***Community Values***

*Authentic*

*Connected*

*Accountable*

*Bold*

***Town Council 5-year Goals:***

- *Approach community challenges through active collaboration and public engagement.*
- *Accommodate growth in a way that maintains our rural feel.*
- *Enable people who live and work here to thrive.*
- *Retain the unique character and traditions of Crested Butte.*
- *De-emphasize cars and focus on walking, biking, and transit.*
- *Continue to passionately care for our natural surroundings and forever protect Red Lady.*
- *Act on the urgency of climate change and prepare for the changes we expect from it.*

*Critical to our success is an engaged community and knowledgeable and experienced staff.*

**AGENDA**
**Town of Crested Butte**
**Regular Town Council Meeting**
**Town Council Chambers**
**507 Maroon Ave; Crested Butte, CO**
**Monday, August 18, 2025**

Meeting information to connect remotely:
https://us02web.zoom.us/j/87521367618
Join via audio: +1 719 359 4580 US +1 669 444 9171 US +1 253 205 0468 US +1 646 931 3860 US +1 689 278 1000 US +1 305 224 1968 US +1 309 205 3325 US +1 360 209 5623 US +1 386 347 5053 US +1 507 473 4847 US +1 564 217 2000 US
Webinar ID: 875 2136 7618

*Public comments may be submitted at any time to the entire Council via email at towncouncil@crestedbutte-co.gov.*

***The times are approximate. The meeting may move faster or slower than expected.***

**6:00 WORK SESSION**

1) Budget Kick-Off – Community Compass Strategic Plan – 2026 Priorities.
*Staff Contact: Interim Finance Director Rob Sweeney*

**7:00 REGULAR TOWN COUNCIL MEETING CALLED TO ORDER BY MAYOR OR MAYOR PRO-TEM**

**7:02 APPROVAL OF AGENDA**

**7:03 CONSENT AGENDA**

1) August 5, 2025 Regular Town Council Meeting Minutes.
*Staff Contact: Town Clerk Lynelle Stanford*

2) Bridges of the Butte Townie Tour and the Adaptive Mountain Bike World Championships Special Event Application and Special Event Liquor Permit for Sunday, September 7, 2025, Closing Elk Avenue from 2nd Street to 5th Street and 3rd Street from Alley to Alley.
*Staff Contact: Town Clerk Lynelle Stanford*

3) Appointment of Board of Zoning Architectural Review Commissioner.
*Staff Contact: Planner III Jessie Earley*

4) Consultant Selection for Community Plan Implementation: Zoning Incentives Analysis, 5-Year Housing Strategy, and 5-Year Community Spaces Strategy.
*Staff Contact: Community Development Director Mel Yemma*

*The listing under Consent Agenda is a group of items to be acted on with a single motion. The Consent Agenda is designed to expedite Council business. Council members may request that an item be removed from Consent Agenda prior to the Council's vote. Items removed from the Consent Agenda will be considered under New Business.*

**7:05 PUBLIC COMMENT**

*The public has the opportunity to comment during the public comment period at the beginning of every regular Council meeting. At this time people may speak for up to five minutes on any topic that is not on the agenda. The Mayor may limit public comments to no more than three minutes if it appears there will be many comments on a similar topic. The public comment period is a time for the Council to listen to the people. Council generally should not engage in a two-way conversation at this time nor should the Council feel compelled to respond to the comments. If Council chooses to discuss or take action on a subject brought up during Public Comment that discussion should be held at the end of the Council meeting under "Other Business to Come Before the Council."*

**7:10 STAFF UPDATES**

**7:15 LEGAL MATTERS**

**7:20 PUBLIC HEARING**

1) (Second Reading) Ordinance No. 7, Series 2025 - An Ordinance of the Crested Butte Town Council Repealing and Replacing Chapter 13, Article 5 of the Crested Butte Municipal Code.
*Staff Contact: Public Works Director Shea Earley*

**7:30** 2) (Second Reading) Ordinance No. 8, Series 2025 - An Ordinance of the Crested Butte Town Council Approving the Ground Lease of a Portion of the Property at 602 Elk Avenue to the Corporation of the Gunnison County Electric Association.
*Staff Contact: Town Manager Dara MacDonald*

**7:40** 3) (Second Reading) Ordinance No. 9, Series 2025 - An Ordinance of the Crested Butte Town Council Repealing and Replacing Chapter 18 of the Crested Butte Municipal Code.

*Staff Contact: Community Development Director Mel Yemma*

**8:10** 4) Consideration of Watershed Permit Application from Mount Emmons Mining Company (MEMC) for the Construction of an Open Channel Storm Water Diversion Structure Located on the Mount Emmons Mining Property, aka Keystone Mine, at 2131 County Rd 12.
*Staff Contact: Public Works Director Shea Earley*

**8:20** **NEW BUSINESS**

1) (First Reading) Ordinance No. 10, Series 2025 - An Ordinance of the Crested Butte Town Council Requiring Energy Assessments for Unlimited Vacation Rental License Holders.
*Staff Contact: Town Clerk Lynelle Stanford*

**8:30** 2) Resolution No. 21, Series 2025 - A Resolution of the Crested Butte Town Council Amending the Adopted Schedule of Certain Fees and Charges for the Fiscal Year 2025.
*Staff Contact: Interim Finance Director Rob Sweeney*

**8:40** **COUNCIL REPORTS AND COMMITTEE UPDATES**

**8:45** **OTHER BUSINESS TO COME BEFORE THE COUNCIL**

**8:50** **DISCUSSION OF SCHEDULING FUTURE WORK SESSION TOPICS AND COUNCIL MEETING SCHEDULE**

- *Tuesday*, September 2, 2025 - 6:00PM Work Session - 7:00PM Regular Council
- Monday, September 15, 2025 - 6:00PM Work Session - 7:00PM Regular Council
- Monday, September 29, 2025 - 6:00PM Intergovernmental Meeting Hosted by the City of Gunnison
- Monday, October 6, 2025 - 6:00PM Work Session - 7:00PM Regular Council

**8:55** **ADJOURNMENT**

# Memorandum

**To:** Town Council

**From:** Dara MacDonald, Town Manager
Mel Yemma, Community Development Director
Rob Sweeney, Interim Finance & Administrative Services Director

**Subject:** **Budget Kick-off -** Community Compass Strategic Plan – 2026 Priorities

**Date:** August 18, 2025

---

**Summary:**
The Crested Butte Community Compass Strategic Plan (Compass) is a guiding document which provides a framework for the Town to navigate the future in a way that is aligned with the values of the community. Staff annually identifies priorities for the upcoming fiscal year in support of our strategic goals and seeks direction from the Town Council in advance of preparing the annual budget.

**Background:**
The Town Council adopted the Compass on November 7, 2022. Staff develops the annual budget by identifying capital and operational expenditures in support of the Compass and in alignment with Council priorities.

**Discussion:**
Staff identified a list of draft priorities for fiscal year 2026 in alignment with the Compass (attached). Staff seeks Council's feedback and direction related the priorities to inform and shape our budget submission.

Staff will refine the draft Community Compass Strategic Plan - 2026 Priorities based upon direction provided by Council. The updated Plan will be brought back to Council during the 2026 Budget Work Session on September 15. The overall 2026 Budget schedule is as follows:

- September 15 Work Session: Discussion regarding Compass 2026 Priorities; 2025 Year-End Projections; 2026 Revenue/Expenditure Assumptions; 2026-2030 Capital Plan
- October 6: Presentation of Draft 2026 Budget
- October 20 Work Session: Refine Draft 2026 Budget; Fund Balance Review; Updated 2026 Revenue/Expenditure Assumptions; Impact to Mill Levy
- November 3: Adopt 2026 Budget, Mill Levies and Fee Schedule

**Recommendation:**

Staff seeks feedback and direction from Council regarding the draft Community Compass Strategic Plan - 2026 Priorities.

**Attachment**
Crested Butte Community Compass Strategic Plan – 2026 Priorities (Draft)

# Crested Butte Community Compass Strategic Plan
# 2026 Priorities
# DRAFT

## 1. Approach community challenges through active collaboration and public engagement.

### *In-Town Strategies and Actions*

a. Commit to utilizing the Compass decision-making and community engagement framework.

b. Align the Town's grant program with the community's values to leverage support to local organizations.

### *Regional Collaboration Strategies and Actions*

c. Work with our partners to find common ground and develop a shared framework for regional collaboration.

- Utilize the One Valley Resiliency Roadmap collaboration framework to collaborate with regional partners on Gunnison County's corridor plan, strengthening coordination and advancing a unified regional framework.
- Support the MetRec as a partner in achieving the recommendations identified in their regional recreation master plan by continuing to serve on the North Valley Advisory Committee to be a thought partner and to represent the Town in regional discussions.

d. Memorialize a regional communication, coordination, and collaboration framework.

e. Lead by example and develop a framework to guide the Town's regional considerations and commit to expending resources outside of the Town.

## 2. Accommodate growth in a way that maintains the Town's and Valley's rural feel.

### *In-Town Strategies and Actions*

a. Evaluate infill development and density opportunities within the Town.

- Complete and adopt the Town's zoning and subdivision code consistent with the outcomes of the Transportation Mobility Plan, Historic Preservation Plan, Climate Action Plan, and Community Plan.

### *Regional Collaboration Strategies and Actions*

b. Participate in the development of a regional land use strategy that concentrates growth near existing infrastructure and minimizes sprawl.

- Collaboratively and actively support Gunnison County's Corridor Plan to integrate land use, transportation, and infrastructure along the Highway 135 corridor.

c. Align the Town's open space acquisition and land banking priorities with the regional land use strategy.

## 3. Enable people who live and work here to thrive.

### *In-Town Strategies and Actions*

**a.** Pursue infill development and increased density opportunities in the Town to increase housing options compatible with our character for those who are employed locally.

- Support and facilitate full lease up of Mineral Point.
- Complete and adopt the Town's zoning and subdivision code, incorporating the zoning incentives recommended in the Community Plan and update the Resident Occupied Affordable Housing (ROAH) requirements.

**b.** Deploy programs and update policies that ensure our neighborhoods are full of neighbors.

- Complete 5-year community housing and community spaces strategies, to complement the regulatory updates in the zoning and subdivision code.
- Actively support Gunnison County Housing Authority to continue deed restriction compliance.

**c.** Assess the functionality and accessibility of Town facilities and leverage them to better meet the community's needs.

- Complete design and initiate construction of the Marshals' building addition and renovation, as well as landscape improvements in Crank's Plaza.
- Identify timelines and priorities for master planning and design of other Town facilities such as Station One, pending the outcomes of the PROST Plan and 5-year Community Spaces Strategy.
- Complete public outreach and design for Jerry's Gym renovation and expansion project.
- Address the right-of-way in the 400 and 500 blocks of Elk Ave. and seek input through a public process to improve access to businesses.

**d.** Leverage the nicotine tax to support mental health, and health and human services initiatives.

**e.** Identify opportunities to promote affordability for residents and businesses to ensure community members can continue to stay in the place they've chosen to build a life or business.

- Complete 5-year community housing and community spaces strategies, to complement the regulatory updates in the zoning and subdivision code, including defining and identifying challenges and initial tools to support locally-serving businesses and nonprofits.
- Continue to support the County's corridor plan to ensure thoughtful and meaningful development within the valley

### *Regional Collaboration Strategies and Actions*

**f.** Evaluate the functionality of the valley's economy and identify the key needs for housing, childcare, and essential goods, and services.

- Complete 5-year community housing and community spaces strategies, to complement the regulatory updates in the zoning and subdivision code, including defining and identifying challenges and initial tools to support locally-serving businesses and nonprofits.
- Through active participation in the Gunnison County Corridor Plan, better understand regional challenges and opportunities with key community needs of community-serving commercial, schools, recreation, transportation, etc.

**g.** Collaboratively develop a regional housing strategy that meets the needs of the Gunnison Valley.

- Actively participate and collaborate through GVRHA transition to GCHA and participate in OVRR housing strategies implementation
- Collaboratively and actively support Gunnison County's Corridor Plan, which will set the stage for a regional Housing Action Plan.

**h.** Fill the community's critical needs of childcare and essential goods and services through strategic investments and incentives.

- Complete 5-year community housing and community spaces strategies, which will identify priority projects, programs, and incentives for the next 5-years.

**i.** Develop sustainable funding sources to effectively leverage solutions that will support a thriving community and make our Town and valley more functional.

- Initiate regional funding conversations to support the implementation of housing strategies.
- Identify and prepare for a sustainable funding mechanism or ballot measure, following the adoption and recommendations of the 5-year Housing and Community Spaces strategies.

## 4. Retain the unique character and traditions of Crested Butte.

***In-Town Strategies and Actions***

**a.** Protect our historic buildings that reflect the different periods of our town's history, while allowing more architectural creativity for new construction.

- Complete and adopt the zoning code update, including the refined boundary for the mining era, new district for the early recreation era, updated demolition regulations, and streamlined development review processes.
- Complete and adopt new design standards that make the mining era more graphical and concise, establish standards for the early recreation era, introduce mass, scale, and form standards that encourage architectural creativity while emphasizing modesty outside of the historic districts; evaluate material allowances in alignment with the Colorado Wildfire Resiliency Code.
- Develop an incentive program to support ongoing maintenance of historic buildings.

**b.** Ensure the Town's special events and public art policies reflect the homegrown spirit of the community.

## 5. De-emphasize cars and focus on walking, biking, and transit.

***In-Town Strategies and Actions***

**a.** Conduct a comprehensive re-examination of how people move throughout the Town through a transportation master plan.

**b.** Evaluate the design and functionality of the Town's streets, alleys, parks, and public spaces for improved social connections for the community.

- Evaluate potential sidewalk or trail connections between the Crested Butte Community School and Big Mine in coordination with the Red Lady roundabout design process.
- Incorporate a new bus stop at the Crested Butte Community School parking lot into the Red

Lady roundabout design, in collaboration with Mountain Express and the Crested Butte Community School.

- Implement the Kapushion Trail Enhancement Project.

**c.** Employ creative solutions such as modifying parking requirements, increased transit investments, street connectivity, and traffic calming measures.

- Adopt new parking requirements, including an updated payment-in-lieu program, as part of the zoning code update to support the goals of the Community Plan and Transportation Mobility Plan.
- Continue phased implementation of the Transportation Mobility Plan, including annual review and refinement of the traffic calming policy and parking management program.
- Pending the Mountain Express 5-year plan and any route adjustments, evaluate and plan for bus shelter improvements, including improving bike storage options.
- Collaborate with Mountain Express on exploring potential pilot programs for car sharing, pending outcomes of their 5-year plan.
- Integrate public art into the Red Lady roundabout.
- Plan or develop artistic/authentic wayfinding for the perimeter trail.

**d.** Align implementation of needed improvements with infrastructure and utility improvements.

- Complete Red Lady roundabout design and initiate construction.
- Coordinate proposed changes to Mountain Express 5-year plan with Streets Master Plan

***Regional Collaboration Strategies and Actions***

**e.** Prioritize and support innovative transit solutions to improve connectivity between communities while ensuring Highway 135 functions well as a two- lane rural road.

- Actively support planning and development of a Brush Creek Park and Ride project as part of the Brush Creek roundabout project.
- Support the Met Rec with the regional priority of completing the CB to CB south trail. Actively collaborate in the Gunnison County Corridor Plan, to integrate transit and multi-modal connections with land use along the Highway 135 Corridor.

**f.** Analyze and improve Sixth Street to provide improved mobility through the Town without dividing the community and maintaining the Town's pedestrian and bicycle-friendly values.

- Complete Red Lady roundabout design and initiate construction, with an emphasis of improving pedestrian safety and connections across Sixth Street.

## 6. Continue to passionately care for our natural surroundings and forever protect Red Lady.

***In-Town Strategies and Actions***

**a.** Update and expand the Town's watershed protection ordinance to include the Slate River watershed and increase protections for the Coal Creek and Slate River watersheds.

- Adopt watershed protection for Slate River intake concurrent with design and engineering of the alternative water source.

- Implement Phase II of the Town Ranch Water Attenuation Project to further support wetland and ecosystem health.

**b.** Evaluate the Town's funding for visitor education to promote stewardship.

***Regional Collaboration Strategies and Actions***

**c.** Concentrate recreational investments near our population centers and facilitate opportunities to access nature without a car.

- Complete Parks, Recreation, Open Space, and Trails (PROST) Plan.

**d.** Actively steward our open spaces and trails including restoration, maintenance, and education programs.

- Continue to actively participate in STOR and regional collaboration opportunities for stewardship and implementation of their 2025-2027 strategic plan.
- Complete PROST plan, ensuring regional collaboration throughout the process.
- Collaborate with Western Colorado University on development of a management plan for Verzuh Ranch
- Collaborate with CBFPD and Trout Unlimited for a habitat restoration, fish health, and fishing access project on the Slate River.

**e.** Leverage real estate transfer tax funding to support collaborative land conservation and recreation initiatives.

- Through the PROST plan, define open space values, acceptable uses of RETT funding, and develop a decision-making framework for Open Space acquisition.

**f.** Evaluate opportunities to improve waste management, including increased recycling and composting options.

- Continue to support partnership compost program with Mt. Crested Butte.
- Continue to incentivize plastic reduction for local businesses through the plastic pollution reduction act.
- Continue to evaluate potential solutions for summer trash issues with our special event partners, Waste Management, and STOR.

## 7. Act on the urgency of climate change and prepare for the changes we expect from it.

***In-Town Strategies and Actions***

**a.** Integrate climate action into all Town regulations, operations, and capital investments and commit the necessary resources to do so.

- Integrate Town facilities Energy Efficiency and Electrification Plan priorities into capital improvement and asset management plans.
- Establish and continue detailed energy use monitoring for a variety of Town-owned affordable housing units.
- Prepare Marshals' facility infrastructure for vehicle electrification as part of renovation/addition and evaluate possibility for building electrification.

**b.** Update the Town's Climate Action Plan to understand actions the Town can take to further reduce its emissions.

- Continue Climate Action Plan implementation and publish 1st annual report with GHG monitoring.

**c.** Increase resiliency in the Town's infrastructure and built environment, including source water protection, drought resistance, and wildfire mitigation considerations.

- Complete design and engineering of alternate source water.
- Integrate Wildfire Readiness Action Plan (WRAP) priority actions into capital plans and initiate implementation plans with partner entities and landowners.
- Complete updated design for Lake Irwin valve and piping project.

***Regional Collaboration Strategies and Actions***

**d.** Advocate for regional, state, and federal policies that further climate action.

- Continue active participation in Colorado Communities for Climate Action.

**e.** Collaboratively develop and implement education and incentive programs to motivate property owners to further energy efficiency and electrification in our building stock and vehicle fleet.

- Collaboratively support future of GV-HEAT and continue to grow GreenDeed program to expand households served and efficiency improvement opportunities.
- Continue to analyze home energy assessments for vacation rentals, and homes that participate in GreenDeed or undergo building renovations or additions to grow and develop energy efficiency and electrification programs and incentives.
- Support voluntary community adoption of renewable energy generation by raising awareness of existing opportunities and evaluating the facilitation of installation through a "group buy" program.

**f.** Leverage staff capacity to collaboratively implement the valley's regional climate action goals.

- Work with GCEA, Gunnison County, Mt CB & City of Gunnison to implement expanded residential energy efficiency and electrification programs and incentives.

**MINUTES**
**Town of Crested Butte**
**Regular Town Council Meeting**
**Tuesday, August 5, 2025**

Mayor Billick called the meeting to order at 7:10PM.

Council Members Present: Mayor Ian Billick, Kent Cowherd, John O'Neal, Anna Fenerty, Beth Goldstone, and Mallika Magner

Gabi Prochaska was present for the meeting through New Business item number one.

Staff Present: Town Attorney Karl Hanlon, Town Manager Dara MacDonald, Interim Finance Director Rob Sweeney, Town Clerk Lynelle Stanford, Public Works Director Shea Earley, and Community Development Director Mel Yemma

Building Official Astrid Matison, Parks, Recreation, Open Space and Trails Director Janna Hansen, and Housing Director Erin Ganser (via Zoom) (for part of the meeting)

## APPROVAL OF AGENDA

Billick confirmed removal of the Executive Session from the agenda.

Fenerty moved and Prochaska seconded a motion to approve the agenda. A roll call vote was taken with all voting, "Yes." **Motion passed unanimously.**

## CONSENT AGENDA

**1) July 21, 2025 Regular Town Council Meeting Minutes.**
***Staff Contact: Town Clerk Lynelle Stanford***

**2) (First Reading) Ordinance No. 8, Series 2025 - An Ordinance of the Crested Butte Town Council Approving the Ground Lease of a Portion of the Property at 602 Elk Avenue to the Corporation of the Gunnison County Electric Association.**
***Staff Contact: Town Manager Dara MacDonald***

**3) The People's Fair Special Event Application Closing Elk Avenue from 2nd Street to 4th Street and 3rd Street from Alley to Alley on Saturday, August 30, 2025, and Sunday, August 31, 2025.**
***Staff Contact: Town Clerk Lynelle Stanford***

**4) Lot 18 at Pristine Point Funding Agreement.**
***Staff Contact: Recreation, Open Space and Trails Supervisor Joey Carpenter***

**5) Resolution No. 20, Series 2025 - A Resolution of the Crested Butte Town Council, Approving the New National Opioids Settlement with Purdue and the Sackler Family.**
***Staff Contact: Town Manager Dara MacDonald***

Prochaska moved and Goldstone seconded a motion to approve the Consent Agenda (with the caveat mentioned by Magner). A roll call vote was taken with all voting, "Yes." **Motion passed unanimously.**

## PUBLIC COMMENT

Rob Mahedy, who reported living at Cement Creek Ranch, and Penni Ervin, 513 Belleview Avenue, commented.

## STAFF UPDATES

MacDonald and Earley updated, and MacDonald answered questions.

## LEGAL MATTERS

Hanlon updated.

## PRESENTATION

**1) 2024 Audited Financial Statements and Letter to Governing Board.**
***Staff Contact: Interim Finance Director Rob Sweeney***

Lillian Marcione and Mike Dooley were present via Zoom on behalf of McMahan and Associates LLC.

Prochaska moved and O'Neal seconded a motion to accept the audit. A roll call vote was taken with all voting, "Yes." **Motion passed unanimously.**

## PUBLIC HEARING

**1) (Second Reading) Ordinance No. 6, Series 2025 - An Ordinance of the Crested Butte Town Council Approving the Lease of a Portion of the Property at 308 3rd Street to the Corporation of the Rocky Mountain Biological Laborary at Gothic.**
***Staff Contact: Public Works Director Shea Earley***

Billick confirmed proper public notice was given. Billick disclosed his relationship with the Rocky Mountain Biological Laboratory (RMBL).

Billick opened the public hearing for public comment. No one commented. The public hearing was closed.

Goldstone moved and Fenerty seconded a motion to approve Ordinance No. 6, Series 2025. A roll call vote was taken with all voting, "Yes." **Motion passed unanimously.**

**2) Hearing to Show Cause, if any, why Crested Butte Market LLC's (doing business as Clark's Market) Fermented Malt Beverage and Wine License No. 04-00825 should not be suspended or revoked for having violated provisions of Colorado State Statute and the Town of Crested Butte Municipal Code related to their Liquor License Renewal Application.**
***Staff Contact: Town Attorney Karl Hanlon***

Billick confirmed that proper public notice had been given. He stated that the Council would accept public feedback at the meeting but intended to continue the public hearing until September 2, 2025. Billick also acknowledged written comments submitted by Peter Cook and Aaron Tomcak.

Billick opened the meeting to public comments. Peter Cook commented.

Magner moved and Fenerty seconded a motion to continue the public hearing to the regular meeting on September 2, 2025. A roll call vote was taken with all voting, "Yes." **Motion passed unanimously.**

**NEW BUSINESS**

**1) (First Reading) Ordinance No. 9, Series 2025 - An Ordinance of the Crested Butte Town Council Repealing and Replacing Chapter 18 of the Crested Butte Municipal Code.**
***Staff Contact: Community Development Director Mel Yemma***

Matison reported on the ordinance. Council members asked questions and discussed.

Magner moved and Goldstone seconded a motion to set Ordinance No. 9, Series 2025 for public hearing on August 18, 2025. A roll call vote was taken with all voting, "Yes." **Motion passed unanimously.**

Prochaska left the meeting after the agenda item and did not vote on subsequent motions.

**2) Resolution No. 19, Series 2025 - A Resolution of the Crested Butte Town Council Adopting the Fund Balance Reserve Policy, Effective August 5, 2025.**
***Staff Contact: Interim Finance Director Rob Sweeney***

Sweeney reported on the agenda item. There was Council discussion.

Fenerty moved and Goldstone seconded a motion to approve Resolution No. 19, Series 2025. A roll call vote was taken with all voting, "Yes," except Magner voted, "No," and Prochaska was not present to vote. **Motion passed.**

**3) (First Reading) Ordinance No. 7, Series 2025 - An Ordinance of the Crested Butte Town Council Repealing and Replacing Chapter 13, Article 5 of the Crested Butte Municipal Code.**
***Staff Contact: Public Works Director Shea Earley***

Goldstone moved and Fenerty seconded a motion to set Ordinance No. 7, Series 2025 for public hearing on August 18, 2025. A roll call vote was taken with all voting, "Yes." **Motion passed unanimously.** Prochaska was not present to vote.

## COUNCIL REPORTS AND COMMITTEE UPDATES

None

## OTHER BUSINESS TO COME BEFORE THE COUNCIL

Academy Place, food trucks, and the healthcare situation were mentioned.

## DISCUSSION OF SCHEDULING FUTURE WORK SESSION TOPICS AND COUNCIL MEETING SCHEDULE

- Monday, August 18, 2025 - 6:00PM Work Session - 7:00PM Regular Council
- *Tuesday*, September 2, 2025 - 6:00PM Work Session - 7:00PM Regular Council
- Monday, September 15, 2025 - 6:00PM Work Session - 7:00PM Regular Council

## ADJOURNMENT

Mayor Billick adjourned the meeting at 9:46PM.

_____

Ian Billick, Mayor

_____

Lynelle Stanford, Town Clerk (SEAL)

# Staff Report

August 18, 2025

**To:** Mayor and Town Council

**Thru:** Dara MacDonald**,** Town Manager

**From:** Lynelle Stanford, Town Clerk

**Subject:** Bridges of the Butte Townie Tour and the Adaptive Mountain Bike World Championships Special Event Application and Special Event Liquor Permit for Sunday, September 7, 2025, Closing Elk Avenue from 2nd Street to 5th Street and 3rd Street from Alley to Alley.

**Date:** August 7, 2025

---

**Summary:**

Gabriel Walker, on behalf of the Adaptive Sports Center of Crested Butte, Inc., has submitted a Special Event Application along with a request for a Special Event Liquor Permit for the upcoming Bridges of the Butte Townie Tour and the Adaptive Mountain Bike World Championships. The event is scheduled to take place on Sunday, September 7, 2025**.**

Event activities will begin with registration at 9:00 AM, followed by a town-wide ride scheduled from Noon to 4:00 PM. The event will conclude with an awards ceremony and after party at 6:00 PM**.**

To accommodate the event, the organizer has requested the closure of Elk Avenue from 2nd Street to 5th Street, beginning early in the morning on September 7 and continuing through 6:00 PM**.** Additionally, 3rd Street from alley to alley will be included in the closure. As part of the day's festivities, the Adaptive Sports Center is working with the Farmers Market to extend market booths along Elk Avenue from 2nd Street to 3rd Street, placing booths in between existing parklets to effectively expand the market footprint. 1st Street and 2nd Street will remain open for through travel, preserving access to and from the northwest section of Town.

The applicant has also requested a Special Event Liquor Permit for a designated licensed area located on Elk Avenue, extending from the 3rd Street intersection to mid-block. Alcohol will be served at the event's base camp during the awards ceremony and after party**,** which is expected to run from approximately 4:00 PM to 6:00 PM. Only attendees aged 21 and over will be permitted to consume alcohol, and they will be identified with colored wristbands issued at registration. Volunteers will be stationed at all designated exits to monitor and ensure that alcohol does not leave the licensed premises.

**Recommendation:**

To approve the Bridges of the Butte Townie Tour and the Adaptive Mountain Bike World Championships special event application and special event liquor permit as part of the Consent Agenda.

**Special Event Permit Application**

Name of Event: Bridges of the Butte Townie Tour & The Adaptive Mountain Bike World Championships

Date(s) of Event: September 7, 2025

Location of Event: 300 Elk Ave, throughout Crested Butte, Lower Loop Mountain Bike Trail

Name of Event Organizer (must be a person): Gabriel Walker

Cell Phone: 801-866-7531 Email: gabe@adaptivesports.org

Emergency Contact (person who will be at the event): Gabriel Walker

Cell Phone: 801-866-7531 Email: gabe@adaptivesports.org

Event Permittee (must match the Certificate of Good Standing): Adaptive Sports of Crested Butte, Inc

Mailing Address: PO Box 1639, Crested Butte, CO 81224

Number of People to attend (include Staff, Volunteers & Attendees) : 400

**What are you requesting of the Town?** (check all that apply):

■ Road Closures (requires Council approval) ■ Parking Lot Closure ■ Use of a Town Park
■ Barricades/cones (street closure, block traffic, route indication, etc.) □ Rolling Closure (parade)
■ CBFPD (medical aid, fire prevention) ■ Marshals (safety, escort) ■ interruption of Mt. Express Bus Route
□ Other: _____
□ None

**Do you intend to participate in the Climate Response Special Event program?** ■ Yes □ No
If no, you will be responsible for paying the $150 fee. If yes, you must complete the Climate Responsible Special Event Worksheet and turn it in with this application. You also may be eligible for a CRSE Rebate!

**Do you plan to use a Town Park or other recreation facility?** ■ Yes □ No
If yes, please contact the Parks, Rec, Open Space and Trails Department at 970-349-7197 or recreation@crestedbutte-co.gov to obtain a park permit. Facility use fees apply. Rates can be found on the Fee Schedule.

**Will your event affect ADA parking spots?** ■ Yes □ No
If yes, describe in your event description how many spaces are being affected and how you plan to replace them. Please request signage if needed.

**Are you serving or selling liquor at your event?** ■ Yes □ No
If yes, complete the Special Event Liquor Permit application and include a map of your liquor area layout, security measures and a continuous, bold, black line outlining your liquor boundary.

**Will you be selling products (food, drink, and/or merchandise)?** ■ Yes □ No
If yes, attach your current Town of Crested Butte Sales Tax License and list of venders.

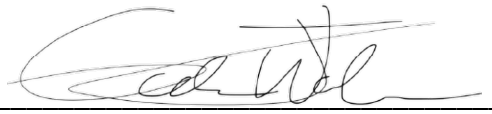
**Is your event a parade or includes a parade?** □ Yes ■ No
If yes, include a DETAILED map of the route. Coordination with the Marshals is necessary.

**Will there be amplified sound at this event:** ■ Yes □ No
If yes, complete the online Notice of Amplified Sound. If you create your own notice, you must include a copy as an attachment to your application. Please be aware of the Town Sound Ordinance.

**Do you wish to advertise your event with a banner on the fence at Pitsker Field?** ■ Yes □ No
If yes complete the online Banner Application form. If you want additional banners advertising your event, include the request in your event description.

In consideration for being permitted by the Town to engage in the permitted event, the Permittee, its heirs, successors, executors, assigns, transferees, employees, officers, directors, members, managers, representatives, contractors, subcontractors, agents, assigns, guests and invitees (collectively, the "Releasor/Indemnitor") hereby acknowledge and agree to the following: (i) Releasor/Indemnitor assume all risk of injury, loss or damage to Releasor/Indemnitor, any of them, arising out of or in any way related to the permitted event, whether or not caused by the act or omission, negligence or other fault of the Town, or by any other cause; (ii)
Releasor/Indemnitor waive and release the Town from any and all claims, demands and actions for injury, loss or damage arising out of or in any way related to the permitted event, whether or not caused by the act or omission, negligence or other fault of the Town, or by any other cause; (iii) Releasor/Indemnitor agree to defend, indemnify and hold harmless the Town from and against any and all liability, claims, damages and demands, including any third party claim asserted against the Town, on account of injury, loss or damage, including, without limitation, claims arising from bodily injury, personal injury, sickness, disease, death, property loss or damage, or any other loss of any kind whatsoever, arising out of or in any way related to the permitted use, whether or not caused by the act or omission, negligence or other fault of the Town, or by any other cause. For purposes hereof, the term "Town" shall include, individually and collectively, its officers, employees, agents, insurers, insurance pools, contractors and subcontractors. By signing this Special Event Application, the Permittee acknowledges and agrees that this assumption of risk, waiver and indemnity extends to all acts, omissions, negligence or other fault of the Town and that said assumption of risk, waiver and indemnity is intended to be as broad and inclusive as is permitted by the laws of the State of Colorado. If any portion hereof is held invalid, it is further agreed that the balance shall, notwithstanding such invalidity, continue in full legal force and effect.

**The undersigned Permittee certifies that all the statements and answers to the above questions are true without any reservations or evasions. The undersigned also understands that the Town of Crested Butte reserves the right to require payment for additional services for major impact events.**



Signature of Applicant (Permittee) Date 05/23/2025

Gabriel Walker
Print Name Clearly

## Event Description

The Adaptive Sports Center's Annual Bridges of the Butte Townie Tour is a uniquely Crested Butte experience that builds community through philanthropy, inclusion, access, and fun. This year's event will be a family-friendly activity for locals and visitors to look forward to participating in. Over the years, Bridges of the Butte has become a key fundraiser that supports the ASC's operational and programmatic costs. The success of this event is crucial to help the ASC continue to fulfill its mission and ensure we can support any individual who desires to participate in our high-quality adaptive sport programs, regardless of their ability to pay.

This year's Bridges of the Butte will be Sunday, September 7 with check-in from 9:00am to 12:00pm, followed by the ride from 12:00pm to 4:00pm, and an awards ceremony afterward until 6:00pm. Riders participate as individuals or in teams and ride to raise funds by completing laps through the town of Crested Butte to earn pledges. This year's event will include both the traditional route throughout town as well as the short course option, ideal for families and tired riders looking to take a break from the long route.

This year's event also incorporates an element of our annual Adaptive Mountain Biking World Championships (AMBWC). AMBWC riders will start and end at the Bridges of the Butte base camp for a cross-country competition that will involve riding to and from Lower Loop as well as riding Lower Loop itself.

## Schedule

Saturday, September 6th - 3rd & Elk

- Advance Course Set up, cones, barricades, and road closure signs placed
- Base Camp supplies staged in box trailer in a base camp parking space

Sunday, September 7th - Throughout Town, 3rd & Elk

| | | |
|---|---|---|
| - | 6:00 am | Set Up (Including Pavement Stickers) |
| - | 8:00 am | Market Booths set up in 200 block of Elk Ave<br>AMBWC Riders start their laps |
| - | 9:00 am – 11:30 am | Registration Check-in |
| - | 11:30am | Last AMBWC Riders return |
| - | 11:45 am | Opening remarks, including safety instructions<br>AMBWC Awards |
| - | 12:00 pm | Event begins—first lap! |
| - | 3:00 pm | Market Booths taken down in the 200 block of Elk Ave |
| - | 3:45 pm | Final "Townie Take Over" Lap |
| - | 4:00 pm | Bike event concludes— food and awards ceremony begin |
| - | 5:00 pm | Begin final course clean-up and event break-down |
| - | 6:30 pm | Begin base area clean-up |
| - | 7:00 pm | Course and base are breakdown completed; 3rd St & Elk Ave opened to traffic |

**Town Staff Requests**

To ensure a successful and safe event, we are requesting the following services from the Town of Crested Butte:

- Marshal support throughout the event
  - Responding to volunteer course marshals as needed
  - Addressing noise and ordinance violations
  - Warning/ticketing for unlawful behaviors
  - Towing vehicles that are parked in the closure the morning of September 7
- The creation of 4 temporary Handicap Parking Space(s) on 3rd St, south of Sopris Alley to function in place of spaces used in the Base Camp area, as well as signs indicating the temporary spaces.
- The use of barricades and bike barricades to demarcate the full closure of Elk from 5th St to 2nd St.
- Signs indicating "No Through Traffic" on the north and south sides of Elk, placed on 4th and 3rd Streets.
- The use of barricades or cones & ropes to demarcate the post-event awards ceremony and area where alcohol will be served, borrowed from the Farmers Market and restaged post event.
- Barricades or cones & ropes indicating the following parking prohibitions:
  - One spot on either side of where the bike path exits Totem Pole Park,
  - One spot on either side of where the bike path exits the bridge/path behind Rijk's Gallery onto 2nd,
  - One spot at the east end of Gothic Ave, where the route drops off the rec path,
  - Snow Lot on southwest corner of 3rd and Sopris Alley.
- The following road closures:
  - Closure of 3rd from the Sopris Alley to the Maroon Alley. This includes all parking and traffic,
  - Closure of Elk Ave from 5th St to 2nd St. This includes all parking and traffic.
- Permission to use removable forms of advertisement at the base camp area and on town property throughout the course (including town planter boxes, town parks, etc)
- If possible, complete street sweeping prior to the event to ensure any unsafe objects on the street are removed.
- Any large potholes along the route be filled for all rider's safety.
- Permission to use asphalt decals to demarcate the route and to direct the public to base camp. The decals will be placed along the course on Sunday morning and removed promptly on Sunday evening.
- Permission to apply water soluble chalk (cleans after 2-3 hard rains) to town property.
- Permission to have aid stations set up by Butte, Totem Pole Park, and Rainbow Park bridges to provide rider support. The stations may include a tent, small table and banner.
- Permission to decorate the bridges along the route, having little to no impact on town property.
- Permission to place electronic message boards on Town Property, with a message indicating a bike event in progress.
- Redirection of the Mountain Express bus service, turning west on Elk Ave, South on 5th, East on Belleview, and North on 6th/135.

**Safety Plan**

Each year our goal is to have a safe, fun, and family-friendly event. As noted in the application, we will have volunteers stationed along the route and at base camp. In addition, participants are encouraged to wear helmets and are required to follow the rules of the road. At least one water station will be set up at base camp, providing both water and electrolyte rich beverages. Light snacks, such as fruit and granola bars, will also be available at base camp. This year's event will continue to offer a shortened course option, which will not require crossing 6th Street, to accommodate families with children and tired riders.

Volunteer- Course Marshals

Volunteer course marshals will play a key role in mitigating the risk to riders at main intersections along the route (see locations below). Many course marshals have experience with this role and train new volunteers how to direct riders through the intersections. Course marshals will wear new, more visible, reflective volunteer vests, have stop/slow signs to regulate biker traffic, and will have emergency contacts, including the development coordinator's phone number and the Marshal's non-emergency phone number. Course marshals will be present at most turns and crossing intersections throughout the event (from 12:00pm-4:00pm). We will involve the police if necessary.

Course Marshal Locations

- Elk Ave & 5th St (2 Volunteers)
- White Rock & 5th St
- Belleview & 5th St
- Belleview & Hwy 135 (2 Volunteers)
- Elk Ave & 7th St
- Gothic & 8th St
- Gothic & Hwy 135 (2 Volunteers)
- Gothic & 5th St
- Butte & 3rd St
- Butte & Peanut Lake Rd (AMBWC Only)
- Maroon & 3rd St (3 Volunteers)
- Maroon Alley & 2nd St
- Maroon & 2nd St
- Sopris & 2nd St

If capacity is reached, volunteers will also be added at:

- Elk Ave & 3rd St
- Elk Ave & Rec Path
- Gothic & Rec Path
- Elk Ave & 1st St
- Sopris & 3rd St

These are represented on the course map provided.

Volunteer- Security

Alcohol will only be permitted and supplied at base camp throughout the award ceremony and after party (~4:00pm-6:00pm). Registrants will be given a colored, single use wristband upon arrival at the event, indicating age over/under 21. Volunteer security or staff members will be stationed at all exits and where alcohol is distributed to ensure drinks do not leave the base camp area, and to ensure that only participants with a 21+ wristband receive drinks. In addition to colored wristbands, ID will also be checked at the point of distribution. Barricades and caution tape indicating the area where alcohol will be served (see additional requests) will also help ensure the security of the Base Camp area.

DR 8439 (09/19/19)
**COLORADO DEPARTMENT OF REVENUE**
Liquor Enforcement Division
(303) 205-2300

# Application for a Special Events Permit

Departmental Use Only
23

In order to qualify for a Special Events Permit, You **Must Be a Qualifying Organization Per 44-5-102 C.R.S. and One of the Following (See back for details.)**

- ☐ Social
- ☒ Athletic
- ☐ Philanthropic Institution
- ☐ Fraternal
- ☐ Chartered Branch, Lodge or Chapter
- ☐ Political Candidate
- ☐ Patriotic
- ☐ National Organization or Society
- ☐ Municipality Owned Arts Facilities
- ☐ Political
- ☐ Religious Institution

| LIAB | Type of Special Event Applicant is Applying for: | |
|---|---|---|
| 2110 | ☐ Malt, Vinous And Spirituous Liquor | $25.00 Per Day |
| 2170 | ☒ Fermented Malt Beverage | $10.00 Per Day |

**DO NOT WRITE IN THIS SPACE**
Liquor Permit Number

1. Name of Applicant Organization or Political Candidate: Adaptive Sports Center of Crested Butte, Inc
State Sales Tax Number (Required): 98-09129-0000

2. Mailing Address of Organization or Political Candidate (include street, city/town and ZIP):
PO Box 1639
Crested Butte, CO 81224

3. Address of Place to Have Special Event (include street, city/town and ZIP):
401 3rd St
Crested Butte, CO 81224

4. Authorized Representative of Qualifying Organization or Political Candidate: Christopher Hensley
Date of Birth: 11/17/66
Phone Number: 970-349-2296 x113

Authorized Representative's Mailing Address (if different than address provided in Question 2.)

