring is to begin in the year 2014. See Part I.B.5.1.g

**Table 9 – Outfall 3001 Sampling and Monitoring requirements for WWTF location prior to biological treatment**

| ICIS Code | Parameter | Discharge Limitations Maximum Concentrations | | | Monitoring Frequency | Sample Type |
|---|---|---|---|---|---|---|
| | | 30-Day Average | 7-Day Average | Daily Max. | | |
| 50050 G | Flow, mgd | Report | | Report | Continuous [1] | Recorder [1] |
| 00180 G | Plant Capacity (% of Capacity - Hydraulic) [1] | Report | | | Monthly | Calculated [1] |
| 00310 G | $BOD_5$, mg/l | Report | Report | | Quarterly | Composite |
| 00310 G | $BOD_5$, lbs/day | Report | Report | | Quarterly | Calculated |
| 00180 G | Plant Capacity (% of Capacity - Organic) [1] | Report | | | Quarterly | Calculated [1] |
| 00530G | Total Suspended Solids, mg/l | Report | Report | | Quarterly | Composite |

*1 The % capacity is to be reported against the listed capacities of 0.40 for the hydraulic capacity and 721 for the organic capacities as noted in Site Approval 4628. The percentage should be calculated using the 30-day average values divided by the corresponding capacity, times 100.*

Percent Removal Requirements ($BOD_5$ and TSS Limitations)

In addition to the concentration limitations for $BOD_5$ and Total Suspended Solids (TSS) indicated above, unless this provision has been specifically waived in the certification, the arithmetic mean of the $BOD_5$, if identified in the certification, and TSS concentrations for effluent samples collected during the calendar month shall demonstrate a minimum of eighty-five percent (85%) removal of $BOD_5$ and TSS. This calculation shall be measured by dividing the respective difference between the mean influent and effluent concentrations for the calendar month by the respective difference between the mean influent and effluent concentrations for the calendar month by the respective mean influent concentration for the calendar month and then multiplying the quotient by 100. In addition, where adjusted TSS limitations are given, the 85 percent removal requirement for TSS shall be waived.

$BOD_5$, TSS, and Oil and Grease – $BOD_5$, TSS, and Oil and Grease limits are taken from State Effluent Regulations. No violations of the dissolved oxygen standard are expected due to this discharge.

pH – This parameter is limited by Water Quality Standards

3.6 Compliance Orders

The 2014 Discharge Permit for the CCMD WWTF contained two compliance reports as part of the overall permit requirements. These two compliance schedules include the following:

3.6.1. Industrial User Survey – CCMD is required to conduct a survey of all industrial users contributing to the influent of the WWTF by May of 2015. The purpose of the survey is to identify potential significant industrial users and then develop a comprehensive pretreatment program to mitigate constituents of concern as summarized in Section 2.5.2. As mentioned above, there is concern that potential Industrial Users may be discharging hazardous wastes into the collection system and inhibiting secondary and disinfection

treatment processes at the WWTF. At the writing of this Utility Plan CCMD had completed the Industrial User Survey (IUS) and was able to identify one potentially significant industrial discharger. As of June 2015, CCMD has implemented corrective actions to mitigate non-domestic contributions from said industrial discharger as a result of the IUS. Since that time CCMD has initiated an industrial pretreatment program for a certain group of commercial users.

3.6.2. Inflow/Infiltration Study – after completion of the IUS (Section 3.6.2. above) CCMD was to initiate and inflow and infiltration (I/I) study due to the elevated per capita hydraulic loading to the WWTF above 120 gallons /capita /day. In addition, any potential I/I issues could potentially be contributing to the elevated hydraulic loading which is at or above the rated hydraulic capacity of the WWTF. The originally proposed compliance schedule was delineated by CDPHE as follows:

1) 11/01/2015 – Submit plan that identifies sources of I/I and prioritizes repairs and rehabilitation to the collection system to reduce I/I. This letter was submitted to CDPHE on October 29, 2017.
2) 11/01/2016 – Submit progress report summarizing the progress in implementing an I/I control program, including progress on securing funding for I/I repairs. CCMD submitted a comprehensive I/I report prepared by Direct Discharge Consulting, LLC in August, 2016
3) 11/01/2017 – Submit progress report including notification that 25% of the I/I targeted repairs have been completed.
4) 11/01/2018 – Submit a progress report including notification that 50% of the I/I targeted repairs have been completed
5) 10-31/2019 – Submit final study results that indicate that 100% of I/I targeted repairs have been completed and that the 120 gallons per day per capita maximum monthly average influent flow goal is met.

Section 3.7.2. below describes the Compliance Evaluation Inspection (CEI) conducted by CDPHE as part of their overall Sanitation Survey. At the time of inspection it appeared that CCMD was in compliance with the Inflow/Infiltration study compliance schedule. However, in CCMD's response letter to the CEI they indicated that they would not be able to meet the remaining components of the schedule and requested a modification to the compliance schedule. The following schedule is the proposed revised compliance schedule for the I/I study from CCMD:

1) 4/2018 – Conduct closed circuit televising of known problem areas and investigate areas within the District collection system in April 2018
2) 6/2018 – Report findings to the Division.
3) 2018 – Repair areas of major concern with funds available
4) 2019 – budget appropriate funds for remaining repairs in 2019.
5) 2020 – report conclusion of all repairs with I&I reduction plan

3.6.3. EPA Compliance Record – the CCMD WWTF is listed in the EPA ECHO database as encountering 1 Quarter in significant non-compliance and 9 quarters of noncompliance out of 12 quarters. However, while CDPHE has directed CCMD to undergo two compliance orders, there are no planned enforcement actions at this date.

The quarter of significant non-compliance occurred in Quarter #1 between the months of April 1, 2014 to June 30, 2014 for excursions of total ammonia. This was followed by two months of compliance after the significant non-compliance issue was resolved. Quarters 4 through 10 experienced periods of non-compliance due to reporting violations in the form of non-submittal of the Industrial User Plans to meet certain compliance deadlines. With the submittal of the final Industrial User Plan in June of 2016 the facility was in compliance through Quarter 12 through March 2017.

The facility has also experienced a number of exceedances of effluent pollutant limits since 2011. **Table 10** below summarizes these exceedances since 2011.

**Table 10 – Summary of Effluent Limit Exceedances at CCMD WWTF since 2011**

| Parameter | Limit Type | Number of Exceedances |
|---|---|---|
| pH | Maximum | 1 |
| pH | Minimum | 1 |
| Ammonia as Total N | 30-day Average | 6 |
| E. coli, thermotol | 30-day Average | 1 |
| E. coli, thermotol | 7-day Max | 10 |
| Flow through WWTP | 30-day Average | 3 |
| E. Coli | 7-day Max | 4 |
| $BOD_5$, % removal | Monthly Avg., Min. | 1 |

3.7 Problems Identified at WWTF

3.7.1 JDS Site Visit

On September 7, 2017 representatives with JDS-Hydro Consultants, Inc. conducted a site visit of the CCMD WWTF. JDS-Hydro was met by Donny Schied (CCMD Public Works Director), Gary Golladay (CCMD WWTF Operator), and David Lewis (Certified Operator in Responsible Charge) to provide a tour of the facility and answer any questions that JDS might have. From this tour, the following deficiencies were noted by CCMD staff and JDS-Hydro. It should be noted that while there are a number of issues that need to be addressed at the WWTF, the facility is well staffed by CCMD and there is ample expertise and resourcefulness available to operate the facility efficiently and effectively. However, addressing these physical deficiencies could provide CCMD staff the tools to be more consistent in meeting effluent limits with less "elbow grease".

Headworks – Two problems are identified in the headworks building. First, the auger that removes paper and plastics from the influent stream often freezes in the winter months. Currently, the headworks building structure is not adequately insulated and is unable to sustain the necessary ambient air temperature to prevent the auger from freezing if the temperature drops below 32 °F. Secondly, the pistagrit (grit removal mechanism) is no longer rotating effectively. It is presumed that the brush has been detached and

occasionally lodges in the machine. This requires periodic repairs by the manufacturer's representative and additional expenses to the facility.