5. Event Manager: Gabriel Walker
Date of Birth: 04/11/96
Phone Number: 970-349-2296 x104

Event Manager Home Address (Street, City, State, ZIP): 418 1/2 Maroon Ave, Crested Butte, CO 81224
Email Address of Event Manager: gabe@adaptivesports.org

6. Has Applicant Organization or Political Candidate been Issued a Special Event Permit this Calendar Year?
☐ No ☒ Yes How many days? 2

7. Is the premises for which your event is to be held currently licensed under the Colorado Liquor or Beer codes?
☒ No ☐ Yes License Number _____

8. Does the Applicant Have Possession or Written Permission for the Use of The Premises to be Licensed? ☒ Yes ☐ No

List Below the Exact Date(s) for Which Application is Being Made for Permit

| Date | Hours From | To | Date | Hours From | To | Date | Hours From | To | Date | Hours From | To | Date | Hours From | To |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 09/07/25 | 3:30 p.m. | 6:30 p.m. | | .m. | .m. | | .m. | .m. | | .m. | .m. | | .m. | .m. |
| | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | |

**Oath of Applicant**

I declare under penalty of perjury in the second degree that I have read the foregoing application and all attachments thereto, and that all information therein is true, correct, and complete to the best of my knowledge.

Signature: [signature]
Title: Development Coordinator
Date: 05/23/2025

**Report and Approval of Local Licensing Authority (City or County)**

The foregoing application has been examined and the premises, business conducted and character of the applicant is satisfactory, and we do report that such permit, if granted, will comply with the provisions of Title 44, Article 5, C.R.S., as amended.

**THEREFORE, THIS APPLICATION IS APPROVED.**

Local Licensing Authority (City or County)
☐ City ☐ County
Telephone Number of City/County Clerk

Signature
Title
Date

**DO NOT WRITE IN THIS SPACE - FOR DEPARTMENT OF REVENUE USE ONLY**

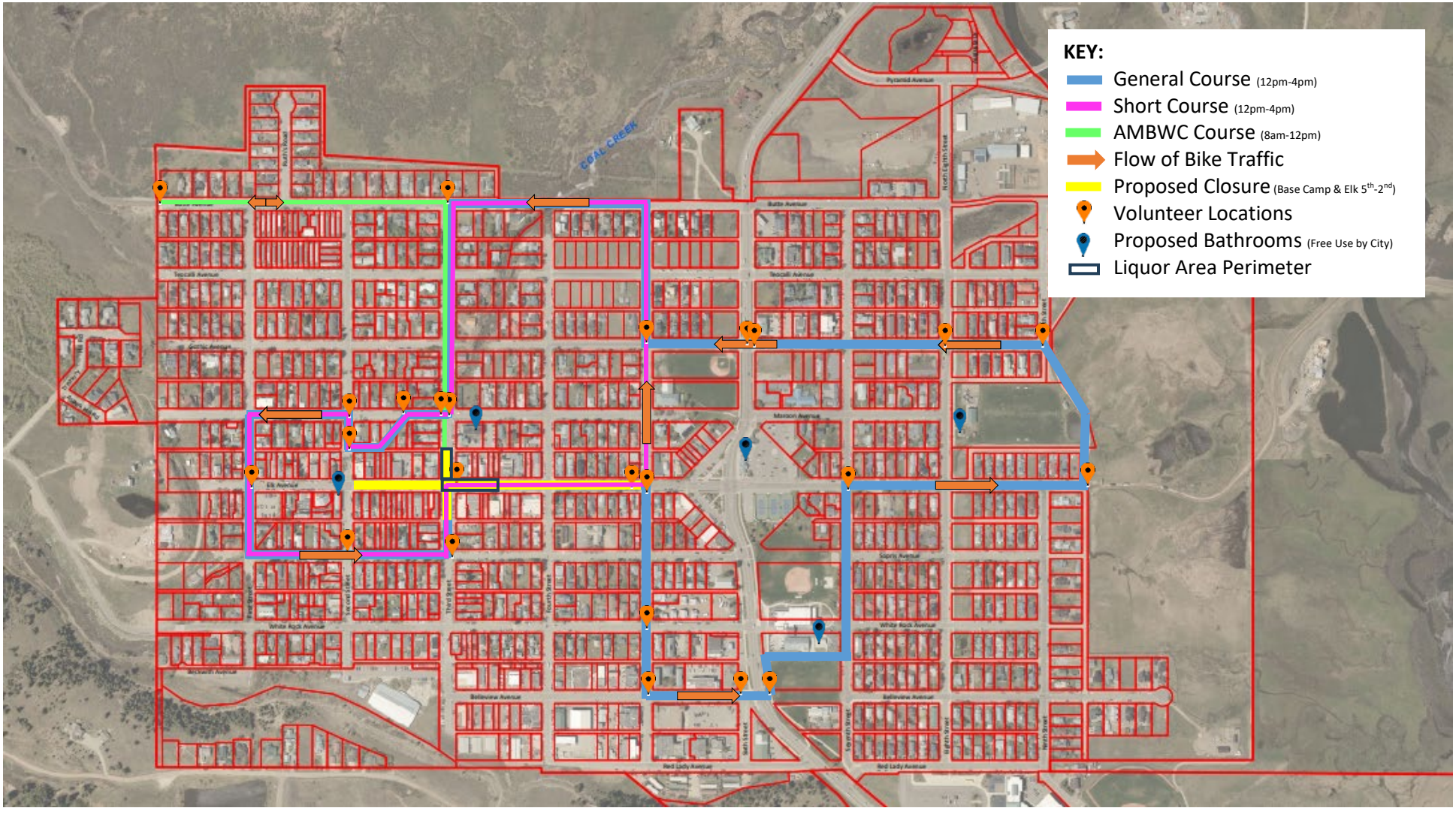
**Liability Information**

| License Account Number | Liability Date | State | Total |
|---|---|---|---|
| | | -750 (999) | $ . |

(Instructions on Reverse Side)




Alcohol will only be permitted and supplied at base camp throughout the award ceremony and after party (~4:00pm-6:00pm). Registrants will be given a colored, single use wristband upon arrival at the event, indicating age over/under 21. Security will be stationed at both exits and in area of alcohol distribution to ensure drinks do not leave the base camp area, and to ensure that only participants with a 21+ wristband receive drinks. In addition to colored wristbands, ID will also be checked at the point of distribution. Barricades and an unbroken caution tape barrier indicating the area where alcohol will be served will also help ensure the security of the Base Camp area.


KEY:
General Course (12pm-4pm)
Short Course (12pm-4pm)
AMBWC Course (8am-12pm)
Flow of Bike Traffic
Proposed Closure (Base Camp & Elk 5th-2nd)
Volunteer Locations
Proposed Bathrooms (Free Use by City)
Liquor Area Perimeter
COAL CREEK
Elk Avenue
White Rock Avenue
Bellevue Avenue
Red Lady Avenue
Third Street
Fourth Street
Fifth Street
Sixth Street
Seventh Street
Eighth Street
North Eighth Street

DEPARTMENT APPROVALS (*For Official Use Only)*
Note: Please clearly state in your comment area what requested services your department will/will not provide for the event.

Bridges of the Butte Townie Tour & The

**MARSHALS:**

Conditions/Restrictions/Comments:

Ok per CBMO

Michael Reily 05/23/2025

Signature Date

**PUBLIC WORKS:**

Conditions/Restrictions/Comments:

Approved. However, there is a potential conflict on 5th Street, at the alley between Sopris Ave and Whiterock Ave due to the water main replacement. Alternate route may be necessary.

Connor Beard

Signature Date

**PARKS AND RECREATION:**

Conditions/Restrictions/Comments:

Approved. Please provide written permission from land owners for trail activities.

Janna Hansen 8/11/25

Signature Date

**TOWN CLERK:**

Conditions/Restrictions/Comments:

Lynelle Stanford 8.5.2025

Signature Date

**TOWN MANAGER:**

Conditions/Restrictions/Comments:

Dara T. MacDonald 08.06.25

Signature Date

**CRESTED BUTTE FIRE PROTECTION DISTRICT:**

Conditions/Restrictions/Comments:

Approved.

Robert Weisbaum 08.06.25

Signature Date

**MT. EXPRESS BUS SERVICE:**

Conditions/Restrictions/Comments:

Approved. Alternate bus route planned.

Andy Braun 08/08/2025

Signature Date

# Staff Report
August 18, 2025

**To:** Mayor and Town Council

**Prepared By:** Jessie Earley, Planner III

**Thru:** Mel Yemma, Community Development Director and Dara MacDonald, Town Manager

**Subject:** **Appointment of Board of Zoning Architectural Review Commissioner**

---

**Summary**
Town Council is responsible for appointing the Board of Zoning and Architectural Review (BOZAR) Commissioners. The Board of Zoning and Architectural Review (BOZAR) has a vacancy on the seven-member board following the resignation of Josh Staab who served a portion of a term. Staff is recommending Town Council approval for the appointment of Anthony "Tony" Veit for a three-year term, expiring in August of 2028.

**Background**
The Town's Municipal Code requires BOZAR members to be residents of the Town of Crested Butte for at least 12 months. Members are also encouraged to have interest, or experience, in historic preservation, construction, landscape design, architecture, or planning.

**Discussion**
Veit has lived in Crested Butte for five years and brings decades of experience as a contractor. For the past ten years, he has worked exclusively on projects within town. Throughout this time, he has collaborated closely with Andrew Hadley and other designers for each of these projects, developing a deep understanding of the BOZAR process and all facets of project execution.

Veit is a strong advocate for preserving the character of the Town of Crested Butte and is well aware of the development pressures it faces. With extensive experience in reading and interpreting plans, he brings valuable insight and expertise that would make him a strong asset to the Board.

Veit has expressed a strong interest in contributing to the Town's efforts to update the zoning code and Design Standards and is eager to be involved in the process in a more substantial way.

**Climate Impact**
No known impact.

**Financial Impact**
A BOZAR member stipends are accounted for in the 2025 Budget adopted by the Council.

**Legal Review**
This action complies with the Town Charter and Municipal Code requirements.

**Recommendation**
Staff recommend that the Town Council appoint Tony Veit to a three-year term as a Board of Zoning and Architectural Review Board Member.

**Proposed Motion**
For a member of the Council, followed by a second, to move to approve the appointment Of Anthony “Tony” Veit to the Board of Zoning and Architectural Review for a three-year term, expiring August 18, 2028.

# APPLICATION
# BOARD OF ZONING AND ARCHTIECTURAL REVIEW
(BOZAR)
Town of Crested Butte, Colorado

Name: ANTHONY (TONY) VEIT

Address: 713 MAROON AVE BOX 2477
Physical PO Box

Phone: 970-596-5006
Home Work Cell

E-mail: tonyveit@yahoo.com

| *For Office use only* |
|---|
| Length of Term |
| Date Appointed |
| Date completed |

How long have you been a resident of the Town of Crested Butte? 5 YEARS
(one year is required)

What kind of experience do you have in reading building plans? EXTENSIVE

What kind of experiences do you have that relating to the design or construction fields that will help you in fulfilling the duties as a BOZAR member?
I HAVE BEEN Building Exclusivly IN TOWN FOR THE LAST 10 years AND HAVE worked closely with LOCAL Architects AND designers Through ALL ASpects OF A project.

Why are you interested in being on BOZAR?

---

What do you feel are important issues facing the Town of Crested Butte that can be addressed through the BOZAR process?
THE COMMUNITY PLAN AND IMPLIMENTATION OF while PRESERVING THE THE FEEL OF the "old" CRESTED BUTTE.

Identify one to two of the most effective projects of the last several years, and why:
I AM very EXCITED TO SEE the Restoration of the First Queen, AS I AM Hoping this will continue & preserve the downtown feel.

Identify one or two of the least effective building projects of the last several years, and why:
I AM Not very Excited ABOUT the New Affordable housing units And the Fire station (I know It's not part of town) That Are currently being constructed on sixth street. they completly change the Feel of our community when Entering from the North.

Signature

6/17/25
Date

Anthony “Tony” Veit
tonyveit@yahoo.com
PO Box 2477
Crested Butte, CO 81224
(970)-596-5006

**Relevant Employment Experience**

**2004-2025 *Owner/Operator* Tony Veit Builders, Inc. – Crested Butte, CO**

- Constructed custom homes.
- Managed all aspects of business including working with owners, architects, engineers, and subcontractors as well as supervising and directing employees.
- Formulated and oversaw budgets, payroll, and all financial planning.

**1998-2004 *Partner* Avery Mountain Enterprises – Crested Butte, CO**

- Acted as a subcontractor; bidding, financing, and constructing homes for general contractors in Crested Butte, Mount Crested Butte, and surrounding municipalities.

**1996-1998 *Manager* Spallone Construction – Gunnison, Co**

- Oversaw all aspects of operations in Crested Butte, Mount Crested Butte, and surrounding areas.
- Oversaw and performed project bidding, relations with general contractors, employee management, operation of heavy machinery.

**1993-1995 *General Manager Terminal Operations* Maersk Pacific ltd. –Long Beach, CA**

- Responsible for all aspects of Maersk’s premier container terminal.
- Worked closely with labor unions, trucking and transport communities, and major rail carriers to ensure customer satisfaction and mitigate industry problems.
- Managed hiring, staffing, scheduling, supervising, training, and evaluation of a permanent staff of 50 employees.

**Education**

**University Of Colorado- Boulder, Colorado**

- Bachelor of Science- Transportation Management, with areas of emphasis in International Business and Finance. Grade point Average 3.53 (4.0 scale).

**Activities and Interests**

- 6- time Grand Traverse finisher.
- Active in skiing, cycling, fishing, climbing and most outdoor activities.
- U.S. Citizen.

References provided upon request

# Staff Report
August 18, 2025

**To:** Mayor and Town Council

**Prepared By:** Mel Yemma, AICP, Community Development Director

**Thru:** Dara MacDonald, Town Manager

**Subject:** Consultant Selection for Community Plan Implementation: Zoning Incentives Analysis, 5-Year Housing Strategy, and 5-Year Community Spaces Strategy

---

**Summary:** The Town of Crested Butte issued a Request for Proposals (RFP) to secure qualified consulting services to assist with the implementation of the recently adopted Community Plan (CP). Staff is recommending entering into an agreement with Economic & Planning Systems, Inc. to support this effort.

**Previous Council Action:** The Town Council adopted the CP on July 7. This meeting additionally included a discussion on the scope and schedule for CP implementation.

**Background:** This RFP is part of the Town's immediate efforts to implement the CP. While the Town is initiating a comprehensive update of its zoning code (led by Town Staff and the Town Attorney), the scope of work outlined in this RFP is designed to complement that process with technical analysis of zoning incentives and targeted strategies to help create housing and community spaces. The scope includes:

1. **Zoning Incentives and Feasibility Analysis:** Provide technical and financial analysis to inform zoning incentives for both community housing and community-serving spaces to ensure the proposed code requirements are both community-aligned and market feasible. The Town will be working in parallel on drafting the code update internally with the Town Attorney, along with associated community outreach, on a schedule that will align with the scope of this RFP.
2. **5-Year Community Housing Strategy:** Develop a tactical five-year strategy to advance the CP's housing goals, including an assessment of Crested Butte's current affordable housing programs and portfolio to identify key gaps and community needs, and prioritize implementation actions over the next five-year period with direction on projects, programs, and funding sources that complement the zoning code update.
3. **5-Year Community Spaces Strategy:** Develop an actionable strategic framework to advance the CP vision for community-serving spaces. This includes clearly defining what qualifies as a community-serving business or organization, assessing current gaps, threats, and challenges, and identifying success metrics and methods for ongoing evaluation. The

strategy will provide a foundational framework with baseline data, designed to be updated and refined as implementation progresses.

**Discussion:** Six proposals were received by the submission deadline. A Town staff team consisting of Mel Yemma (Community Development Director), Erin Ganser (Housing Director), Kaitlyn Archambault (Planner I), and Dara MacDonald (Town Manager) reviewed the proposals and interviewed two finalists. Economic & Planning Systems, Inc. stood out based on:

- Robust experience working with similar mountain and resort communities.
- A project approach that thoughtfully integrates the three scopes of work of zoning incentives, housing strategies, and community-serving commercial spaces.
- Deep expertise in economic data analysis, coupled with a strong emphasis on storytelling.
- Clear examples of not coming to the table with boiler plate solutions, but rather letting the process, data, and feedback guide the outcome.
- Partnership with Studio Seed as a subconsultant to provide robust modeling and thoughtful graphics to support the zoning code update

This combination of skills and approach will support the Town's multifaceted goals to implement the CP.

**Climate Impact:** Continuing implementation of the CP supports the CAP by providing more opportunities for people to live closer to where they work, shop, and access services.

**Financial Impact:** The consulting contract includes a not-to-exceed budget of $150,000 and will be funded through the allocated budget for Community Plan implementation for the remainder of 2025 and will be requested to complete the project during the 2026 budget process. The Town received $50,000 from the State to support the housing strategy portion of the project.

**Legal Review:** The Town Attorney has reviewed the RFP and contract template. Final contract terms will be reviewed upon consultant selection to ensure compliance with Town policies and procurement requirements.

**Recommendation and Proposed Motion:** For a council member to make a motion, followed by a second, to authorize the Town Manager to sign a professional services agreement with Economic & Planning Systems, Inc. for consulting services for Community Plan Implementation, as part of the consent agenda.

**ATTACHMENT**

1. Community Plan Implementation Proposal from Economic & Planning Systems. Inc.



# COMMUNITY PLAN IMPLEMENTATION

*Prepared for:*

**Town of Crested Butte**

*Prepared by:*

**Economic & Planning Systems, Inc.**

in collaboration with:

studioseed
URBAN DESIGN + PLANNING

August 1, 2025

EPS #253076

Economic & Planning Systems, Inc.
The Economics of Land Use

DENVER
LOS ANGELES
OAKLAND
SACRAMENTO

August 1, 2025

Ms. Erin Ganser
Housing Director
Town of Crested Butte
eganser@crestedbutte-co.gov

**Subject: Crested Butte Community Plan Implementation; EPS #253076**

Dear Ms. Ganser:

Economic & Planning Systems (EPS) is excited to submit this proposal to work with the Town of Crested Butte to prepare 5-Year Strategies to address priority issues and goals in the Community Plan. We are interested in this project because it draws from several areas of our diverse practice in land use economics. Few firms have the range of skills and experience needed to address the wide range of issues identified in the Town's RFP.

## Background of your firm/project team and experience with market analysis, zoning regulations, affordable housing, economic resiliency, and other elements of this project.

EPS is a land use economics consulting firm with over 50 employees and offices in Denver, Colorado; and Oakland, Sacramento, and Los Angeles, California. The firm was founded in 1983. Our practice areas cover affordable housing, economic development and resiliency, real estate feasibility analysis, public finance, land use and transportation planning, and public-private partnerships. This project will require expertise in all of these areas because the issues around housing, economic vitality, and community spaces, character and viability are interrelated.

We will staff this project from our Denver office, whose staff have been at the forefront of housing policy and strategy in Colorado for over 30 years. Brian Duffany, Principal, will be the principal-in-charge and project manager responsible for the overall project direction and outcomes. Brian has over 20 years of experience in housing, community planning, community economics, economic development, land use-transportation analysis, nexus studies, and cost of growth studies. Brian specializes in the economics of high-amenity places and recreation gateways and has worked in numerous mountain and rural communities in Colorado and the mountain west.

Rachel Shindman, VP, will serve as the housing policy advisor. Rachel has 10 years of experience with EPS including a similar project in Ketchum, ID. Rachel also has deep experience in Colorado mountain communities, leading housing strategies, needs assessments, and policy and fee analysis work on affordable housing. Rachel and Brian have worked extensively in the Telluride Region, the Roaring Fork Valley and several other land-constrained mountain towns with high real estate costs.

To meet the Town's schedule, we will assign a team of associates to the project who also round out our experience. Associates Karen Chen and Sushma Pramod-Meyer are assigned to the project and have strong experience in housing policy, market analysis, and community planning. They are skilled in data visualization and creating graphics to communicate findings and concepts. Avery Weiss, Associate, will support real estate feasibility modeling, funding analysis, and reviewing the Town's ROAH and employment generation (linkage) programs.

EPS has partnered with Studio Seed for this assignment, who will provide expertise in analyzing and visually representing the proposed zoning incentives. Studio Seed is a WBE firm based in Golden focused on urban design and land use planning combined with thoughtful engagement. Firm owner and principal Cheney Bostic has 20 years of experience in urban design, architecture, and landscape architecture. EPS and Studio Seed have partnered on previous projects with successful outcomes including the West Vail Master Plan and the Minturn Community Plan.

## Your experience working with similar communities and your familiarity with Crested Butte's policies objectives.

Our Team has deep experience in high-cost mountain and amenity/recreation gateway communities. We understand well the challenges of keeping these places viable as places to live at all life stages, to operate businesses, and to provide local government services. The challenges associated with the cost of real estate and limited land are common to many of these areas. Recognizing that no place is a perfect comparison to Crested Butte, a sample of places where we have recent experience that face similar challenges and have similar goals is listed below.

| County/Region | Client Place/Jurisdiction | Topics Addressed |
|---|---|---|
| Archuleta County, CO | Pagosa Springs<br>Archuleta County | Economic development, housing needs assessments |
| Eagle County, CO | Avon<br>Eagle<br>Vail<br>Minturn<br>Eagle County | Economic development, housing policy, linkage/nexus studies, community planning, zoning incentives, short-term rental (STR) policy |
| Grand County, CO | Winter Park<br>Granby | P3 negotiations, urban renewal, STR policy, impact fees |
| Lake County | Leadville<br>Lake County | Housing needs assessment<br>Short-term rental policy |

| | | |
|---|---|---|
| Mesa County, CO | Fruita | Community planning, housing policy, housing funding |
| Roaring Fork Valley, CO (Pitkin-Garfield, Eagle Counties) | Aspen, Basalt, Snowmass Village, Carbondale, Glenwood Springs<br>RFTA<br>Roaring Fork School District<br>Pitkin County | Housing policy, linkage/nexus studies, short-term rental (STR) policy, employee housing |
| Routt County, CO | Steamboat Springs<br>Routt County<br>Yampa Valley Housing Authority | Community planning, economic development, main street strategy, urban renewal, linkage/nexus studies, affordable housing demand, Brown Ranch negotiations |
| San Miguel County, CO | Mountain Village<br>Telluride<br>San Miguel County | Housing needs assessments, linkage/nexus studies, retail/commercial strategies, STR policy, misc. economic assignments |
| Summit County, CO | Breckenridge<br>Keystone<br>Summit County<br>St. Anthony Summit Hospital | Housing needs assessments, STR policy, P3 negotiations, employee housing |
| Blaine County, ID | Ketchum | Zoning incentives and commercial demand analysis |
| Gallatin County, MT | Big Sky<br>Bozeman<br>Gallatin County | Housing strategy and policy, P3 negotiations for affordable housing, economic development, misc. economic assignments |
| Teton County, WY | Teton County | Linkage/nexus study |

**Please describe how your previous experiences have informed the way you do business now. Please provide specific and recent examples of lessons learned in similar communities and the solutions you have implemented going forward.**

Our work has contributed to several successful tangible outcomes, listed below. EPS does not want to "claim credit" for the outcomes – they are the product of strong collaboration and work by the client and EPS support, and by their elected officials.

**Successful Outcomes**

| Community/Client | Project | Outcome |
|---|---|---|
| Town of Vail (with Studio Seed) | West Vail Master Plan | Adopted plan (APA Colorado Award) |
| Town of Minturn (with Studio Seed) | Community Plan, Downtown Code Update | Adopted plan<br>New Downtown zoning, parking reductions |
| City of Fruita (with Studio Seed) | Comprehensive Plan | Adopted plan, led to Downtown zoning changes which catalyzed new housing |
| St. Anthony Summit Medical | Employee housing needs strategy | Adopted higher pay and housing stipend<br>Began development planning on surplus property |
| Town of Basalt | Housing needs assessment, implementation measures | New STR regulatory fee adopted<br>Updated housing fee-in-lieu adopted<br>Considering ballot measure for dedicated housing funding |
| Town of Breckenridge | Short-Term Rental Policy | Adopted the first regulatory fee on STRs in the State |
| Town of Telluride | Short-Term Rental Policy | New STR regulations and regulatory fee |
| City of Aspen | Short-Term Rental Policy | Study led to successful ballot measure for an STR excise tax |
| Lake County | Short-Term Rental Policy | Adopted new STR regulations |
| Town of Mountain Village | Linkage/nexus study | Adopted new housing linkage policy |
| Town of Winter Park | Development plan and market study | Mixed-use project with grocery anchor built |

| | | |
|---|---|---|
| Ketchum, ID | Zoning incentives and commercial demand study | Adopted new Downtown zoning ordinance aimed at producing affordable housing and preserving ground floor commercial space. |
| Big Sky, MT | Housing Strategy | Formed a non-profit Housing Trust |

The less tangible outcomes, which we value highly, are when our clients feel like we have listened and responded to their concerns and helped the community move forward or past a challenge.

**Lessons Learned**

Successful projects are a partnership between the client and the consultant. Open, honest communication builds trust and keeps projects on schedule. Over time we have learned how to balance technical analysis with qualitative input from the community: numbers and data can't tell the whole story. The data, analysis, and outreach tell the story and inform the recommendations. Also, EPS' value is our credibility and objectivity. We do not design an analysis to support a predetermined outcome.

Lastly, we approach projects like this holistically to help communities understand the numerous forces shaping their experience. We recognize the context and capacity of our client communities and ensure our recommendations are grounded in the market context, scale, and resources of the community.

## The reasons why the Town should select your firm/project team.

We believe our qualifications, experience of the staff assigned to the project, and our references show that EPS will be a good partner for the Town. We want to emphasize our collaborative style of working, and the range of experience we have that is needed to address all the topics identified in the RFP. If we are selected, we are happy to work with you on any modifications to the scope or timeline as needed to meet your needs.

Sincerely,

ECONOMIC & PLANNING SYSTEMS, INC.



Brian L. Duffany
Principal

# Understanding and Approach

## Project Understanding

Mountain towns in Colorado, and other amenity rich places, need to be proactive and self-reliant to sustain their economies, critical services, and viability as places to live year-round. The COVID-19 pandemic accelerated and magnified trends that had been in place for decades which, if not managed, will continue to change the character of these places. The influx of wealth continues to drive up all real estate costs: housing, land, commercial space. Rising real estate costs displace people and businesses, which affects community character, the economy, quality of life, and the appeal of the place for people who live there year-round.

We have seen the effects of these trends in communities across the Mountain West: when costs get too high, people and businesses move "down valley," creating a feedback loop as more people discover that their friends and their kids' friends have also left. When local-serving businesses leave, the cost of day-to-day items - groceries, a reasonably priced lunch or dinner - go up as businesses cater to higher spending guests and part-time residents. These trends then create a feedback loop and are difficult to counter because of the size and power (amount of money) of the market economy.

For many years, Crested Butte has had housing policies that require new development to mitigate their impacts on housing demand. With a continually changing market, and increased housing market pressure, the Town would like to review its approaches to Resident Occupied Affordable Housing (ROAH) to ensure they meet the needs of the community and to examine ways to make them more effective.

The Town is also finding that it needs an approach to retaining local-serving businesses and nonresidential space. Nonresidential ("commercial" for brevity here) space is important for local businesses, non-profits, maintenance and repair services – essentially all of the business needs of a community. When these businesses and organizations leave, quality of life declines as residents have to travel further for basic needs and services. Overall, the Town wants to ensure that it has a comprehensive set of policies, ranging from zoning to parking, housing, and business development and retention, that meet the needs of the community.

# Project Approach

EPS' approach to this work is to develop recommended strategies and actions that are based on sound objective research and analysis supported by data and qualitative input. A synopsis of our approach is outlined below, with more detail in the Proposed Scope of Work. Crested Butte is trying to manage a lot of difficult impacts and has numerous complex policies and programs in place to do this. The Town is looking for clear, actionable direction on what to do over the next five years to optimize its approaches and make best use of limited resources.

## Zoning Incentives

The Town is evaluating and designing zoning policies to incentivize the private market in building ROAH. For incentives to work, they need to have enough financial value for a real estate developer to want to use to them. Studio Seed will work with EPS and the Town on this task to help calibrate the incentives to the land use and building context of the town and financial pro forma modeling of current market conditions. EPS will create financial models for common building prototypes, supported by Studio Seed. The financial pro formas will be used to estimate if the incentives are great enough to be successful and how they can be optimized to achieve the Town's goals.

## Housing Policy

Successful affordable housing programs use a suite of approaches encompassing land use regulations, supply (development), preservation, and funding. The Town would like to ensure that its approaches are relevant to the market and needs of the community, and that it is following best practices tailored for Crested Butte. EPS will do a concise "refresh" on housing market conditions and indicators of housing affordability and gaps to inform the work. From our work and client base, we are familiar with the housing policies and funding sources in mountain communities in Colorado, their pros and cons, and advances made in recent years. We will help the Town understand how to modify its policies to ensure they serve the intended populations and purposes.

## Community Commercial Space

The Community Plan (CP) found that the market is catering to tourism and luxury demand and not meeting the needs of the year-round community. The Town would like to better understand these trends and if or how it can redirect some of the market to help support and retain local-serving businesses, non-profits, arts and cultural organizations, and "third places" where people can gather informally to build connections and share experiences (e.g., music, art, meet friends, impromptu business meetings). Similar to ROAH, the Town may need to consider policies and funding sources to preserve and incentivize construction of these types of

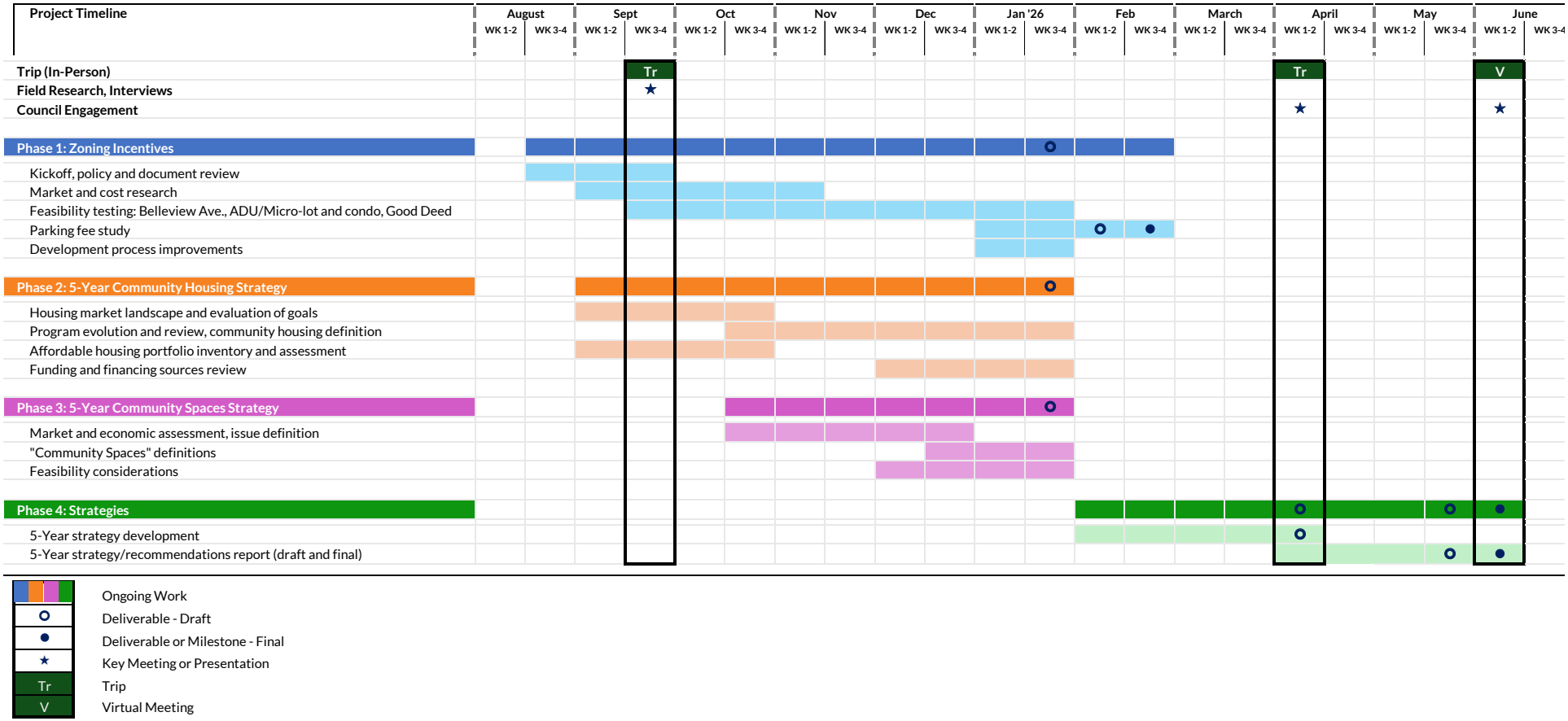
places. We will prepare a market assessment to gauge the gaps in and evolution of commercial real estate and local-serving businesses in Crested Butte and the Gunnison Valley. We will use pro forma modeling to document feasibility constraints, and to consider how zoning and land use policy can contribute to preserving and creating this type of real estate.

## Project Structure

The sequencing and approximate timing of tasks is summarized in **Figure 1**. The schedule is organized around three main engagement points, a research trip and two Council Work Sessions.

- **Research trip (September)** – EPS will travel to Crested Butte to conduct initial field and other in-person research. We would like to see the neighborhoods, development projects, zoning districts, and commercial spaces and areas relevant to the work. We would also conduct developer, real estate, and architect interviews during this trip (with follow-ups by phone/video conference). If the Council calendar allows, we could also make a short introductory presentation and engage in a discussion with Council to hear from them their priorities and questions for the work to address.
- **Research and analysis (August-January)** – In order to move into recommendations and policy development in Spring 2026, most of the analytical and "problem definition" work needs to be complete around the end of 2025 and early 2026. There may be some refinements to the work in 2026 depending on what we learn, or things we need to revisit in developing recommendations with the Town.
- **Recommendations and Policy Development (February-March)** – In early 2026, EPS will collaborate with Town staff on recommendations, strategies, and actions to bring to Town Council in early April.
- **Council Work Session 1 (In-Person, Early April)** – The purpose of Work Session 1 is to present the draft strategies and recommendations to Town Council for discussion and questions. That input will guide us in preparing the Draft Strategy document(s) for their consideration in packet material and Work Session 2.
- **Council Work Session 2 (Virtual, June)** – The second Council Work Session is proposed for approximately mid June. Here, we will present the final recommendations, strategies, and actions, incorporating comments and revisions from the first Work Session.

## Figure 1. Project Timeline



# Proposed Scope of Work

Our proposed scope of work is provided below. It closely follows the RFP, so we are mainly noting any areas we think need emphasis and where we will request support from the Town. EPS values collaboration with our clients and we welcome comments and input on the work plan, budget, and timeline if we are selected to work with Crested Butte.

The Understanding and Approach sections above present our understanding and rationale for each phase of work. For brevity and clarity, we are focusing on the workflow in this section, and less on the contextual aspects of the project. The Scope of Work also includes regular scheduled project check-ins with the Town's project manager(s).

## Phase 1. Zoning Incentives Analysis

Phase 1 includes a kickoff, data collection, and the technical work on calibrating zoning incentives for ROAH. There will be overlap with this Phase and Phases 2 and 3 as they will share market data and development cost inputs.

### 1.1 Kickoff, policy and document review

- Convene a project kickoff meeting to review the timeline, begin data collection, and to discuss contextual issues.
- Review relevant background material, policy documents, and ordinances.
- Submit an initial data request and identify contacts for future requests.

### 1.2 Market, cost, and design research

In this task, we will obtain the information we need to evaluate and test the proposed zoning incentives for ROAH in Task 1.3.

- Collect data on current real estate values from home sales data, new development pricing, and interviews.
- Collect data on construction costs for common building types, separating out the major components such as land, parking, hard costs, soft costs, and development fees.
- Identify and interview roughly 4-6 area builders and real estate developers on costs, market values, and for input on the zoning code and potential incentives. Also discuss parking requirements for input on the Parking Fee Study.
- Identify and interview roughly 4-6 architects or planners with local experience with the Town's zoning code and other requirements. Gather input on how the code may impede ROAH, infill development, and community commercial space. Also discuss parking requirements for input on the Parking Fee Study.

## 1.3 Feasibility testing

This task encompasses the evaluation and feasibility testing of the three policies listed in the RFP: the Belleview Avenue Zoning Incentives; the ADU/Micro-lot and condo incentives, and the Good Deed Program.

### *Belleview Avenue Zoning Incentives*

- Review the current and proposed zoning to construct approximately 2-4 building prototypes that would result under the zoning, including a baseline building prototype under the current zoning.
- Using the market and cost research, build a real estate pro forma spreadsheet model (a comparison of costs and revenues) to test the financial performance of the baseline building(s) and buildings under the proposed incentives.
- Test the impacts of different ROAH requirements under the baseline and zoning incentives. Measure each scenario with financial performance metrics in the real estate pro forma model.
- Determine what modifications to zoning and/or the ROAH are needed to effectively enable the market to build more ROAH in projects with less subsidy from the Town or other sources.

### *ADU/Micro-lot and Condo Incentives*

- Analyze the physical feasibility of additional ADU incentives, such as the "Double ADU" incentive which would allow more ADU density on a lot. Also, through interviews and research, examine the viability of "condo-ing" ADUs to allow for ADU ownership, considering legal, sale-ability, and practical factors.
- Recommend deed restriction structures for ADUs, for-rent or for-sale. This will be informed by our review of existing policies, the Community Plan, interviews, and peer community programs.

### *ROAH Policies*

The Town considered or is considering updates to its ROAH fees, which were last updated about 15 years ago. Many fee study updates are resulting in large fee increases due to the increases in real estate and construction costs, if the maximum fee is adopted. There are, however, numerous other factors in housing mitigation fees and requirements that determine what someone ultimately pays or is required to build. We anticipate the following work in evaluating the ROAH.

- Review the most recent fee or nexus study and provide comments to Town Staff for discussion. EPS can provide guidance on whether the study(ies) meet current standards, but cannot give a legal opinion.
- Compare the employee generation rates, fee calculation assumptions, and applied mitigation rate to peer communities with similar policies.

- Consider the development feasibility impacts of new fees in the context of other pro forma modeling. Also consider the other side of the equation – how much revenue the fees may generate and their impacts on unit production or acquisitions (including deed restriction programs).
- Make recommendations on suggested changes to the ROAH fees and their application.

### *Good Deed Program*

The appeal of deed restriction acquisition programs is that acquiring a deed restriction on an existing home can be less expensive than developing an affordable unit. This assumption varies based on market and cost conditions in the community, but generally holds true in high-cost mountain towns. We will evaluate the effectiveness of the Town's program, considering:

- Examine available funding for deed restriction purchases.
- Compare deed restriction purchase programs in peer communities, from existing EPS research and follow ups in our client base and other communities.
- Compare the amount paid in peer programs to market value; interview program managers to gauge effectiveness.
- Compare deed restriction acquisition costs to per unit affordable housing development costs.
- Make recommendations on any recommended changes to the Town's current approach.

## 1.4 Parking Fee Study

Parking is often an issue in land constrained mountain towns. Parking is also a significant development cost, especially when affordable housing and community commercial space is a goal. The Town would like to update its fee-in-lieu for parking, which is used to fund other parking options and transportation initiatives.

- Document current parking requirements. Suggest any refinements for any land uses where the parking requirements may be out of scale or may reflect outdated approaches.
- From interviews and project cost data, estimate the cost per parking space (surface and structured) for use in the fee calculation.
- Calculate the fee-in-lieu of providing parking for the Town's land use categories using the appropriate parking requirement rates. Summarize the results in a standalone memorandum.

### 1.5 Development process improvements

- Make high level recommendations on changing the development process to be more efficient, transparent, and predictable.
- These recommendations will be developed from interviews with local builders/ developers and architects, and a review of the Town's requirements.

### Phase I Findings

- EPS will synthesize the key findings from the Phase 1 research and analysis into a draft deliverable to be used by EPS and Town staff in developing Strategies in Phase 4.

## Phase 2. 5-Year Housing Strategy

### 2.1 Housing market landscape and evaluation of goals

The purpose of this task is to measure progress against three stated goals, and potentially determine if other goals or metrics should be considered. The stated goals are:

- 75% of homes are occupied by full-time residents
- 30% of homes will have deed restrictions
- Grow number of Town employee rental units to 15
- The work we expect to complete will include:
- Prepare a concise update to housing market conditions and affordability indicators. Build on work from the 2024 Gunnison Valley Regional Housing Needs Assessment (HNA).
- Update key economic and demographic data that will inform the evaluation of the Town's housing goals. These include full time population and households, second home/part time resident totals and percentages, affordability metrics (gaps to median price and rent, cost burden), and jobs and wages by location.
- Create indicators from data to measure progress against the goals and on the overall alignment of the housing market compared to local needs. Document the data sources and methods so that the measurements can be easily updated.

### 2.2 Program evolution and review, community housing definition

The RFP suggests to us that the Town would like to consider and understand how the Town's housing policies and programs align with the needs of the community. Many mountain communities focused on "workforce" housing in the early program years and are now finding that the community needs are much broader. In this task, we will compare the Town's programs and policies to the housing needs and demographics of the community.

- Summarize Town housing programs and policies, specifically the AMI targets for each policy, and the range of ROAH deed restrictions. Data and findings from the Affordable Housing Portfolio Assessment will also be used in this task.
- Compare the above policies and programs to community demographics and areas of prioritized need from the HNA.
- Determine if any housing gaps or needs are not being addressed, and what changes to policies and increased resources would be needed to address them. Through this analysis, we will work with Town Staff to propose any changes to the definition of "Community Housing" that may be warranted.

## 2.3 Affordable housing portfolio inventory and assessment

This task will overlap with Task 2.2, as they both inform whether the Town's programs and policies are ready to meet changing needs. We may request some assistance from the Town in sourcing affordable housing inventory data. The 2020 5-Year Housing Plan, the Town's website, and other sources contain inventory data. We will ask staff to help verify its accuracy and any gaps.

- Compile documentation on the Town's housing inventory. Tabulate information such as AMI targets, rents, affordability term, and type of deed restriction (as data allows).
- Compile a list of planned or proposed projects (development pipeline).
- Strive to compile high level funding source information, e.g. town funded, developer mitigation requirement, non-profit or other partners, and any state/federal funding. This will not be a detailed "capital stack" analysis, but an identification of how the project was paid for.
- If readily available, obtain vacancy rate and turnover data. Note that this can be a time-intensive exercise depending on the management of each property and we may not be able to do an exhaustive tabulation within the budget.
- Interview developers and others familiar with major projects or key projects that illustrate particular success or challenge.
- Compare the inventory to the needs identified in earlier tasks and in the HNA. Determine alignment of the inventory, and pipeline projects, with housing priorities.

## 2.4 Funding and financing sources review

Strong housing programs need to have a range of tools and funding sources to address capital projects (construction) and non-capital operating costs (funding ongoing programs). Units and fees produced from development are cyclical and "lumpy", as IHOs and linkage programs rely on new development. Also, these fees can only be used on development and related costs. In a largely built out infill context, these programs have limitations. An ongoing funding source can be more versatile, depending on any applicable ballot language, and more reliable from year to year.

Crested Butte's primary funding source is a 7.5% excise tax on short-term rentals. The Town also uses a portion of its Real Estate Transfer Tax (RETT) on affordable housing, which qualifies as a capital project. These recurring funding sources are supplemented with developer mitigation units and fees.

- Compile revenue trends by source. As available, also compile data on how funds were spent including capital construction, programs, and maintenance of properties.
- Prepare case studies from similar communities on dedicated funding sources for housing and other community priorities. Draw from previous EPS assignments and our client base to fill in gaps and add contextual background information on why communities selected their various approaches.
- Collaborate with the Town to determine how to best use these funds, based on the housing goals
- Determine if there is the potential to generate new funding, and from what source(s) or mechanism(s).

### Phase 2 Findings

- EPS will synthesize the key findings from the Phase 2 research and analysis into a draft deliverable to be used by EPS and Town staff in developing Strategies in Phase 4.

## Phase 3. 5-Year Community Spaces Strategy

The work in this task will enable the Town to understand the trends driving the evolution of commercial space in the Town, and what types of community serving businesses, organizations, and physical spaces or real estate are needed. It will also result in recommendations on what land use and incentive strategies the Town can use to support a thriving community.

### 3.1 Market and economic assessment, issue definition

- Prepare a high-level assessment of the inventory of non-residential/commercial space in Crested Butte and the North Valley area. If sufficient data is readily available, this could include a business-level inventory, but we are not assuming that will be possible within the budget.
- Assess trends in jobs by location, and where possible, trends in commercial space location by type with available data. Interviews may be needed to supplement quantitative and spatial data. Strive to show what businesses are being retained in Crested Butte, and what has migrated into the adjacent North Valley and further south to Gunnison.
- Forecast demand for commercial space from spending patterns, comprised of full-time residents, part-time residents, and visitors. Compare demand to the commercial inventory to identify gaps in the market.

- Assess the need for third spaces from the Community Plan, and 3-6 targeted interviews with businesses, non-profits, and other community-driven organizations.

## 3.2 Community Spaces Definitions

- EPS will propose definitions for Community Spaces. We will develop definitions to encompass a range of retail, food & beverage, office, services, maintenance and repair, and light industrial business needs. We will also address other needs such as space and venues for community gathering, and arts and culture.
- The proposed definitions will be informed by the gaps in the market or inventory determined in the previous task.

## 3.3 Feasibility considerations

The market is not providing community serving uses, likely because they are not financially feasible or there is a perceived lack of demand. The earlier tasks will inform the demand question, and this task will inform the feasibility question. It is important to understand the financial feasibility of Community Spaces. If the Town is interested in developing an incentive program, we need to identify what type and amount of incentive or subsidy is needed, and if the Town has the resources to implement such a policy.

- Adapt the pro forma modeling from Phase 1 to gauge the feasibility of common building types, using local market rents and construction costs. Since Community Serving Businesses may not be able to pay full market rent, estimate the feasibility gap for major types of Community Serving Space.
- Determine what incentives and policies could help create or retain more Community Servicing Space. Consider policies such as deed restrictions for commercial space and use case studies from other programs (limited number of examples) to inform the recommendations.

## Phase 3 Findings

- EPS will synthesize the key findings from the Phase 3 research and analysis into a draft deliverable to be used by EPS and Town staff in developing Strategies in Phase 4.

## Phase 4. Strategy and Recommendations

### 4.1 Draft Strategies, Work Session 1

This final phase of work includes developing draft and final strategies to bring to Town Council. EPS will first develop a long list of draft strategies for each topic area to be discussed in a virtual meeting with Town staff. These will be refined into a memorandum and/or a slide deck for Town Council review.

The packet material for Work Session 1 with Town Council is envisioned to be summaries of the key findings from the analyses from each phase, plus the draft recommended 5-year strategies. After this meeting, we will debrief with Town Staff to begin revising the recommended strategies for the Draft and Final Strategy documentation.

### 4.2 Final Strategies and Draft and Final Document

EPS will prepare the full study documentation and finalize the recommendations to present to Town Council in Work Session 2. The 5-Year Strategies will be concise to enable the Town to easily see the path forward. It will identify the responsible department or partner entity, resources required (staff, funding, others TBD), and relative level of effort. We will also prioritize the strategies based on importance (Council input) and relative ease of implementation. The Strategy document will enable the Town to create annual work programs and inform budgeting.

# Budget

The budget for the project is not to exceed $150,000, as shown below in **Table 1**. The estimated hours and cost by task and staff level are shown for planning purposes. EPS may re-allocate budget across tasks, staff levels, and between EPS and Studio Seed so long as the total cost is not exceeded, unless there is authorization from the Client for additional budget.

## Table 1. Project Budget

| Description | Engagement | Principal [1] | Associate | Research/ Support | EPS | C. Bostic | Studio Seed | Total |
|---|---|---|---|---|---|---|---|---|
| **Billing Rate (2025 rates)** | | **$255** | **$160** | **$120** | | | **$175** | |
| **Phase 1: Zoning Incentives** | Research Trip (IP); Interviews (IP,V) | | | | | | | |
| Kickoff, policy and document review | | 6 | 8 | 4 | $3,290 | 4 | $700 | $3,990 |
| Market and cost research | | 20 | 40 | 24 | $14,380 | 12 | $2,100 | $16,480 |
| Feasibility testing: Belleview Ave., ADU/Micro-lot and condo, Good Deed | | 6 | 40 | 0 | $7,930 | 32 | $5,600 | $13,530 |
| Parking fee study | | 12 | 32 | 0 | $8,180 | 8 | $1,400 | $9,580 |
| Development process improvements | | 4 | 4 | 0 | $1,660 | 8 | $1,400 | $3,060 |
| Phase 1 Findings | | 16 | 32 | 0 | $9,200 | 8 | $1,400 | $10,600 |
| **Subtotal** | | **64** | **156** | **28** | **$44,640** | **72** | **$12,600** | **$57,240** |
| **Phase 2: 5-Year Community Housing Strategy** | | | | | | | | |
| Housing market landscape and evaluation of goals | | 4 | 32 | 16 | $8,060 | 0 | $0 | $8,060 |
| Program evolution and review, community housing definition | | 4 | 16 | 0 | $3,580 | 0 | $0 | $3,580 |
| Affordable housing portfolio inventory and assessment | | 2 | 8 | 24 | $4,670 | 0 | $0 | $4,670 |
| Funding and financing sources review | | 4 | 16 | 0 | $3,580 | 0 | $0 | $3,580 |
| Phase 2 Findings | | 16 | 32 | 0 | $9,200 | 0 | $0 | $9,200 |
| **Subtotal** | | **30** | **104** | **40** | **$29,090** | **0** | **$0** | **$29,090** |
| **Phase 3: 5-Year Community Spaces Strategy** | | | | | | | | |
| Market and economic assessment, issue definition | | 8 | 32 | 16 | $9,080 | 0 | $0 | $9,080 |
| "Community Spaces" definitions | | 8 | 8 | 0 | $3,320 | 0 | $0 | $3,320 |
| Feasibility considerations | | 8 | 32 | 0 | $7,160 | 8 | $1,400 | $8,560 |
| Phase 3 Findings | | 16 | 32 | 0 | $9,200 | 0 | $0 | $9,200 |
| **Labor Subtotal** | | **228** | **624** | **152** | **$28,760** | **8** | **$1,400** | **$30,160** |
| **Phase 4. Strategy and Recommendations** | | | | | | | | |
| Draft Strategies, Work Session 1 | Council Worksession 1 (IP) | 32 | 32 | 8 | $14,240 | 0 | $0 | $14,240 |
| Final Strategies and Draft and Final Document | Council Worksession 2 (V) | 32 | 40 | 8 | $15,520 | 0 | $0 | $15,520 |
| **Labor Subtotal** | | **456** | **1,164** | **292** | **$29,760** | **0** | **$0** | **$29,760** |
| **Expenses** | | | | | | | | |
| Travel | | | | | $2,500 | | $1,250 | $3,750 |
| **Subtotal** | | | | | **$2,500** | | **$1,250** | **$3,750** |
| **Totals** | | **322** | **884** | **220** | **$134,750** | **80** | **$15,250** | **$150,000** |

[1] Also includes time at the VP rate of $215/hour

303 623 3557
epsys.com
Denver | Los Angeles | Oakland | Sacramento



# About Economic & Planning Systems

**Economic & Planning Systems, Inc. (EPS)** is a land economics consulting firm experienced in the full spectrum of services related to real estate development, the financing of public infrastructure and government services, land use and conservation planning, and government organization.

EPS was founded on the principle that real estate development and land use-related public policy should be built on realistic assessment of market forces and economic trends, feasible implementation measures, and recognition of public policy objectives, including provisions for required public facilities and services.

## AREAS OF EXPERTISE

- Housing Policy
- Real Estate Economics
- Public Finance
- Land Use & Transportation
- Economic Development & Revitalization
- Fiscal and Economic Impact Analysis
- Public-Private Partnership (P3)
- Parks and Open Space Economics

## Clients Served

Since 1983 EPS has provided consulting services to hundreds of public- and private-sector clients in Colorado and throughout the United States. Clients include cities, counties, special districts, multi-jurisdictional authorities, property owners, developers, financial institutions, and land use attorneys.

## Staff Capabilities

The professional staff includes specialists in public finance, real estate development, land use and transportation planning, government organization, and computer applications. The firm excels in preparing concise analyses that disclose risks and impacts, support decision making, and provide solutions to real estate development and land use-related problems.

## Previous Work

### Development Code Support and Commercial Demand Study

*Ketchum, Idaho*

The City of Ketchum adopted an interim ordinance (Ordinance 1234) in October of 2022. The ordinance required development projects in the commercial core zone districts to build a minimum number of housing units, provide commercial space, and/or community housing units in exchange for increased allowable density. Concerns about the need for preservation of ground floor commercial space opportunities and impacts on the feasibility of development were raised while the interim ordinance was in place. To address these concerns, EPS was engaged to provide analyses to support changes to the ordinance to attract use of the density bonus incentive and secure desired community outcomes.

EPS completed several analyses to support drafting of a permanent ordinance and ongoing stewardship of Downtown. The commercial demand study portion of the project included inventorying existing commercial space in the city, providing recommendations for ongoing tracking of available commercial space, and estimating the future demand for commercial space. The commercial demand study helped to support the need to preserve ground floor commercial space opportunities in the core of the community. To support the ordinance drafting, the financial feasibility of conceptual development programs was modeled to assess how changes to the ordinance impact feasibility and the attractiveness of using the density bonus. The findings of the feasibility study were used to draft a permanent ordinance, which was adopted by the City Council.

### Mountain Village Retail and Economic Base Strategies

*Mountain Village, Colorado*

EPS has worked with the Town of Mountain Village over the course of more than 10 years on various economic, land use, and fiscal issues. Much of our work was around helping the Town strengthen business conditions in the Village Core, which struggled with vacancies and high business turnover, gaps in placemaking and activation, and competition with Telluride. This context is similar to the relationship between Mount Crested Butte and the Town of Crested Butte.

EPS has prepared demand studies to gauge how additional lodging and residential density in the Town could support more demand for businesses. In this work, we have partnered with urban designers and retail strategists to combine the economic analysis with tangible placemaking and business strategies. The most recent work found that since COVID, the Village's customers are wealthier, stay shorter periods of time, and spend more on experiential retail such as restaurants and lodging. For retail to grow in the commercial core, the stores must shift from bulk, commodity stores to engaging retail experiences that connect to the unique brand of Mountain

Village. While Community Commercial Space was not a focus of this work, this experience helps us understand the market drivers in similar places like Crested Butte.

### Housing Needs Assessment and Technical Assistance

*Basalt, Colorado*



Basalt is a small town 20 miles "down valley" from Aspen. The Town has inclusionary zoning (IZ) and commercial affordable housing linkage policies that have been in place since the 1990s, and like many communities in the Roaring Fork Valley, has been working to address the impacts of high cost luxury development on affordable housing needs for a long time. The Town hired EPS to complete three tasks to help the Town adjust its approach to affordable housing as market and land use conditions change.

- Housing Needs Assessment (HNA) – The Town wanted to ensure that its approach to housing, especially what it was planning to construct, was addressing the needs of the community. EPS completed a new HNA for the town that included analyses of market conditions, the economy, and demographics, and a survey of residents in the Town's deed restricted housing. The HNA recommended that the Town broaden its approach to housing with ADUs, buy downs, deed restriction incentives, and dedicated funding. The Town is nearing build out and will be able to rely less on tools like IZ and linkage, which are tied to new development, to create new affordable housing.
- Fee-in-lieu update – EPS updated the Town's fee-in-lieu calculation for the IZ program with new household income and housing cost data.
- STR Regulatory Fee Study – EPS prepared a regulatory fee study to enable the Town to generate revenue for affordable housing from the impacts of short-term rentals on affordable housing demand.
- Program Implementation – EPS is partnering with another firm to provide the Town with more detailed recommendations on developing and implementing specific programs including:
    - A deed restriction incentive and buy-down program
    - A dedicated funding source, in addition to the STR fees passed in Spring 2025
    - Revisions to housing mitigation rates in the IHO and linkage policies

## West Vail Master Plan

*Vail, Colorado*




EPS was the lead real estate economics consultant, with Studio Seed as subconsultant, for the West Vail Master Plan that won an APA Colorado Chapter Award in 2022. West Vail is the area north of I-70 at exit 173. From a land use and development perspective, Vail is known for its compact, relatively high density, architecturally consistent villages: Vail Village and Lionshead. West Vail is a stark contrast with its 1-3 story buildings and large areas of surface parking. The suburban style of development dating to the 1980s is no longer the highest and best use of the properties. The area presents unique development opportunities in that there are a small number of landowners controlling large properties, including the Town that owns the parking structure and holds a ground lease to City Market.

The community process identified a desire to create a more inviting neighborhood center, and to incentivize reinvestment and redevelopment. The area has one of the highest value real estate markets in Colorado; however, the Plan needed to balance creating and preserving affordable housing, and retaining key businesses including two supermarkets (Safeway and City Market) and other local-serving businesses.

EPS worked with the planning and urban design team to design redevelopment scenarios that achieved multiple goals and were financially feasible. EPS used market analysis and built a pro forma feasibility model to determine the level of financial feasibility, public benefits (affordable housing, low cost commercial space) that could be carried by the developments, and where public financing such as TIF could be used as an incentive.

## Housing Funding Strategy

*Fruita, Colorado*

Fruita has emerged as a hub for outdoor recreation and is facing growing housing market pressures. Like many other communities in Colorado, there have been growing concerns about the ability of the local workforce to access housing in the city. The City retained EPS to formulate a housing funding strategy focused on generating new revenue streams and how those funds can be most effectively allocated to create more workforce housing options. The study also modeled various housing programs, including an ADU program, land banking, and down payment assistance, to determine the impact of new funding in relation to housing

targets and the financial feasibility of establishing a revolving loan fund for the City. Based on our recommendations, the City intends to establish permanent funding sources for housing and to consider a combination of supply- and demand-side programs aimed at workforce housing.

### Residential Linkage Study

*Vail, Colorado*

EPS was hired by the Town of Vail to conduct a residential construction employment generation linkage study to replace the Town's inclusionary housing ordinance. Using employment, building permit, and economic output data, EPS (along with the consulting firm RRC Associates) calculated the number of construction and operations & maintenance employee employees generated per 1,000 square feet of new residential construction. The analysis creates a nexus between residential construction and workforce housing demand.

EPS also prepared a comparison of linkage regulations in eight similar high-cost mountain resort communities and counties. EPS is also documenting how the new policy will differ from the existing IHO in terms of the affordable housing mitigation requirements for new development. This ensured that the new linkage study would generate a fee that reflects the cost of construction and housing in Vail compared to the Town's peers. The Town may consider changes to the regulations in early 2026.

### Short Term Rental Policy Study

*Telluride, Colorado*

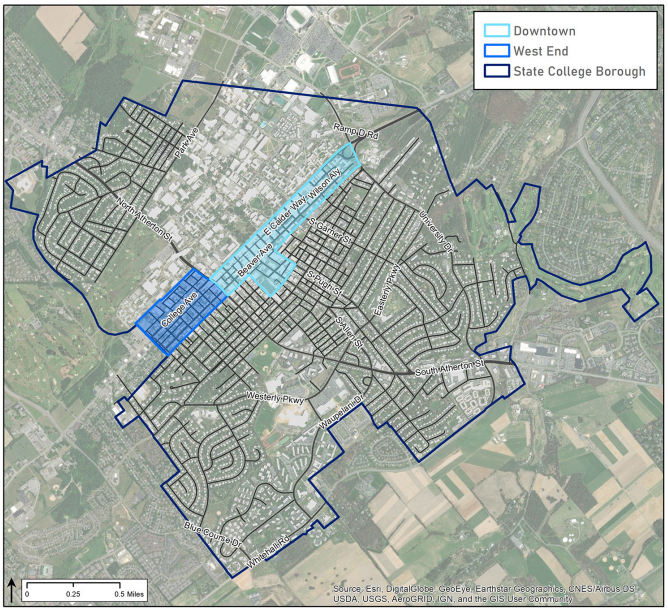
EPS designed a study and facilitated a process to inform the community and Town Council on the benefits and negative impacts of STRs in the Telluride region economy. The worked started with a conditions study, that inventoried, mapped, and analyzed STR characteristics and market values in the Town. EPS facilitated two community open houses, and three Town Council meetings on the topics to identify and vet various policy approaches including licensing caps, zoning modifications, and a regulatory fee. The Town ultimately relaxed licensing caps and adopted a regulatory fee on STRs that will increase funding for affordable housing.

### Zoning Feasibility Analysis

*State College, Pennsylvania*

The Borough of State College is in the process of updating its zoning that dates to the 1950s. The Borough recently made code changes that allowed much higher development densities in and around Downtown near the Penn State campus. The Borough was considering additional zoning changes to require more affordable housing, green construction techniques, and to allow less parking as an incentive. The Borough and its constituents were also concerned about how new higher density buildings were affecting community character.

The Borough hired EPS to conduct a real estate proforma feasibility analysis to determine if the buildings that would result from zoning changes would be feasible to develop, and what incentives could be used to achieve public benefits like affordable housing and ground floor mixed use space. EPS built pro forma feasibility models for six building prototypes to evaluate various metrics and determine recommendations for changes to the proposed zoning code and public policy objectives. EPS also conducted a market analysis and interviewed local developers to inform the analysis. EPS helped facilitate two City Council workshops on the topic as well. The City is considering code changes as a result of the work.



# EPS References

Paul Wiser
Town Manager
Town of Mountain Village
970 729 2654 (m) | pwisor@mtnvillage.org

***Project: Mountain Village Retail and Economic Base Strategies***

Michelle Bolson (Haynes)
Assistant Town Manager
Town of Mountain Village
970 239 4061 | mhaynes@mtnvillage.org

***Project: Mountain Village Retail and Economic Base Strategies***

James Lindt
Assistant Planning Director
Town of Basalt
970 279 4468 | james.lindt@basalt.net

***Project: Housing Needs Assessment and Technical Assistance***

Matt Gennett, AICP
Community Development Director
Town of Vail
970 479 2146 | mgennett@vailgov.com

***Project: West Vail Master Plan***

Dan Caris
Director, Planning & Development
City of Fruita
970 858 0786 | dcaris@fruita.org

***Project: Housing Funding Strategy***

Zoe Dohnal
Deputy Town Manager
Town of Telluride
970 638 3762 | zdohnal@telluride-co.gov

***Project: Telluride Short Term Rental Policy Study***

Ed LeClear
Director
Planning & Community Development
Borough of State College
814 234 7100 | eleclear@statecollegepa.us

***Project: Zoning Feasibility Analysis***

Following are key personnel resumes that describe team members' similar experience with developing plans and engaging the community. Previous examples applicable to this project are provided as well as each individuals' availability to work on this project.

Each of the team members performing work on this project are located in Denver, Colorado.



### Education

Master of Regional Planning, Cornell University

Bachelor of Arts, Colby College

### Employment History

26 Years Experience

21 Years with EPS

### Affiliations

American Planning Association

Urban Land Institute

### Speaking Engagements

*Implications of Scheetz vs. Eldorado County, CA*, Rocky Mountain Land Use Institute, 2025

*TIF for TAT: Urban Renewal After HB 15-1348*, Rocky Mountain Land Use Institute Conference, 2018

*Streetcar Economics*, American Planning Association Conference, 2010

### Awards

Downtown Colorado, Inc. Governor's Best Plan Award – *City of Englewood Economic Development Strategic Plan*

American Planning Association, Colorado Chapter – West Vail Master Plan

### % Availability

25-75% depending on weekly needs of the project

Economic & Planning Systems, Inc.

*The Economics of Land Use*

www.epsys.com

# Brian Duffany

## Principal

**Brian Duffany** is a real estate economist and planner with 25 years' experience in land economics. Brian has a broad base of experience in real estate development feasibility analysis, workforce housing, financial and economic modeling, economic development, economic and demographic analysis, local government finance, fiscal impact analysis, and transportation planning. Much of his work is in mountain, rural, and amenity gateway communities. Brian helps communities understand the market and economic forces shaping them. His work includes housing strategy and policies, comprehensive and neighborhood planning, and impact fee programs. He leads projects that bring together technical work, public engagement, and discussions with policymakers on implementing the recommendations.

### HOUSING NEEDS AND STRATEGIES

- Housing Needs Assessment and Implementation | Basalt, CO
- Regional Housing Needs Assessment | San Miguel County, CO
- Regional Housing Needs Assessment | Eagle County, CO
- Yampa Valley Housing Authority Demand Study | Routt County, CO (Ongoing)
- Roaring Fork Transportation Authority (RFTA) Employee Housing Strategy | Roaring Fork Valley, CO

### POLICY AND IMPLEMENTATION

- Housing Funding Strategy | Fruita, CO
- Housing Mitigation Fee Study | Pagosa Springs, CO
- Inclusionary Zoning and Linkage Fee Study | Fort Collins, CO
- Affordable Housing Mitigation Employment Generation Study | Routt County, CO (Ongoing)
- Short Term Rental Regulatory Fee | Breckenridge, CO
- Pro Forma Analysis of Inclusionary Housing Policy | Burlington, VT
- Short-Term Rental Policy Study | Telluride, CO
- Short-Term Rental Regulatory Fee | Breckenridge, CO

### PLANNING

- Comprehensive Master Plan | Mount Crested Butte, CO
- Comprehensive Plan Economic Elements | Fruita, CO
- Community Plan Update | Minturn, CO
- West Vail Master Plan and Housing Strategy | Vail, CO
- Growth Policy Update | Bozeman, MT
- Brown Ranch Affordable Housing Annexation Negotiation Support | Steamboat Springs, CO

1600 Stout Street, Suite 1850, Denver, CO 80202 | 303 623 3557 | bduffany@epsdenver.com



# Rachel Shindman, AICP

## Vice President

**Rachel Shindman**, AICP, brings several years of experience in many of EPS's practice areas. Her specializations include housing, real estate economics, fiscal and economic impact analysis, and economic development and revitalization. She has worked on studies addressing housing policy, housing funding strategies, zoning and development feasibility, and small-scale commercial feasibility across Colorado and the Mountain West, with a focus on mountain communities. Her work is based in both data analysis and outreach, and her experience in community and stakeholder engagement includes interviews, focus groups, surveys, and community meetings. Rachel enjoys engaging on projects at the intersection of topics and interests, including affordable housing policy, funding and financing strategies, and community-oriented planning. She has a strong skill set for addressing economic and policy issues, and her experience in public, private, and nonprofit organizations enable her to work successfully with a diverse set of clients and stakeholders.

### Education

Master of Regional Planning, Cornell University

B.A., Queen's University

B.Ed., Queen's University

Certificate in GIS, Queen's University

### Employment History

10 Years with EPS

### Affiliations

American Institute of Certified Planners

American Planning Association

Urban Land Institute

### Presentations

*Short Term Rental, Long Term Impact?* American Planning Association – National Conference 2025, Denver, CO

*The Promises and Pitfalls of Data-Driven Planning* American Planning Association – National Conference 2025, Denver, CO

*From Hiring to Housing: Employer Strategies for Housing Solutions* Presentation (convener and presenter) American Planning Association - Colorado State Conference, Virtual 2020

### % Availability

25-75% depending on weekly needs of the project

### SELECTED PROJECT EXPERIENCE

- Retail and Feasibility Study | Ketchum, ID
- Zoning Feasibility Study | State College, PA
- Downtown Plan | La Crosse, WI
- Downtown Master Plan | Idaho Springs, CO
- Hilltop Commercial Demand and Feasibility Study | Tacoma, WA
- Regional Housing Needs Assessment | Eagle County, CO
- Regional Housing Needs Assessment | Roaring Fork Valley, CO
- Inclusionary Housing and Linkage Study | Steamboat Springs, CO
- Short Term Rental Policy Technical Assistance | Lake County, CO
- Short Term Rental Study | Vail, CO
- Housing Needs Update | Summit County, CO
- St. Anthony Summit Hospital Employee Housing | Summit County, CO
- Housing Needs Analysis and Strategy | Ouray, CO
- Housing Needs Assessment | Basalt, CO
- Roaring Fork Transportation Authority Employee Housing Strategy | Roaring Fork Valley, CO
- Housing Linkage Program | Mountain Village, CO
- Affordable Housing Mitigation Rate and Fee-in-Lieu Updates | Vail, CO
- Housing Needs Assessment | Lake County, CO
- Housing Needs Study | Archuleta County, CO
- Housing Needs Assessment | Upper Arkansas Area Council of Governments, CO
- Housing Needs Assessment | Chaffee County, CO
- Housing and Transportation Funding Model | Boulder County, CO
- Downtown Workforce Housing Needs Assessment | Billings, MT

Economic & Planning Systems, Inc.
*The Economics of Land Use*
www.epsys.com

1600 Stout Street, Suite 1850, Denver, CO 80202
303 623 3557
rshindman@epsdenver.com



# Karen Chen

## Associate

**Karen Chen** has worked on various types of land use economic and housing related projects for public, private, and nonprofit clients. She is well-versed in ArcGIS and enjoys analyzing and visualizing geospatial data. She has worked on a wide range of projects at EPS involving housing and commercial market analysis, housing policy development, development feasibility, and downtown strategic investment strategies. Her recent work includes analyzing the housing market and housing demand in Steamboat Springs, assessing employee generation rates to guide housing mitigation policies in Routt County, and contributing to analysis on potential inclusionary housing policies in Front Range communities. Prior to EPS, Karen worked at an economic development consulting firm based in Washington, DC, where she supported communities with economic development strategies, conducted retail market analyses, and more, as well as an outreach and engagement firm where she helped facilitate community engagement for planning and infrastructure projects in a diverse range of communities.

### Education

MPS In Urban + Regional Planning Georgetown University

BA in Architectural Studies University of Pittsburgh

### Employment History

7 Years Experience

2 Years with EPS

### Certifications

LEED Green Associate, 2019

### Presentations

*Rules of Thumb for Retail Viability* 2023 Main Street Now Conference

### % Availability

50-90% depending on weekly needs of the project

### SELECTED PROJECT EXPERIENCE

- Affordable Housing Policy Development | Lakewood, CO
- Inclusionary Housing and Residential Linkage Policy Tools | Erie, CO
- Comprehensive Plan Housing Needs Assessment | Keystone, CO
- I-70 Airpark Interchange Residential and Commercial Projections | Aurora, CO
- YVHA Housing Demand Study | Routt County, CO
- Steamboat Springs Community Area Plan | Steamboat Springs, CO
- Louisville Comprehensive Plan Update | Louisville, CO
- Redtail Ridge Economic Impact | Louisville, CO
- Downtown Strategic Investment Plan | Tulsa, OK
- Federal Boulevard Corridor Plan | Adams County, CO
- Economic Market Analysis | Erie, CO
- Downtown Master Planning Services | Livingston, MT
- Multimodal Transportation Master Plan | Aurora, CO

Economic & Planning Systems, Inc.
*The Economics of Land Use*
www.epsys.com

1600 Stout Street, Suite 1850, Denver, CO 80202
303 623 3557
kchen@epsdenver.com



# Sushma Pramod-Meyer

Associate

**Sushma Pramod-Meyer** is a planner with experience in housing policy, zoning analysis, and community-based planning. She supports a range of projects at EPS through data analysis, feasibility studies, and targeted stakeholder engagement to shape policies that are both equitable and grounded in market realities. Her recent work includes housing strategies in San Miguel County and Basalt, CO; Gallatin County, MT; and ongoing work in Roaring Fork region and El Paso, TX. She also contributed to a density bonus program review in Austin, TX; engaged industrial businesses in Denver for the City's Neighborhood Planning Initiative, and interviewed RFTA and RFSD employees on employee housing strategies in the Roaring Fork Valley. Prior to EPS, Sushma worked at the NYC Department of Housing Preservation and Development where she managed affordable housing projects through predevelopment, and gained hands-on experience with entitlement processes, partnerships, and implementation planning.

## Education

Master of Urban Planning, University of Illinois at Urbana-Champaign

Bachelor of Architecture. Visvesvaraya Technological University

## Employment History

6 Years Experience

2 Years with EPS

## Previous Experience

NYC Dept. of Housing Preservation and Development, New York City, 2019-2023

## % Availability

50-90% depending on weekly needs of the project

## SELECTED PROJECT EXPERIENCE

- Regional Housing Needs Assessment | Aspen, CO
- Housing Strategy | San Miguel County, CO
- Comprehensive Plan Update 2023 | El Paso, TX
- Housing Needs Assessment | El Paso, TX
- Density Bonus Program Assessment | Austin, TX
- Housing Needs Assessment | Basalt, CO
- Future Land Use Map and Housing Strategy | Gallatin County, CO
- Mobile Home Park Market Study | Buena Vista, CO
- Ilium Valley Floor Market and Feasibility Study | Mountain Village, CO
- University of Central Oklahoma Neighborhood Master Plan | Edmond, OK
- Housing Affordability Implementation Plan | Oklahoma City, OK

- **NYC DEPT. OF HOUSING PRESERVATION AND DEVELOPMENT**
  - Senior Planner
    - Managed City-sponsored affordable housing projects, delivering 1,200+ units across various housing types
    - Led community outreach efforts and collaborated with developers, City agencies, and elected officials to support housing initiatives
    - Presented projects at public hearings and prepared materials for discretionary approval

Economic & Planning Systems, Inc.
*The Economics of Land Use*
www.epsys.com

1600 Stout Street, Suite 1850, Denver, CO 80202
303 623 3557
spramod@epsdenver.com



# Avery Weiss

## Associate

**Education**

Master of City Planning
University of Pennsylvania

BA Amherst College, Psychology

**Employment History**

1 Year with EPS

**Affiliations**

Urban Land Institute

American Planning Association

**% Availability**

50-90% depending on weekly needs of the project

**Avery Weiss** has completed a multitude of projects surrounding real estate development feasibility, housing regulation analysis, housing market analysis, municipal finance, and retail/commercial core economic planning. For the Mountain Village Commercial Retail Study Analysis, Avery analyzed sales tax and foot traffic/visitation data to diagnose the vitality of Mountain Village's commercial core. In concert with the project principal, he identified key customer characteristics that the Town's retail needs to start considering, such as an emphasis on unique, experiential retail as opposed to the current bulk, commodity retail product.

In addition, for the Vail Residential Linkage Study Avery led the peer community research effort, where he normalized disparate housing regulations from eight different communities and counties to create a comparison matrix. The matrix includes the key assumptions and inflection points in each community's regulations, including the employee generation formula, mitigation rate, affordable unit dimensions, and fee-in-lieu calculations. The matrix helped the Town understand both how the residential linkage fee would compare to the current inclusionary zoning fee, and whether the fee accurately reflects the cost of construction and housing in the Town compared to peer communities.

**SELECTED PROJECT EXPERIENCE**

- Commercial Retail Study Analysis | Mountain Village, CO
- Affordable Housing Linkage Fee Study | Vail, CO
- Short-Term Rental Impact Study | Pitkin County, CO
- Land Use and Building Energy Code Updates | Pitkin County, CO
- Denver RTD On Call Real Estate and Economic Development Services | Denver, CO
- Impact Fee and Inclusionary Zoning Update Study | Burlington, VT
- Housing Needs Assessment | Sheridan, CO
- Urban Renewal Advisory Services | Winter Park, CO
- Housing Needs Assessment | Keystone, CO

Economic & Planning Systems, Inc.
*The Economics of Land Use*
www.epsys.com

1600 Stout Street, Suite 1850, Denver, CO 80202
303 623 3557
aweiss@epsdenver.com

studioseed
URBAN DESIGN + PLANNING

# cheney b. bostic, AICP

OWNER | PRINCIPAL



Cheney Bostic is a multidisciplinary consultant with 20 years of experience in architecture, landscape architecture, urban design, and planning. She collaborates with communities of all sizes—leading efforts from high-level visioning to the implementation of complex, code-compliant projects. Drawing on a strong architectural background, Cheney delivers practical, context-sensitive solutions that bridge design and policy.

Her work spans urban design projects across the United States, with a focus on character preservation, urban infill, corridor transformation, and transit-oriented development that revitalizes underutilized land.

At Studio Seed, Cheney specializes in land use studies, building and housing typologies, streetscape plans, master plans, neighborhood plans, corridor plans, zoning codes and design guidelines. Cheney is a founding member of the Urban Design Advisory Committee (UDAC) at the University of Colorado Denver and the Colorado Chapter of the Congress for the New Urbanism (CNU-CO).

## education

MASTER OF ARCHITECTURE,
UNIVERSITY OF OREGON (2006)

BACHELOR OF ARCHITECTURE,
SOUTHERN ILLINOIS UNIVERSITY (2004)

## certification

AMERICAN INSTITUTE OF
CERTIFIED PLANNERS (AICP)

LEADERSHIP IN ENERGY AND
ENVIRONMENTAL DESIGN (LEED AP)

## publications

*COLORADO URBANIZING:*
*EXPERIENCING THE NEW URBANISM*

● *indicates project completed with EPS*
» *% Availability - 10-15%*

## zoning and housing experience

» **UNLOCKING HOUSING CHOICES** | zoning for missing middle housing (Denver, CO)
» **SOUTH ARK NEIGHBORHOOD PLAN** | new neighborhood + zoning (Salida, CO)
● **MINTURN 100 BLOCK DESIGN GUIDELINES** | design guidelines (Minturn, CO)
» **SILVERTON COMMUNITY PLAN** | small lot housing types (Silverton, CO)
» **DENVER AREA PLANS |** five plans focused on land use + zoning (Denver, CO)
» **ZONING CODE GRAPHICS** | for Kendig Keast Collaborative (multiple cities)
» **BOULDER VALLEY COMPREHENSIVE PLAN** | housing + infill prototypes (Boulder, CO)
» **ENCINITAS HOUSING ELEMENT** | housing plan (Encinitas, CA)
» **RE:CODE LA** | zoning and housing strategy (Los Angeles, CA)

## colorado mountain town experience

» **BUENA VISTA COMPREHENSIVE PLAN** | downtown + character (Buena Vista, CO)
» **NEDERLAND DOWNTOWN PLAN** | downtown plan (Nederland, CO)
● **MINTURN DOWNTOWN PLAN** | downtown plan (Minturn, CO)
● **WEST VAIL NEIGHBORHOOD PLAN** | commercial center zoning + concepts (Vail, CO)
» **IDAHO SPRINGS DOWNTOWN PLAN** | downtown plan (Idaho Springs, CO)
» **FLAGSTAFF DOWNTOWN PLAN** | downtown plan + zoning (Flagstaff, AZ)
● **FRUITA COMMUNITY PLAN** | design guidance and visualization (Fruita, CO)
» **FRISCO COMMUNITY PLAN** | gateway and opportunity site concepts (Frisco, CO)
» **GUNNISON VIBRANCY INITIATIVE** | downtown planning (Gunnison, CO)

# Memorandum

**To:** Town Council

**From:** Dara MacDonald, Town Manager

**Subject:** Manager's Report

**Date:** August 18, 2025

---

Town Manager

1) Local IMPACT Accelerator grant application – The Town has submitted a Letter of Interest for the Local IMPACT Accelerator grant through the Colorado Energy Office. We have requested $1,110,000 in collaboration with the City of Gunnison, Gunnison County and Mt. Crested Butte. We should hear by the end of September if we are invited to submit a full grant application. Following is a brief project summary. If invited to the next round we will continue to refine the scope.

   "The application includes passing building efficiency and electrification expansion policies through votes by the respective elected bodies. We are asking for project funds to evaluate the effectiveness of existing rebate and incentive programs to inform updated policies around building efficiency and electrification and guide an incentive program expansion beyond deed-restricted units and to cover additional energy efficiency interventions. In order to pass the policies, we will analyze the past four years of the programs by assessing deliverables; constraints; cost-effectiveness; and energy reduction, emissions reduction, and affordability benefits. We intend to pass updated policies for our rebate and incentive programs which will exceed existing state and local resources and requirements by expanding support beyond solely deed-restricted homes and covering additional energy efficiency and GHG reduction measures beyond those included in standard building codes. The project work will support the building efficiency and electrification expansion policy by expanding community outreach to target all community members, providing pilot funding for building electrification and energy efficiency projects, and building up a local contractor workforce to address the current shortage."

Sustainability

1) No updates.

Public Works

1) Town of Crested Butte was interviewed regarding the SRF Infrastructure loan that was used for the Wastewater 2021-2025 upgrade. Pg – 13-15. Take a look at the link here: Rocky Mountain Water – Issue 4, 2025 by Kelman & Associates - Issuu

Marshals

1) No updates.

Parks, Recreation, Open Space and Trails

1) **Baxter Trail & parking lot relocation update:** The parking lot is scheduled to reopen by 8/13. Trail access will be from the west side of the parking lot. The trail kiosks will be reinstalled after the solar garden fence is installed.






2) **Mineral Point Trail update:** Construction has been smooth and ahead of schedule for the Mineral Point Trail. The portion of the trail south of Pyramid Avenue will be completed first, followed by the pond section on the north side of Pyramid, and finishing with the CBFPD portion to the river.

3) **Trash update:**

a. How much spent on Big Bellies

i. $202,520 in 2022

b. How have we changed practices to address issues in 2025?

i. Relocated Big Bellies from all parks except for Totem Pole and placed them on Elk Ave. replacing the parks units with regular bear proofs that are emptied by Parks staff.

ii. Added a unit to Totem Pole.

iii. Ordered parts from Big Belly to fix two units that were not placed this summer.

iv. Increased service from 2x/week to 3x/week last week of June – second week of August

c. Plan for improvements/changes for next year

i. Will increase service from 2x/week to 3x/week all of June and all of August

ii. Will evaluate all units prior to placement in the spring and will order parts well in advance to ensure all units are functioning prior to placement for the summer.

iii. Will work with WM and the Chamber to develop a trash management plan for the 4th of July.

Community Development

1) **Red Lady Roundabout webpage:** Staff aims to have a landing page under "Town Projects" on the Town website about the roundabout project and process by the time of the Council meeting. Further information will be provided at the end of the month about engagement opportunities in September.

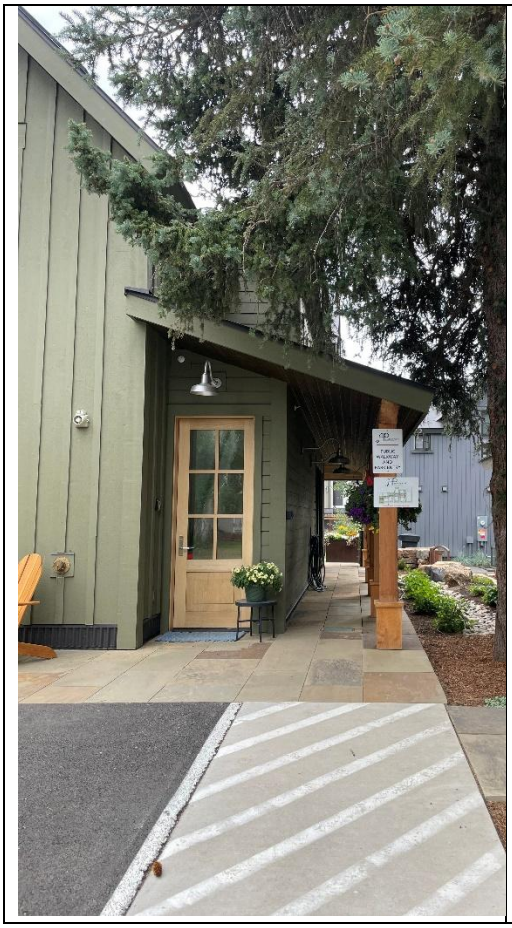
2) **Academy Place:** Council requested information on what was required for public amenity and the benefits that were provided to the Town in exchange for what concessions to the development. The PUD process will be updated through the zoning code update, which will include several BOZAR and Council discussions on what has worked well and what has not worked well for PUDs in the past.

   BOZAR and Town Council approved the following waivers for the Academy Place PUD per Code Section 16-6-380 (a) (16) in exchange for four public amenities, described below:

   - Increase in parcel size from 9,375 sf to 28,375sf
   - Reduction of the North rear yard setback from fifteen feet to seven feet, six inches.
   - Reduction of the parking calculation for the PUD from 29 spaces to 28 spaces to accommodate the ROAH unit.
   - Reduction of the deed restricted owner-occupied and/or long-term rental unit from two parking spaces to one parking space.

   Justification for approval of the PUD, included four public amenities:

   1. Increased amount of open space
   2. The building placement, massing and scale.
   3. The provision of one resident occupied affordable housing unit (ROAH), as well as an additional long-term rental/owner occupied unit. The development provided an extra affordable housing unit that they would not have been required to otherwise.
   4. Landscape plan that provides for public easement through the site that includes the dedicated easement to preserve four mature spruce trees and new patio in the southwest corner of the property and walkway through the center garden with access points from Fifth Street and Whiterock Avenue that is dedicated specifically for public use and maintained by Academy Place.
      - Academy Place has well marked access to the public walkway and park at various locations on the property. There is clearly marked entry and access from the west end of the property, just to the south of the concierge/administrative building, as well as the marked access and park entry on the southwest corner of the property (photos 1 and 2).