CCMD's ORC has met with a representative from Enviro-Tech to discuss acquiring a new screen and grit system for the headworks to be replaced in 2018. A full expansion of the plant will be in the near future but is not financially feasible for 2018. However, improvements to the current screening and grit removal equipment are needed now and cannot wait for a future expansion project for replacement. The new screening and grit removal equipment will be sized for future expansion capacities.

Inflow / Infiltration / Elevated inflows – As mentioned previously in this plan the District currently is experiencing elevated flows at the wastewater plant in the form of Inflow / Infiltration (I/I) and increased residential and commercial flows due to increased growth. These excess flows are a challenge to the existing treatment processes at the WWTF, which are currently sized for 0.4 MGD. Periodic excursions in ammonia and E. coli can be attributed to the WWTF trying to treat larger hydraulic flows than it is designed to treat. In order to equalize inflows and reduce the volume of wastewater that the facility must treat, inflow bypasses the SBR basins and are stored in the existing small lagoons. When the diurnal influent flow patterns are low, stored influent is pumped from the lagoons back to the headworks building for treatment

Lagoons – while the existing lagoons no longer included in the overall treatment process they do serve an important function in the form of equalizing storage. As long as the lagoons are to serve in this capacity they should be improved to a serviceable condition. The control structures that enable the facility to control elevations in the ponds are in disrepair and there is a substantial amount of overgrowth in and around the lagoons which can compromise their capacity and integrity. Documentation as to whether the lagoons are lined is unavailable at this time.

UV Redundancy – Currently, only one bank of UV lights is installed for disinfection of the effluent stream. A second stream complete with UV treatment would enable to plant to have the ability to service one entire set of UV lights while the second set would be used for treatment. During storm events, a second set of UV disinfection lights would assist in the high flows treated at the plant.

Blowers – Because of the age and type of blowers employed with the SBR basins, there is no ability to control the blowers' speed (only turn them on and off). This intense use of the blowers has been detrimental to the life-span of these units. CCMD WWTF staff is required to either repair or rebuild the blowers on a consistent basis at a time when parts needed for the aged blowers are also becoming obsolete.

Digester Tank – Two of the three basins within the digester tank are fully operational. Due to budget constraints at the time of the WWTF expansion in 2005, the third tank was not equipped with aeration capabilities. The third tank is piped and ready for operation if an aeration grid is installed. While the aerated digester is not a point of constraint at this time, it will be in the future.

SBR Process and Control – as mentioned above, the current SBR process is controlled by a timer only. Currently, there are no probes or monitors existing in the basins to help with process monitoring or control. The original DO probes used to monitor DO levels in each of the SBR basin were removed due to their relative inaccuracy and calibration issues. CCMD operations is currently looking into the possibility of using ORP probes to monitor the SBR basins and run the batching process on Oxidation Reduction Potential.

3.7.2 CDPHE Compliance Evaluation Inspection (CEI) Site Visit and State Findings Letter

On October 11, 2017, CDPHE performed a CEI at the CCMD WWTF. Paul Hanson was the State engineer responsible for the inspection. Historical data was evaluated and exceedances were discussed. An inspection of the facilities followed the discussion of the documented WWTF performance. Mr. Hanson verbally elaborated upon the Findings and Recommendations CDPHE would document in a letter that would be provided to CCMD within 45 days. Following receipt of this letter, CCMD had 30 days to draft responses to CDPHE's Findings and Recommendations. The list below summarizes the issues discussed in CDPHE's Findings and Recommendation letter. Both the State letter and the CCMD response can be found in Appendix 7.9 and 7.10 respectively.

The State's letter to CCMD in regards to the CEI inspection on October 11, 2017 listed and described three (3) Major Findings and six (6) Observations/Recommendations.