- There is also marked access from Whiterock, to the east of Units 515 and 519 and west of Units 523, 527, 531 and 533 (photo 3). A paved walkway runs south to north here, into the alley between Whiterock and Sopris, with another marked public access point midway through this walkway (photo 4).







- The courtyard and benches are open to the public (photo 5 and 6).





- The signage includes maps, clearly outlining the public walkway (photo 7).




- The bike racks placed throughout the property in the parking areas and guest house entry points are for guests only and are located in front of gates with signage clearly marked for "AP Guests Only". There is no public access from these points to the public courtyard.

3) **Drones**: Beginning in August, the Town of Crested Butte will periodically use drones to collect photos and data in support of a variety of public projects. Projects range from documenting street conditions to support streets planning, supporting roof inspections on Town facilities, collecting stock images of parks, recreation programs, open space properties, and trails, documenting and inventorying affordable housing projects, and more. Drone flights will take place over public rights-of-way and public spaces, including Town-owned streets and alleys, facilities, and parks and recreation areas.

   All flights will be conducted by a licensed FAA Part 107 Drone Pilot on Town staff and will be limited to rights-of-way and public spaces. The Town is committed to respecting personal privacy and will not operate drones over private property. To read the Town's drone policy, please click here.

4) **Town Hall exterior work:** The work that is taking place through the State Historical Fund grant is proceeding on the Town Hall building. New windows have been installed on the north and south elevations. Windows are white, as the windows were historically. The masonry repointing and repairs

to parge coat are slated to be completed by mid-September. The crew will keep close watch as temperatures start to drop to manage their work flow and take necessary precautionary measures to avoid having mortar freeze.

5) **Recreation Era Survey Grant:** In May 2025, we were notified that we had been awarded a $25,000 Certified Local Government (CLG) grant to fund survey work for the new period of significance related to the early recreation/ski era. Shortly afterward, the State indicated that the award was held up at the federal level and was unlikely to move forward. Last week, Lindsey Flewelling with History Colorado let us know that federal funds are now available and the grant will proceed.

6) **Final Paradise Park Triplex:** Staff is working with GVRHA to determine whether they are willing to assist with the qualification of tenants on the last three units of Paradise Park. GVRHA has indicated that they are not willing to assist with the lottery. High Mountain Concepts anticipates achieving TCO in early December. Staff anticipates the application period would be late August into September with the lottery held in late September.

Town Clerk

1) Please be reminded of the deadline of Friday, August 29, 2025, at 5:00PM to submit completed petitions and documentation to be a candidate in the November 4, 2025, election.

2) Please join the Clerk's Department for an information session regarding the election on Wednesday, August 13, 2025, from 5:00PM to 6:00PM in the Council Chambers. Existing Council members are welcome and encouraged to share their first-hand experiences of serving on the Council.

3) The Art Market will continue Sundays in the Fall, operating through September 28, 2025, with the exception of September 21, 2025, to accommodate ARTumn. The Farmers Market will run through October 5, 2025.

4) Take down for parklets is scheduled for October 7, 2025.

5) The next special event the Council can likely expect on an agenda is Vinotok. At the time of the packet, an application had not yet been submitted.

Finance/HR/IT

1) Save as You Throw (SAYT): The August utility bill included a reminder message to choose a container size by the August 29 deadline. Staff continues to update Frequently Asked Questions (FAQs) on the Town's website to address residents' questions.

2) Business Licensing/Sales Tax System: The Town is working with its software vendor to migrate our business licensing and sales tax system to an updated platform. Staff and the vendor will perform testing to ensure all functionality is working properly. We anticipate the upgrade to occur in September.

Upcoming Meetings or Events Council may choose to attend

September 22 – Joint dinner with Mt. Crested Butte Town Council to discuss Mountain Express, location TBD

September 24 - Final Compass Navigation Committee wrap-up meeting, 8:30am – 1:00pm

September 29 – Quarterly Intergovernmental meeting, City of Gunnison hosting, location TBD

October 1 – Chamber of Commerce Business After Hours sponsored by the Town of Crested Butte. Details will be forthcoming.

Upcoming Agenda Items
See attached **draft** list of upcoming Council agenda topics

* As always, please let me know if you have any questions or concerns. You may also directly contact department directors with questions as well.

# Crested Butte Town Council
# Upcoming Agenda

**TUESDAY - September 2 -** Packets out Monday, August 25th Mallika out

Work session –

- Budget – Fund balances and revenue projections, 5 years. Current reserve policy and GF at 50%, initial look at 5-year projections

**Regular Meeting**

1. Consent Agenda
   a. Minutes – Lynelle
   b. Selection of Architect for Marshals Facility – Mel/Shea/Mike
   c. Q2 Financial Report – Rob
   d. Health Care Cost Concerns letter - Ian
2. Presentation
   a.
3. Public Hearing
   a. Ord __, Amending Ch 6-5-?? To require energy audits for vacation rentals, 2nd reading – Dara/Lynelle
   b. Clark's Market liquor license hearing – Karl/Lynelle
   c. Hold for an Appeal of a BOZAR decision – Mel
4. New Business
   a. Cost analysis of composting program – Dara
   b.
5. Exec Session

**September 15 -** Packets out Monday, September 8th Gabi out

Work session – 2hrs?

- 2026 Budget Work session
  - Refined Strategic Plan and 2026 priorities
  - Capital Plan
  - Overall Fund Strategies

**Regular Meeting**

1. Consent Agenda
   a. Minutes – Lynelle
   b. Resolution – Appointing Election Commissioners
   c. Amendment to Waste Management Agreement - Shea
2. Presentation
   a. Red Lady Roundabout 30% design – Shea/Mel
3. Public Hearing
   a.
4. New Business
   a. Resolution, IGA with Mt CB Water & San for Solids Processing – Shea
   b. IGA with Gunnison County re: Red Lady roundabout – Shea (Placeholder – waiting on grant docs from Feds)
   c. SH 135 Corridor Plan IGA – Mel
   d. Plastic Pollution Reduction Act, local implementation - Dannah
5. Exec Session

DRAFT

**September 22** - Joint meeting with Mt CB re: Mountain Express

**September 29** – Quarterly Intergovernmental meeting, City of Gunnison hosting

**October 6 -** Packets out Monday, September 29th
Work session –

- Joint BOZAR work session
  - What have we done so far?
    - Discuss development review process/role of BOZAR
    - Discuss/review proposed code structure moving forward
  - What's coming next? – outreach overview

**Regular Meeting**

1. Consent Agenda
   a. Minutes – Lynelle
   b. Adoption of the Snow Plan – Shea
   c. Q3 update of Council priorities (Staff Updates) – Dara
   d. Review of grant applications/awards (Staff Updates) - Dara
2. Presentation
   a.
3. Public Hearing
   a.
4. New Business
   a. Center for the Arts, Consideration of Building Transfer – Dara (schedule for 1hr plus)
   b. Draft 2026 Budget –
   c. Direction on Late Night Taxi funding -
5. Exec Session

**October 20 -** Packets out Monday, October 13th
Work session –

- 2026 Budget

**Regular Meeting**

1. Consent Agenda
   a. Minutes – Lynelle
   b. Annual rental agreement with WEHA - Janna
2. Presentation
   a.
3. Public Hearing
   a.
4. New Business
   a.
   b.
5. Exec Session

**November 3 -** Packets out Monday, October 27th
Work session –

**Regular Meeting**

1. Consent Agenda
   a. Minutes – Lynelle
   b. Q3 Financial Report

DRAFT

c. Annual report by the Chair of the Weed Advisory Board on Weed Management in the Town of Crested Butte - Janna
2. Presentation
a.
3. Public Hearing
a. Adopt 2026 Annual Budget
4. New Business
a.
b.
5. Exec Session

**November 17 -** Packets out Monday, November 10th
Work session –

**Regular Meeting – Swear in Mayor & New Council Members**
1. Consent Agenda
a. Minutes – Lynelle
2. Presentation
a.
3. Public Hearing
a.
4. New Business
a. Appointment of the Mayor Pro Tem - Lynelle
b. Board and Committee Appointments – Lynelle
c.
5. Exec Session

**December 1 -** Packets out Monday, November 24th
Work session –

**Regular Meeting**
1. Consent Agenda
a. Minutes – Lynelle
b. Annual Funding Agreement with the Chamber of Commerce - Dara
2. Presentation
a.
3. Public Hearing
a.
4. New Business
a.
b.
5. Exec Session

**December 15 -** Packets out Monday, December 8th
Work session –

**Regular Meeting**
1. Consent Agenda
a. Minutes – Lynelle
2. Presentation
a.
3. Public Hearing
a.
4. New Business
a.
b.
5. Exec Session

DRAFT

**Future/Annual Items**

January – Resolution setting posting places
- Annual resolution approving Council Rules of Procedure
- Annual review of progress on Council goals/priorities
- Annual review of grant applications/awards
- Presentation from QQ (following elections)
- CIRSA elected officials training (following elections)
- Presentation from Region 10 (following elections)
- Town Attorney quarterly report

February – Year-end report from Chamber of Commerce
- Mt. Express annual report
- Year-end financial summary

March - Annual review of traffic calming and parking management (include bike safety) – 2nd meeting so can have President's Day data

April - Q1 review of progress on Council goals/priorities
- review of grant applications/awards
- Town Attorney quarterly report

May – Q1 financial summary
- Legislative Session summary
- Annual update of AH Guidelines for updated HUD AMI limits
- review of grant applications/awards

June – Annual Report on Visitor Center operations – Chamber Director

July – Q2 review of progress on Council goals/priorities
- Town Attorney quarterly report

August – Initiate annual budget with Council

September – Q3 review of progress on Council goals/priorities
- Q2 financial summary
- review of grant applications/awards
- Annual budget work sessions with Council

October – Snow Plan
- Annual revisiting of the Climate Action Plan – strategies & actions
- 15th – deadline for presentation of the annual budget
- Annual rental agreement with WEHA
- Town Attorney quarterly report

November – Annual report by the Chair of the Weed Advisory Board on Weed Management in the Town of Crested Butte

DRAFT

- Q3 financial summary
- Board & Committee appointments (following election)
- Appointment of Mayor pro-tem (following election)
- Adoption of annual budget (Nov or Dec depending on election cycle)

December – Funding agreement with Chamber of Commerce

- Agreement with GVRHA for Green Deed

DRAFT

# Staff Report
August 18, 2025

**To:** Mayor and Town Council

**Prepared By:** Shea D Earley

**Thru:** Dara MacDonald

**Subject:** Ordinance No 7, Series 2025 – An Ordinance of the Crested Butte Town Council Approving the Repeal and Replacement of Chapter 13 Article 5

---

**Summary:**
Ordinance No 7, Series 2025 would repeal and replace Chapter 13, Article 5 - Refuse and Sanitation System, of the Town Code. The primary purpose for this revision is to implement the Save As You Throw (SAYT) Program.

**Previous Council Action:**
January 6, 2025 – Initial discussion of SAYT Program and curb side composting.
April 21, 2025 – Council Work Session to discuss the proposed SAYT Program.
April 21, 2025 – Council adopted the 2030 Climate Action Plan which includes an implementation action to "adopt a Save-As-You-Throw (SAYT) waste ordinance."

**Background:**
During the renewal process of the WM Municipal Refuse and Recycling Collection and Disposal Services Contract, Town Staff and WM saw an opportunity to more concertedly pursue the rollout of a "Save-as-You-Throw" (SAYT) waste program, which was noted in the previous contract but not seriously explored. Staff brought this concept forward to Town Council on January 6, 2025, to discuss whether Council had interest in rolling out a SAYT program and incorporating a stronger commitment to doing so in the contract with WM. At the April 21, 2025 Council Work session, Council reviewed more details about the program and affirmed their desire to implement a SAYT program.

The SAYT program, commonly referred to as "Pay as You Throw", allows customers to choose a cart size based on the size of the household and the corresponding amount of trash produced. In addition, the SAYT program would continue to incorporate the existing recycling program. Pricing for the program varies with the size of the refuse container selected by a household, with pricing increasing significantly for the largest cart size. Coupled together, refuse and recycling programs facilitate waste diversion to the landfill and recycling centers, while incentivizing customers to choose a smaller cart by the introduction of a tiered rate system, based on cart size.

**Discussion:** Currently, all residential waste & recycling customers in Crested Butte pay a flat monthly rate of $28.97 regardless of cart size. Along with trash service, customers also receive bi-weekly curbside recycling service. Currently, 74% of trash carts in Crested Butte are 96-gallon. Peer communities who have implemented similar programs have reported roughly a 50% shift away from the largest bin size.

The approval of Ordinance No 7 would codify the following changes to the Town's Refuse Collection and Sanitation System:

1. Under a SAYT program, customers would choose one of three bin sizes:
    a. 32 gallon cart at $24.62 ($4.35 monthly reduction from current rates)
    b. 64 gallon cart at $27.23 ($1.74 monthly reduction from current rates)
    c. 96 gallon cart at $40.56 ($11.59 monthly increase from current rates)
2. Customers who purchase a 32 or 64 gallon cart will not be allowed to purchase an extra 96 gallon cart
3. Cart size can be chosen or changed on an annual basis in August, for a fee adopted by the Town Council (currently proposed at $25).
4. Cart sizes can be changed if there is a change in account responsibility, at no charge.
5. Clarifying requirements to opt out of the Town's residential waste collection program to align with State statutes and refuse contract
    a. Opt Out Requirments:
        i. A single building consists of both residential and commercial uses and the entire building is owned by one (1) owner;
        ii. A single or multiple building property consists of both residential and commercial uses owned by different owners within the same property in which the common elements, as such term is defined under the Colorado Common Interest Ownership Act, Section 38-33.3-101, et seq., C.R.S. (CCIOA), are owned and managed by a homeowners' or unit owners' association;
        iii. Four (4) or more dwelling units within the same building are owned by the same owner;
        iv. Four (4) or more dwelling units are owned by different owners within a single or multiple building property in which the common elements, as such term is defined under the CCIOA, are owned and managed by a homeowners' or unit owners' association.
    b. Properties will maintain their current status, meaning properties that have opted out will continue to not receive trash service from the Town.
6. Removal of the reduced collection rate for income qualified individuals.
    a. Currently, the reduced collection rate is only being applied to one account.
    b. Already have a 50% discount on the base rate for water and sewer service.
7. Service charges shall be due on or before the 20$^{th}$ of each month which aligns with current practice.
8. Customers would continue to receive bi-weekly recycling pick up.

**Climate Impact:**

The development of the SAYT program stems from the 2019 Climate Action Plan (CAP) directive to "explore options with Waste Management (WM) for increased waste diversion from landfills" and the 2030 CAP's recommended action to "Adopt a Save-as-you-Throw waste ordinance". WM reported an 24% average recycling rate for 2024, and participation in the residential drop off program remains at about 50 participants, on average. A SAYT program paired with free recycling and possibly a compost program will motivate community members to increase recycling rates and compost program participation to divert organic waste away from the landfill, reducing methane. Waste emissions represent approximately 3% of the Town of Crested Butte's total 2022 GHG emissions. Changes in recycling rates, organic diversion rates, and their emissions impacts, will be tracked over time as this program is implemented.

**Financial Impact:**
Proposed rate changes for weekly refuse collection:

| Container | Price per month |
|---|---|
| 96 gl (current) | $28.97 |
| 32 gl (SAYT) | $24.62 |
| 64 gl (SAYT) | $27.23 |
| 96 gl (SAYT) | $40.56 |

Monthly charges include bi-weekly curb side recycling pick up.

Resolution 21, Series 2025 proposes to amend the current fee schedule to reflect the implementation of the SAYT program.
Once enrollment for various cart sizes has been affirmed and financial impacts understood, staff may bring additional fee changes forward for Council consideration as part of the 2026 budget adoption. Otherwise, fees will be adjusted annually as part of the contract with WM according to CPI and other commodity factors.

**Legal Review:**
The Town Attorney has assisted staff with drafting and reviewing the proposed Ordinance.

**Recommendation:**
Staff recommends that Town Council approve Ordinance No 7, Series 2025 repealing and replacing Chapter 13, Article 5: Refuse and Sanitation Systems

**Proposed Motion:**
A Council member should make a "motion to approve Ordinance No 7, Series 2025 repealing and replacing Chapter 13, Article 5: Refuse and Sanitation Systems" followed by a second and roll call vote.

**Attachments:**
Ordinance No 7 Series 2025

**ORDINANCE NO. 7**
**SERIES 2025**

**AN ORDINANCE OF THE CRESTED BUTTE TOWN COUNCIL REPEALING AND REPLACING CHAPTER 13, ARTICLE 5 OF THE CRESTED BUTTE MUNICIPAL CODE.**

**WHEREAS,** the Town of Crested Butte, Colorado ("the Town") is a home rule municipality duly and regularly organized and now validly existing as a body corporate and public under and by virtue of the Colorado Constitution and laws of the State of Colorado; and

**WHEREAS,** the Town Council has determined that implementation of Save As You Throw pricing for refuse removal helps to incentivize waste reduction practices and furthers greenhouse gas emissions goals; and

**WHEREAS,** Town Council finds it is necessary and proper to repeal and replace Chapter 13, Article 5 of the Crested Butte Municipal Code as provided in this ordinance.

NOW, THEREFORE, BE IT ORDAINED BY THE TOWN COUNCIL OF THE TOWN OF CRESTED BUTTE COLORADO:

**Section 1.** The foregoing recitals are incorporated herein as if set forth in full.

**Section 2.** Chapter 13, Article 5 of the Crested Butte Municipal Code is hereby repealed and replaced as provided for on the attached **Exhibit A**.

**Section 3.** Following adoption and noticing of this ordinance the effective date for solid waste will be for services billed on October 31, 2025

**Section 4.** Upon the effective date of this ordinance, the codifier is hereby authorized to renumber the Code in conformance with these amendments.

INTRODUCED, READ, AND SET FOR PUBLIC HEARING THIS 5TH DAY OF AUGUST 2025.

ADOPTED BY THE TOWN COUNCIL UPON SECOND READING IN PUBLIC HEARING THIS ____ DAY OF _____ 2025.

TOWN OF CRESTED BUTTE, COLORADO

ATTEST:

By:_____
Ian Billick, Mayor

_____
Lynelle Stanford, Town Clerk

Exhibit A

# ARTICLE 5 Refuse and Sanitation System

## Sec. 13-5-10. Definitions.

For the purposes of this Article, the following terms shall have the meanings given in this Section:

*Residential property* means a single unit providing complete, independent living facilities for one or more persons, including permanent provisions for living, sleeping, eating, cooking, and sanitation. For purposes of this Article, a residential property may consist of a single or multiple building property containing no more than seven dwelling units. Further, a residential property may be part of a building with both residential and commercial uses.

*Recyclable materials* means those materials including but not limited to metals, glass, plastic, wood, and paper that are intended for remanufacturing or reconstitution identified by the Town or their contractor, which may be collected and conveyed by the Town or its contractors, and which are identified as *recyclable materials* and placed in designated recycling bins.

*Refuse* means all putrescible and nonputrescible domestic wastes, including, among other things, trash, garbage, rubbish, and solid wastes; provided, however, that *refuse* shall not include human body wastes, medical wastes, dead animals, highly inflammable or explosive materials or ashes.

## Sec. 13-5-20. Compulsory refuse collection;.

(a) Every owner or occupant of a premises within the Town shall provide for the collection and disposal of refuse in accordance with the regulations of this Article.

(b) The Town's system of refuse collection and disposal for residential users shall consist of weekly pickup and disposal of all refuse properly deposited into the system in accordance with the regulations adopted pursuant to this Article.

(c) The Town's system of recyclable materials collection and disposal for residential users shall consist of bi-weekly pickup and disposal of all recyclable materials properly deposited into the system in accordance with the regulations adopted pursuant to this Article.

(d) Owners or occupants of premises within the Town that are not defined as residential properties per this Article shall arrange privately for routine removal of refuse and recyclable materials.

(e) The Town shall have the authority to choose the proper pick-up location and type of refuse container for residential properties, be it an individual container or dumpster

(f) All refuse accumulated at or generated by the occupants of any residential property within the Town shall be collected, conveyed and disposed of by the Town or its contractors. No other person shall collect, convey over any of the streets or alleys of the Town or dispose of any refuse accumulated at or generated by the occupants of any dwelling; provided, however, that this Article shall not prohibit the actual producer of refuse, or the owner or occupant of a dwelling at which refuse has accumulated, from personally collecting, conveying and disposing of bulky refuse of a type not normally collected by the Town or its contractors. All commercial users must dispose of refuse and recyclable materials generated by such use.

## Sec. 13-5-30. Opt-out requirements

(a) The occupants of any residential property that meets any of the following qualifications may opt out of the Town's compulsory refuse and recycling collection requirements described in Subsection (a) above when:

(1) A single building consists of both residential and commercial uses and the entire building is owned by one (1) owner; or

(2) A single or multiple building property consists of both residential and commercial uses owned by different owners within the same property in which the common elements, as such term is defined under the Colorado Common Interest Ownership Act, Section 38-33.3-101, et seq., C.R.S. (CCIOA), are owned and managed by a homeowners' or unit owners' association; or

(3) Four (4) or more dwelling units within the same building are owned by the same owner; or

(4) Four (4) or more dwelling units are owned by different owners within a single or multiple building property in which the common elements, as such term is defined under the CCIOA, are owned and managed by a homeowners' or unit owners' association.

(b) For any of the four (4) exemptions described in Subsection (a) above, the owner or association must elect to opt out of the Town's compulsory refuse and recycling collection requirements in writing to the Town Manager on forms provided by the Town. Such election shall adequately describe the property subject to the election and how the property will be served for refuse removal.

(1) The exemption shall become effective the next succeeding calendar month when the election is received by the Town Manager before the first day of the preceding calendar month. Any election given after the first day of the calendar month shall become effective in the calendar month immediately following the succeeding calendar month.

(d) The election by the owner or association will remain in effect until the owner or association otherwise notifies the Town Manager in writing, which shall be given before the tenth day of the preceding calendar month to be effective in the next succeeding calendar month. Any notice given after the tenth day of the calendar month shall become effective in the calendar month immediately following the succeeding calendar month.

(e) Any property owner or association that has elected out of or is not subject to the Town's compulsory refuse and recycling collection requirements as described herein must obtain adequate refuse collection service to comply with this Chapter.

## Sec. 13-5-40. Refuse containers and precollection practices.

(a) All residential properties within the Town shall select at least one (1) of the refuse container sizes set forth by the Town Council in the fee schedule.

(b) No refuse container shall be placed in the right-of-way for curbside pickup other than between the hours of 6:00 a.m. and 8:00 p.m. of the day for scheduled collection. After pickup, all refuse containers must be removed from the right-of-way.

(c) Refuse and recycling from residential users shall be deposited either in a lidded refuse container or lidded dumpster in serviceable condition. Refuse containers shall have a capacity of 32-, 64-, or 96-gallons.

(d) An individual residential user who is served by refuse containers may select their container size annually in September, which size shall not be changed other than on change of account responsibility. The adjustments to container size shall become effective the next succeeding calendar month when the election is received by the Town or their contractor before the tenth day of the preceding calendar month. Any election due to a change of account responsibility given after the tenth day of the calendar month shall become effective in the calendar month immediately following the succeeding calendar month.

(e) All refuse containers and dumpsters shall be placed for municipal collection at ground level on the premises of the owner of said container, not more than ten (10) feet and accessible from the street or alley from which collection is made, and accessible by the automated collection truck. Refuse containers and dumpsters shall be deemed inaccessible, as required by this subsection, unless a path through accumulated snow has been made from the street or alley to the refuse container or dumpster. All refuse, before being placed in a container, shall be:

(1) Drained of all free liquids; and

(2) Wrapped in plastic bags, paper or other similar material to prevent contamination of the container.

(f) For the protection of wildlife, all refuse containers must be managed in accordance with Sec 7-5-320, 7-5-330, and 7-5-340. Use of wildlife resistant refuse containers is strongly encouraged. Any wildlife resistant container not provided by the Town or their contractor must be unlocked by 7:00 a.m. on pickup day by the customer.

(g) Containers for co-mingled recyclable materials are provided by the Town or their contractor. These may be placed for bi-weekly collection under the same requirements as refuse containers.

(h) Replacement refuse or recyclable material containers can be provided upon request or as required due to damage or deteriorated condition. A replacement fee will be charged to the customer.

(c) Tree trimmings, hedge clippings and other bulky materials need not be placed in containers for collection but shall be cut in lengths not to exceed four (4) feet and shall be securely tied in bundles not more than two (2) feet thick before being deposited for collection.

## Sec. 13-5-40. Compulsory refuse and recycling collection fee.

(a) The owner of every residential property, not exempt under Section 13-5-30, within the Town shall pay to the Town each month the amount of fee established by the Town Council. That fee is set forth in the fee schedule.

(b) All service charges shall be paid monthly on or before the 20th of the month at the office of the Town. In the event of default or tardiness in any payment required by this Article, there shall be added a delinquency charge, plus the reasonable costs of collection, including attorney's fees. Service charges shall be charged against the property owner commencing upon the issuance of a certificate of occupancy or at the time of actual occupancy, whichever occurs first. Any delinquent payment shall constitute a lien against the property served and shall be collectible in the manner of delinquent taxes.

## Sec. 13-5-50. Limitation on quantity collected.

(a) The refuse collection program entitles the owner or occupant of each residential property within Town to have the Town or its contractors collect, once each week (bi-weekly for recyclable materials), the volume of refuse or recyclable materials that can be contained in the household’s selected refuse container and provided recycling container, respectively.

(b) The owner or occupant may contact the contractor directly if they have additional refuse to be collected. The fee for this service is that set forth in the fee schedule adopted by the Town Council.

## Sec. 13-5-60. Waste receptacles on public property.

It is unlawful for any person or business entity to place a waste receptacle of any size on public property except as follows:

(1) Receptacles placed by, at the direction of or with the written consent of the Town; and

(2) Receptacles temporarily placed for residential collection, as set forth in Section 13-5-40 above.

## Sec. 13-5-70. Violation; penalty.

Any person who violates the provisions of this Article shall be fined in accordance with the provisions of Section 1-4-20 of this Code.

# Staff Report
August 18, 2025

**To:** Mayor and Town Council

**Prepared By:** Dara MacDonald, Town Manager

**Subject:** Ordinance 08, Series 2025 - An Ordinance of the Crested Butte Town Council approving the ground lease of a portion of the property at 602 Elk Ave to the Corporation of the Gunnison Count Electric Association

---

**Summary:** The current 10-year ground lease agreement with GCEA for the EV charging station at the tennis courts will expire in October. This ordinance would extend the lease for an additional 10 years under essentially the same terms.

**Previous Council Action:** No recent actions.

**Background:** The Town entered into a 10-year ground lease with GCEA in 2015 allowing for the placement and operation of a publicly accessible electric vehicle charging station in the parking lot adjacent to the tennis courts at the corner of 6th Street and Elk Ave. GCEA is responsible for installation and maintenance of the equipment and collects all usage fees. The arrangement has been working well for both parties.

**Discussion:** This ordinance would allow for an extension of an arrangement for public EV charging that appears to have been working well for the past decade.

**Climate Impact:** Publicly available EV charging stations support the Town's GHG emissions reductions goals by supporting the transition to electric vehicles.

**Financial Impact:** None.

**Legal Review:** The Town Attorney has reviewed the lease and ordinance. Some minor modifications were made to the insurance requirements of the tenant in the lease between 1st and 2nd reading.

**Recommendation:** Staff recommend the Council approve Ordinance 08, Series 2025 and enter into a new lease with GCEA for the EV charging station at the tennis courts.

**Proposed Motion:**
A Council member should make a “motion to approve Ordinance 08, Series 2025” followed by a second and roll call vote.

**ORDINANCE NO. 08**

**SERIES NO. 2025**

**AN ORDINANCE OF THE CRESTED BUTTE TOWN COUNCIL APPROVING THE GROUND LEASE OF A PORTION OF THE PROPERTY AT 602 ELK AVE TO THE CORPORATION OF THE GUNNISON COUNT ELECTRIC ASSOCIATION.**

**WHEREAS,** the Town of Crested Butte, Colorado (the "Town") is a home rule municipality duly and regularly organized and now validly existing as a body corporate and politic under and by virtue of the Constitution and laws of the State of Colorado; and

**WHEREAS,** pursuant to Section 31-15-713 (c), C.R.S., and Section 1.4. of the Town Charter, the Town Council may lease any real estate, together with any facilities thereon, owned by the Town when deemed by the Town Council to be in the best interest of the Town; and

**WHEREAS,** Gunnison County Electric Association desires to lease a portion of the property at 602 Elk Avenue, adjacent to the tennis courts, from the Town for electric vehicle charging stations and related improvements for a period of ten years; and

**WHEREAS,** the Town Council and Gunnison County Electric Association wish to enter into the long-term Ground Lease attached hereto as **Exhibit A**; and

**WHEREAS,** the Town Council finds hereby that approving leases of various Town properties for use by certain entities is in the best interest of the Town.

NOW, THEREFORE, BE IT ORDAINED BY THE TOWN COUNCIL OF THE TOWN OF CRESTED BUTTE COLORADO:

**Section 1.** **Findings.** The foregoing recitals are incorporated herein as if set forth in full.

**Section 2.** **Authorization of Town Manager.** Based on the foregoing, the Town Council hereby authorizes the Town Manager to execute a lease in substantially the same form as attached hereto as **Exhibit A**.

INTRODUCED, READ AND ADOPTED BEFORE THE TOWN COUNCIL THIS ___ DAY OF _____, 2025.

ADOPTED BY THE TOWN COUNCIL UPON SECTION READING IN PUBLIC HEARING THIS ____ DAY OF _____ 2025.

TOWN OF CRESTED BUTTE, COLORADO

By: _____
Ian Billick, Mayor

ATTEST:

_____
Lynelle Stanford, Town Clerk

GROUND LEASE

This Ground Lease ("**Lease**") is made and entered into on _____, 2025, by and between Town of Crested Butte, Colorado, a Colorado municipal corporation ("**Landlord**") and Gunnison County Electric Association, a Colorado cooperative association ("**Tenant**"), each a "Party" and together the "Parties."

**Recitals**

A. Landlord is the owner of certain real property located at 602 Elk Ave in Gunnison County, Colorado (the "**Premises**") as more particularly described in Appendix A attached hereto and incorporated herein by this reference.

B. Tenant desires to lease the Premises from Landlord for the purpose of operating, maintaining, repairing, and replacing electric vehicle charging stations and related improvements, which may include (i) electric vehicle charging stations, (ii) equipment associated with the Charging Stations, (iii) enclosure and/or façade for the location and housing of the Charging Stations, (iv) bollards to protect the Charging Stations from impact or other damage, and (v) signage designating the Charging Stations, (collectively, the "**Improvements**") thereon.

C. Landlord is willing to lease the Premises to Tenant for such purpose, subject to the terms and conditions set forth herein.

NOW, THEREFORE, in consideration of the mutual covenants and agreements set forth herein, and for good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the Parties agree as follows:

1. **Lease of Premises.** Landlord hereby leases to Tenant, and Tenant hereby leases from Landlord, the Premises, for the purpose of operating, maintaining, repairing, and replacing the Improvements. Tenant shall not use the Premises for any other purpose without the prior written consent of Landlord.

2. **Term.** Tenant shall have and hold the Premises for a term of 10 years commencing on October 20, 2025 at 5 p.m. and expiring on October 20, 2035 at 11:59 p.m. (the "**Term**"), unless the Term is earlier terminated or extended as provided in the Lease. Upon expiration or earlier termination of the Lease, Tenant shall remove the Improvements at its sole costs and expense at the direction of Landlord, failing which Landlord may remove and dispose of the same at Tenant's sole cost and expense.

3. **Rent.** Rent shall be due and payable on an annual basis at a rate of $10.00 per year during the Term, commencing on the first day of the Term, and continuing thereafter

4. **Use and Maintenance of Improvements.**

   a. All Improvements shall be constructed in accordance with plans and specifications approved by Landlord, which consent shall not be unreasonably withheld. Tenant shall be responsible for obtaining all necessary permits, licenses, and approvals from any and all applicable governmental authorities for the operation, maintenance, repair, and replacement of the Improvements.

   b. Tenant shall maintain the Improvements in a good and workmanlike manner, in compliance with any and all applicable federal, state, and local laws and regulations, and in accordance with the approved plans and specifications. Tenant shall maintain the Premises and Improvements in a clean and orderly condition at all times. Tenant shall be responsible for the maintenance and repair of the Improvements during the Term, except that Landlord shall be responsible for removing snow on the property adjacent to the Premises. No refuse, scrap, debris, garbage, trash, bulk materials, or waste shall be kept, stored, or allowed to accumulate on the Premises. Abandoned vehicles shall not be permitted on the Premises. No overnight parking shall be prohibited on the Premises from November 1 – April 30. Tenant shall have the right to tow vehicles from the Premises and place signage on the Premises appropriate to enforce the same. Any signs must conform to Town's Municipal Code and MUTCD regulations as applicable.

   c. Tenant shall not make any alterations to the Premises without the prior written consent of Landlord, which consent shall not be unreasonably withheld. Tenant covenants and agrees that (i) nothing shall be done or kept on the Premises which might impair or damage the Premises, and (ii) no hazardous substances shall be maintained or deposited on the Premises.

   d. Tenant shall be responsible for the replacement of any improved surface that is removed or damaged as a result of the installation and/or maintenance of the improvements.

   e. Tenant shall be responsible for obtaining and paying for all utilities necessary for the operation of the Improvements.

5. **Insurance.** Tenant shall maintain, at its sole cost and expense, the following insurance coverage:

a. Commercial general liability insurance with limits of not less than $1,000,000 per occurrence and $2,000,000 in the aggregate. Such coverage shall include public liability, operations, property damage and personal injury.

b. Property insurance covering the Improvements and Tenant's personal property on the Premises.

c. Workers' compensation insurance as required by Colorado law.

d. Any other insurance reasonably requested by Landlord.

Tenant shall cause Landlord to be designated as an additional insured under its commercial general liability insurance policy required under Section 5.a. Tenant shall provide Landlord with certificates of insurance evidencing such coverage and evidencing payment of all premiums shall be made available to Landlord upon request.

6. **Surrender; Restoration.** Upon expiration or termination of the Term, Tenant shall surrender and restore the Premises to its original condition, reasonable wear and tear excepted.

7. **Assignment.** This Lease shall not be assignable by Tenant without the prior written approval of Landlord.

8. **Default; Breach; Remedies.** The occurrence of any one of the following events constitutes a material default of this Lease by Tenant:

   a. The failure of Tenant to make any payment of Rent when due where the failure continues for a period of 10 days after notice from Landlord to Tenant.

   b. The failure by Tenant to observe or perform any of the covenants, conditions, or provisions of this Lease, where the failure continues for a period of 10 days after notice from Landlord to Tenant.

   In the event of default, in addition to the remedies that may be permitted or provided for under applicable law or in equity, Landlord shall have the right to terminate this Lease by giving Tenant written notice of such termination. Upon a determination by Landlord, in Landlord's sole and absolute discretion, that Landlord requires use of the Premises for any other purpose or that the Improvements are not serving a public purpose sufficient to justify its location on the Premises, Landlord may terminate this Lease upon 120 days' written notice to Tenant.

9. **Indemnification.** To the extent permitted by law, each party to this Agreement shall hold harmless, indemnify and defend the other party, including the other party's employees, officers, agents and assigns, from any claim, lawsuit, or award of damages to the extent such claims, lawsuit, or award of damages arise from the action or inaction of that party's own officers, employees and agents.

10. **Governmental Immunity Act.** No term or condition of this Lease shall be construed or interpreted as a waiver, express or implied, of any of the immunities, rights, benefits, protections, or other provisions of the Colorado Governmental Immunity Act, C.R.S. §§ 24-10-101 et seq.

11. **No Third-Party Beneficiaries.** The Parties expressly agree that enforcement of the terms and conditions of this Lease, and all rights of action relating to such enforcement, shall be strictly reserved to the Parties. The Parties expressly intend that any person other than the Parties who receives services or benefits under this Lease shall be deemed to be an incidental beneficiary only.

12. **Notice.** Any notice or communication required hereunder between the Landlord and Tenant must be in writing, and may be given either personally or by registered or certified mail, return receipt requested or by email at the email address provided below. Such notices or communications shall be given to the Parties at their addresses set forth below:

    If to Tenant, to:
    Gunnison County Electric Association
    Attn: Chief Executive Officer
    37250 US Highway 50
    Gunnison, CO 81230

    If to Landlord, to:
    Town of Crested Butte
    Attn: Dara MacDonald, Town Manager
    507 Maroon Avenue
    P.O. Box 39
    Crested Butte, CO 81224
    dmacdonald@crestedbutte-co.gov

    With a copy to:
    Karl J. Hanlon
    Karp Neu Hanlon, P.C.
    201 14th Street, Suite 200
    PO Drawer 2030
    Glenwood Springs, CO 81602
    kjh@mountainlawfirm.com

13. **Colorado Law.** The interpretation, enforcement, or any other matters relative to this Lease shall be construed and determined in accordance with the laws of the State of Colorado. Any litigation involving this Lease or its subject matter shall be brought and maintained in

the District Court in Gunnison County, Colorado. Each party hereby waives all rights to trial by jury.

14. **Severability.** Should any portion of this Lease be declared invalid or unenforceable by a court of competent jurisdiction, then the remainder of this Lease shall be deemed severable, shall not be affected, and shall remain in force and effect unless amended or modified by mutual consent of the Parties.

15. **No Waiver.** The failure of either party to insist upon the strict performance of any provisions of this Lease or to exercise any right or option available to it, or to serve any notice or to institute any action, shall not be a waiver or a relinquishment for the future of any such provision.

16. **Entire Agreement; Amendments.** This Lease is the entire agreement of the Parties and supersedes any prior agreements or understandings (written or oral) with respect to the matters set forth herein. This Lease may not be amended, nor may any rights hereunder be waived, except by an instrument in writing executed by the parties against whom such waiver or modification is sought to be enforced. Course of dealing, no matter how long, is not intended to be, and shall not be construed as, an amendment to this Lease.

17. **Counterparts.** This Lease may be executed in one or more counterparts and on separate counterparts; such counterparts will be compiled into one fully-executed Lease. A signature delivered by e-mail, facsimile or other electronic transmission will be deemed to constitute an original and fully-effective signature.

[signatures immediately follow on next page]

IN WITNESS WHEREOF, the Landlord and Tenant have executed this Lease on the day and year first written above.

**LANDLORD:**

Town of Crested Butte, Colorado

_____ Date: _____
Ian Billick, Mayor

Attest

_____
Town Clerk

**TENANT:**

The Gunnison County Electric Association

By: _____ Date: _____
Name: _____
Title: _____

# Staff Report
August 18, 2025

| | |
|---|---|
| **To:** | Mayor and Town Council |
| **Prepared By:** | Astrid Matison, Chief Building Official and Josh Staab, Building Inspector |
| **Thru:** | Mel Yemma, AICP, Community Development Director |
| **Subject:** | Ordinance No.9, Series 2025: An Ordinance of the Crested Butte Town Council Repealing and Replacing Chapter 18 of the Crested Butte Municipal Code. |

**Summary:**

This is the public hearing to adopt the 2024 International Code Council (ICC) building codes, aligning with the Town's regular three-year update cycle. The proposed updates follow the 2024 ICC changes, adjust amendments based on council feedback, and introduce a consideration to require energy assessments for certain types of remodels, with supporting information and discussion points for Council further described below. The updated code would take effect on January 1, 2026.

**Previous Council Action:**

- **July 7, 2025:** Held a work session reviewing and discussing proposed changes with the update to 2024 ICC codes.
- **August 5, 2025:** Discussed the code and held the first reading of Ordinance No. 9, Series 2025.

**Background:** Every three years (previously every six years), the Town adopts the ICC family of building codes to ensure public health, safety, and efficiency of construction practices within each jurisdiction.

The Town currently enforces the 2021 ICC family of building codes, with above code provisions to advance the Town's climate action goals. The Town's above code requirements (incorporating new requirements from the State's model electric and solar ready code) include:

| Residential Construction | Commercial Construction |
|---|---|
| ***New Construction***<br>• **Sprinklers:** Required for all shared-wall units (duplexes, triplexes, multifamily). | ***New Construction***<br>• **International Green Construction Code (IgCC) Provisions:** Requirements for water use, indoor air quality, site drainage, and onsite mixed-use recycling. |

| | |
|---|---|
| • Zero Energy Ready Home (ZERH) **Certification:** Required for all new residential units.<br>• **EV Charging Readiness:** Must meet State EV infrastructure requirements.<br>• **All-Electric Requirement:** Heating, hot water, and appliances must be electric.<br>• **Solid Fuel Devices:** Require a HERS score of 30 or lower.<br>***Remodels***<br>• **Energy Assessment:** Optional for non-Level 3 remodels (subsidized by the Town).<br>• **Solid Fuel Devices:** Require HERS score of 50 or lower.<br>• **Level 3 Remodels (exceeds 50% of work area):**<br>• *Historic Structures:* Must meet energy code while preserving historic structures.<br>• Require an energy assessment.<br>• Must meet EV readiness, electric-ready, and solar-ready standards. | • **Solar Installation:** Required for buildings 5,000 sq. ft. and larger; smaller buildings must be solar-ready per State Model Code.<br>• **EV Charging Readiness:** Must meet State EV infrastructure requirements.<br>• **All-Electric Requirement:** Applies to all systems except commercial kitchens.<br>***Remodels***<br>• **Level 3 Remodels (exceeds 50% of work area):**<br>• Must meet EV readiness, electric-ready, and solar-ready standards.<br>• Major additions (exceeds 50% of the existing building area) must meet EV readiness, electric-ready, and solar ready provisions. |

## Discussion:

At the August 5 Town Council meeting, Council requested amendments to the ordinance along with additional data and information on several discussion points. This ordinance is presented as a repeal-and-replace of the building code to provide a clean, updated version; however, several provisions that have not been proposed to Council for discussion are remaining consistent with the current code.

The revised Ordinance No. 9, Series 2025 exhibit reflects the following changes since the first reading:

- The work area definition in the Existing Building Code was refined to provide better clarity with what is included in the threshold for different levels of alterations
- Energy assessments for level 2 and 3 remodels are proposed to be required and level 1 remodels are encouraged to complete an assessment, with the cost subsidized by the Town, which is also further described below for Council discussion and direction
- The Fire Code section includes amendments requested by the Fire Protection District
- The amendment regarding a 18" lower roof setback for solar panels is removed. Staff requested the Fire District provide supporting information on this.
- The requirement for commercial buildings over 5,000 sq. ft. to provide solar panels has been removed. Instead, all new commercial buildings will be required to be solar-ready per the State of Colorado model code.
- The HERS requirement for solid fuel-burning devices has been removed, as discussed below.

- The sprinkler requirement remains limited to buildings with shared walls, consistent with the prior reading and current regulations, with additional analysis provided below for Council's input.

Each of these changes is described in more detail below. Staff is specifically seeking Council direction on two key issues: energy assessments and sprinkler requirements.

**Work Area Definition:**

To clarify for remodel projects staff proposes a refined Work Area definition below. This improved definition helps architects and building officials accurately determine if a project meets the Level 3 threshold. Projects classified as Level 3 must comply with additional requirements, including the Colorado Model Electric Ready and Solar Ready Codes.

- ***2024 IEBC definition of WORK AREA.*** That portion or portions of a building consisting of all reconfigured spaces as indicated on the construction documents. Work area excludes other portions of the building where incidental work entailed by the intended work must be performed and portions of the building where work not initially intended by the owner is specifically required by this code.
- ***Proposed definition of WORK AREA.*** That portion or portions of the building consisting of reconfigured and altered spaces as indicated with an outline on the floorplans, as measured from the inside face of the building envelope. Exterior walls that have drywall removed shall be included in the work area calculation. Altered spaces that include replacement of finishes such as flooring, cabinets, or electrical or plumbing fixtures that do not require state plumbing or electric permit would not be included in the work area outline.

**Energy Assessments for Remodels**

The only additional above code provision staff recommends for this code update is to implement the 2025 Climate Action Plan recommendation to require residential remodel projects that require a building permit to undergo a home energy assessment to collect data on the existing building stock within the town and provide property owners with information on potential energy efficiency upgrades.

The 2030 Climate Action Plan's "Improve Efficiency" strategy identifies Action 1. Under the category of "Understand Crested Butte's Building Stock". Action 1 is a recommendation to *"require energy assessments for all remodels to collect community-wide energy use data in residential and commercial properties."*

Town Staff is not currently recommending to require or subsidize energy assessments for commercial buildings, due in part to limited infrastructure for referring owners to qualified commercial energy auditors. However, improving access to energy data for commercial buildings is a future priority, identified in the Climate Action Plan through a potential benchmarking program, as additionally shown below.

*Recommendations from the Climate Action Plan under the "Improve Efficiency" Strategy.*

| Actions | Description | Implementation Begins |
|---|---|---|
| **Understand Crested Butte's Building Stock** | | |
| Action 1. **Require energy assessments for all remodels to collect community-wide energy use data in residential and commercial properties.** | Updates Crested Butte's Building Code to require energy assessments for all residential alteration permits (Levels 1, 2, and 3, **see Guide to Key Terms**). It utilizes the permitting process as a touchpoint to gather baseline energy data for future retrofitting programs. Homeowners also gain valuable insights to improve and electrify their properties. | 2025-2026 |
| Action 2. **Require energy assessments for short-term rentals to collect community-wide energy use data in residential and commercial properties** | As of 2024, Crested Butte has 191 licensed vacation rentals. This action integrates energy assessments into the annual licensing process, helping the Town track energy use over time and providing owners with insights to improve efficiency and electrify their properties. | 2025-2026 |
| Action 3. **Require energy use disclosure and benchmarking for commercial buildings.** | Requires commercial buildings over a certain size to disclose energy use, enabling comparisons to drive energy reductions through awareness and efficiency improvements. A benchmarking program will help the Town track energy data and inform future efficiency incentives or requirements. | 2027-2028 |

### *What's in an Energy Assessment?*

This recommendation seeks to both gather baseline energy data for future retrofit programs, as well as support providing homeowners with insights to improve efficiency of their property. An example energy assessment report is attached as a reference. The report provides important data points such as different R-values of insulation of different parts of the home (which vary greatly depending on what year a home was built), HVAC and mechanical systems used, air exchange rates, and general life/safety information. The report both provides baseline data, as well as includes recommendations for the homeowner to consider implementing to address safety concerns and improve energy efficiency.

### *What are the different Alteration Levels?*

A building permit is required for most remodel projects that go beyond basic cosmetic updates. Cosmetic work such as painting, replacing flooring, or swapping out cabinet doors does not require a permit. However, if your remodel includes any demolition, framing, electrical, plumbing, mechanical work, or changes to the exterior of a building such as insulation or windows, a permit is required. This is because the International Energy Conservation Code (IECC) applies to any repair, alteration, addition, or relocation that affects a building's systems or energy performance.

The IECC defines remodels in three levels of alteration.

| Level | Definition | Example |
|---|---|---|

| | | |
|---|---|---|
| 1 | **IEBC Section 602 Alteration—level 1**<br><br>**602.1 Scope.**<br><br>Level 1 alterations include the removal and replacement or the covering of existing materials, elements, equipment or fixtures using new materials, elements, equipment or fixtures that serve the same purpose. | Examples include replacing or covering existing materials, fixtures, or equipment with new versions that serve the same function, such as updating insulation, replacing existing windows, or replacing a water heater.<br><br>**Example from 214 Sopris Avenue:** Re-siding and window replacements constitute a level 1 alteration. They additionally were just approved for a permit to begin re-roofing, which is also a level 1 alteration.<br><br>  |
| 2 | **IEBC Section 603 Alteration—level 2**<br><br>**603.1 Scope.**<br><br>Level 2 alterations include the addition or elimination of any door or window, the reconfiguration or extension of any system, or the installation of any additional equipment, and shall apply where the work area is equal to or less than 50 percent of the building area.<br><br>*Exception: The movement or addition of nonfixed and movable fixtures, cases, racks, counters and partitions not over 5 feet 9 inches (1753 mm) in height shall not be considered a Level 2 alteration.* | Examples include reconfiguring spaces, adding or removing doors and windows, extending systems like HVAC or lighting, or installing new equipment, as long as the work affects 50 percent or less of the building's area.<br><br>**Example from 5 Beckwith:** This house constructed a dormer additional to the upstairs and had significant framing added to the existing roof structure. A bathroom was added upstairs, and the top floor was re-insulated, however, this work did not exceed 50% of the building area.<br><br>  |

| | | |
|---|---|---|
| 3 | **IEBC Section 604 Alteration—level 3**<br><br>**604.1 Scope.**<br><br>Level 3 alterations apply where the work area exceeds 50 percent of the building area. | Level 3 Alterations apply to larger remodels that affect more than 50 percent of the building. The more extensive the work, the more requirements you will need to meet for energy efficiency, ventilation, and safety.<br><br>**Example from 330 Whiterock:** The original structure was unsheathed to the framing on exterior and the structure has been relocated and added on to. The total amount of work done to the building exceeded 50% of the building area.<br><br>  |

***Discussion Considerations for Energy Assessments***

The Town currently requires energy assessments for Level 3 alterations and encourages (with a $550 subsidy) assessments for Levels 1 and 2. Based on Council feedback, the updated ordinance proposes requiring assessments for Levels 2 and 3 while continuing to encourage them for Level 1. Subsidies for Level 1, and possibly continuing subsidies for Level 2, can be considered in the 2026 budget.

As a discussion point, an exemption for buildings constructed to the 2015 IECC code (adopted by the Town in 2017) or later, which marked a significant efficiency improvement, could also be considered. This will be discussed further in the vacation rental licensing ordinance update but could be applied to the building code as well. Additionally, staff suggests exempting properties that have an assessment completed within the past 10 years, but to require sharing the report with the Town.

Staff requests Council direction on which levels should require assessments.

**Fire Code and Lower Roof Setback on Solar**

The Fire Code portion of the building code ordinance includes the following amendments requested by the Fire District.

- When a single property includes a main house and accessory building(s) interconnection of the smoke detector system between the main house and accessory building(s) is required.
- Location of electrical and PV meters and emergency disconnects to be located on a non-snow roof shed side of a structure such as gable end. Cricket, roof shelters, or enclosures do not substitute the requirement for protection of these meters and disconnects.

Staff requested that the Fire District provide a rationale for their requested 18-inch lower roof setback amendment in a letter to Council prior to the August 18 meeting. After further review, staff confirmed that neither Gunnison County nor Mt. Crested Butte include this setback requirement. Staff recommends removing the amendment and defaulting to the IRC, which already includes egress and setback requirements for rooftop solar safety. This removal is reflected in the updated ordinance.

**Solar Ready for Commercial Buildings**

The updated ordinance removes the requirement for new or Level 3 alteration commercial projects over 5,000 sq. ft. to provide solar panels. Instead, all new and Level 3 commercial alterations must be solar-ready per the Colorado Model Code. This change aligns with the Climate Action Plan's focus on increasing efficiency, electrification, and decarbonization. Specifically, the Plan emphasizes advocating for Tri-State's grid decarbonization and collaboration to achieve 100% renewable energy. While the Town will continue to streamline processes for individual solar installations, removing this solar provision supports the broader strategy to prioritize decarbonization at the grid level.

**Solid Fuel Burning Devices**

The updated ordinance removes the HERS requirement for solid fuel burning devices, reflecting the primary focus on reducing particulate emissions rather than improving energy efficiency. The Town's code continues to require solid fuel devices to meet EPA Phase 2 emissions standards, limiting particle pollution to 5.1 grams per kilogram of wood burned. This voluntary EPA program uses emissions per wood burned (g/kg) to better reflect typical fireplace use. Staff recommends removing the HERS provision, maintaining the EPA Phase 2 requirement, and monitoring any future impacts.

**Sprinklers**

The updated ordinance continues the Town's past approach of not requiring fire sprinklers in single-family homes and ADUs, but requiring them for buildings with shared walls. More information is provided for Council to discuss potentially changing this amendment. While national fire data overwhelmingly supports sprinklers for life safety, some communities have scaled back requirements due to cost and infrastructure concerns.

***National Data on Sprinklers***

The International Residential Code (IRC) has required sprinklers in one- and two-family homes since 2006. Sprinklers became more prevalent because modern homes burn 8x faster than older homes, reducing escape time from 29 minutes to 3–5 minutes. This is due in part to lightweight construction methods and the prevalence of synthetic materials, which ignite more easily, release more heat, and produce more toxic smoke than traditional wood and natural-fiber furnishings.

Case studies from **Prince George's County, MD** (1992–2007), **Scottsdale, AZ** (1986–2001), and **Bucks County, PA** (1988–2010) identified:

| Location | Summary |
|---|---|
| **Prince George's County, MD** | • 13,494 single-family/townhouse fires; 245 in sprinklered homes<br>• 89% of fire deaths in residential buildings<br>• 101 deaths & 328 injuries in homes **without** sprinklers<br>• 0 deaths in homes **with** sprinklers |
| **Scottsdale, AZ** | • 41,408 homes; 50% with sprinklers<br>• 598 home fires; 49 in sprinklered homes<br>• 13 deaths in homes **without** sprinklers<br>• 0 deaths in homes **with** sprinklers |
| **Bucks County, PA** | • 88% of fire deaths in residential buildings<br>• 90 deaths in homes **without** sprinklers<br>• 0 deaths in homes **with** sprinklers |

### *Cost Comparisons*

National averages for sprinklers estimate they add $1.35–$1.61 per square foot, dropping to ~$0.80 in established markets. However, local experience with Paradise Park indicated they added considerable cost. The table below compares the costs experienced with Paradise Park (this consolidates an average given different unit sizes/building types), with a comparison of a 2-hour fire wall that would be required in lieu of sprinklers:

**Cost of Sprinklering Per Unit**

Assume 1,100 SF, two story, two bed unit

| | | |
|---|---|---|
| $ | 18,700 | Internal sprinkler system ($17/SF) |
| $ | 15,000 | 2" service upsize -- assumes being able to access the line via ROW, not cutting into asphalt |
| $ | 300 | Curb Stop |
| $ | 200 | External service line |
| $ | 34,200 | ADDED COSTS |

Without Fire Supression, add costs for 2-Hour firewall between units

| | | |
|---|---|---|
| $ | 2,600 | one unit cost |

To put these costs into perspective, the sprinkler system added approximately $31.09 per square foot, accounting for 5.6% of the total construction costs. For reference, Phase 1 of Paradise Park averaged $473 per square foot, while Phase 2 averaged $512 per square foot. By comparison, the fire wall option would have cost $2.36 per square foot, representing 0.5% of the total construction cost.

Some studies have shown that home fire sprinkler systems can lower homeowner insurance premiums, typically ranging from 5–15%. The amount varies by insurer, state, and other risk factors, with some companies offering additional discounts for combining sprinklers with other fire safety features. While not universal, these savings can help offset installation and maintenance costs over time.

### *What are other communities doing?*

The following table shows what code and requirements for sprinklers similar communities require. Currently Steamboat Springs, Buena Vista, and Moffat County do not require sprinklers for duplexes:

| JURISDICTION | CODE YEAR | UNDER THE IRC CODE | AMENDED OUT SFD'S | REQUIRED FOR CERTAIN SIZE SFD | AMENDED OUT SFD'S AND DUPLEXES | ADDED SPRINKLERS FOR EXISTING RESIDENTIAL BUILDINGS |
|---|---|---|---|---|---|---|
| City of Gunnison | 2021 | | X | | | |
| Town of Mt. Crested Butte | 2021 | | | X | | |
| Gunnison County | 2021 | | | X | | |
| Avon | 2021 | X | | | | |
| City of Aspen | 2021 | X | | | | |
| Vail | 2024 | X | | | | X |
| Steamboat Springs | 2021 | | | | X | |
| City of Durango | 2015 | X | | | | |
| Telluride | 2018 | X | | | | X |
| Winter Park | 2021 | X | | | | |
| Buena Vista | 2021 | | | | X | |
| Breckenridge | 2018 | | | X | | X |
| Pitkin County | 2021 | | | X | | |
| Moffat County | 2018 | | | | X | |

***Discussion Considerations for Sprinklers***

In general, there is a movement to reconsider requiring sprinklers in single family homes and duplexes to reduce costs and improve affordability, however, it is challenging to weigh the pros/cons when it comes to life safety statistics and not having a consistent approach across similar communities. Some pros/cons of sprinklers for Council consideration include:

| Pros | Cons |
|---|---|
| • **Life safety:** Drastically reduces the risk of civilian death (89% lower), civilian injury (31% lower), and firefighter injury (48% lower) in home fires, especially with faster-burning modern materials and furnishings.<br>• **Early suppression:** Limits fire spread, reducing toxic smoke exposure and increasing survivability for residents and firefighters.<br>• **Potential property protection:** May reduce structural damage and loss of belongings.<br>• **Insurance savings:** Premium discounts possible in some markets.<br>• **Market variation:** The Town's current amendmend of singel family homes is | • **Higher upfront costs:** Local costs in Paradise Park were well above national averages and installation requires upsized water service.<br>• **Infrastructure impacts:** Many sprinklered homes require **2-inch water service lines** rather than the standard ¾- or 1-inch lines. This can significantly increase construction costs (thousands of dollars per connection), place additional demand on municipal water capacity, and may require street or main upgrades in some areas.<br>• Maintenance and repair risks: If the system is not well or actively maintained, there is potential for freeze damage, leaks, or accidental discharge in cold climates. |

| | |
|---|---|
| consistent with our neighboring jurisdictions. The majority of communities have amended and expanded requirements to increase residential sprinkler systems and encourage installation in existing buildings or required IRC standards as a bare minimum.<br>• | • **Market variation:** Some communities have repealed or relaxed requirements to reduce housing costs and encourage development. |

**Climate Impact:** Regulating Crested Butte's building stock (both new construction and renovations) remains one of the Town's most effective strategies to reduce building energy-related greenhouse gas (GHG) emissions, which account for approximately 93% of the Town's total emissions. This building code update supports Crested Butte's ongoing climate goals by reducing new and future building emissions through energy efficiency and electrification, and continuing to collect valuable data on the existing building stock through expanding the use of home energy assessments.

**Financial Impact:** There are no proposed changes to building permit fees at this time nor anticipated financial impacts to the Town. Later this year, the Town will evaluate its solar permitting fees as part of the fee schedule adoption, which was also a recommendation from the Climate Action Plan.

**Legal Review:** The Town Attorney has reviewed changes to align with the 2024 ICC codes and drafted the attached ordinance.

**Recommendation:** For a council member to make a motion, followed by a second, to adopt Ordinance 9, Series 2025, with the following amendments:

- Council decision on what level alterations to require energy assessments
- Council decision on potentially adjusting the sprinkler amendment
- Any additional Council direction on the ordinance

## ATTACHMENTS

1. Ordinance No. 9, Series 2025: An Ordinance of the Crested Butte Town Council Repealing and Replacing Chapter 18 of the Crested Butte Municipal Code.
2. Exhibit A: Chapter 18 – Building Regulations
3. Example Energy Assessment
4. Letter from CBFPD (Solar setback letter will be sent separately)

**ORDINANCE NO. 9**
**SERIES 2025**

**AN ORDINANCE OF THE CRESTED BUTTE TOWN COUNCIL REPEALING AND REPLACING CHAPTER 18 OF THE CRESTED BUTTE MUNICIPAL CODE.**

**WHEREAS,** the Town of Crested Butte, Colorado ("the Town") is a home rule municipality duly and regularly organized and now validly existing as a body corporate and public under and by virtue of the Colorado Constitution and laws of the State of Colorado; and

**WHEREAS,** Town Council finds it is necessary and proper to repeal and replace Chapter 18 of the Crested Butte Municipal Code as provided in this ordinance.

NOW, THEREFORE, BE IT ORDAINED BY THE TOWN COUNCIL OF THE TOWN OF CRESTED BUTTE COLORADO:

**Section 1.** The foregoing recitals are incorporated herein as if set forth in full.

**Section 2.** Chapter 18 of the Crested Butte Municipal Code is hereby repealed and replaced as provided for on the attached **Exhibit A**.

**Section 3.** Upon the effective date of this ordinance, the codifier is hereby authorized to renumber the Code in conformance with these amendments.

INTRODUCED, READ, AND SET FOR PUBLIC HEARING THIS ___ DAY OF AUGUST 2025.

ADOPTED BY THE TOWN COUNCIL UPON SECOND READING IN PUBLIC HEARING THIS ____ DAY OF _____ 2025.

TOWN OF CRESTED BUTTE, COLORADO

ATTEST:

By:_____
Ian Billick, Mayor

_____
Lynelle Stanford, Town Clerk

**EXHIBIT A**

# CHAPTER 18 - Building Regulations

## ARTICLE 1 Building Code

### Sec. 18-1-10. Adoption.

The International Building Code ("IBC"), 2024 edition, Chapters 1 through 35 without appendices, published by the International Code Council, Inc., 4051 West Flossmoor Road, Country Club Hills, Illinois 60478, is hereby adopted by reference thereto and incorporated into and made part of the Crested Butte Municipal Code to have the same force and effect as if set forth herein in every particular pursuant to Title 31, Article 16, Part 2, C.R.S.

The subject matter of this adopted code is to establish the minimum requirements to provide a reasonable level of safety, health and general welfare through structural strength, *means of egress*, stability, sanitation, light and *ventilation*, energy conservation, and for providing a reasonable level of life safety and property protection from the hazards of fire, *explosion* or *dangerous* conditions, and to provide a reasonable level of safety to fire fighters and emergency responders during emergency operations.

### Sec. 18-1-20. Reserved.

### Sec. 18-1-30. Amendments.

The code adoption herein is modified by the following amendments:

(1) IBC Section 105.2 is amended to read as follows:

**R105.2 Work exempt from permit. Building**.

1. Fences less than 6 feet (1828.8 mm) high.
2. Oil derricks.
3. Retaining walls that are not over 4 feet (1219 mm) in height measured from the bottom of the footing to the top of the wall, unless supporting a surcharge or impounding Class I, II or IIIA liquids.
4. Sidewalks and driveways not more than 18 inches (457 mm) above adjacent grade, and not over any *basement* or *story* below and are not part of an *accessible route*.
5. Painting, papering, tiling, carpeting, cabinets, counter tops and similar finish work.
6. Temporary motion picture, television and theater stage sets and scenery.
7. Swings and other playground equipment accessory to detached one- and two-family *dwellings*.

(2) IBC Section 202 Definitions is amended by inserting or amending the following definitions within the alphabetical order of the existing definitions as follows:

*Crawlspace*. Any space below the first floor of a building with a height of 60 inches or less, measured from the ground level at any point within the perimeter to the bottom of the floor joist directly above.

*All Electric Building*. A new building that contains no combustion equipment or plumbing for combustion equipment serving space heating (with the exception of solid fuel-burning devices that meet requirements in Article 8 of this Chapter), water heating (including pools and spas), cooking appliances (including barbeques but excluding Commercial Food Heat-processing Equipment), and clothes drying, within the building or building property lines, and instead uses electric heating appliances for service.

*Combustion Equipment*. Any equipment or appliance used for space heating, service water heating, cooking, clothes drying and/or lighting that uses fuel gas or fuel oil.

*Commercial Food Heat-processing Equipment*. Equipment used in a food establishment for heat-processing food or utensils and that produces grease vapors, steam, fumes, smoke, or odors that are required to be removed through a local exhaust ventilation system.

*Direct Current Fast Charger ("DCFC") EVSE*. As defined by the Colorado Model Electric Ready and Solar Ready Code Chapter 2. Equipment capable of fast charging on a 100A or higher 480VAC three phase branch circuit. AC power is converted into a controlled DC voltage and current within the EVSE that will then directly charge the electric vehicle.

*Electric Heating Appliance*. A device that produces heat energy to create a warm environment by the application of electric power to resistance elements, refrigerant compressors, or dissimilar material junctions.

*Electric Ready*. A building that meets the following construction requirements:

a. Where a gas heating system is installed, provide a dedicated electric circuit, panel space and location for condensate drainage.

b. Where a gas water heating system is installed, provide a dedicated electric circuit, panel space, and location for condensate drainage.

c. Where a gas cooking stove is installed, a dedicated circuit and panel space for electric appliance replacement is provided.

d. Where a gas dryer is installed, a dedicated circuit and panel space for electric appliance replacement is provided.

*Electric Vehicle Capable Light Space (EV Capable Light Space)*. As defined by the Colorado Model Electric Ready and Solar Ready Code Chapter 2. A designated vehicle parking space that has conduit and/or raceway installed to support future implementation of electric vehicle charging installation and has sufficient physical space adjacent to the existing electrical equipment for future electrical upgrades.

*Electric Vehicle Capable Space (EV Capable Space)*. As defined by the Colorado Model Electric Ready and Solar Ready Code Chapter 2. A designated vehicle parking space that has electric panel capacity and conduit and/or raceway installed to support future implementation of electric vehicle charging.

*Electric Vehicle Ready Space (EV Ready Space)*. As Defined by the Colorado Model Electric Ready and Solar Ready Code Chapter 2. A designated vehicle parking space that has electric panel capacity, raceway wiring, receptacle, and circuit overprotection devices installed to support future implementation of electrical vehicle charging.

*Electric Vehicle Supply Equipment (EVSE)*. As defined by the Colorado Model Electric Ready and Solar Ready Code Chapter 2. An electric vehicle charging system or device that is used to provide electricity to a plug-in electric vehicle or plug-in hybrid electric vehicle, is designed to ensure that a safe connection has

been made between the electrical grid and the vehicle and is able to communicate with the vehicle's control system so that electricity flows at an appropriate voltage and current level.

*Electric Vehicle Supply Equipment Installed Space (EVSE Installed Space)*. As defined by the Colorado Model Electric Ready and Solar Ready Code Chapter 2. A vehicle parking space that is provided with a dedicated EVSE connection.

*Fuel Gas*. A gas that is natural, manufactured, liquefied petroleum, or a mixture of these.

*Townhouse*. A single-family dwelling unit that is constructed in a group of two or more attached units in which each unit extends from the foundation to roof and with open space on at least two sides.

(3) IBC Section 1301.1 is amended by adding three new subsubsections to read as follows:

1301.1.2. - All Electric Buildings. All new commercial buildings shall be All Electric Buildings, with the exception of *Commercial Food Heat-processing Equipment*. *Commercial Food Heat-processing Equipment shall be Electric Ready*.

1301.1.3. - Commercial Electric Vehicle Ready. Where parking spaces are provided (in new commercial buildings, and Level 3 Alteration remodels including additions), the parking spaces shall be provided with electric vehicle power transfer infrastructure in compliance with the Colorado Model Electric Ready and Solar Ready code Section CV502, and additionally, commercial buildings and accessory structures with two or more parking spaces shall provide one Level II EVSE parking space and one DC Fast Charger shall be provided for 5 or more required parking spaces

1301.1.4. - Solar Ready Commercial Building. As defined by the Colorado Model Electric Ready and Solar Ready Code Chapter 2. A solar-ready zone shall be provided on the roof(s) of all new commercial buildings.

(4) IBC Section 1805.3 is amended to read as follows:

1805.3 - Waterproofing. All basement construction shall adhere to Section 18-16-10 of the Crested Butte Municipal Code for basement waterproofing.

(5) Solar requirements shall not exceed any Gunnison County Electric Association net metering limitation in place when submitting permit application.

## Sec. 18-1-40. Fees.

Fees for any permit or inspection required by the codes adopted in this Chapter or required by Article 13 of this Chapter are set by resolution of the Town Council.

## Sec. 18-1-50. Rules and regulations.

The Town may, from time to time, promulgate such rules and regulations as it deems necessary to implement and carry out the intent of this Article; provided, however, that such rules and regulations shall not be inconsistent herewith.

## Sec. 18-1-60. Conflicting provisions.

In the event of a conflict between the code adopted herein and any provision set forth in Chapter 16 of this Code, such conflict shall be resolved in favor of said Chapter 16.

### Sec. 18-1-70. Violation, liability, and penalty.

(a) Any person who violates any provision of this Article or this Chapter shall be punished by a fine not to exceed one thousand dollars ($1,000.00) for each offense. Each day that a violation of this Article or this Chapter continues to exist shall constitute a separate and additional offense.

(b) Any person violating any provisions of this Article or this Chapter shall be liable to the Town for any expense, loss, or damage, including reasonable attorneys' fees, occasioned by reason of such violation.

(c) The Town may institute injunction, abatement, or any other appropriate action to prevent, enjoin, or abate any violation of this Article or this Chapter.

(d) The remedies provided by this Section are cumulative and not exclusive and are in addition to any other remedies provided by law.

## ARTICLE 1.5 International Green Construction Code

### Sec. 18-1.5-10. Adoption.

The International Green Construction Code ("IgCC"), 2024 edition, selected sections from Chapters 1, 3, 5, and 6 through 9 pursuant to Section 18-1.5-30, published by the International Code Council, Inc. 4051, West Flossmoor Road, Country Club Hills, Illinois 60478, is hereby adopted by reference thereto and incorporated into and made part of the Crested Butte Municipal Code to have the same force and effect as if set forth herein in every particular pursuant to Title 31, Article 16, Part 2, C.R.S.

The subject matter of the adopted code includes minimum requirements to be used in conjunction with the other codes and standards adopted by this jurisdiction. The requirements in this code shall not be used to circumvent any applicable safety, health, or environmental requirements. The provisions of this Code shall apply to the design, construction, addition, alteration, equipment, change of occupancy, relocation, replacement, demolition and removal of every building or structure or any appurtenances connected or attached to such buildings or structures and to the building site on which the building is located. Occupancy classifications shall be determined in accordance with the International Building Code.

### Sec. 18-1.5-20. Reserved.

### Sec. 18-1.5-30. Selected Sections to be Adopted by Reference and Amendments Thereto.

The following selected sections of the Green Construction Code are hereby adopted in their entirety and amended as follows:

(1) IgCC Chapter 1 “Scope and Administration” is adopted in its entirety.

(2) IgCC Chapter 3 “Definitions, Abbreviations and Acronyms” is adopted in its entirety.

(3) IgCC Chapter 5 “Site Sustainability” Section 501.3.4 (Stormwater management) is adopted in its entirety.

(4) The following sections of IgCC Chapter 6: “Water Efficiency” shall be adopted in their entirety: Section 601.3.2 (Building water use reduction); Section 601.3.2.2 (Appliances); Section 601.3.2.3 (HVAC systems and equipment); Section 601.3.2.5 (Commercial food service operations); and Section 601.3.3 (Hot water distribution).

(5) The following sections of IgCC Chapter 7 “Energy Efficiency” shall be adopted in their entirety: Section 701.4.3.8 (Kitchen exhaust systems).

(6) The following sections of IgCC Chapter 8 “Indoor Environmental Quality” shall be adopted in their entirety: Section 801.3.1 (Indoor air quality); Section 801.4.3.4 (Soil-gas control); and Section 801.4.2 (Materials).

(7) IgCC Chapter 9 “Materials and Resources” Section 901.3.2 (Extracting, harvesting, and/or manufacturing) shall be adopted in its entirety.

(8) IgCC Chapter 9 “Materials and Resources” Section 901.3.4 (Areas for storage and collection of recyclables and discarded goods) shall be adopted and amended to delete Sections 901.3.4.2 through 901.3.4.4.

## ARTICLE 2 Residential Code

### Sec. 18-2-10. Adoption.

The *International Residential Code* ("IRC"), 2024 edition, Chapters 1 through 44, with Appendix BE (Radon Control Methods), Appendix BG (Sound Transmission), Appendix BI (Light Straw-Clay Construction), and Appendix BJ (Straw-Bale Construction), and Appendix BK(Cob Construction Monolithic adobe), published by the International Code Council Inc. 4051, West Flossmoor Road, Country Club Hills, Illinois 60478, is hereby adopted by reference thereto and incorporated into and made part of the Crested Butte Municipal Code to have the same force and effect as if set forth herein in every particular pursuant to Title 31, Article 16, Part 2. C.R.S.

The subject matter of the adopted code includes comprehensive provisions and standards regulating the erection, construction, enlargement, alteration, repair, moving, removal, conversion, demolition, occupancy, equipment, use, height, area and maintenance of buildings and structures for the purpose of protecting the public health, and safety and general welfare.

### Sec. 18-2-20. Reserved.

### Sec. 18-2-30. Amendments.

The code adoption herein is modified by the following amendments:

(1) IRC Section R105.2. Building exemptions are amended to read as follows:

**R105.2 - Work exempt from permit. Building.**

1. Fences 6 feet (1828.8 mm) or less in height.
2. Retaining walls that are not over 4 feet (1219 mm) in height measured from the bottom of the footing to the top of the wall, unless supporting a surcharge.
3. Sidewalks and driveways.
4. Painting, papering, tiling, carpeting, cabinets, counter tops and similar finish work.
5. Prefabricated swimming pools that are less than 24 inches (610 mm) deep.
6. Swings and other playground equipment.

(2) IRC Section R202 is amended by inserting or amending the following definitions within the alphabetical order of the existing definitions as follows:

*All Electric Building*. A new building that contains no combustion equipment or plumbing for combustion equipment serving space heating (with the exception of solid fuel-burning devices that meet requirements in Article 8 of this Chapter), water heating (including pools and spas), cooking appliances (including barbeques), and clothes drying, within the building or building property lines, and instead uses electric heating appliances for service.

*Combustion Equipment*. Any equipment or appliance used for space heating, service water heating, cooking, clothes drying and/or lighting that uses fuel gas or fuel oil.

*Commercial Food Heat-processing Equipment*. Equipment used in a food establishment for heat-processing food or utensils and that produces grease vapors, steam, fumes, smoke, or odors that are required to be removed through a local exhaust ventilation system.

*Crawl Space.* Any space below the first floor of a building with a height of 60 inches or less, measured from the ground level at any point within the perimeter to the bottom of the floor joist directly above.

*Electric Heating Appliance*. A device that produces heat energy to create a warm environment by the application of electric power to resistance elements, refrigerant compressors, or dissimilar material junctions.

*Fuel Gas*. A gas that is natural, manufactured, liquefied petroleum, or a mixture of these.

*Solar Ready Residential Building*. A solar-ready zone shall be provided on the roof(s) of all new residential buildings and Level 3 Alteration remodels and additions per the Colorado Model Electric Ready and Solar Ready Code Sections RS402.1 through RS402.8 and Sections RS410 through RS410.2.

*Townhouse.* A single-family dwelling unit constructed in a group of two or more attached units in which each unit extends from the foundation to roof and with open space on at least two sides.

(3) IRC Section R301.2 is amended by adding the following table to R301.2 (1) as follows:

| | |
|---|---|
| Flat Roof Snow Load: | 100 lbs. per square foot |
| Ground Snow Load: | Not Determined |
| Wind Design Speed: | 104 |
| Topographic effects | No |
| Special wind region | No |
| Wind-borne debris zone | No |
| Seismic Design Category | C |
| Subject to Damage From | |
| 1. Weathering | Severe |
| 2. Frost Line depth | 36 inches |
| 3. Termite | Slight |
| Winter Design Temp. | -16 degrees Fahrenheit |
| Roof Ice Barrier Underlayment Required | Yes |

| | |
|---|---|
| Floor Hazard | Flood Insurance Rate Maps (FIRM) 08051C0726D, 08051C0727D |
| Air Freezing Index | 3500 |
| Manual J Design Criteria | |
| 1. Elevation | 8921 |
| Altitude Correction Factor by Appliance Manufacturer | |
| 1. Coincident Wet Bulb Coldest Month | 0.4 Percent |
| 2. Indoor Winter Design Dry-Bulb Temp | -68 Degrees Fahrenheit |
| 3. Outdoor Winter Design Dry-Bulb Temp | -25.0 Degree Fahrenheit |
| 4. Heating Temperature Difference | 93 Degrees (68 to -25) |
| Latitude | 38.8697146 |
| Mean Annual Temperature | 35 degrees Fahrenheit |

(4) IRC Section R309.2 is amended to read as follows:

**R309.2 - One- and two-family dwellings automatic sprinkler systems**. Single-family dwellings are exempt from automatic residential fire sprinkler requirement.

(5) IRC Section R310.4 is amended to read as follows:

**R310.4 Interconnection**. Where more than one smoke alarm is required to be installed within an individual *dwelling unit* in accordance with Section R310.3, the alarm devices shall be interconnected in such a manner that the actuation of one alarm will activate all of the alarms in the individual *dwelling unit*. Physical interconnection of smoke alarms shall not be required where *listed* wireless alarms are installed and all alarms sound upon activation of one alarm. When a single property includes a main house and accessory dwelling(s) Interconnection between the main house and accessory dwelling(s) is required.

(6) IRC Section R311 is amended to read as follows:

**R311 - Carbon monoxide alarms**. Carbon monoxide alarms shall comply with Section R311 and Chapter 18, Article 14 of the Crested Butte Municipal Code. In the case of conflicts between the codes the more restrictive will apply.

(7) IRC Section R319.4 is amended to read as follows:

**R319.4 - Area Wells**. An emergency escape and rescue opening where the bottom of the clear opening is below the adjacent grade shall be provided with an area well in accordance with Sections R319.4.1 through R319.4.4. All area wells required for emergency escape shall be provided with a roof or projection above and curbing sufficient to prevent the accumulation of snow and ice inside the window well. Roofs or projections over window wells that are larger than the minimum code size of 9 square feet will count toward FAR as covered decks.

(8) IRC Section R325.2 is amended to read as follows:

**R325.2 - Bathrooms**. Bathrooms, water closet compartments and other similar rooms shall be provided with mechanical ventilation with minimum ventilation rates of 50 cfm for intermittent ventilation and 20 cfm for continuous ventilation. Ventilation air from the space shall be exhausted directly to the outside of the building.

(9) IRC Section R406.2 is amended to read as follows:

**R406.2 - Concrete and masonry foundation waterproofing.** In areas where a high-water table or other severe soil-water conditions are known to exist, exterior foundation walls that retain earth and enclose interior spaces and floors below grade shall be waterproofed from the finished grade to the higher of the top of the footing or 6 inches (152 mm) below the top of the basement floor. Walls shall be waterproofed in accordance with one of the following:

1. Two-ply hot-mopped felts.
2. Fifty-five-pound (25 kg) roll roofing.
3. Forty-mil (1 mm) polymer-modified asphalt.
4. Sixty-mil (1.5 mm) flexible polymer cement.
5. One-eighth-inch (3 mm) cement-based, fiber-reinforced, waterproof coating.
6. Sixty-mil (1.5 mm) solvent-free liquid-applied synthetic rubber.

All joints in membrane waterproofing shall be lapped and sealed with an adhesive compatible with the membrane. All basement construction shall be in compliance with the requirements of Section 18-16-10 of the Crested Butte Municipal Code. In the case of conflicts between the codes, the more restrictive will apply.

**Exception:** Organic-solvent-based products such as hydrocarbons, chlorinated hydrocarbons, ketones, and esters shall not be used for ICF walls with expanded polystyrene form material. Use of plastic roofing cements, acrylic coatings, latex coatings, mortars and pargings to seal ICF walls is permitted. Cold-setting asphalt or hot asphalt shall conform to Type C of ASTM D449. Hot asphalt shall be applied at a temperature of less than 200°F (93°C).

(10) IRC Section R1002.2 is amended to read as follows:

**R1002.2 - Installation**. Masonry heaters shall be installed in accordance with this section and comply with one of the following:

1. Masonry heaters shall comply with the requirements of ASTM E1602.
2. Masonry heaters shall be listed and labeled in accordance with UL 1482 or CEN 15250 and installed in accordance with the manufacturer's instructions.

All solid fuel burning devices shall conform to Chapter 18, Article 8 of the Crested Butte Code.

(11) IRC Section R1004.1 is amended to read as follows:

**R1004.1 - General**. Factory-built fireplaces shall be listed and labeled and shall be installed in accordance with the conditions of the listing. Factory-built fireplaces shall be tested in accordance with UL 127. All solid fuel burning devices shall conform to Chapter 18, Article 8 of the Crested Butte Municipal Code.

(12) IRC Section N1101.13 is amended to read as follows:

**N1101.13 - Application**. Residential buildings shall comply with Section and Section N1101.13.1, N1101.13.2, N1101.13.3 or N1101.13.4.

(13) IRC Section N1101.13.5 is amended by adding a new subsection to read as follows:

**N1101.13.5 Residential Electric Requirements**.

**N1101.13.5.1- All Electric**. Residential buildings shall be All Electric Buildings.

**N1101.13.5.2- EV Parking**. All residential buildings or garages shall provide one Electric Vehicle Ready Space per dwelling unit.

**N1101.13.5.3 - Zero Energy Ready Home**. All new heated buildings shall become qualified as a Department of Energy Zero Energy Ready Home (as amended by the Department of Energy) by meeting the national program requirements specified in the program, becoming verified and field-tested in accordance with HERS standards by an approved verifier, and meeting all applicable codes.

(14) IRC Section **N1105 Simulated building performance** is deleted in its entirety.

(15) All new heated residential structures shall meet Sec. 18-9-30.

## ARTICLE 2.5 Existing Building Code

### Sec. 18-2.5-10. Adoption.

The *International Existing Building Code* ("IEBC"), 2024 edition, Chapters 1 through 16 without appendices, published by the International Code Council Inc., 4051 West Flossmoor Road, Country Club Hills, Illinois 60478, is hereby adopted by reference thereto and incorporated into and made part of the Crested Butte Municipal Code to have the same force and effect as if set forth herein in every particular pursuant to Title 31, Article 16, Part 2, C.R.S.

The subject matter of this adopted code shall apply to the *repair, alteration, change of occupancy, and addition* to and relocation of *existing buildings*.

**Exception:** Detached one- and two-family dwellings and townhouses not more than three stories above grade plane in height with a separate means of egress, and their accessory structures not more than three above grade plane in height, shall comply with this code or the *International Residential Code*.

### Sec. 18-2.5-20. Home Energy Assessments.

Home Energy Assessments are required for Level 2 and 3 alterations. For Level 1 alterations it is encouraged to obtain a Home Energy Assessment.

**Exception:** Properties newly constructed with building permits issued after January 1, 2017, are exempt from this requirement.

### Sec. 18-2.5-30. Amendments.

The code adoption herein is modified by the following amendments:

(1) IEBC Section 202 is amended by inserting or amending the following definitions within the alphabetical order of the existing definitions as follows:

*Building Area*. The area included within surrounding exterior walls, or exterior walls and fire walls, exclusive of vent shafts and courts. Areas of the building not provided with surrounding walls shall be included in the building area if such areas are included within the horizontal projection of the roof or floor above.

*DC Fast Charger ("DCFC") EVSE*. As defined by the Colorado Model Electric Ready and Solar Ready Code Chapter 2. Equipment capable of fast charging on a 100A or higher 480VAC three phase branch circuit. AC power is converted into a controlled DC voltage and current within the EVSE that will then directly charge the electric vehicle.

*Electric Ready*. A building that meets the following construction requirements:

a. Where a gas heating system is installed, provide a dedicated electric circuit, panel space, and location for condensate drainage.

b. Where a gas water heating system is installed, provide a dedicated electric circuit, panel space, and location for condensate drainage.

c. Where a gas cooking stove is installed, a dedicated circuit and panel space for electric appliance replacement is provided.

d. Where a gas dryer is installed, a dedicated circuit and panel space for electric appliance replacement is provided.

*Electric Vehicle Capable Light Space (EV Capable Light Space)*. As defined by the Colorado Model Electric Ready and Solar Ready Code Chapter 2. A designated vehicle parking space that has conduit and/or raceway installed to support future implementation of electric vehicle charging installation and has sufficient physical space adjacent to the existing electrical equipment for future electric upgrades.

*Electric Vehicle Capable Space (EV Capable Space)*. As defined by the Colorado Model Electric Ready and Solar Ready Code Chapter 2. A designated vehicle parking space that has the electric panel capacity and conduit and/or raceway installed to support future implementation of electric vehicle charging.

*Electric Vehicle Supply Equipment (EVSE)*. As defined by the Colorado Model Electric Ready and Solar Ready Code Chapter 2. An electric vehicle charging system or device that is used to provide electricity to a plug-in electric vehicle or plug-in hybrid electric vehicle, is designed to ensure that a safe connection has been made between the electrical grid and the vehicle and is able to communicate with the vehicle's control system so that electricity flows at an appropriate voltage and current level.