FINDINGS:

- Finding #1: D0017 - 1 Permit Violations
  CCMD WWTF is at hydraulic capacity. At this point, according to the discharge permit, this facility should be under construction to expand. CCMD will need to provide a response to CDPHE written by a licensed engineer as to what the expansion plan for the facility needs to be and how soon this expansion can be accomplished. In addition, one of the two lagoon ponds onsite are used to provide equalizing storage during heavy rain events. These ponds were not included in the last site application. It is unknown if these ponds are properly lined for use in any situation. These ponds must be included in the next site application and will need to either verified as having proper lining, decommissioned, or properly lined for continued use.
- Finding #2: B0020-1 Management Practice Violations
  The influent flume meter reading appears to be off by more than 10%. This problem needs to be remedied and a letter documenting the solution needs to be sent to the State.
- Finding #3: Reporting Violations
  An E. Coli exceedance of 346 in April of 2016 was over the permit limit of 250 but did not trigger an exceedance with the State because their program was incorrectly set to identify only the exceedances over 400. A letter is required from CCMD as to why the E. Coli level was above 250 in April of 2016 and what was done to remedy that exceedance.

RECOMMENDATIONS:

- The I/I study and remediation as noted in the CCMD compliance schedule should continue. CCMD should submit a Permit Modification Application to the State

for an extension to the compliance schedule for completion of the I/I remediation. CCMD does not currently have the funding to complete the jetting of all 69 miles of collection lines. 7 miles have been cleaned and evaluated as of this CEI.

- During the review of the DMR data, selenium did not appear on the June 2017 report. It was then noted that selenium was not reported on previous quarters. CCMD's ORC was to work with the WQCD Clean Water Data Management Workgroup to ensure Selenium was properly transferring/displaying in NetDMR.
- The SCADA system needs to be upgraded and functioning.
- CCMD should incorporate into the District ordinances proper penalties for ignoring the WWTF Fat, Oil, and Grease (FOG) Ordinance meant to prevent collection line blockages.
- In 2013 there was a biosolids spill at the WWTF. CCMD did not document or report the spill and will be required to do so in the Findings and Recommendations response letter.
- Emergency Response Plans need to be written and available. The focus was for Sanitary Sewer Overflows.

CCMD sent a response letter on December 18, 2017 addressing the State's Findings and recommendations.

RESPONSE TO FINDINGS:

- Section #1: D0017-1 Permit Violations
  CCMD replied that Utility Plan has been drafted by JDS-Hydro consultants and that the District is currently working with Direct Discharge Consulting, LLC to evaluate the processes that will need to be implemented in the plant expansion.
- Section #2: B0020-1 Management Practice Violations
  The District is currently obtaining quotes to replace the influent and effluent flow meters, have them installed, and then certify the meters within 10% accuracy of the actual flow rate. New meters should be installed in 2018.
- Section #3: E0016-1 Reporting Violations
  The E. coli violation in April of 2016 was corrected in NetDMR.

RESPONSE TO RECOMMENDATIONS:

- The District will request a permit modification in regards to extending the time frame for I/I evaluation and treatment as follow:
  a. Conduct Closed Circuit Televising of known problem areas and investigate other areas within the District collection system in April 2018.
  b. Report the findings to the Division in June 2018.
  c. Repair areas of major concern with funds available in 2018.
  d. Budget appropriate funding in 2019 to continue repairs in 2019.
  e. Report conclusion of all repairs with I&I reduction plan in 2020.
- The District ORC is working with Mark Lombardi to assure PD Selenium is displaying on the NetDMR and reporting accurately.
- The District SCADA system is in the process of being upgraded at this time. The ORC has provided costs to install upgraded DO/ORP probes to the system to

increase efficiency with process variables. The District hopes to fund the upgrades in 2019.

- The District has indicated to the ORC that they are appropriating funds within 2018 to clean and CCTV 1/3 of the collection system in 2018, either by contracting a cleaning crew, or by purchasing a jetting machine for the District staff to operate. The District intends to continue with the cleaning program to assure the entire system is cleaned every three years as required by the Division.

3.8 Biosolids Handling - Biosolids from this facility qualify as Class B biosolids. As mentioned above the biosolids are treated in a covered two stage aerobic digester where they are aerated before they are pumped into liquid sludge holding tankers. The biosolids are removed weekly by the contractor Veris, LLC.