*Electric Vehicle Supply Equipment Installed Space (EVSE Installed Space)*. As defined by the Colorado Model Electric Ready and Solar Ready Code Chapter 2. A vehicle parking space that is provided with a dedicated EVSE connection.

*Electric Vehicle (EV) Ready Space*. As Defined by the Colorado Model Electric Ready and Solar Ready Code Chapter 2. A designated vehicle parking space that has the electric panel capacity, raceway wiring, receptacle, and circuit overprotection devices installed to support future implementation of electrical vehicle charging.

*Home Energy Assessment*. An assessment includes a home visit by a building performance institute (BPI) certified energy analyst that results in a report that analyzes the current condition and energy usage of a home and provides a list of recommended improvements.

*Level II EVSE*. As defined by the Colorado Model Electric Ready and Solar Ready Code Chapter 2. A designated vehicle parking space and dedicated EVSE capable of charging at 40 amperes or higher at 208 or 240VAC.

*Solar Ready Commercial Building*. As defined by the Colorado Model Electric Ready and Solar Ready Code Chapter 2. A solar-ready zone shall be provided on the roof(s) of all new commercial buildings. Level 3 Alteration remodels and additions shall meet Sections CS401 through CS402.7.

*Solar Ready Residential Building*. A solar-ready zone shall be provided on the roof(s) of all new residential buildings and Level 3 Alteration remodels and additions per the Colorado Model Electric Ready and Solar Ready Code Sections RS402.1 through RS402.8 and Sections RS410 through RS410.2.

*Work Area*: That portion or portions of the building consisting of reconfigured and altered spaces as indicated with an outline on the floorplans, as measured from the inside face of the building envelope. Exterior walls that have drywall removed shall be included in the work area calculation. Altered spaces that include replacement of finishes such as flooring, cabinets, or electrical or plumbing fixtures that do not require state plumbing or electric permit would not be included in the work area outline.

(2) IEBC **Section 907** is deleted in its entirety and replaced with a new section to read as follows:

**907 ENERGY CONSERVATION**

**907.1 - Minimum requirements**. Except as specified in this section, Level 3 alterations to existing buildings or structures are permitted without requiring the entire building or structure to comply with the energy requirements of the International Energy Conservation Code or International Residential Code. The alterations shall conform to the energy requirements of the International Energy Conservation Code or International Residential Code as they relate to new construction only.

**907.2 - Electric Ready**. Existing buildings undergoing Level 3 alterations shall be Electric Ready.

**907.3 - Commercial Level 3 Alterations.**

**907.3.1 -** Level 3 Alterations shall meet Solar Ready Commercial Building as defined.

**907.3.2 - Commercial EV Parking**. Where parking spaces are provided for Level 3 Alteration remodels including additions, the parking spaces shall be provided with electric vehicle power transfer infrastructure in compliance with the Colorado Model Electric Ready and Solar Ready code Section CV502, and additionally, commercial buildings and accessory structures with two or more parking spaces shall provide one Level II EVSE parking space and one DC Fast Charger shall be provided for 5 or more required parking spaces.

**907.4 - Residential Level 3 Alterations.**

**907.4.1 - Home Energy Assessment**. All existing residential buildings undergoing alterations shall obtain a Home Energy Assessment prior to issuance of a building permit.

**Exception:** Residential Level 1 Alterations including exterior alterations of roof, window and door, and siding replacement projects are encouraged to obtain a Home Energy Assessment as subsidized by the Town. All such replacements shall meet the 2024 IECC.

**907.4.2 - Residential EV Ready Parking**. All existing residential buildings undergoing a Level 3 Alteration and or addition, shall provide one Electric Vehicle Ready space for each dwelling unit per the Colorado Model Electric Ready and Solar Ready Code Sections RV501 through RV501.3.

**907.5 Historic buildings with Level 3 Alterations**. Level 3 alterations of Historic Buildings, as defined in Section 16-1-20 of Town Code, shall meet 2024 IECC without damaging the existing historic structure, except that closed cell foam insulation can be used in the ceiling framing cavities only. No closed cell foam shall be used in the wall framing cavities. BOZAR shall review the areas to be disturbed on-site before any work commences and during the construction process as needed. A blower door test conducted after drywall is optional.

# ARTICLE 3 Mechanical Code

## Sec. 18-3-10. Adoption.

The *International Mechanical Code* ("IMC"), 2024 edition, as published by the International Code Council, Inc. 4051 West Flossmoor Road, Country Club Hills, Illinois 60478, is hereby adopted by reference thereto and incorporated into and made part of the Crested Butte Municipal Code to have the same force and effect as if set forth herein in every particular pursuant to Title 31, Article 16, Part 2, C.R.S.

The subject matter of the adopted code includes regulating and governing the design, construction, quality of materials, erection, installation, alteration, repair, location, relocation, replacement, addition to, use or maintenance of mechanical systems as herein provided; providing for the issuance of permits and the collection of fees therefor.

## Sec. 18-3-20. Reserved.

## Sec. 18-3-30. Amendments.

The code adopted herein is modified by the following amendments:

(1) IMC Section 905.1 is amended to read as follows:

**Section 905.1 - General.** Fireplace stoves and solid-fuel type room heaters shall be listed and labeled and shall be installed in accordance with the conditions of the listing. Fireplace stoves shall be tested in accordance with UL 1482. Fireplace inserts intended for installation in fireplaces shall be listed and labeled in accordance with the requirements of UL 1482 and shall be installed in accordance with the manufacturer's instructions. New wood burning residential hydronic heaters shall be EPA certified. All solid fuel-burning devices shall comply with the requirements of Chapter 18, Article 8 of the Crested Butte Municipal Code.

## Sec. 18-3-40. Rules and regulations.

The Town may, from time to time, promulgate such rules and regulations as it deems necessary to implement and carry out the intent of this Article; provided, however, that such rules and regulations shall not be inconsistent herewith.

## Sec. 18-3-50. Conflicting provisions.

In the event of a conflict between the IMC and any provisions set forth in Chapter 16 of this Code, such conflict shall be resolved in favor of said Chapter 16.

### Sec. 18-3-60. Fees.

Fees for any permit or inspection required by the IMC are set forth in Appendix A to this Code.

### Sec. 18-3-70. Violation, liability, and penalty.

(1) Any person who violates any provision of the IMC shall be punished by a fine not to exceed one thousand dollars ($1,000.00) for each offense. Each day that a violation continues to exist shall constitute a separate and additional offense.

(2) Any person who violates any provision of the IMC shall be liable to the Town for any expense, loss, or damage, including reasonable attorneys' fees, occasioned by reason of such violation.

(3) The Town may institute injunction, abatement, or any other action to prevent, enjoin, or abate any violation of the IMC.

(4) The remedies provided by this Section are cumulative and not exclusive and are in addition to any other remedies provided by law.

## ARTICLE 4 Plumbing Code

### Sec. 18-4-10. Adoption.

The *International Plumbing Code* ("IPC"), - 2021 edition, including Appendices C and E, published by the International Code Council, Inc. 4051 West Flossmoor Road, Country Club Hills, Illinois 60478, is hereby adopted by reference thereto and incorporated into and made part of the Crested Butte Municipal Code to have the same force and effect as if set forth herein in every particular pursuant to Title 31, Article 16, Part 2, C.R.S.

The subject matter of the adopted code includes regulating and governing the design, construction, quality of materials, erection, installation, alteration, repair, location, relocation, replacement, addition to, use or maintenance of mechanical systems as herein provided; providing for the issuance of permits and the collection of fees therefor.

### Sec. 18-4-20. Reserved.

### Sec. 18-4-30. Amendments.

The code adopted herein is modified by the following amendments: none.

### Sec. 18-4-40. Rules and regulations.

The Town may, from time to time, promulgate such rules and regulations as it deems necessary to implement and carry out the intent of this Article; provided, however, that such rules and regulations shall not be inconsistent herewith.

### Sec. 18-4-50. Conflicting provisions.

In the event of a conflict between the IPC and any provisions set forth in Chapter 16 of this Code, such conflict shall be resolved in favor of said Chapter 16.

### Sec. 18-4-60. Violation, liability, and penalty.

(a) Any person who violates any provision of the IPC shall be punished by a fine not to exceed one thousand dollars ($1,000.00) for each offense. Each day that a violation continues to exist shall constitute a separate and additional offense.

(b) Any person who violates any provision of the IPC shall be liable to the Town for any expense, loss, or damage, including reasonable attorneys' fees, occasioned by reason of such violation.

(c) The Town may institute injunction, abatement, or any other action to prevent, enjoin, or abate any violation of the IPC.

(d) The remedies provided by this Section are cumulative and not exclusive and are in addition to any other remedies provided by law.

## ARTICLE 5 Electrical Code

### Sec. 18-5-10. Adoption.

The National Electrical Code ("NEC"), 2023 edition, published by National Fire Protection Association, One Battery March Park, Quincy, Massachusetts 02169-7471, is hereby adopted by reference thereto and incorporated into and made part of the Crested Butte Municipal Code to have the same force and effect as if set forth herein in every particular pursuant to Title 31, Article 16, Part 2, C.R.S.

The subject matter of the adopted code includes regulating and governing the design, construction, quality of materials, erection, installation, alteration, repair, location, relocation, replacement, addition to, use, or maintenance of electrical systems as herein provided; providing for the issuance of permits and the collection of fees therefor.

### Sec. 18-5-20. Amendments.

The code adopted herein is modified by the following amendments:

Location of electrical and PV meters and emergency disconnects shall be located on a non-snow roof shed side of a structure such as at a gable end of the structure. Crickets, roof shelters, or enclosures do not substitute the requirement for the natural gas meter, electrical/PV meters (emergency disconnects, and/or propane riser to be on a gable end of a building/ structure.

### Sec. 18-5-30. Rules and regulations.

The Town may, from time to time, promulgate such rules and regulations as it deems necessary to implement and carry out the intent of this Article; provided, however, that such rules and regulations shall not be inconsistent herewith.

### Sec. 18-5-40. Conflicting provisions.

In the event of a conflict between the NEC and any provisions set forth in Chapter 16 of this Code, such conflict shall be resolved in favor of said Chapter 16.

### Sec. 18-5-50. Violation, liability, and penalty.

(a) Any person who violates any provision of the NEC shall be punished by a fine not to exceed one thousand dollars ($1,000.00) for each offense. Each day that a violation continues to exist shall constitute a separate and additional offense.

(b) Any person who violates any provision of the NEC shall be liable to the Town for any expense, loss, or damage, including reasonable attorneys' fees, occasioned by reason of such violation.

(c) The Town may institute injunction, abatement, or any other action to prevent, enjoin, or abate any violation of the NEC.

(d) The remedies provided by this Section are cumulative and not exclusive, and are in addition to any other remedies provided by law.

## ARTICLE 5.5 Colorado Model Electric Ready and Solar Ready Code

### Sec. 18-5.5-10. Adoption.

Pursuant to Section 4.14 of the Town Charter and Title 31, Article 16, Part 2, C.R.S., there is hereby adopted the Colorado Model Electric Ready and Solar Ready Code for the Town, by reference thereto, the Colorado Model Electric Ready and Solar Ready Code published June 1, 2023, by the Colorado Energy Office, 1600 Broadway Suite 1960, Denver, CO 80202, regulating and governing the design and construction of buildings to prepare new buildings for solar photovoltaic or solar thermal, electric vehicle charging infrastructure, and electrification of building systems; providing for the issuance of permits and the collection of fees therefor; and each and all of the regulations, provisions, penalties, conditions and terms of said code are hereby referred to, adopted and made a part of, as if fully set out herein.

### Sec. 18-5.5-20. Amendments.

The code adopted herein is modified by the following amendments:

(1) **Section 101.1 Title** shall read as follows:

This code shall be known as the Electric Ready and Solar Ready Code of the Town of Crested Butte and shall be cited as such. It is referred to herein as “this code.”

(2) **Section 101.2 Scope** shall read as follows:

This code applies to all new buildings and dwelling units, and the buildings’ sites and associated systems and equipment, and Level 3 alterations as defined in the International Existing Building Code (IEBC).

(3) **Section 104.2 Required Inspections** shall read as follows:

An approved agency, upon notification, shall make the inspections set forth in Sections 104.2.1 through 104.2.4.

(4) **Section 108.4 Failure to Comply** shall read as follows:

Any person who shall continue any work after having been served with a stop work order, except such work as that person is directed to perform to remove a violation or unsafe condition, shall be subject to fines established by the Town of Crested Butte.

(5) **Section 202 General Definitions** shall be amended by adding the following definitions:

*Major Remodel.* Alteration Level 3 as defined in the International Existing Building Code (IEBC).

*Major Addition.* A major addition is defined as an addition that is more than 50 percent of the existing building area (as defined by the International Building Code (IBC) of the existing floor level as measured from the inside face of the exterior walls.

## ARTICLE 6 Fire Code

### Sec. 18-6-10. Adoption.

The *International Fire Code* ("IFC"), 2024 Edition, including Appendices B-M, as published by the International Code Council, is hereby adopted by reference thereto and incorporated into and made part of the Crested Butte Municipal Code as the Town Fire Code to have the same force and effect as if set forth herein in every particular pursuant to Title 31, Article 16, Part 2, C.R.S.

The subject matter of the adopted code includes regulating and governing the safeguarding of life and property from fire and explosion hazards arising from storage, handling and use of hazardous substances, materials and devices and from conditions hazardous to life or property in the occupancy of buildings and premises as herein provided; providing for issuance of permits and collection fees therefor. State and EPA regulations shall take precedence if there is any International Fire Code regulations pertaining to the use, storage, handling, manufacture or dispensing of flammable and compressed gases, corrosive materials, explosives and fireworks, flammable gases and solids, highly toxic and toxic materials, liquefied petroleum gases, organic peroxides, oxidizers, pyrophoric materials, pyroxylin (Cellulose nitrate) plastic, unstable (reactive) materials, water-reactive solids and liquids or any other material which may be characterized or become known as a hazardous material.

### Sec. 18-6-20. Amendments.

The code adoption herein is modified by the following amendments:

(1) IFC Section 101.1. is amended to read as follows:

**101.1. - Title.** These regulations shall be known as the Fire Code of the Town of Crested Butte, hereinafter referred to as "this Code."

(2) IFC Section 102.7 is amended to read as follows:

**102.7 - Referenced codes and standards**. The codes and standards referenced in this code shall be those that are listed in Chapter 80, and such codes and standards shall be considered to be part of the requirements of this code to the prescribed extent of each such reference and as further regulated by Sections 102.7.1 and 102.7.2. The most current NFPA edition may be utilized upon approval of the CBFPD Fire Marshal.

(3) IFC Section 102.8 is amended to read as follows:

**102.7 - Subjects not related to this code**. Where applicable standards or requirements are not set forth in this code, or are contained within other laws, codes, regulations, ordinances or bylaws adopted by the jurisdiction, compliance with applicable standards of the National Fire Protection Association or other nationally recognized fire safety standards, as *approved*, shall be deemed as prima facie evidence of compliance with the intent of this code. Nothing herein shall derogate from the authority of the *fire code official* to determine compliance with codes or standards for those activities or installations within the *fire*

*code official's* jurisdiction or responsibility. The most current NFPA edition may be utilized upon approval of the CBFPD Fire Marshal.

(4) IFC Section 104.7.2 is amended to read as follows:

**104.7.2 Inspections**. The fire code official shall keep a record of each inspection made, including notices and orders issued, showing the findings and disposition of each.

**104.7.2.1 Inspection requests**. Requests for inspections shall be submitted at least five (5) working days prior to the date of requested inspections.

(5) IFC Section 507.1 is amended to read as follows:

**507.1 - Required water supply.** An *approved* water supply capable of supplying the required fire flow for fire protection shall be provided to premises on which facilities, buildings or portions of buildings are hereafter constructed or moved into or within the jurisdiction. Where required fire flows cannot be provided, an approved monitored fire suppression system complying with Section 9 of this Code and the Guidelines and Standards of the Fire Code shall be installed throughout every occupancy and structure.

**Exception**. Occupancy R-3 single family dwellings

(6) IFC Section 507.5.5 is amended to read as follows:

**507.5.5- Clear space around hydrants**. A 3-foot clear space shall be maintained around the circumference of fire hydrants and "Fire Department Connections," except as otherwise required or approved.

(7) ICF Section 507.5.6 is amended to read as follows:

**507.5.6 - Physical protection**. Where fire hydrants and "Fire Department Connections" are subject to impact by motor vehicle, guard posts or other approved means shall comply with Section 312.

(8) IFC Section 605.8 is amended to read as follows:

**605.8 - Gas Meters**. Above-ground gas meters regulators and piping subject to damage shall be protected by a barrier complying with Section 312 or otherwise protected in an approved manner. Locations of gas meters, regulators and piping shall also comply with the Fire Code. Gas meters shall be located on a non-snow roof shed side of a structure such as at a gable end of the structure. Crickets, roof shelters, or enclosures do not substitute the requirement for the natural gas meter, electrical/PV meters (emergency disconnects, and/or propane riser to be on a gable end of a building/ structure.

(9) IFC Section 5806 is amended to read as follows:

**5806 - Flammable Cryogenic Fluids**. The storage and use of flammable cryogenic fluids is not allowed in the Town of Crested Butte.

(10) IFC Section 6103.3 is amended to read as follows:

**6103.3 - Location of equipment and piping.** Locations of gas meters, regulators and piping shall comply with this section of the Fire Code. Electrical and PV meters shall be located on a non-snow roof shed side of a structure such as at a gable end of the structure. Crickets, roof shelters, or enclosures do not substitute the requirement for electrical/PV meters (emergency disconnects, and/or propane riser to be on a gable end of a building/ structure.

(11) IFC Appendix B 105.1 is amended to read as follows:

**B105.1 - Fire-flow requirements for buildings**. The minimum *fire-flow* and flow duration requirements for one- and two-family *dwellings* (Group R-3), Group R-3 and R-4 buildings and *townhouses* shall be as specified in Tables B105.1(1) and B105.1(2). Minimum fire flow requirements shall be 1,500 gpm.

### Sec. 18-6-30. Copy on file.

At least one (1) copy of the International Fire Code, certified to be a true copy, is on file in the Building Department office and may be inspected by any interested person between the hours of 8:30 a.m. and 5:00 p.m., Monday through Friday, holidays excepted.

### Sec. 18-6-40. Rules and regulations.

The Town may, from time to time, promulgate such rules and regulations as it deems necessary to implement and carry out the intent of this Article; provided, however, that such rules and regulations shall not be inconsistent herewith.

### Sec. 18-6-50. Conflicting provisions.

In the event of a conflict between the code adopted herein and any provisions set forth in Chapter 16 of this Code, such conflict shall be resolved in favor of said Chapter 16.

### Sec. 18-6-60. Violation, liability, and penalty.

(a) Any person who violates any provision of this Article shall be punished by a fine not to exceed one thousand dollars ($1,000.00) for each offense. Each day that a violation of this Article continues to exist shall constitute a separate and additional offense.

(b) Any person violating any provisions of this Article shall be liable to the Town for any expense, loss, or damage, including reasonable attorneys' fees, occasioned by reason of such violation.

(c) The Town may institute injunction, abatement, or any other appropriate action to prevent, enjoin, or abate any violation of this Article.

(d) The remedies provided by this Section are cumulative and not exclusive, and are in addition to any other remedies provided by law.

## ARTICLE 7 Fuel Gas Code

### Sec. 18-7-10. Adoption.

The International Fuel Gas Code, 2021 edition, including Appendices, published by the International Code Council Inc. 4051 West Flossmoor Road, Country Club Hills, Illinois 60478 ("IFGC"), is hereby adopted by reference thereto and incorporated into and made part of the Crested Butte Municipal Code as the Town Fuel Gas Code to have the same force and effect as if set forth herein in every particular pursuant to Title 31, Article 16, Part 2, C.R.S.

The subject matter of the adopted code includes regulating and governing the design, construction, quality of materials, erection, installation, alteration, repair, location, relocation, replacement, addition to, use or maintenance of fuel gas system and fuel gas appliances as herein provided; providing for the issuance of permits and the collection of fees therefor.

## Sec. 18-7-20. Reserved

## Sec. 18-7-30. Amendments.

The code adoption herein is modified by the following amendments:

(1) IFGC Section 101.1. is amended to read as follows:

**101.1. - Title.** These regulations shall be known as the Fuel Gas Code of the Town of Crested Butte, hereinafter referred to as "this Code."

(2) IFGC Section 304.1 is amended to read as follows:

**304.1 - Combustion, Ventilation and Dilution Air**. Air for combustion, ventilation and dilution of flue gases for appliances installed in buildings shall be provided by application of 304.9. *Direct-vent appliances*, gas appliances of other than natural draft design, vented gas appliances not designated as Category I and appliances equipped with power burners shall be provided with combustion, ventilation, and dilution air in accordance with the *appliance* manufacturer's instructions. All installed fuel gas-burning appliances shall be high efficiency direct-vent appliances with sealed combustion, installed in accordance with their listing, and in compliance with the manufacturer's installation instructions. All such appliances shall be installed in compliance with Chapter 18, Article 9 of the Crested Butte Municipal Code.

(3) IFGC Section **304.2. Appliance Location** is deleted in its entirety.

(4) IFGC Section **304.3. Draft hood/regulator location** is deleted in its entirety.

(5) IFGC Section **304.5. Indoor combustion air** is deleted in its entirety.

(6) IFGC Section **304.6. Outdoor combustion air** is deleted in its entirety.

(7) IFGC Section **304.7. Combination indoor and outdoor combustion air** is deleted in its entirety.

(8) IFGC Section **304.8. Engineered installations** is deleted in its entirety.

## Sec. 18-7-40. Rules and regulations.

The Town may, from time to time, promulgate such rules and regulations as it deems necessary to implement and carry out the intent of this Article; provided, however, that such rules and regulations shall not be inconsistent herewith.

## Sec. 18-7-50. Conflicting provisions.

In the event of a conflict between the IFGC and any provisions set forth in Chapter 16 of this Code, such conflict shall be resolved in favor of Chapter 16.

## Sec. 18-7-60. Fees.

Fees for any permit or inspection required by the IFGC are set forth in Appendix A to this Code.

## Sec. 18-7-70. Violation, liability, and penalty.

(a) Any person who violates any provision of the IFGC shall be punished by a fine not to exceed one thousand dollars ($1,000.00) for each offense. Each day that a violation continues to exist shall constitute a separate and additional offense.

(b) Any person who violates any provision of the IFGC shall be liable to the Town for any expense, loss, or damage, including reasonable attorneys' fees, occasioned by reason of such violation.

(c) The Town may institute injunction, abatement, or any other action to prevent, enjoin, or abate any violation of the IFGC.

(d) The remedies provided by this Section are cumulative and not exclusive, and are in addition to any other remedies provided by law.

## ARTICLE 8 Solid Fuel-Burning Devices

### Sec. 18-8-10. Definitions.

For the purposes of this Article, the following terms shall have the meanings given in this Section:

*Approved solid fuel-burning device* means a solid fuel-burning device that meets the EPA Phase 2 qualified fireplace.

*Approved solid fuel-burning fireplace* means a solid fuel-burning device that meets the EPA Phase 2 qualified fireplace.

*Approved solid fuel burning stove means* a free-standing solid fuel-burning device that has an emission limit of 2.5 grams per hour and is listed on the EPA Certified Wood Stoves Data Base

*Solid fuel-burning device* means any stove, firebox or other mechanical device designed and/or used for the purpose of generating heat by the burning of wood, coal, pulp, paper or other nonliquid or nongaseous fuel.

### Sec. 18-8-20. Required installation.

No solid fuel-burning device shall be installed within any structure, building or mobile home in the Town unless such device is an approved solid fuel-burning device. No building can contain more than one (1) solid fuel-burning device; however, a building housing a retail sales space for authorized stove dealers who are selling stoves approved for use by the Town shall be allowed to have one (1) or two (2) solid fuel-burning devices so long as the device(s) in such space are being used for demonstration purposes only.

### Sec. 18-8-30. Sec. 18-8-30. Permit required.

(a) An application shall be filled out and a solid fuel-burning device installation permit issued prior to the installation of any solid fuel-burning device. This provision includes installation of any replacement devices, as well as first installations.

(b) All applications requesting a first installation of a solid fuel-burning device shall comply with Section 18-9-60, Solid Fuel Burning Device Permit.

### Sec. 18-8-40. Notice of removal of solid fuel-burning device.

The Building Department shall be notified when a solid fuel-burning device is removed from a structure. Once removed, a new compliant device may not be installed after sixty (60) days unless said structure is in compliance with Section 18-9-60 of this Chapter.

### Sec. 18-8-50. Fees.

In order to compensate the Town for the costs of enforcing this Article and for the costs of implementing programs and improvements to reduce air pollution caused by solid fuel-burning devices, a permit fee as established by resolution of the Town Council will be charged for applications requesting first installations, and a permit fee as established by resolution of the Town Council will be charged for replacement installations.

### Sec. 18-8-60. Exemption from regulations.

The following devices are exempt from these regulations; provided, however, that new nonconforming devices may not be installed under these exemptions. Applications for exemptions hereunder shall be made in writing to the Town Manager, who shall have the right to inspect the applicable premises to confirm the qualification for exemption. The decision of the Town Manager shall be final unless appealed to the Town Council within thirty (30) days of the decision. Upon appeal to the Town Council, the matter shall be considered and a decision rendered within sixty (60) days. The exemptions are:

(1) A solid fuel-burning device using coal as an exclusive fuel source located in structures or buildings constructed prior to September 1, 1935, so long as such device was installed and in use prior to July 21, 1986, and is owned by the same owner since said date.

(2) Any solid fuel-burning device upon real property which is owned and occupied on a full-time basis by a person who qualifies for a sewer and water service charge rebate pursuant to Section 13-1-330 of this Code.

(3) Solid fuel-burning devices located in buildings with significant historical value that are not used as a primary heat source and are only fired on an occasional basis.

(4) Solid fuel-burning devices utilized by authorized wood stove dealers as regulated by Section 18-8-20 of this Article.

### Sec. 18-8-70. Installation requirements and standards.

All solid fuel-burning devices shall be installed as per the manufacturer's recommendations, in accordance with appropriate building and fire codes and standards as adopted in this Chapter, and as directed by the Building Official and Fire Marshal.

### Sec. 18-8-80. Maintenance of solid fuel-burning devices.

It shall be the responsibility of each solid fuel-burning device owner to adequately repair and maintain the device in order to assure that it burns in accordance with its original specifications and does not exceed those particulate emission standards allowed. If complaints are filed or questionable emissions are observed on three (3) separate occasions, the Building Department may initiate an investigation of a device and require that the device be tested, repaired, or replaced to assure compliance with this Article.

### Sec. 18-8-90. Penalty and delinquencies.

Any person violating any provision or section of this Article, including a failure to obtain the required permit, shall be guilty of a misdemeanor and, upon conviction thereof, may be punished in accordance with the provisions of Section 1-4-20 of this Code. Any person or entity who does not pay the license fee when required shall also be deemed in violation of this Article. Any unpaid permit fee shall accrue a delinquency charge of three percent (3%) per month, compounded monthly. Any such delinquency shall become a lien upon the real property on which the

permitted solid fuel-burning device exists, which lien may be collected in the same manner as a tax lien. The Town shall be entitled to recover all of its collection costs, including attorneys' fees, as part of any action or proceeding to collect delinquent permit fees due pursuant to this Article.

### Sec. 18-8-100. Abatement.

The Town shall have the power to abate, enjoin, or otherwise correct the violation of any provision of this Article through any court of competent jurisdiction. The Town, in such action, shall be entitled to its costs and attorney fees in the event that it prevails.

## ARTICLE 9 Energy Standards

### Sec. 18-9-10. Purpose.

The intent of this Article is to ensure energy conservation and sustainable building practice within the Town. All new heated structures shall comply with the terms of this Article. Existing structures undergoing alterations and or additions shall meet Article 2.5 International Existing Building Code and this code as applicable.

### Sec. 18-9-20. Definitions.

For purposes of this Article, the use of a plural form shall not necessarily imply that more than the singular is suggested, condoned, or allowed, and the following terms shall have the meanings herein given:

*All Electric Building.* A new building that contains no combustion equipment or plumbing for combustion equipment serving space heating (with the exception of solid fuel-burning devices that meet requirements in Article 8 of this Chapter), water heating (including pools and spas), cooking appliances (including barbeques and smokers with the exception of Commercial Food Heat-processing Equipment), and clothes drying, within the building or building property lines, and instead uses electric heating appliances for service.

*Combustion Equipment.* Any equipment or appliance used for space heating, service water heating, cooking, clothes drying and/or lighting that uses fuel gas or fuel oil.

*Commercial Food Heat-processing Equipment.* Equipment used in a food establishment for heat-processing food or utensils and that produces grease vapors, steam, fumes, smoke, or odors that are required to be removed through a local exhaust ventilation system.

*DC Fast Charger ("DCFC").* EVSE. As defined by the Colorado Model Electric Ready and Solar Ready Code Chapter 2. Equipment capable of fast charging on a 100A or higher 480VAC three phase branch circuit. AC power is converted into a controlled DC voltage and current within the EVSE that will then directly charge the electric vehicle.

*Decorative Appliance.* A device utilizing natural gas as a fuel designed to appear as a real fireplace and shall be a direct vent appliance with no opening to the interior of the structure.

*Electric Heating Appliance.* A device that produces heat energy to create a warm environment by the application of electric power to resistance elements, refrigerant compressors, or dissimilar material junctions.

*Electric Ready*. A building that meets the following construction requirements:

a. Where a gas heating system is installed provide a dedicated electric circuit, panel space and location for condensate drainage.

b. Where a gas water heating system is installed provide a dedicated electric circuit, panel space, and location for condensate drainage.

c. Where a gas cooking stove is installed, a dedicated circuit and panel space for electric appliance replacement is provided.

d. Where a gas dryer is installed, a dedicated circuit and panel space for electric appliance replacement is provided.

*Electric Vehicle Capable Light Space (EV Capable Light Space)*. As defined by the Colorado Model Electric Ready and Solar Ready Code Chapter 2. A designated vehicle parking space that has conduit and/or raceway installed to support future implementation of electric vehicle charging installation and has sufficient physical space adjacent to the existing electrical equipment for future electric upgrades.

*Electric Vehicle Capable Space (EV Capable Space)*. As defined by the Colorado Model Electric Ready and Solar Ready Code Chapter 2. A designated vehicle parking space that has the electric panel capacity and conduit and/or raceway installed to support future implementation of electric vehicle charging.

*Electric Vehicle Supply Equipment (EVSE).* As defined by the Colorado Model Electric Ready and Solar Ready Code Chapter 2. An electric vehicle charging system or device that is used to provide electricity to a plug-in electric vehicle or plug-in hybrid electric vehicle, is designed to ensure that a safe connection has been made between the electrical grid and the vehicle and is able to communicate with the vehicle's control system so that electricity flows at an appropriate voltage and current level.

*Electric Vehicle Supply Equipment Installed Space (EVSE Installed Space)*. As defined by the Colorado Model Electric Ready and Solar Ready Code Chapter 2. A vehicle parking space that is provided with a dedicated EVSE connection has been made between the electrical grid and the vehicle and is able to communicate with the vehicle's communication system so that electricity flows at an appropriate voltage and current level.

*Electric Vehicle (EV) Ready Space.* As Defined by the Colorado Model Electric Ready and Solar Ready Code Chapter 2. A designated vehicle parking space that has the electric panel capacity, raceway wiring, receptacle, and circuit overprotection devices installed to support future implementation of electrical vehicle charging.

*Fuel Gas.* Agas that is natural, manufactured, liquefied petroleum, or a mixture of these.

*Home Energy Assessment.* An assessment includes a home visit by a building performance institute (BPI) certified energy analyst that results in a report that analyzes the current condition and energy usage of a home and provides a list of recommended improvements.

*Home Energy Rating System (HERS) certificate.* A certificate generated by an accredited home energy rating system program provider.

*Level II EVSE*. As defined by the Colorado Model Electric Ready and Solar Ready Code Chapter 2. A designated vehicle parking space and dedicated EVSE capable of charging at 40 amperes or higher at 208 or 240VAC.

*R Value.* A term used to describe the thermal transmission of heat through a combination of insulating components in a wall, roof, or foundation assembly.

*Renovation.* To improve or repair a structure and may include preservation and rehabilitation.

*Solar Ready Commercial Building.* As defined by the Colorado Model Electric Ready and Solar Ready Code Chapter 2. A solar-ready zone shall be provided on the roof of all new commercial buildings. Level 3 Alteration remodels and additions shall meet Sections CS401 through CS402.7.

*Solar Ready Residential Building*. A solar-ready zone shall be provided on the roof of all new residential buildings and Level 3 Alteration remodels and additions per the Colorado Model Electric Ready and Solar Ready Code Sections RS402.1 through RS 402.8 and Sections RS410 through RS410.2.

*Sustainable building practices.* Building practices that accommodate increased population by means that reduce overall per-capita energy usage.

*U Value.* The reciprocal of R value. The rate of non-solar heat flow through a building.

## Sec. 18-9-30. Utilization of Home Energy Rating System (HERS).

All new, heated residential structures shall become qualified as a Department of Energy Zero Energy Ready Home (ZERH) by meeting the national program requirements, becoming verified and field-tested in accordance with HERS standards by an approved verifier, and meeting all applicable codes.

## Sec. 18-9-40. International Energy Conservation Code.

(a) Adoption. The *International Energy Conservation Code* ("IECC"), 2024 edition, without appendices, as published by the International Code Council Inc. 4051 West Flossmoor Road, Country Club Hills, Illinois 60478 is hereby adopted by reference thereto and incorporated into and made part of the Crested Butte Municipal Code to have the same force and effect as if set forth herein in every particular pursuant to Title 31, Article 16, Part 2, C.R.S.

The subject matter of the adopted code includes regulating and governing the minimum energy conservation requirements as herein provided; providing for the issuance of permits and collection of fees (as appropriate) therefor; and each and all of the regulations, provisions, penalties, conditions, and terms of said code.

(b) Amendments. The code adoption herein is modified by the following amendments:

(1) Section C104.1.1 is amended to read as follows:

**C104.1.1. - Above Code Programs**. The code official or other authority having jurisdiction shall be permitted to deem a national, state, or local energy efficiency program as exceeding the energy efficiency required by this code. Buildings approved in writing by such an energy efficiency program shall be considered to be in compliance with this code. The requirements identified in Table C402.1.3 shall be met. New commercial buildings are also governed by Article 1.5 (International Green Construction Code) and Article 5.5 (Colorado Model Electric Ready and Solar Ready Code) of Chapter 18 of the Crested Butte Town Code.

(2) IECC Section C401.2 is amended to read as follows:

**C401.2 - Application**. Commercial buildings shall comply with Section C401.2.1 or C401.2.2 and shall comply with C401.2.3. A compliance method other than the Prescriptive Compliance Option in C401.2.1. shall be pre-approved by the building official.

(3) IECC Section C401.2 is amended by adding a new subsection to read as follows:

**C401.2.3. Commercial Electric Requirements**.

**C401.2.3.1. All Electric**. Commercial buildings shall be All Electric Buildings, with the exception of *Commercial Food Heat-processing Equipment*. *Commercial Food Heat-processing Equipment shall be Electric Ready*.

**C401.2.3.2. Commercial EV Parking**. Where parking spaces are provided for Level 3 Alteration remodels including additions, the parking spaces shall be provided with electric vehicle power transfer infrastructure in compliance with the Colorado Model Electric Ready and Solar Ready code Section CV502, and additionally, commercial buildings and accessory structures with two or more parking spaces shall provide one Level II EVSE parking space. Additionally, one DC Fast Charger shall be provided for 5 or more required parking spaces.

**C401.2.3.3. Solar Requirements**.

*Solar Ready Commercial Building.* As defined by the Colorado Model Electric Ready and Solar Ready Code Chapter 2. A solar-ready zone shall be provided on the roof(s) of all new commercial buildings.

(4) IECC **Chapter 5 [Commercial Energy]** is deleted in its entirety and replaced with a new section to read as follows:

**Chapter 5 [Commercial Energy] Commercial Existing Buildings**. The alteration, repair, addition and change of occupancy of existing buildings and structures shall comply with the requirements of the International Existing Building Code (IEBC) as amended in Section 18-2.5-30 of the Town Code, Existing Building Code, and the Colorado Model Electric Ready and Solar Ready Code.

(5) IECC Section R401.2 is amended to read as follows:

**R401.2 - Application**. Residential buildings shall comply with Sections R401.2.6 as follows and Section R401.2.1.

(6) IECC Section R401.2 is amended to add a new subsection R401.2.6 to read as follows:

**R401.2.6. Residential Electric Requirements**.

**R401.2.6.1. All Electric**. Residential buildings shall be All Electric Buildings.

**R401.2.6.2. EV Parking**. All new residential buildings, garages, and exterior parking spaces shall provide one Electric Vehicle Ready Space for each dwelling unit per the Colorado Model Electric Ready and Solar Ready Code Sections RV501 through RV501.3.

**R401.2.6.3. Zero Energy Ready Home**. All new heated buildings shall become qualified as a Department of Energy Zero Energy Ready Home (as amended by the Department of Energy) by meeting the national program requirements specified in the program, becoming verified and field-tested in accordance with HERS standards by an approved verifier, and meeting all applicable codes. Residential construction may meet the requirements of either the performance path or the prescriptive path to qualify.

(7) IECC Section R405.1 is amended to read as follows:

**R405.1 - Scope**. This section establishes criteria for compliance using simulated building performance analysis. Such analysis shall include heating, cooling, mechanical ventilation, and service water-heating energy only. The utilization of this section shall be specifically approved by the Building Official prior to submittal of design documents.

(8) IECC Chapter 5 [Residential Energy] is amended as follows

**Chapter 5 [Residential Energy]. Residential Existing Buildings**. The alteration, repair, addition and change of occupancy of existing buildings and structures shall comply with the requirements of this chapter, the International Existing Building Code (IEBC) and the Colorado Model Electric Ready and Solar Ready Code.

## Sec. 18-9-50. Minimum efficiency standards for new construction; commercial structures.

Commercial buildings with less than five thousand (5,000) square feet shall install Solar Ready Components per the Colorado Model Electric Ready and Solar Ready Code. Commercial buildings five thousand (5,000) square feet or larger shall install solar PV panels to roof(s) per Section 18-1.5-30(5). Solar installation requirements shall not exceed any Gunnison County Electric Association net metering limitation in place when submitting a building permit application.

## Sec. 18-9-60. Solid fuel-burning device permit.

(a) Only one (1) solid fuel-burning device shall be permitted within any structure. Permits for solid fuel-burning devices shall be obtained from the Building Official. Prior to issuance of a permit allowing for the placement of a solid fuel-burning device within any structure, the applicant shall apply for a Solid Fuel Burning permit.

(b) Permissible solid fuel-burning devices shall meet the EPA List of Phase 2 Qualified (Maximum 4.5 grams of particle pollution per kilogram of wood) Fireplaces:

(c) Solid fuel—burning device permit. All solid fuel-burning devices must incorporate exterior combustion air ventilation that complies with Section 701.1 and 701.2 of the International Mechanical Code (IMC), as defined in Article 3 of this Chapter. Ducting for solid fuel-burning devices must be fitted with backdraft dampers.

(d) All applications for solid fuel-burning devices shall reflect the applicant's compliance with the foregoing requirements.

## Sec. 18-9-70. Minimum efficiency standards for renovation of existing historic buildings.

Any heated buildings or portions thereof undergoing renovations must comply with Section 18-9-40 above. The Building Official may waive any or all of the requirements of Section 18-9-40 at their discretion per IECC C102.1 and with IECC Section C501.5 Historic buildings- Commercial Provision and per IECC Section R102.1 and R501.5 Historic buildings- Residential Provision.

Buildings shall meet IECC without damaging the existing historic structure with the exception that closed cell foam insulation can be used in the ceiling framing cavities. No closed cell foam shall be used in the wall framing cavities. BOZAR reviews this work on site before any work commences and during the construction process as needed. A blower door infiltration test conducted after drywall is optional

## Sec. 18-9-80. Building science requirements.

(a) All new, heated residential structures shall become qualified as a Department of Energy Zero Energy Ready Home (as amended by the Department of Energy) and Section 18-9-30 by meeting the national program requirements specified in the program, becoming verified and field-tested in accordance with HERS standards by an approved verifier, and meeting all applicable codes and Section 18-9-40.

## Sec. 18-9-90. Snowmelt system requirements.

All snowmelt systems must be approved by the Building Official and shall meet the following requirements:

(1) R-10 insulation below the heated surface must be incorporated;

(2) Minimum slab thickness for sidewalks must be five (5) inches; and

(3) Snowmelt equipment must include automatic temperature and surface moisture controls (no idling snowmelt equipment is permitted).

## Sec. 18-9-100. Renewable Energy Mitigation Program.

Installing a zone and tubing to a future outdoor heated area is prohibited without first obtaining an outdoor energy usage permit. All outdoor snowmelt systems must meet IECC Section R403.9.2 Snow Melt and Ice System controls and comply with the following Renewable Energy Mitigation Program (REMP) requirements. All outdoor pools, hot tubs and spas must comply with the REMP requirements. Outside heating and electric heat trace systems must comply with IECC Sections C403.14 through C403.14.3, C403,14,4, and R403.9.2 through R403.9.4.

(1) **REMP; Applicability**. For purposes hereof, an "outdoor snowmelt system" shall include any heating system installed in any walkway, driveway, roof, or any other exterior surface. All energy utilized in operating outdoor snowmelt systems, and outdoor pools, hot tubs and spas with a top surface area in excess of sixty-four (64) square feet (as determined by the unit's manufacturer), shall be produced by a renewable energy system; or, in lieu thereof, the owner of the property with said outdoor snowmelt system and/or subject pool, hot tub or spa shall make payment to the Town in lieu of providing energy produced by a renewable energy system. The owner of the subject property shall have the right to choose between providing energy from a Town-approved renewable energy system or making payment in lieu thereof, or a combination of both, in order to offset energy used by outdoor snowmelt systems and subject pools, hot tubs and spas. For any subject hot tub or spa, only that surface area over said sixty-four (64) square feet shall be subject to the requirements of this Section. Any outdoor snowmelt system or subject pool, hot tub or spa that has been installed prior to June 25, 2007, shall be exempt from the requirements of this Section. Said exemption shall not apply, however, to any modification to any existing outdoor snowmelt system or outdoor pool increasing the square footage thereof, said modification requiring an outdoor energy usage permit as defined hereunder.

(2) **Outdoor energy usage permit**. Prior to the installation of any (i) outdoor snowmelt system and/or (ii) outdoor pool, hot tub or spa, the owner of the property affected by such installation shall obtain an outdoor energy usage permit. No outdoor snowmelt system or subject pool, hot tub or spa shall be installed without first obtaining an outdoor energy usage permit, as well as a plumbing and mechanical permit as applicable, from the Building Official. No outdoor energy usage permit shall be required for any outdoor snowmelt system or subject pool, hot tub or spa located on public property or any portable outdoor heat lamp.

a. An outdoor energy usage permit shall not be issued until the owner of the subject property has complied with the requirements of this Section. All outdoor snowmelt systems shall be in compliance with Section 18-9-90 above.

b. An outdoor energy usage permit shall be obtained by said owner for each outdoor snowmelt system and subject pool, hot tub and spa, or any modification to any outdoor snowmelt system and outdoor pool increasing the square footage thereof. An outdoor

energy usage permit shall include a processing fee that shall cover the cost and expense of the Building Official of reviewing and processing said outdoor energy usage permit application.

c. The Building Official shall review and approve any complete and properly submitted application for an outdoor energy usage permit within thirty (30) days of its submission; except that, if the installation of any outdoor snowmelt system or subject pool, hot tub or spa is part of any new construction, addition, renovation or remodel that otherwise requires a building permit under this Code, the application for said outdoor energy usage permit shall be approved, if at all, along with the approval and issuance of said building permit, and the installation shall be considered part of the structure for purposes of Article 13 of this Chapter. In such circumstances, the issuance of an outdoor energy usage permit shall be subject to Board approval as provided in this Code. No outdoor energy usage permit shall be granted, however, until a Town-approved renewable energy system or other Town-approved system, as described in Subparagraph (3)(b) of this Section, has been selected by the owner of the affected property and/or payment in lieu has been made, as applicable, as further described in Paragraph (3) of this Section. The owner shall provide the following supporting documentation along with the application for an outdoor energy usage permit:

1. The legal description of the affected property;

2. The signature of the owner of the property or other person with written legal authority (e.g., power of attorney) of the owner;

3. A site development plan drawn to scale for the building and/or sidewalk, driveway, or patio, as applicable, that is the subject of the outdoor snowmelt system or subject pool, hot tub or spa installation;

4. A complete set of drawings, plans, and specifications, to scale, depicting any outdoor snowmelt system or subject pool, hot tub or spa installation, along with the type and efficiency of the same;

5. If the owner of the affected property elects to incorporate a renewable energy system or other Town-approved system, a complete set of drawings, plans and specifications, to scale, of the renewable energy system or other Town-approved system and its proposed installation location, along with the type and efficiency of the same;

6. The owner's election to either utilize a renewable energy system or other Town-approved system or make payment in lieu, or a combination of both, as set forth in Paragraph (3) of this Section; and

7. Any other information requested by the Building Official in order to review the application for compliance with this Section and Section 18-9-90 above.

Only subsections (1), (2), (5), (6) and (7) hereof shall apply to subject pools, hot tubs and spas. The items listed above are hereby incorporated into the application for the outdoor energy usage permit.

d. Outdoor energy usage permit applications, unless otherwise included as part of a building permit for any new construction, addition, renovation, or remodel as discussed above, shall be submitted only to the Building Official and not the Board for approval.

e. All installations of outdoor snowmelt systems shall be in strict compliance with the application requirements for an outdoor energy usage permit. Any deviation from the application requirements shall require a new outdoor energy usage permit. All installations of outdoor snowmelt systems shall be completed within six (6) months of issuance of an outdoor energy usage permit; except that, where the installation of an outdoor snowmelt system is otherwise associated with a building permit for any new construction, addition, renovation or remodel as discussed above, such longer permitted time under this Code as it relates to said building permit shall apply.

f. Should the Building Official discover the installation of any outdoor snowmelt system or subject pool, hot tub or spa in violation of this Section, the same shall attach a "stop work order" to said installation in a conspicuous place. Where the Building Official discovers any use of property in violation of this Section, the same shall attach a "desist order" to the property and attempt to deliver a copy of the same to the occupier of the property. Any stop work order or desist order shall be signed by the Building Official and indicate the subject area in which the violations exists. The removal of a stop work order or desist order by any person before the violation is corrected shall constitute a violation of this Section. The continuation of construction or use in violation of a stop work or desist order shall also constitute a violation of this Section.

g. An outdoor energy usage permit shall not be issued in connection with any property until all due and owing fees for sewer, water, sanitation, street or other improvement assessments, real property taxes, real estate transfer taxes and/or other fees or taxes due to the Town in connection with said property have been paid in full and are current in all respects.

(3) **Calculations; Renewable energy systems; Payment in lieu**.

a. Calculations. The amount of energy used by an outdoor snowmelt system or subject pool, hot tub or spa shall be calculated by the Town using a system adopted by the Town. Said system shall also calculate the payment in lieu of providing energy produced by a renewable energy system or other Town-approved system. The Town shall utilize the Town of Crested Butte Outdoor Energy Worksheet attached as Exhibit "A" to the ordinance codified herein, a copy of which is on file in the Town Clerk's office, to calculate the mitigation required for outdoor energy usage. Said Town of Crested Butte Outdoor Energy Worksheet shall also be utilized to calculate the renewable energy mitigation credit proposed to offset the proposed outdoor energy usage. The assumptions and calculations incorporated into the Town of Crested Butte Outdoor Energy Worksheet are incorporated in the Calculation Assumptions attached as Exhibit "B" to the ordinance codified herein, a copy of which is on file in the Town Clerk's office. Once said energy usage and payment in lieu are calculated by the Town, the owner of the property affected by the outdoor snowmelt system or subject pool, hot tub or spa shall select whether it will utilize either a Town-approved renewable energy system or other Town-approved system to offset energy usage by any outdoor snowmelt system or subject pool, hot tub or spa, or make payment in lieu thereof. The owner of the

affected property may select use of a combination of both a Town-approved renewable energy system or other Town-approved system to offset energy usage by any outdoor snowmelt system or subject pool, hot tub or spa and payment in lieu thereof. Such combination shall, however, be approved in advance by the Building Official. No outdoor energy usage permit may be issued until the owner of the affected property has selected either a Town-approved renewable energy system or other Town-approved system to offset energy usage by any outdoor snowmelt system or subject pool, hot tub or spa or payment in lieu thereof, or a combination of both as approved by the Town.

b. Renewable energy systems. All renewable energy systems and other systems must be approved in advance by the Building Official. Said renewable energy systems may be solar or geothermal in nature. Other energy usage mitigation systems may be proposed but must be approved in advance by the Building Official. Any renewable energy system utilized as mitigation for outdoor energy usage must conform to the requirements set forth in the Project Checklist attached as Exhibit "C" to the ordinance codified herein, a copy of which is on file in the Town Clerk's office, as applicable. Other systems must provide an engineering analysis that calculates the renewable energy mitigation credit for the proposed system and provides all necessary information as determined by the Building Official. Review of the system will be at the expense of the owner. No renewable energy system or other system shall be approved which does not cause the mitigation of energy usage to be made within the Town. All proposed renewable energy mitigation systems and any other systems shall be included as part of the application for an outdoor energy usage permit. If the proposed renewable energy system is solar in nature, the panels and/or collectors must be approved through the standard building permit process and must be approved by the Board. The type of renewable energy system or other system, the specifications and efficiency thereof, the location of the installation of said renewable energy system or other system and any other additional information requested by the Building Official must be submitted with the application for an outdoor energy usage permit.

c. Payments in lieu. The Town may accept payment from the owner of an affected property as described in this Section in lieu of providing energy produced by a Town-approved renewable energy system, or partial payment in lieu of from said owner of an affected property providing only partial energy produced by a Town-approved renewable energy system, as delineated in this Section. Acceptable payments shall be made by cash or check only. The owner of the affected property shall make payment in lieu of, at the time of, and as a condition precedent to, issuance of an outdoor energy usage permit. Such payment requirements shall apply to any addition or modification to any outdoor snowmelt system or outdoor pool where the owner has selected payments in lieu as described in this Section. In the event that an owner of an outdoor snowmelt system, subject pool, hot tub or spa with an outdoor energy usage permit for such energy usage seeks to make modifications to such usage such that any payment in lieu previously made could otherwise be reduced, no refund shall be given by the Town.

d. Appropriation of funds. All payments in lieu received pursuant to this Section shall be deposited into a separate account with the Town. Funds derived from payments in lieu made pursuant to this Section shall be utilized by the Town to, in no order of preference: (i) defray any costs and expenses associated with the operation,

administration and enforcement of the REMP program described in this Section; (ii) reduce and offset energy consumption in public buildings; (iii) reduce energy consumption in residential affordable housing units; (iv) defray the cost and expense of engineering and education to promote energy consciousness, renewable energy installation and reducing energy use; and/or (iv) cover such other costs and expenses consistent with the goals of the REMP and the Energy Code, as determined by the Town Council.

e. Updating and monitoring. The Building Official may monitor and, to the extent necessary, update and amend, as determined by the Building Official, the Town of Crested Butte Outdoor Energy Worksheet, the Calculation Assumptions and the Project Checklist in order to promote and advance the goals of the REMP.

(4) **Violations**. Any person who violates any of the provisions of this Section may be fined an amount not to exceed one thousand dollars ($1,000.00) for each offense. Each day that such violation continues to exist shall be deemed to be a separate offense.

### Sec. 18-9-110. Penalties.

(a) **Offense.** Any person who violates any of the provisions of this Chapter shall be fined an amount not to exceed one thousand dollars ($1,000.00) for each offense. Each day that such violation continues to exist shall be deemed a separate offense.

(b) **Actions.** The erection, construction, alteration, enlargement, conversion, moving or maintenance of any building, and the use of any land, building or structure, which activity or use is continued, operated, or maintained contrary to any provision of this Chapter shall be unlawful. The Town may institute injunction, abatement, or any other appropriate action to prevent, enjoin, abate, or remove such violation. Such action may also be maintained and instituted by any property owner who is damaged by a violation of this Article.

## ARTICLE 10 – Sanitary Standards and Regulations

### Sec. 18-10-10. Purpose.

The purpose of this Article is to provide minimum requirements for the protection of the health, welfare and safety of the residents and inhabitants of the Town and the occupants of all public accommodations, and to set forth applicable standards of maintenance, sanitation, ventilation, occupancy and use of public accommodations and buildings.

### Sec. 18-10-20. Definitions.

For the purpose of this Article, certain words and phrases shall be defined as follows:

*Boarding and rooming house* means a building other than a hotel or lodge where, for compensation, meals or lodging are provided for five (5), but not more than fifteen (15) persons.

*Building* means any structure having a roof supported by columns or walls.

*Dormitory* means a building containing sleeping rooms designed to be rented for short-term occupancy, with adequate sanitary facilities, and which may or may not have cooking facilities as an accessory use.

*Dwelling* means any building or part thereof designed or used for private residential purposes.

*Dwelling unit* means any room or group of rooms located within a dwelling and forming a single habitable unit with facilities which are used or intended to be used for living and sleeping, and a part of which is exclusively or occasionally appropriated for cooking or eating.

*Exit* means a continuous and unobstructed means of egress to a public way, and shall include intervening doorways, corridors, ramps, stairways, smoke-proof enclosures, horizontal exits, exit courts and yards.

*Floor area* as defined in Chapter 16, Section 16-1-20.

*Garbage* means all putrescible animal and vegetable wastes resulting from the handling, preparation, cooking, and consumption of food.

*Grounds* means exterior yard areas or premises.

*Guest* means any person hiring or occupying a room for living or sleeping purposes.

*Guest room* means any room used, or intended to be used, by a guest for sleeping purposes.

*Habitable room* means a room or enclosed floor space used or intended to be used for sleeping, living, cooking, or eating purposes, excluding bath or toilet rooms, service rooms, foyers, connecting corridors, closets, storage spaces or utility rooms.

*Health Department* means the Health Department and the officers and employees of the Town.

*Hot water* means water at a temperature of not less than one hundred twenty (120) degrees Fahrenheit.

*Hotel* or *lodge* means a building containing sleeping rooms designed to be rented for short-term occupancy and which may or may not have eating or drinking facilities as an accessory use.

*Kitchen* means a room used, or designed to be used, for the preparation of food.

*Motel* means a building or group of buildings containing individual sleeping or living units designed and used for temporary rental occupancy and with automobile parking space adjacent to or near each rental unit.

*Multiple dwelling* means any dwelling containing more than one (1) dwelling unit.

*Nuisance.* The following shall be defined as nuisances:

a. Any public nuisance known at common law or in equity jurisprudence.

b. An attractive nuisance known at common law or in equity jurisprudence.

c. Whatever is dangerous to human life or detrimental to health.

d. Overcrowding a room with occupants.

e. Insufficient ventilation, illumination, or heating.

f. Inadequate or unsanitary sewerage or plumbing facilities.

g. Unsanitary conditions.

h. Whatever renders air, food or drink unwholesome or detrimental to the health of human beings.

*Occupant* means any person living, sleeping, cooking in, or having possession of a dwelling unit or rooming unit.

*Operator* means any person who owns or has charge, care or control of a building or part thereof in which dwelling units or rooms are rented.

*Public accommodations* means any establishment or building, including a rooming house, boarding house, lodging house, hotel, motel or other facility by whatever name known, which maintains, advertises, offers or rents to a guest as a place where sleeping or rooming accommodations are provided, whether with or without meals.

*Refuse* means all combustible or noncombustible, putrescible, or non-putrescible solid or liquid wastes, including garbage, rubbish, ashes, and manure.

*Rooming unit* means any room or group of rooms forming a single habitable unit used or intended to be used for living and sleeping, but not for cooking or eating purposes.

*Sanitary facilities* means toilet, privies, lavatories, showers, baths, bathtubs, urinals, laundry tubs and the service rooms provided for installation and use of these units.

## ARTICLE 11 Utility Undergrounding Requirements

### Sec. 18-11-10. Underground installation required.

All electric and communication utility lines and services, and all street lighting circuits, except as hereinafter provided, shall be installed underground.

### Sec. 18-11-20. Exceptions.

(1) Transformers, switching boxes, terminal boxes, meter cabinets, pedestals, ducts, and other facilities necessarily appurtenant to such underground and streetlight facilities when placed aboveground within the utility easement provided therefor or within the street or other public place as appropriate.

(2) All facilities reasonably necessary to connect underground facilities to existing or permitted overhead or aboveground facilities.

(3) Overhead electric transmission and distribution feeder lines and overhead communication long distance, trunk and feeder lines, existing or new.

(4) Such utility facilities as are present on the effective date of this Article which are used or useful in serving a proposed development.

(5) Development of a limited extent in previously developed areas where overhead service exists, provided that a permit for such overhead service is obtained from the Board of Zoning and Architectural Review. Said permit shall only be issued in those cases where the new service cannot reasonably be placed underground.

### Sec. 18-11-30. Responsibility of developer.

The developer of any improvements to real property requiring the installation of utility service lines shall be responsible for complying with the requirements of this Article. They shall make the necessary arrangements, including payment for any construction or installation charges, with each of the serving utilities for the installation of such facilities. The developer shall present evidence, prior to the final approval of a certificate of occupancy for

said improvements, that the necessary arrangements have been made with each of the serving utilities for the installation of facilities in compliance with this Article.

## ARTICLE 12 Construction Site Regulations

### Sec. 18-12-10. Definition.

For purposes of this Article, *construction site* shall mean any location where activities pursuant to a building permit are conducted.

### Sec. 18-12-20. Construction activity hours.

No construction activity on any construction site shall take place before 7:00 a.m., nor extend past 7:00 p.m., Monday through Saturday. No construction activity on any construction site shall take place before 8:00 a.m. nor extend past 5:00 p.m. on any Sunday.

### Sec. 18-12-30. Sec. 18-12-30. Construction debris.

The owner of a property on which construction activity is taking place is required to:

(1) provide recycling bins on the construction site to recycle glass bottles, plastic bottles, and cardboard, and,

(2) Ensure that all debris, garbage, and refuse are removed from the construction site, and that such debris, garbage, and refuse do not enter upon the public right-of-way or any private property.

### Sec. 18-12-40. Construction site safety.

Every excavation on site shall have safety fencing erected as a public safeguard. Adjoining public or private property shall be protected from damage during construction, remodeling, and demolition work. Protection shall be provided for footings, foundations, party walls, chimneys, skylights, and roof work.

Provisions shall also be made to control water runoff and erosion during construction and demolition activities.

### Sec. 18-12-50. Sec. 18-12-50. Violation, liability, and penalty.

(a) The failure to comply with this Article shall constitute a nuisance. The owner of the property upon which such violation occurs shall be jointly and severally liable for the violation.

(b) Any person who violates any of the provisions of this Chapter shall be fined an amount not to exceed one thousand dollars ($1,000.00) for each offense. Each day that such violation continues to exist shall be deemed a separate offense.

(c) In addition, any person who violates any provision of this Article shall be liable to the Town for any expense, loss, or damage, including reasonable attorneys' fees, occasioned by reason of such violation.

(d) The Town may institute injunction, abatement, or any other action to prevent, enjoin, or abate any violation of this Article.

(e) The remedies provided by this Article are cumulative and not exclusive, and are in addition to any other remedies provided by law.

# ARTICLE 13 Building Inspector and Building Permits

## Sec. 18-13-10. Building permit applications.

(a) All applications for building permits shall be made on the forms provided by the Town for that purpose, and shall be accompanied by the following:

(1) The legal description and address of the lot(s) involved.

(b) It shall be the duty of the Building Inspector to administer and enforce all provisions of this Article except for those powers granted to the Board of Zoning and Architectural Review, hereinafter referred to as the "Board." In addition, the Building Inspector may permit the construction of a foundation before the actual issuance of a building permit if all of the following conditions apply:

(1) An application for a building permit has been submitted to the Building Inspector and is complete with sufficient plans, and is awaiting only Board approval;

(2) The applicant has signed a written and acknowledged agreement with the Town on a form provided by the Town agreeing to remove all work performed within sixty (60) days of the Board's rejection of the application; and

(3) The Building Inspector and the Chair of the Board agree that there is just cause for allowing work to commence on the foundation, and the application is in keeping with all Town regulations and policies of the Board.

## Sec. 18-13-20. Building permit applications.

(a) All applications for building permits shall be made on the forms provided by the Town for that purpose, and shall be accompanied by the following:

(1) The legal description of the lot involved.

(2) A deed for the property establishing title.

(3) A plot plan of the lot or parcel, drawn preferably to a one-eighth-inch-to-one-foot scale, showing the dimensions of the lot or parcel and the size and location of the building or structure to be erected thereon, together with all other structures on the lot or parcel.

(4) Plans showing the height and elevation of the building or structure, and the exterior walls and roof thereof, with a general schematic drawing of the exterior design of the building drawn to one-quarter-inch or one-eighth-inch to foot scale.

(5) A statement concerning the use to be made of such building or structure.

(6) A statement setting forth necessary variances, conditional uses, conditional waivers, or other special reviews.

(7) Floorplans drawn to one-quarter-inch or one-eighth-inch to foot scale.

(8) A perspective, drawn to scale, showing the relationship of the proposed building or project to nearby buildings, if requested by the Chair of the Board or the Building Inspector.

(9) The signature of the owner of the property or some other person with the written legal authority of the owner, if that person has the written legal authority to make such application.

(10) Any other information specifically requested by the Board or Building Inspector in order to review the application for compliance with this Article or any other Town ordinance or code.

(11) A complete site development plan for the entire proposed building site, drawn to scale and indicating:

a. All paving, driveways, walkways, parking areas, trash or Dumpster locations and other service structures;

b. All walls and fences with their location and heights;

c. Grass or other planted ground cover;

d. Any trees and shrubbery with a notation as to species and size at the time of planting and a notation as to any mature landscaping proposed to be removed or relocated on the site;

e. Any exterior lighting; and

f. Proposed deviation of finish grade from natural grade in excess of one (1) vertical foot.

g. On site plan dimensions of all Town Right of Ways that are adjacent to the lot(s) involved.

(12) A front elevation, drawn to scale, showing the width and height of the street elevation (alley elevation in the case of an alley structure) of the proposed building, any other buildings on the proposed building site and the buildings on the parcels abutting the proposed building site, all on one (1) drawing.

(13) A cross-section of each building section which varies in floor-to-ceiling height from any other section in the building.

(14) If the natural grade of a building site varies more than two (2) vertical feet between any two (2) points on the site or one (1) vertical foot within the building footprint, the natural contour of the site shall be graphically depicted on the site plan with no greater than one-foot contour lines and depicted on the submitted elevations of the proposed structure. If the finish grade of the site is proposed to be different from the natural grade of the site by more than one (1) vertical foot, both finish and natural grade shall be clearly depicted and labeled as such on the site plan and on the submitted elevations of the structure.

(15) The engineering plans for single- and two-family residences shall be prepared by a registered or licensed design professional and signed and stamped with a seal stamp.

(16) All construction documents for commercial projects shall be prepared by registered or licensed design professionals and signed and stamped with a seal stamp.

(b) The Building Inspector shall refer all complete applications to the Board, except those applications designated "insubstantial" as provided in Paragraph 16-21-100(a)(9) of this Code, for sketch plan review, classification and approval as provided in Sections 16-21-130 and 16-21-140.

## Sec. 18-13-30. Application fees.

(a) The Building Official shall charge a fee for any building permit or sign permit application sufficient to cover related Town expenses as described in the building code adopted by the Town in this Chapter. Should any

building or sign permit application or permit be withdrawn and returned to the Building Official within ninety (90) days after the date of application or issuance, the Building Official may refund up to eighty-five percent (85%) of any application or permit funds not used to pay publication costs. The Building Official shall be authorized to charge such additional fees as are necessary to offset expenses to the Town occasioned by requests or approvals not combined with building permit applications, special or extra publications or special Board meetings.

(b) Building permit fees and application fees shall be waived for all resident-occupied affordable housing. Building permit fees are based on the entire building. Where a resident-occupied affordable housing unit is contained within the building, permit fees shall be reduced in proportion to the cost of construction of the resident occupied affordable housing unit.

## Sec. 18-13-40. Building permit.

(a) No building or structure shall be erected, constructed, structurally altered, moved, demolished, or changed without first obtaining a building permit issued by the Building Inspector. Such building permit shall be issued when the applicant has complied with all requirements of this Chapter and any code adopted herein, including the requirement for the submission of construction documents and payment of such fees as are required to review such documents, and when the applicant has obtained all approvals required hereunder.

(b) The determination of value or valuation of the building permit scope of work under any provision of this chapter shall be made by the Building Official based on the published International Code Council minimum valuation table multiplied by the regional multiplier of 2.70, or other evidence of value, whichever is greater, as determined by the Building Official. The value to be used in computing the building permit and building plan review fees shall be the total value of all construction work for which the permit is issued. The approval by the Board of a building permit application shall be valid for the period of time set forth in Section 24-68-104, C.R.S., as implemented by Section 16-19-30 of this Code, so long as said sections remain in effect.

(c) No building permit shall be issued unless and until a performance deposit has been deposited with the Building Department.

(1) The amount of the performance deposit shall be the amount of the valuation of the structure for which a building permit is sought multiplied by fifty hundredths percent (.50%).

(2) The performance deposit will be released upon the issuance of a certificate of occupancy for the structure for which the building permit is sought, if the Building Department determines that all improvements have been completed in accordance with the approved plans, including landscaping and parking requirements. The performance deposit will be released upon request within a two-year period only after issuance of certificate of occupancy date.

(3) Two hundred fifty dollars ($250.00) per violation may be retained by the Town where the applicant has failed to perform any building, construction, structural alteration, movement, demolition or change work to any building or other structure in strict compliance with the approved plans and specifications therefor. Such retained deposit amounts shall represent the estimated costs and expenses of the Building Inspector in processing and handling said failures. Following such failure to perform, the Building Inspector shall notice the applicant of such failure and thereafter may retain the same without further action on the part of the Town. Nothing contained herein shall prohibit the Town from exercising any other remedies provided at law or

in equity, including, without limitation, an action for attorneys' fees, costs, and expenses in connection with any such failure to comply.

(d) No building permit shall be issued until written approval of the application is given by the Building Inspector and the Board when the latter is required under the terms of this Article.

(e) No permit shall be issued after February 1st, 2023, unless a current building contractor license is submitted. The building contractor license shall meet Gunnison County building contractor licensing program requirements.

(f) No building permit shall be issued unless the proposed erection, construction, alteration or change of the building or use of the building or land is in full conformance with this Article.

(g) Upon issuance of the building permit, the applicant shall perform all work thereunder in strict accordance and compliance with the application, plans and specifications, representations to the Board and Building Inspector, and any memoranda of agreement. The Building Inspector, members of the Board and other Town officials shall monitor and inspect the work being performed and, upon the discovery of any deviation from the plans, application or representations, shall report the deviation to the Building Inspector who shall order all work on the structure to cease until the Board considers, at its next regular meeting, if the deviation is substantial, in which case a new building permit shall be required.

(h) After the issuance of a building permit, any substantial deviation from the plans, application or representations shall require a new building permit, which shall be applied for and considered in the same fashion as a new application.

(i) Any application or other request under this Article shall be made by an owner of the property or their legal representative as evidenced by a written power of attorney. Any permits, approvals, conditions, or other decisions under this Article shall benefit and/or bind such applicant, the owner, other co-owners of the property and their heirs or assigns.

(j) Penalties; enforcement. No person shall build, construct, structurally alter, move, demolish, or change any building or other structure for which a building permit is required without compliance with the requirements of the Section. Any person who violates this Section shall be guilty of a misdemeanor and subject to a maximum fine of one thousand dollars ($1,000.00) per offense, or by imprisonment not to exceed ninety (90) days, or by both such fine and imprisonment. Each day any such building or structure is out of compliance with this Section shall be a separate offense hereunder. The Marshal's Department, the Building Inspector or the Town Manager may enforce the penalties provided hereunder, including, without limitation, by proper summons to appear in a court of competent jurisdiction. The Town may institute injunction, abatement, or any other appropriate action to prevent, enjoin, abate or remove any violation of this Section. Remedies provided in this Section are cumulative and concurrent and not intended to be exclusive, and the same are in addition to all other rights provided at law and in equity.

## Sec. 18-13-50. Boundaries.

No building or structure shall be constructed or erected on any lot prior to the property corners of the lot being properly established and marked by permanent monuments consisting of a metal pin not less than one-half (½) inch in diameter and not less than sixteen (16) inches in depth below ground level. Any such corner monument or other survey monumentation required by the Town after October 1, 1988, shall be surveyed from and based upon one (1) or both of two (2) official survey monuments. Such official survey monuments are located at the precise centerline intersections of Elk Avenue with Third Street and Seventh Street, respectively; stamped as follows: "CL

ELK CL THIRD E.F. BENNER PLS 9476 1997" and "CL SEVENTH/ELK 1988 LS 11250." A cross mark "X" on each monument marks the precise centerline intersection.

## Sec. 18-13-60. Construction time.

Unless additional time, which shall be no more than six (6) months, is granted for good cause by the Building Inspector, all exterior construction must be totally completed within one (1) year of the commencement of construction under a building permit. If not completed, the building permit shall expire, and the owner shall obtain a new permit based on the valuation of the work to be complete the project.

## Sec. 18-13-70. Certificate of occupancy.

(a) It is unlawful for the owner of a structure or any other person to rent, occupy or use any structure within the Town without obtaining, in advance, a certificate of occupancy; provided, however, that a certificate of occupancy shall not be required for that part of any structure which has been: (1) completed; and (2) occupied and in use, prior to July 24, 1973. Any modification or alteration of or addition to any structure after July 24, 1974, for which a building permit or other permit is required, shall not be occupied or used prior to the issuance of a certificate of occupancy. Any change in use within any structure shall require a new certificate of occupancy.

(b) Procedure for obtaining a certificate of occupancy.

(1) A written or verbal request for a certificate of occupancy must be made to the Building Inspector at least forty-eight (48) hours prior to the certificate of occupancy inspection.

(2) As soon as reasonably practicable and not more than ten (10) days after receipt of the request for the certificate of occupancy, the Building Inspector shall inspect the structure for which the certificate of occupancy has been sought to ascertain if the structure conforms with all the applications, plans and specifications theretofore submitted to the Town and all state statutes and Town ordinances.

(3) If the Building Inspector determines that the structure conforms to all applications, plans and specifications theretofore submitted to the Town and all state statutes and Town ordinances, they shall issue a certificate of occupancy.

(4) If either the Building Official, Building Inspector or the Chair of the Board determines that the structure fails, in any manner, to conform with all applications, plans and specifications theretofore submitted to the Town, or with all state statutes and Town ordinances, a certificate of occupancy shall not be issued. In that event, the applicant shall be informed of the reason why the certificate of occupancy has not been granted.

(5) After a denial of an application for a certificate of occupancy, the Building Inspector and/or the Chair of the Board shall ascertain, in their reasonable discretion, if the defects or shortcomings in the structure will require so substantial a reinspection as to warrant an additional application fee.

## Sec. 18-13-80. Stop work or desist order.

Should the Building Inspector discover any construction within the Town in violation of this Article, they shall attach a stop work order to that construction in a conspicuous place. Should the Building Inspector discover any use of property in the Town in violation of this Article or in violation of any agreement pursuant to Section 16-9-70

of this Code, they shall attach a desist order to the property and attempt to deliver a copy of the same to the occupier of the property. Any stop work order or "desist" order shall be signed by the Building Inspector and indicate the subject area in which the violation exists. The removal of a stop work order or desist order before the violation is corrected shall constitute a violation of this Article. The continuation of construction or use in violation of a stop work order or desist order shall also constitute a violation of this Article.

### Sec. 18-13-90. Payment of overdue fees.

No building permit or certificate of occupancy shall be issued by the Town for any lot, parcel or structure until all overdue fees for sewer, water, sanitation, street or other improvement district assessments, real property taxes, real estate transfer taxes and/or other fees or taxes due to the Town in connection with said lot, parcel or structure have been paid in full.

### Sec. 18-13-100. Appeals from Building Inspector.

Any person desiring to appeal any order, requirement, decision, action, omission, or determination by the Building Inspector under this Chapter must file such appeal with the Board within thirty (30) days after such action by delivering the same to the Town Clerk. Such appeal shall be in writing and shall contain all data and information necessary for a clear understanding and intelligent action by the

## ARTICLE 14 Carbon Monoxide Detector/Alarm Regulations

### Sec. 18-14-10. Carbon monoxide detection.

(a) **Adoption.** The *International Fire Code* ("IFC"), 2024 Edition, Chapter 9, Section 915, as published by the International Code Council, is hereby adopted by reference thereto and incorporated into this section to have the same force and effect as if set forth herein in every particular pursuant to Title 31, Article 16, Part 2, C.R.S.

The subject matter of the adopted code includes regulating and governing the safeguarding of life and property from carbon monoxide and the detection of conditions hazardous to life or property in the occupancy of buildings and premises as herein provided.

(b) **Amendments.**

The code adoption herein is modified by the following amendments:

(1) IFC Section - 915 is amended to read as follows:

**Section 915.1 General.** Carbon monoxide (CO) detection shall be installed in new buildings in accordance with Section 915.1 Carbon monoxide detection shall be installed in existing buildings in accordance with Section 1103.9 when the following occurs:

a. A building permit is obtained for a level 2 or 3 Alteration remodel.

b. At transfer of ownership of a residential unit

c. At transfer of rental residential units

**Exception:** Carbon monoxide detection is not required in Group S, Group F, and Group U occupancies that are not normally occupied.

(2) IFC Section 915.1.1 is amended to read as follows:

**Section 915.1.1.1 - Where Required.** Carbon monoxide detection shall be installed in the locations specified in Section 915.2 where any of the following exist.

a. 1, In a building that contain a CO source

b. In a building that contain or are supplied by a CO producing forced air furnace

c. In buildings with attached private garage

d. In buildings that have a CO producing vehicle that is used within the building

e. In a building that have a Fuel-burning appliances outside of dwelling units, sleeping units and classrooms, shall have Carbon monoxide detection provided fireplaces within 15 feet of a bedroom.

**Exceptions:**

a. Carbon monoxide detection shall not be required in *dwelling units*, *sleeping units* and classrooms where a carbon monoxide detector is provided in one of the following locations:

b. In an approved location between the fuel-burning appliance or fuel-burning fireplace and the dwelling unit, sleeping unit or classroom.

c. On the ceiling of the room containing the fuel-burning appliance or fuel-burning fireplace.

(3) IFC Section 915.2.1 is amended to read as follows:

**Section 915.1.5. – Dwelling Units**. Carbon monoxide detection shall be installed in *dwelling units* outside of each separate sleeping area within 15 feet of the bedrooms. Where a CO source fuel-burning appliance is located within a bedroom or its attached bathroom, carbon monoxide detection shall be installed within the bedroom.

(4) IFC Section 915.2.2 is amended to read as follows:

**Section 915.2.2. – Sleeping units**. Carbon monoxide detection shall be installed in sleeping units.

**Exception:** Carbon monoxide detection shall be allowed to be installed outside of each separate sleeping area within 15 feet of the sleeping unit where the sleeping unit or its attached bathroom does not contain a CO source fuel-burning appliance and is not served by a CO producing forced-air furnace.

(5) IFC Section 915.3.1 is amended to read as follows:

**Section 915.3.1 - Alarm limitations.** Carbon monoxide alarms shall only be installed in dwelling units.

## Sec. 18-14-20. Definitions.

For purposes of this Article only, the following terms shall have the following meanings ascribed thereto:

*Adjacent* means directly above, below, or next to.

*Carbon monoxide detector/alarm* means any single- or multiple-station carbon monoxide detector and alarm listed by a nationally recognized, independent product safety testing and certification laboratory to conform to the standards for carbon monoxide alarms issued by such laboratory or any successor standards.

*Dwelling unit* means one (1) or more rooms or other spaces, arranged for use by one (1) or more persons, on a permanent, temporary or transient basis, for sleeping or living, located in one (1) or more of the following use categories: R1, R2, R3 and R4.

*Enclosed parking area* means a structure or portion thereof utilized for the parking of motor vehicles and other carbon monoxide-emitting equipment which is less than fifty percent (50%) open at all times to outside air.

*Fuel-burning device* means any equipment that burns solid, liquid or gaseous fuel, or a combination thereof, including, without limitation, a gas-fueled stove, wood stove, coal stove, natural gas/heating oil heater, natural gas/ heating oil boiler, natural gas/heating oil furnace and any equipment that burns wood, coal, natural gas, kerosene, petroleum or hydrocarbon products indoors.

*NFPA 720* means the NFPA 720 Standard for the Installation of Carbon Monoxide Detection and Warning Equipment.

*Other applicable uses* means one (1) or more rooms arranged for use by one (1) or more persons, on a permanent, temporary or transient basis, for sleeping or living, located in one (1) or more of the following use categories: E, I1, I2, I3 and I4. *Other applicable uses* shall include, but shall not be limited to, day care, hospital, medical and assisted living facilities.

## Sec. 18-14-30. Installation requirements.

(a) All existing dwelling units and existing other applicable uses or those undergoing new construction, additions, remodels and renovations where: (1) a fuel-burning device is or will be installed therein or adjacent thereto; and/or (2) an enclosed parking area is adjacent thereto, shall contain a carbon monoxide detector/alarm.

(b) A carbon monoxide detector/alarm shall be installed in any room or space that is not otherwise considered a dwelling unit or other applicable use under this Article but that is:

(1) Fifty (50) square feet or less and that contains a fuel-burning device; and/or

(2) Generally utilized as a central location of one (1) or more fuel-burning devices.

(c) In dwelling units and other applicable uses, a carbon monoxide detector/alarm shall be installed within fifteen (15) feet of the entrance to each room lawfully used at any time for sleeping.

(d) Dwelling units and other applicable uses shall have a carbon monoxide detector/alarm installed on each story of the structure and in such other locations as deemed necessary by the Building Official.

(e) Carbon monoxide detectors/alarms for existing dwelling units and other applicable uses and those undergoing new construction, additions, remodels, renovations, and alterations shall carry the listing of a nationally recognized, independent product safety testing and certification laboratory to conform to the standards for carbon monoxide alarms issued by such laboratory or any successor standards.

(f) All carbon monoxide detectors/alarms shall be installed in accordance with NFPA 720 standards and the manufacturer's recommended installation requirements, except as otherwise provided in this Section.

(g) All dwelling units and other applicable uses undergoing new construction, additions, remodels, renovations, and alterations where a carbon monoxide detector/alarm is required shall have primary (i.e., hard-wired) and secondary (e.g., battery back-up) power sources for all carbon monoxide

detectors/alarms. All multiple-station carbon monoxide detectors/alarms required by this Section shall be interconnected.

(h) All existing dwelling units and other applicable uses where a carbon monoxide detector/alarm is required must comply with NFPA 720 standards or, in lieu of an NFPA 720 standard carbon monoxide detector/alarm, a plug-in (without a switch and with battery back-up) or battery-operated carbon monoxide detector/alarm shall be installed which shall carry the listing of a nationally recognized, independent product safety testing and certification laboratory to conform to the standards for carbon monoxide alarms issued by such laboratory or any successor standards.

(i) In all structures with multiple dwelling units and other applicable uses where the structure contains a central fire alarm system, carbon monoxide detectors/alarms shall be connected to the structure's central fire alarm system and shall be audible in each dwelling unit within the structure. Such carbon monoxide detectors/alarms shall initiate a supervisory signal at the fire alarm panel and provide an audible alarm at the device upon the detection of carbon monoxide. Such carbon monoxide detectors/alarms shall be initiated to a monitoring agency or be an audible/visual alarm located in a conspicuous place on the exterior of the structure.

(j) Compliance with the requirements of this Article shall be irrespective of the occupancy of a dwelling unit or other applicable use.

## Sec. 18-14-40. Exception to installation requirements.

For any existing dwelling unit or other applicable use and those undergoing new construction, additions, remodels, and renovations where a carbon monoxide detector/alarm is required by this Article, **Sec. 18-14-50. Time for compliance**.

All dwelling units and other applicable uses undergoing new construction, additions, remodels, renovations, and alterations where carbon monoxide detectors/alarms are required under this Article shall be in compliance with these carbon monoxide detector/alarm regulations at the time of such construction, additions, remodels, renovations, and alterations. All existing dwelling units and other applicable uses where carbon monoxide detectors/alarms are required under this Article shall have six (6) months from the effective date of these carbon monoxide detector/alarm regulations or a change in tenancy of the dwelling unit or other applicable use, whichever occurs first, to comply with the requirements hereof.

## Sec. 18-14-50. Testing, inspection, and maintenance of carbon monoxide detectors/alarms.

(a) All carbon monoxide detectors/alarms shall be tested, inspected, and maintained in accordance with NFPA 720 standards or shall carry the listing of a nationally recognized, independent product safety testing and certification laboratory to conform to the standards for carbon monoxide alarms issued by such laboratory or any successor standards.

(b) Subject to the obligations of a tenant in any tenancy as described in Subsection (d) below, the owner of any dwelling unit or other applicable use where a carbon monoxide detector/alarm is required under this Article shall be responsible for the installation, testing, inspection, maintenance, repair and/or replacement of such carbon monoxide detector/alarm.

(c) Prior to the commencement of any tenancy in any dwelling unit, the owner shall replace any carbon monoxide detector/alarm that has been stolen, removed, missing or is found to be not operational by the

owner. At the time of the commencement of the tenancy for the dwelling unit, the owner shall ensure that any batteries necessary to make the carbon monoxide detector/alarm operational are provided to the tenant at the time the tenant takes residence in the dwelling unit. The owner shall replace any carbon monoxide detector/alarm if notified by a tenant as specified in Subsection (d) below that any carbon monoxide detector/alarm was stolen, removed, missing or is found to be not operational during the tenant's occupancy. The owner shall correct any deficiency in any carbon monoxide detector/ alarm if notified by a tenant in accordance with Subsection (d).

(d) The tenant of any rental property shall:

(1) Keep, test and maintain all carbon monoxide detectors/alarms in good repair;

(2) Notify, in writing, the owner of the dwelling unit or the owner's authorized agent, as applicable, if the batteries of any carbon monoxide detector/alarm require replacement;

(3) Notify, in writing, the owner of the dwelling unit or the owner's authorized representative if any carbon monoxide detector/alarm is stolen, removed, missing or is found to be not operational during the tenant's occupancy; and

(4) Notify, in writing, the owner of the dwelling unit or the owner's authorized representative of any deficiency in any carbon monoxide detector/alarm that the tenant cannot correct.

(e) No person shall remove batteries from, or in any way render inoperable, a carbon monoxide detector/alarm, except as part of a process to inspect, maintain, test, repair or replace the carbon monoxide detector/alarm or replace the batteries in the carbon monoxide detector/alarm.

### Sec. 18-14-60. Limitation of liability.

No person shall have a claim for relief against any property owner, an authorized agent of a property owner, a person in possession of real property and/or an installer of any carbon monoxide detector/alarm for any damages resulting from the installation, operation, maintenance or effectiveness of a carbon monoxide detector/alarm if the property owner, authorized agent, person in possession of real property and/or installer installs, operates, maintains and tests the carbon monoxide detector/alarm in accordance with the manufacturer's published instructions and the provisions of these carbon monoxide detector/alarm regulations.

## ARTICLE 15 Deconstruction and Recycle Plan

### Sec. 18-15-10. Required.

If a permit is requested for the demolition of an existing structure in accordance with Section 16-2-60 or 16-14-190 of this Code, a site-specific deconstruction and recycle plan must be submitted and approved by the Building Official. Said plan should, as a goal, seek to recycle, reuse, or resell fifty percent (50%) of the existing materials in the deconstructed structure or element. Materials from the following categories should be considered: doors, windows, cabinets, roofing, wood flooring, plumbing fixtures, mechanical and heating fixtures, framing and structural materials, landscaping elements, concrete, and bricks. The plan should identify what materials are to be recovered. The plan should either specify a destination for the recycled materials or the materials should be made available to the public for acquisition for a minimum of two (2) weeks, as well as how the same is to be communicated and accomplished. Recycled materials may not be placed on Town rights-of-way or other Town property.

# ARTICLE 16 Basement Construction Requirements

## Sec. 18-16-10. Basement construction.

All new basements, as defined in Section 16-1-20, of this code must meet the following requirements.