*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.*

3.9 Odor Control – No odor controls required in permit. The WWTF is located in an area which is somewhat removed from adjacent residents and the freeway. If odor problems are identified by nearby residents then routine operation and maintenance should be able to correct any problems

4.0 Water Quality Characteristics

"The Basic Standards and Methodologies for Surface Water", Regulation No. 31, outlines the use of acute and chronic flows to determine water quality based effluent limitations. The flows, which are used to calculate acute and chronic effluent limitations are traditionally the one-day in three-year low flow (1E3) and the 30-day in three year low flow (30E3). However, as mentioned in Section 1.7.2. the receiving stream (Greenhorn Creek) low flows are essentially zero (0). Therefore, there was no ambient water quality data to assist with the calculation of Water Quality Based Effluent Limits. Therefore, the Division had to evaluate certain parameters (i.e. chlorine, E.coli, temperature, ammonia, pH) in the absence of any in-stream or upstream information.

Considering that the low-flow characteristics in-stream flows in Greenhorn Creek upstream of the WWTF it is highly unlikely that any adverse effects from the treated wastewater discharge will occur. Ultimately, upon entry into the Arkansas River, discharge from the CCMD WWTF is not expected to cause a violation of any water quality standard in the river due to re-aeration and the dilution factor of the Lower Arkansas River. On most occasions, discharge from the CCMD WWTF does not even reach the St. Charles River.

Currently, the size of the CCMD WWTF does not qualify for administration under Regulation No. 85 (only facilities 2.0 MGD and larger must develop improvements to address more stringent nutrient limits for nitrogen and phosphorus). However, with the pending implementation of Regulation No. 31 nutrient limits into all stream segments in 2027 the facility may need to begin evaluation of nitrogen and phosphorus strategies at the WWTF.

5.0 Management and Financial Plans

While these two communities are in arbitration over the metering and associated service billings for the collection and processing of sewage from the Town of Rye into the Colorado City Metropolitan District WWTF, these communities feel it would be best to provide their current financial information on an as needed basis.

Of note, both communities should anticipate financing a potential WWTF expansion in the near future. It is likely that the treatment processes required to meet upcoming nutrient regulations contained in Regulation No. 31 will be relatively expensive to finance. Both Rye and Colorado City should anticipate pursuing alternative funding mechanisms outside their current balance sheets. Being that the completion of the previous WWTF improvements project ran into cash flow issues, it is safe to assume that financing similar or more extensive improvements to the same facility might require investment in either low interest loans or grant programs. Being that both Colorado City and the Town of Rye are candidates for low-income funding programs, a local Median Household Income (MHI) survey might be beneficial to both communities. Regions with low MHI's traditionally are eligible for low interest rate loans or grants through the Colorado Department of Health and Environment's (CDPHE) State Revolving Fund program. There are also planning grants and design grants available to MHI challenged communities through CDPHE's Grants and Loans Unit. In addition, other grants are available through the state's Water Quality Impact Fund and Nutrient's Assistance Fund. Additional monies may also be available in the form of matching grants through the Colorado Department of Local Affairs (DOLA) Energy Impact and Assistance Fund. Regardless, both communities should begin financial planning for additional expenditures for either a WWTF expansion / improvement project or associated repairs in their collections system following the state mandated I/I studies.

Managerially, CCMD employs a competent staff to manage and operate the WWTF and associated collections system. In addition, CCMD has employed an out-of-district ORC to help run the facility and assist with the plant's ability to maintain compliance. The District should be able to operate any advanced biological nutrient improvement processes that may be required to meet future effluent limits.

Copies of CCMD's and the Town of Rye's service rates and fees are found in Appendices #7.8 and #7.9 respectively. Copies of CCMD's and the Town of Rye's most recent financial audits are found in Appendices #7.11 and #7.12 respectively.

## 6.0 References


Colorado Department of Public Health and Environment, Water Quality Control Division, Certification, Colorado Discharge Permit System – CDPS GENERAL PERMIT, August 29,2014

Colorado Department of Public Health and Environment, Water Quality Control Division, Certification, Colorado Discharge Permit System – *Permit Number CO0021121, Colorado City Metropolitan District WTF, Issued and Signed: September 29, 2014: Effective:* November 1, 2014; *Expires:* October 31, 2019.

Colorado Department of Public Health and Environment, Water Quality Control Division, Certification, Colorado Discharge Permit System – *Rationale for Certification and Fact Sheet, Permit Number CO0021121, Colorado City Metropolitan District WWTF,* September 29, 2014

Colorado Department of Public Health and Environment, Water Quality Control Division, Certification, Colorado Discharge Permit System – Water Quality Assessment for Greenhorn Creek, *Permit Number CO0021121, Colorado City Metropolitan District WWTF,* August 12, 2014

Clyde B. Young & Co. Consulting Engineers, *Amendment to Site Plan and Engineering Report, Wastewater Treatment Plant Improvements* prepared for Colorado City Metropolitan District; December 2001

Direct Discharge Consulting, LLC, *Inflow and Infiltration Analysis for Colorado City Metropolitan District NPDES Permit Number CO0021121*; April – July 2016

PACOG 2012 Water Quality Management Plan, as adopted December 6, 2013

Environmental Protection Agency, Enforcement and Compliance History Online, *Detailed Facility Report for Colorado City Metro District CWA Minor Permit #CO0021121,* August 31, 2017

Colorado Department of Public Health and Environment, Water Quality Control Division, *Compliance Advisory – Reported Effluent Violation Colorado City Metro District, CO0021121,* March 5, 2014.

Colorado City Metropolitan District, *Letter of Explanation for Discharge Violation Report for month of March 2014 for the Colorado City Metro. District Permit #CO-0021121,* April 14, 2014

Colorado City Metropolitan District, *Letter of Explanation for Discharge Violation Report for month of April 2014 for the Colorado City Metro. District Permit #CO-0021121,* May 15, 2014

Colorado City Metropolitan District, *Letter of Explanation for cause and correction of DMR violations for the Colorado City Metro. District Permit #CO-0021121,* April 14, 2014

Colorado City Metropolitan District, *Letter of Explanation for Ammonia Violation Report for month of June 2014 for the Colorado City Metro. District Permit #CO-0021121,* July 7, 2014

Colorado Department of Public Health and Environment, Water Quality Control Division, *Compliance Advisory – Reported Effluent Violation Notice of Significant Non-Compliance Colorado City Metro District, CO0021121,* August 18, 2014

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Colorado Department of Public Health and Environment, Water Quality Control Division, *Compliance Advisory – Reported Effluent Violation Notice of Significant Non-Compliance response to Colorado City Metro District,* CO0021121, August 29, 2014

Colorado City Metropolitan District, *Industrial User Survey Compliance Report 12099 Letter Report for NPDES Permit Number CO0021121 to Ms. Janet Kieler, Permit Section Manager – WQCD CDPHE,* June 3, 2015

Colorado City Metropolitan District, *Unapproved Pretreatment Program Inspection for Permit No. CO0021121 to Mr. Al Garcia, Pretreatment Coordinator – U.S. EPA Region 8,* October 5, 2015

Colorado City Metropolitan District, *Inflow/Infiltration Compliance Report 04399 Letter Report for NPDES Permit Number CO0021121 to Ms. Janet Kieler, Permit Section Manager – WQCD CDPHE,* October 29, 2015

Greenhorn Valley Source Water Protection Plan, Pueblo County, CO; Kimberly Mihelich; February 2014

www.city-data.com/city/Colorado-City-Colorado.html, Population Data

## 7.0 Technical Support Appendices Incorporated into WUP

7.1 2014 WWTF Permit Fact Sheet
7.2 2014 WWTF Permit WQA
7.3 2014 WWTF Permit
7.4 2016 I/I Special Report
7.5 Greenhorn Valley Source Water Protection Plan
7.6 Colorado City Metropolitan District – Discharge Monitoring Report Summary
7.7 Appendix A Colorado City Metropolitan District Rates/Fees
7.8 Town of Rye Rates and Fees
7.9 2017 CDPHE CEI Findings and Recommendations Letter
7.10 2017 CCMD CEI Response Letter
7.11 2016 CCMD Audit / Finances
7.12 2017 Town of Rye Audit / Finances