(1) Basement foundation design. Basements shall be designed and constructed to be completely waterproof and shall be no larger in footprint than the aboveground structure they support, with the exception of window wells and exiting features and underground parking facilities in Business, Tourist and Commercial districts. Basement foundations shall be designed by a licensed Colorado professional engineer experienced in these types of waterproof structural systems, who shall affix their seal on all relevant construction documents.

(2) Floors. All floors in basements are required to be waterproofed. They shall be constructed of concrete, designed and constructed to withstand the hydrostatic pressures to which such floors will be subjected. Waterproofing shall be accomplished through means approved in the International Building Code, such as applied membranes and coatings installed under the slab in accordance with the manufacturer's requirements. Additionally, concrete admixtures may be utilized in conjunction with approved membranes and coatings. Alternative designs may be approved on a case-by-case basis by the Building Official if submitted by a licensed Colorado professional engineer.

(3) Walls. Walls required to be waterproofed shall be of concrete and shall be designed and constructed to withstand the hydrostatic pressure and other lateral loads to which such walls will be subjected. Waterproofing shall be accomplished through means approved in the International Building Code, such as applied membranes and coatings installed on the positive hydrostatic pressure side of the wall according to the manufacturer's requirements. The waterproofing shall be lapped and sealed to the slab waterproofing according to the manufacturer's requirements and shall extend to a point not less than six (6) inches above finished grade. Concrete admixtures may be utilized in conjunction with approved membranes and coatings. Alternative designs may be approved on a case-by-case basis by the Building Official if submitted by a licensed Colorado professional engineer.

(4) Water table displacement. Basement foundations shall not extend more than one (1) story, as such term is defined in the International Residential Code (IRC), below existing grade. On sloping sites, maximum foundation depth will be determined by the Building Official.

(5) Construction dewatering. Construction dewatering may be allowed only during construction of the basement foundation upon approval by the Building Department. The proponent is responsible for obtaining any required dewatering discharge permits that may be required by the State or other licensing agency and shall provide copies of the same to the Town. A construction dewatering and discharge plan including the location and point of discharge shall be submitted to the Town for approval prior to commencement of dewatering.

(6) Dewatering systems. Permanent dewatering systems shall not be allowed. Accommodations for emergency dewatering systems and sumps may be allowed if they are designed by a Colorado professional engineer and shall be described as part of the foundation submittal and approved by the Building Department. Automatic pumping systems may not be incorporated into the design of such dewatering systems. Water may not be discharged into the Town's sewer system as part of an emergency dewatering proposal. Prior to activating any emergency dewatering system, the

Town must be notified in writing, with such notice providing the address, location for discharge and volume of discharge. Said activation must be approved by the Town.

# ARTICLE 17 Property Maintenance

## Sec. 18-17-10. Adoption.

Pursuant to Title 31, Article 16, Part 2, C.R.S., there is adopted as the Property Maintenance Code of the Town, by reference thereto, the *International Property Maintenance Code*, - 2024 edition, including Chapters 1—8, as published by the International Code Council Inc. 4051 West Flossmoor Road, Country Club Hills, Illinois 60478 ("IPMC"), regulating and governing the conditions and maintenance of all property, buildings and structures; by providing safe, sanitary and fit for occupation and use; and the condemnation of buildings and structures unfit for human occupancy within the Town of Crested Butte, is hereby adopted herein.

## Sec. 18-17-20. Amendments.

The code adoption herein is modified by the following amendments:

(1) Section 101.1. is amended to read as follows:

**101.1. - Title.** These regulations shall be known as the Property Maintenance Code of the Town of Crested Butte, hereinafter referred to as "this Code."

(2) **Section 104. Fees** is deleted in its entirety.

(3) **Section 113. Demolition** is deleted in its entirety.

(4) Section 110.4 is amended to read as follows:

**110.4 - Stop Work Order Failure to comply**. Any person who shall continue any work after having been served with a stop work order, except such work as that person is directed to perform to remove a violation or unsafe condition, shall be subject to a maximum fine of one thousand dollars ($1,000) per offense.

(5) Section 302.4 is amended to read as follows:

**302.4 - Weeds.** Premises and exterior property shall be maintained free from weeds as defined herein, and Article 3 of the Town Code. Noxious weeds shall be prohibited. Weeds shall be defined as all grasses, annual plants, and vegetation, other than trees or shrubs provided; however, this term shall not include cultivated flowers and gardens.

(6) Section **304.14. Insect screens** is deleted in its entirety.

(7) Section 602.3 is amended to read as follows:

**602.3 - Heat supply**. Every owner and operator of any building who rents, leases or lets one or more dwelling units or sleeping units, on terms either expressed or implied, to furnish heat to the occupants thereof shall supply heat year-round to maintain a minimum temperature of 68 degrees in all habitable rooms, bathrooms and toilet rooms.

(8) Section **602.4** is amended to read as follows

**602.4 - Occupiable workspaces**. Indoor occupiable workspaces shall be supplied with heat year-round to maintain a minimum temperature of 65 degrees during the period the spaces are occupied.

GVRHA
GUNNISON VALLEY REGIONAL HOUSING AUTHORITY
EnergySmart COLORADO
YOUR LOCAL ENERGY EFFICIENCY PARTNERS

# Home Energy Assessment

**Your Energy Smart Analyst:**
Edward Morrison
Hearth Design Build LLC
(720) 480-6197

EnergySmart COLORADO

## Welcome to Energy Smart!

You have taken the first step to improving the comfort, safety, and efficiency of your home. The following report details the findings from the Home Energy Assessment on May 3, 2024.
Call your local Energy Smart Colorado Resource Center with any questions or to discover available rebates that can help make these recommendations a reality.

Building type: **Single Family**
Year built: **1900**
Square footage: **2,144**
Primary heating fuel: **Natural Gas**
Number of bedrooms: **3**
Number of occupants: **3**



## Assessment overview:

After completing your Energy Assessment, recommendations to improve the efficiency, comfort, and safety of this home are to:
- Incorporate energy conscious practices into daily routines.
- Test for Radon every 2 years.
- Upgrade incandescent bulbs to LEDs.
- Pursue air sealing.
- Add insulation in the roof, foundation, and walls during remodel aligned with a continuous pressure boundary.
- Consider a solar voltaic system.
- Investigate more sustainable heating systems; consider installing a heat pump.
- Learn more about Energy Smart appliances, PHI, PHIUS, LEED, and WaterSense certified building components, and materials with low embodied energy for remodels and replacements.
- These items will be discussed in more detail in this report.

Your utility provider(s):

ATMOS energy

GVRHA
GUNNISON VALLEY REGIONAL HOUSING AUTHORITY
EnergySmart COLORADO
YOUR LOCAL ENERGY EFFICIENCY PARTNERS

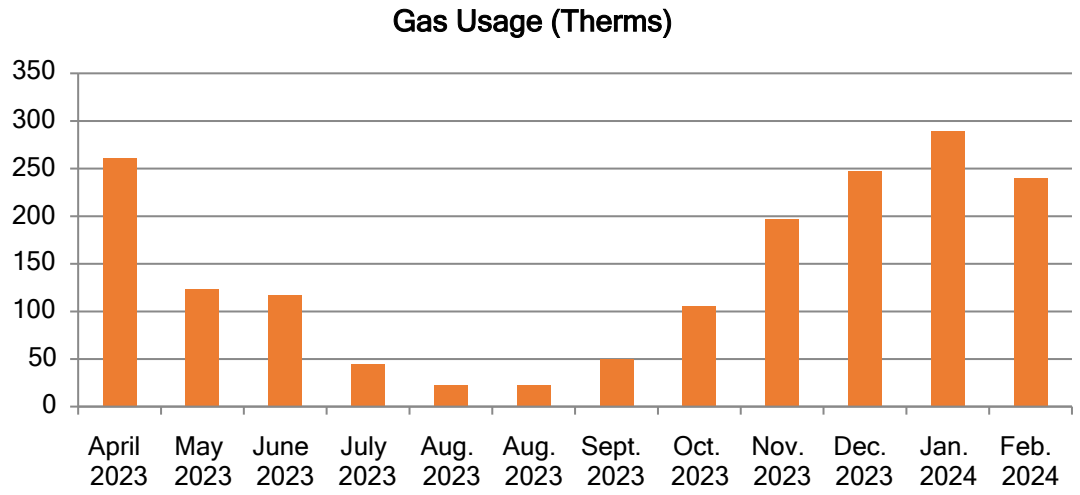
# Energy Usage

**Your Energy Smart Analyst:**
Edward Morrison
Hearth Design Build LLC
(720) 480-6197

EnergySmart COLORADO

Electric utility provider:
**GCEA**
Electric account #: **474816**
Estimated electricity cost per kWh: **$0.12**
Annual electric usage: **0 kWh**
Annual electric cost: **$0**

Gas utility provider:
**Atmos Energy**
Gas account #: **4016964035**
Estimated gas cost per Therm: **$1.34**
Annual gas usage: **0 Therms**
Annual gas cost: **$2,395**




ATMOS energy

GVRHA GUNNISON VALLEY REGIONAL HOUSING AUTHORITY | EnergySmart COLORADO

YOUR LOCAL ENERGY EFFICIENCY PARTNERS

# Recommended Upgrades

Your Energy Smart Analyst:
Edward Morrison
Hearth Design Build LLC
(720) 480-6197

EnergySmart COLORADO

When your Analyst performed your Home Energy Assessment, information was collected to estimate annual energy savings on projects you might consider completing to save money on your energy bills. Below is a breakdown of those suggested improvements, the estimated costs and potential annual savings, which were calculated through OptiMiser, an energy modeling software. A Savings to Investment Ratio (SIR) of 1 or greater means that the resulting energy savings will pay for the cost of the project.

| Energy Detail (estimated) | Existing Home | Improved Home | Units |
|---|---|---|---|
| Annual energy consumption | 289.2 | 115.0 | MMBTU |
| Annual electrical consumption | 6,343 | 4,924 | kWh |
| Annual gas consumption | 2,676 | 982 | THERMS |
| Potential PV system size to offset annual electric usage (estimated) | | | KW |

| Recommended Improvement | Estimated Cost | Estimated Annual Savings | SIR |
|---|---|---|---|
| Reduce air leaks and weatherstrip doors to save energy and increase comfort. | $1,000 | $453 | 6.8 |
| Replace incandescent lights with LEDs to save energy and replacement costs. | $85 | $78 | 6.5 |
| Increase wall insulation to save energy and increase comfort. | $10,000 | $431 | 2.2 |
| Condition your crawl space to save energy and increase comfort. | $5,000 | $169 | 1.7 |
| Improve vault or flat roof insulation to save energy and increase comfort. | $10,000 | $130 | 0.6 |
| Add storm windows or install new windows to save energy and increase comfort. | $5,000 | $128 | 0.5 |

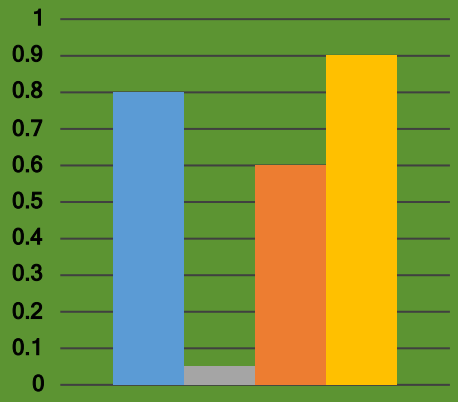
GVRHA
GUNNISON VALLEY REGIONAL HOUSING AUTHORITY
EnergySmart COLORADO
YOUR LOCAL ENERGY EFFICIENCY PARTNERS

# Air Leakage

**Your Energy Smart Analyst:**
Edward Morrison
Hearth Design Build LLC
(720) 480-6197

EnergySmart COLORADO

Cubic volume: **24,870CF**
Blower door flow rate: **4,917CFM50**



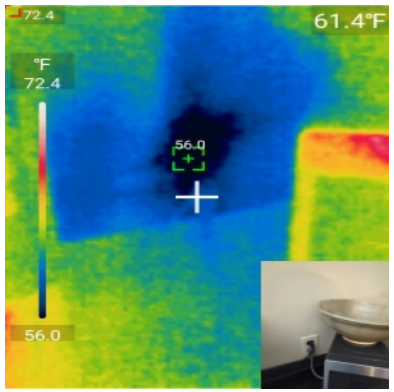

**Natural Air Changes per Hour (ACHn)**

**Your Home** Tight Home
Average Home Leaky Home

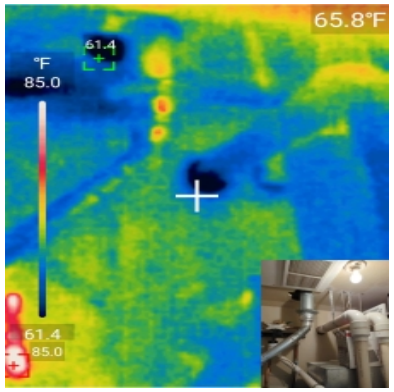
CF = Cubic Feet. The volume of air contained in a 1' x 1' x 1' cube.
CFM50 = Cubic Feet per Minute at 50 Pascals negative pressure. This number estimates how much air your home loses each hour.
ACHn = Natural Air Changes per Hour. Expressed in the chart above as 0.8, this means that about 80.00% of the air in your home is lost to the outside every hour.

**Energy Smart Tip:**

Your analyst used a blower door fan to test for air leakage. This test helps determine how leaky or tight the home is relative to other homes. Your home's natural leakage rate is shown in the chart on the left. A very leaky home costs more to heat, while a very tight home may require continuous mechanical ventilation. Leaks can be repaired through attic floor sealing, caulking, weather stripping, and other means.




*Holes in the drywall, like switches and plugs, are noticeable air leaks. Apply caulk inside the electrical box and install cover plates.*




*Mechanical penetrations are considerable air leaks. Big holes, like the water heater vent, may require sheet metal.*



*Some exterior dampeners are worn out and not closing properly when not in use. Replace these with new dampeners.*

## Recommendations:

- Your home has a natural air exchange rate of 80% per hour: every hour more than 3/4 of the conditioned interior air leaks out and is replaced with unconditioned exterior air. A more appropriate air exchange rate for your home is about 24% per hour. Air sealing measures should be considered.
- Air leaks identified include: plumbing and ventilation penetrations, bath fan assemblies, exterior dampeners, sliding and double hung window operations (especially bathroom windows), interior and exterior plugs and switches, fireplace, upstairs ventilating window, CAZ makeup air from crawlspace,
- Recommendations include:
- Seal other air leaks with caulk, tape, gaskets, and weatherstripping. When air sealing, high leaks should be prioritized first, followed by low leaks and leaks that affect daily comfort. Consider sealing shut windows which are not operated and replacing old dampers on the exterior.
- Install plastic film over some windows which do not require operation in the winter.
- Determine Additional air leaks with subsequent blower door tests.
- Replace naturally drafting water heater with sealed combustion and remove makeup air vent.
- Install intentional ventilation with an HRV or ERV.
- During renovation, ensure a well-detailed pressure boundary aligned with the thermal boundary.

GVRHA
GUNNISON VALLEY REGIONAL HOUSING AUTHORITY
EnergySmart COLORADO
YOUR LOCAL ENERGY EFFICIENCY PARTNERS

# Envelope – Foundation

**Your Energy Smart Analyst:**
Edward Morrison
Hearth Design Build LLC
(720) 480-6197

EnergySmart COLORADO

Primary foundation:
**Vented Crawlspace**
Percentage of total: **100%**
Existing R-value: **5**
Recommended R-value: **20**

Secondary foundation:

Percentage of total: **%**
Existing R-value: **0**
Recommended R-value:

Upgrading Foundations – If your home is built over a vented crawlspace, you can improve energy efficiency, comfort and durability by upgrading the foundation to a "conditioned crawlspace." This involves sealing and insulating the foundation walls and rim and installing a sealed vapor barrier on the ground.

**Energy Smart Tip:**

Your home's foundation is a very important part of its thermal performance. Increasing the level of insulation on your foundation may be an important step to improve comfort. Sealing cracks and gaps can help to reduce "**stack effect**" – a thermodynamic process that contributes dramatically to heat loss in your home. As a result, it is recommended to always combine air sealing with any insulation project.

## Recommendations:

The foundation was not accessible during the assessment. Based on the age of construction and remodel, it is assumed to be lightly insulated and ventilated.
- Recommendations include:
- Test for Radon every 2 years, the 2nd leading cause of lung cancer.
- Encapsulate crawlspaces. with a well-detailed radon/vapor barrier to reduce bulk water, vapor, and soil gasses such as radon, from entering the home and building assemblies.
- Install appropriate insulation along the stem-wall (R-20 recommended minimum), in the rim joists (r-20 minimum), in the floor (R-20 recommended minimum), or all of the above.

GVRHA GUNNISON VALLEY REGIONAL HOUSING AUTHORITY | EnergySmart COLORADO

YOUR LOCAL ENERGY EFFICIENCY PARTNERS

# Envelope – Walls

**Your Energy Smart Analyst:**
Edward Morrison
Hearth Design Build LLC
(720) 480-6197

EnergySmart COLORADO

Primary wall construction:
**Wood Frame**
Exterior finish: **Wood Siding**
Existing R-value: **15**
Recommended R-value: **38**
Recommended continuous R-value: **10**

Secondary wall construction:

Exterior finish:
Existing R-value:
Recommended R-value:
Recommended continuous R-value:

Thermal bridging – This term refers to the transfer of heat through the structural components of your home, like wood or steel beams, or other framing elements.
R-value – Represents the capacity of an insulating material to resist heat flow. The higher the R-value, the greater the insulating power.

**Energy Smart Tip:**

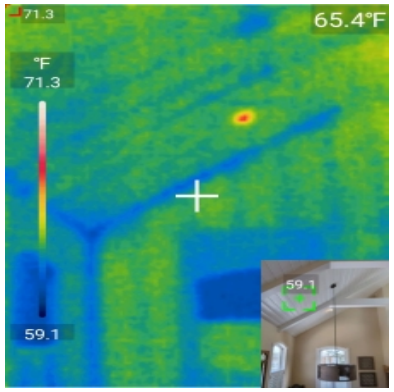
Walls make up the largest percentage of surface area facing the outside environment. Improving wall insulation can be a challenge due to the limited space inside a wall and the difficulty accessing wall cavities. If wall cavities are exposed during a remodel, consider fully insulating them with fiberglass batts. Insulation can also be blown in through holes drilled through the exterior of the home. When replacing exterior siding, rigid insulation such as foam board can be installed to minimize heat loss while also improving the wall's R-value.



*Exterior wood is in good condition; no cracks or gaps were observed. Keep paint in good condition to preserve the life of the siding.*



*Interior finish is drywall painted with latex paint. The latex paint appears to be the primary air barrier in the home; any holes are potential sources of infiltration.*




*Insulation is providing moderate protection from thermal conduction, but each stud can be seen as a thermal bridge on the thermal camera.*

## Recommendations:

- Wall systems are varied. Cavities measured between 4.5" and 9" deep. Most walls appear to be insulated with fiberglass batts however, there was no discernible insulation in the 9" deep kitchen wall.
- Exterior cladding is wood in good condition with fresh paint.
- Interior finish is primarily painted drywall which provides the primary air barrier, with electrical and plumbing penetrations.
- Recommendations include:
- Pursue air sealing with weatherstripping, caulk, tape, and gaskets.
- During renovations or remodels, install and maintain a well-detailed air barrier, aligning the pressure boundary to the exterior of the structure.
- During renovations or remodels, increase insulation as much as practicable. PHIUS recommendation for our climate is R-48, including at least R-10 continuous insulation.

GVRHA GUNNISON VALLEY REGIONAL HOUSING AUTHORITY | EnergySmart COLORADO

YOUR LOCAL ENERGY EFFICIENCY PARTNERS

# Envelope – Roof

**Your Energy Smart Analyst:**
Edward Morrison
Hearth Design Build LLC
(720) 480-6197

EnergySmart COLORADO

Primary roof:
**Cathedral Ceiling**
- Construction: **Wood Frame**
- Exterior finish: **Metal Roof**
- Percentage of total: **100%**
- Existing R-value: **15**
- Recommended R-value: **60**

Secondary roof:

- Construction:
- Exterior finish:
- Percentage of total: **%**
- Existing R-value:
- Recommended R-value:

Upgrading roofs – Roofs are typically considered for energy improvements when there is easy access to the existing insulation, such as an attic floor, or when you are re-roofing your home. In some cases, rigid foam insulation can be added to your roof deck to increase its thermal performance, saving you money on utility bills and making your home more comfortable.

**Energy Smart Tip:**

Adding insulation to your attic can be one of the most cost-effective upgrades to your home. Be sure to air-seal all connections between the attic and living space before installing additional insulation. Also be sure to protect existing vents with baffles and complete any repair projects. And don't forget to insulate and weather-strip the attic hatch!



*Roof exterior cladding is metal, a durable and vernacular detail for our location, and is in serviceable condition.*



*Primary roof system is vaulted. Seasonally adjust Ceiling fans to provide comfort without engaging the heating or cooling systems.*



*Consult a solar installer to assess the viability of a Photovoltaic solar array on south facing roof.*

## Recommendations:

- Your home currently has 2 roof systems: a vaulted ceiling presumed to be insulated with fiberglass batts to maybe R-15, based on the age of the home and thermal images, and an inaccessible unconditioned attic.
- The cladding in both cases is metal
- Interior finish is painted drywall with several holes, which provides the primary air barrier on the upper levels, or wooden boards.
- Recommendations include:
- Utilize ceiling fans to efficiently move warm or cold air to or from the living space, rather than raising the setting on the thermostat and creating more heat.
- Pursue air-sealing with a clear caulk.
- During renovations, increase insulation as much as practicable and continuously if possible. PHIUS recommendation for our climate is R-60.
- During renovations, install a well-detailed air barrier.
- Consider installing an HRV which could help circulate and mix air from upper and and lower floors increasing comfort.
- Consult a solar installer as to the practicality of a Photovoltaic solar array.

GVRHA GUNNISON VALLEY REGIONAL HOUSING AUTHORITY | EnergySmart COLORADO

YOUR LOCAL ENERGY EFFICIENCY PARTNERS

# Envelope – Windows & Doors

**Your Energy Smart Analyst:**
Edward Morrison
Hearth Design Build LLC
(720) 480-6197

EnergySmart COLORADO

Existing window type:
**1-pane, wood/vinyl frame**

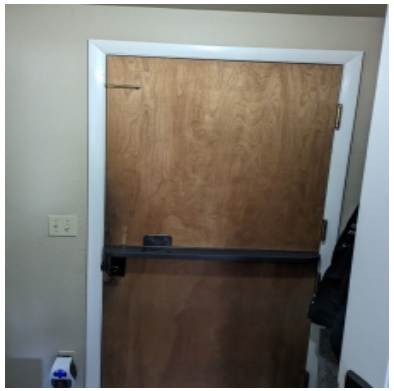
Recommended window type:
**Storm Clear + 1-pane, wood frame**

Square footage (sf) of windows:
- Front: **43sf**
- Right: **49sf**
- Back: **35sf**
- Left: **13sf**

U-factor – This number refers to the ability of your windows to resist heat loss. It is the numerical reciprocal of R-value.
Low-e – These coatings are applied to glass when windows are manufactured and help to reduce the window's emissivity, which can improve insulating properties when properly applied.
Gas filled – Noble gasses are used as an air barrier between panes of glass to help increase a window's thermal performance. The seals that keep these gasses trapped inside can fail over time and should be inspected periodically.

**Energy Smart Tip:**

Adding storm windows, insulating blinds or replacing your current windows can save energy and make your home feel more comfortable. When replacing windows, install energy efficient units with a U-factor of .28 or lower and ensure that the rough opening of the window is properly air-sealed with a low-expanding foam that is approved for doors and windows.



*The back shed door has no weatherstripping. Install to prevent air infiltration close to the water heater and furnace.*



*These insulated window treatments can be very effective at mitigating heat transfer at this window.*



*The front door has a quality screw -on weatherstripping which is poorly installed, showing gaps between the strips at the corners.*

## Recommendations:

- 10 Windows with a variety of operations, air-seals are marginal to poor.
- 2 doors into conditioned space include front door and back shed door. Weatherstripping is fair to non-existent.
- Recommendations Include:
- Install new screw-on weatherstripping which can conform to the plane of the door. Ensure no gaps at corners and operation closes tightly at every point of gasket. This may require adjustmenting the hang, swing, or latch of the doors.
- Air-seal each seam between components of the window frame, casing, stool, and apron with clear caulk.
- Install insulated window treatments. This is typically a cost effective way to decrease heat transfer around the window fenestration.
- Consider interior or exterior storm windows, such as Indow Windows, which are non-invasive.
- When considering new windows and doors, consider those Passive House or PHIUS certified.

GVRHA
GUNNISON VALLEY REGIONAL HOUSING AUTHORITY
EnergySmart COLORADO
YOUR LOCAL ENERGY EFFICIENCY PARTNERS

# Heating & Cooling

**Your Energy Smart Analyst:**
Edward Morrison
Hearth Design Build LLC
(720) 480-6197

EnergySmart COLORADO

Heating system type:
**Furnace-Ducted**
Fuel: **Natural Gas**
Efficiency rating (AFUE):
Recommended AFUE:

Secondary heating system:
**Furnace-Wall**

Cooling system type:
**None**
Efficiency rating (SEER):
Recommended SEER:

Fireplace type: **Natural Gas**

AFUE – Annual Fuel Utilization Efficiency is the measure of your heating system's efficiency. Higher numbers are more energy efficient.
SEER – Seasonal Energy Efficiency Ratio is the measure of your cooling system's efficiency. Higher numbers are more energy efficient.

**Energy Smart Tip:**

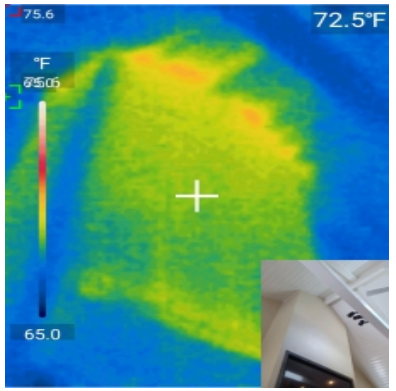
Your home's heating and cooling systems were inspected for safety and efficiency. Older heating systems should be replaced with energy efficient, sealed-combustion units or highly energy efficient heat pumps. This is often a significant upgrade so considerations beyond energy savings should be made. ENERGY STAR certified equipment will provide the best efficiency and savings.




*Category IV furnace produces heat efficiently, but it may not be delivered efficiently if duct-work is not insulated. Heat pumps can be more than 3x more efficient.*




*Thermostat temperature is being "held" at 67° indefinitely. Program a set-back temperature for when the house is unlikely to be occupied, or cooler temperatures are desired. Adjustments can be made as needed.*




*Much of the heat produced by the natural gas fireplace is lost up the chimney, as seen on the thermal image.*

## Recommendations:

- Heat systems include a ducted Category IV 100 kBTUH Natural Gas furnace with an under-utilized programmable thermostat, a Natural Gas Fireplace, and small plug-in wall heaters.
- Recommendations include:
- Utilize programmable thermostats. These can save a lot of energy and money. Set temperatures to lowest comfortable level and adjust as necessary. Set Away Temperature to lowest point the system can recover from in 2-4 hours, or if the system can rest for 4-6 hours..
- Utilize ceiling fans to move conditioned air, or convect heat, back to occupants.
- Consider adding heat pump technology, such as a mini-split, to your home's heating and cooling systems. Recent advances in this technology have made it more accessible and appropriate in cold climates. Subsidies are available.

GVRHA GUNNISON VALLEY REGIONAL HOUSING AUTHORITY | EnergySmart COLORADO

YOUR LOCAL ENERGY EFFICIENCY PARTNERS

# Water Heating

**Your Energy Smart Analyst:**
Edward Morrison
Hearth Design Build LLC
(720) 480-6197

EnergySmart COLORADO

Hot water system type:
**Storage**
Fuel: **Natural Gas**
Set temperature:
Solar thermal assist: **N/A**
Pipes insulated?: **No**
Existing EF:
Recommended EF:

EF – Energy Factor is a metric used to compare the energy conversion efficiency of residential appliances and equipment. EF ratings vary by appliance size and type, but in general, bigger numbers are more energy efficient.

**Energy Smart Tip:**

Many water heating systems are set to temperatures that are too high for safety and energy efficiency. Keep your water temperature at 120˚F for optimum energy performance and to keep your family safe.



*Natural drafting water heaters require indoor air to function. The flue should rise for at least 12" before bending. When replacing consider an Energy Star certified unit.*



*Delivered water temperature is below 120°, the recommended minimum temperature to avoid bacterial growth. Increase water temperature.*



*This aerated shower head is rated to 1.75 gallons per minute and helps prevent using excessive water when it is in use. Aeration appears to be in good working order.*

## Recommendations:

- Domestic hot water is supplied by a 50 gallon naturally drafting natural gas water heater.. Water is preheated by the Central Boiler. This unit is in good condition with no obvious damage, - Water heater flue has improper amount of rise before first bend. There was no spillage detected.
- Delivered water temperature is less than 120°, the recommended temperature to avoid bacterial growth.
- Bathroom sinks and shower heads are aerated
- Recommendations include:
- Install pipe insulation on hot water lines.
- Repair draft flue to standard installation to avoid backdrafting water heater.
- Increase delivered water temperature. Recommended minimum temperature is 120° to prevent bacterial growth.
- When replacing the appliances and fixtures, consider Energy Star and WaterSense rated models. Very efficient heat pump water heaters can be up to 3 times more efficient.

GVRHA GUNNISON VALLEY REGIONAL HOUSING AUTHORITY | EnergySmart COLORADO

YOUR LOCAL ENERGY EFFICIENCY PARTNERS

# Health & Safety

**Your Energy Smart Analyst:**
Edward Morrison
Hearth Design Build LLC
(720) 480-6197

EnergySmart COLORADO

Combustion zone location:
**Conditioned Space**

Ambient CO:

Primary appliance:
- Worst case spillage: **Pass**
- Worst case flue CO air free:
- Natural conditions spillage: **Pass**
- Natural conditions flue CO air free:

Hot water appliance:
- Worst case spillage: **Pass**
- Worst case flue CO air free:
- Natural conditions spillage: **Pass**
- Natural conditions flue CO air free:

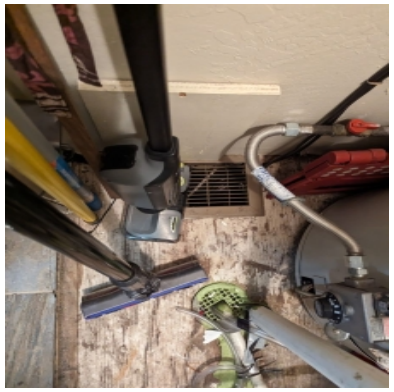
Secondary appliance:
- Worst case spillage:
- Worst case flue CO air free:
- Natural conditions spillage:
- Natural conditions flue CO air free:

CO – A byproduct of combustion, CO (Carbon Monoxide) is a colorless, odorless and tasteless gas that is slightly less dense than air. It is toxic to humans in concentrations above 35 ppm.

Worst case – Your Analyst tested your heating system under the "worst case" conditions for proper operation. If your appliance fails this test, a follow-up test is performed under “natural conditions” to determine if there is a safety risk.

**Energy Smart Tip:**

Energy Smart Colorado requires analysts to perform combustion safety tests on gas-fired equipment. Problems with furnaces, boilers or water heaters may include but are not limited to: poorly-tuned burners, combustion gas spillage (also called back drafting), gas leaks and improper venting. Any health and safety issues identified by your Analyst should be a top priority and must be repaired by a qualified professional before making efficiency upgrades to the home. ***Caution: improper air-sealing may create safety issues.**



*Floor vent provides direct air to the water heater from the crawlspace.*




*Water heater undiluted carbon monoxide in the flue is 13 parts per million, well under the limit of 200ppm*




*Highest measurement of ambient CO was 2 part per million in the living room, well under the limit of 35.*

## Recommendations:

- The Combustion Appliance Zone requires 2000cuft of makeup air for the water heater. Along with the crawlspace, there is approximately 4000cuft available.
- There was no observed spillage, or gas leaks in this home.
- Stovetop CO readings were under the upper limit of 25ppm.
- Gas stovetop has exhaust
- No recommendations at this time.
- Install the proper number of Carbon Monoxide alarms and smoke alarms. Each floor is recommended to have a carbon monoxide and smoke alarm, and a smoke alarm in each bedroom.
- When replacing appliances, get units with dedicated air supply rated for this elevation, or electric models, which do not consume indoor conditioned air and release fewer particulates.
- When making purchases and upgrades, look for Energy Star appliances. When replacing the stove, consider an induction cooktop. Induction can be close to 90% efficient.

GVRHA
GUNNISON VALLEY REGIONAL HOUSING AUTHORITY
EnergySmart COLORADO
YOUR LOCAL ENERGY EFFICIENCY PARTNERS

# Lighting & Appliances

**Your Energy Smart Analyst:**
Edward Morrison
Hearth Design Build LLC
(720) 480-6197

EnergySmart COLORADO

Total # of lamps (bulbs): **91**

Incandescent or halogen lamps: **17**
LED or CFL lamps: **71**
Florescent tubes: **3**

Refrigerator ENERGY STAR:
kWh usage per year: **539**

Second fridge ENERGY STAR:
kWh usage per year:

Freezer ENERGY STAR:
kWh usage per year:

Dishwasher ENERGY STAR:

Clothes washer ENERGY STAR:

Tips to reduce kWh base-load:
1) Use smart power strips for big energy users like home entertainment systems
2) Use laptop computers instead of big towers – they use up to 90% less power
3) Upgrade all of your appliances as they age to ENERGY STAR

**Energy Smart Tip:**

Replace incandescent and CFL lamps with LEDs. LEDs use about 20% of the energy and last up to 25 times longer than traditional incandescent bulbs. They also contain no toxic mercury and turn on instantly. Your refrigerator is usually one of the biggest consumers of electricity in your home. If your fridge is more than 10 years old, consider replacing it with an ENERGY STAR certified unit.



*Refrigerators typically demand a large portion of a home's energy use. When replacement is necessary, consider efficient models, such as those rated by Energy Star.*



*When replacing this stove, consider an induction model. Induction stoves are safer, more precise, and about 35% more energy efficient than natural gas cooktops.*



*Some lightbulbs are still old incandescent. Typically one of the most cost effective energy upgrades is to replace these with LEDs which can use as little as 10% the energy.*

## Recommendations:

- House has a "French" style refrigerator. According to the EPA, your refrigerator costs about $75 to run every year at 539kWh.
- Of the refrigerator, dishwasher, clothes washer, and clothes dryer, no Energy Star appliances were observed.
- Of the 91 light bulbs counted, there are 70 LED, 1 CFL, 17 Incandescent and 3 tube fluorescent.
- Recommendations include:
- Upgrade remaining incandescent bulbs in living room and bedrooms to LEDs, this is often the most cost-effective energy upgrade.
- When making upgrades or replacements, consider Energy Star and WaterSense rated models. Induction stoves are safer, more precise, and estimated to be up to 90% efficient, compared to 40% for gas. Some models work even when the power goes out unlike a gas unit.

GVRHA GUNNISON VALLEY REGIONAL HOUSING AUTHORITY | EnergySmart COLORADO

YOUR LOCAL ENERGY EFFICIENCY PARTNERS

# Costs, Loans and Rebates

RENU colorado residential energy upgrade loan

## Direct Installs

The following energy-saving items were installed during the assessment:

| Quick Fix installed | Quantity | Cost |
|---|---|---|
| Bath aerators: | 0 | $0.00 |
| DHW blankets: | 0 | $0.00 |
| Kitchen aerators: | 0 | $0.00 |
| LED bulbs: | 7 | $35.00 |
| Pipe wrap: | 0 | $0.00 |
| Showerheads: | 0 | $0.00 |
| Thermostats: | 0 | $0.00 |
| Weatherstripping: | 0 | $0.00 |
| Thermostat setback: | 0 | $0.00 |
| DHW setback: | 0 | $0.00 |
| **TOTAL** | | $35.00 |
| **QF Annual Savings** | **$** | $42.31 |
| **QF Annual Savings** | **kWh** | 352.59 |
| **QF Annual Savings** | **Therm** | 0 |

1. The Colorado Residential Energy Upgrade Loan (RENU) loan program is a statewide residential loan program sponsored by the Colorado Clean Energy Fund in partnership with Colorado-based credit unions. It makes home energy upgrades easy and affordable by offering low-cost, long-term financing for energy efficiency and renewable energy improvements. Additional clean energy lenders are linked here.

2. Your electric utility provider is GCEA

   Click here for electric rebates

   Your gas utility provider is Atmos Energy

   Click here for gas rebates

   ATMOS energy

3. In addition to reviewing the above links for rebates available through your utility provider, Energy Smart Colorado may also have local rebates available for your community and your project may be eligible for tax credits. Click here for more info.

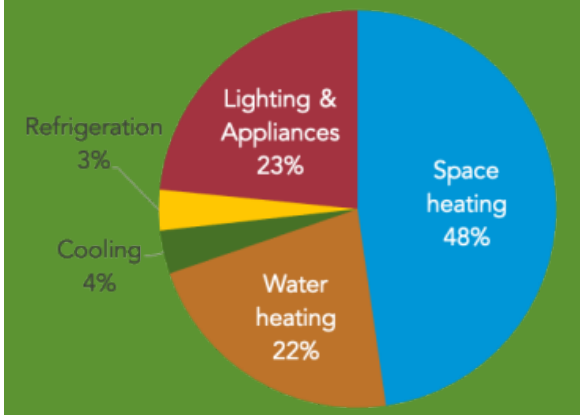
| Your assessment invoice | | | | | |
|---|---|---|---|---|---|
| **Assessment costs:** | | **Partner contributions:** | | **Your costs:** | |
| Base cost | $450.00 | Electric utility copay | $0.00 | Your base cost | $0.00 |
| Additional costs | $0.00 | Gas utility copay | | Additional costs | $0.00 |
| Quick Fix total | $35.00 | Energy Smart incentive | | Additional Quick Fixes | $0.00 |
| | | | | Program discount | $0.00 |
| **Assessment total** | **$485.00** | **Analyst payment** | **$464.00** | **Your total** | **$0.00** |

GVRHA
GUNNISON VALLEY REGIONAL HOUSING AUTHORITY
EnergySmart COLORADO
YOUR LOCAL ENERGY EFFICIENCY PARTNERS

# Energy Advising

## We're here to help!

### How do our homes use energy?




Heating our homes accounts for the biggest portion of utility bills in our cold climate. *Source: U.S. Energy Information Administration, 2015 Residential Energy Consumption Survey.*

## Have Questions?

Energy Advisors at your local Energy Smart Colorado **Energy Resource Center** can provide unbiased advice on the next steps toward making your home more comfortable and less costly to operate. They can help you with applicable rebates, incentives, contractors and best practices so you know you're making educated decisions that are right for **your** home.

### Our Energy Advisors are expert consultants who can:

- Provide expert advice about energy upgrades
- Help you prioritize next steps for your home energy improvements
- Connect you with qualified contractors
- Assist you with applicable rebates and financing, and help you with the paperwork
- Connect you with your utility provider's incentive programs

### Interested in Home Electrification (removing fossil fuels from your home)?

- Visit LoveElectric.org to learn more and to find rebates, installers, and additional resources

You may receive a call from an Energy Advisor offering to review this assessment with you.
*We look forward to working with you!*

Call to speak with an
Energy Smart Colorado Energy Advisor:
**Gunnison Valley Regional Housing Authority: 970-234-5613**
(This is a free service!)

GVRHA
GUNNISON VALLEY REGIONAL HOUSING AUTHORITY
EnergySmart COLORADO
YOUR LOCAL ENERGY EFFICIENCY PARTNERS

# Your Home Summary

**Your Energy Smart Analyst Certification:**
Hearth Design Build LLC
Analyst EIN: 84-1746921
BPI Building Analyst
Analyst Certification #: 5066334

EnergySmart COLORADO

| Metric | Value | Metric | Value | Metric | Value |
|---|---|---|---|---|---|
| Building Type: | Single Family | Primary Roof: | Cathedral Ceiling | Combustion Zone Location: | Conditioned Space |
| Year Built: | 1900 | Construction: | Wood Frame | Ambient CO: | |
| Square Footage: | 2,144 | Exterior Finish: | Metal Roof | *Primary Heating Appliance* | |
| Primary Heating Fuel: | Natural Gas | Percentage of Total: | 100% | Worst Case Spillage: | Pass |
| Number of Bedrooms: | 3 | Existing R-Value: | 15 | Worst Case Flue CO Air Free: | |
| Number of Occupants: | 3 | Recommended R-Value: | 60 | Natural Conditions Spillage: | Pass |
| Electric Utility Provider: | GCEA | Secondary Roof: | | Natural Conditions Flue CO Air Free: | |
| Account #: | 474816 | Construction: | | *Hot Water Heating Appliance* | |
| Electricity Cost per kWh: | $0.12 | Exterior Finish: | | Worst Case Spillage: | Pass |
| Annual Electric Usage (kWh): | 0 | Percentage of Total: | % | Worst Case Flue CO Air Free: | |
| Annual Electric Cost: | $0 | Existing R-Value: | | Natural Conditions Spillage: | Pass |
| Gas Utility Provider: | Atmos Energy | Recommended R-Value: | | Natural Conditions Flue CO Air Free: | |
| Account #: | 4016964035 | Existing Window Type: | 1-pane, wood/vinyl frame | *Secondary Heating Appliance* | |
| Gas Cost per Therm: | $1.34 | Recommended Window Type: | Storm Clear + 1-pane, wood frame | Worst Case Spillage: | |
| Annual Gas Usage (Therms): | 0 | Front Window (sf): | 43 | Worst Case Flue CO Air Free: | |
| Annual Gas Cost: | $2,395 | Right Window (sf): | 49 | Natural Conditions Spillage: | |
| Cubic Volume (cf): | 24,870 | Back Window (sf): | 35 | Natural Conditions Flue CO Air Free: | |
| Blower Door Flow Rate (CFM50): | 4,917 | Left Window (sf): | 13 | Total # of Lamps: | 91 |
| Primary Foundation: | Vented Crawlspace | Heating System Type: | Furnace-Ducted | Incandescent/Halogen Lamps: | 17 |
| Percentage of Total: | 100% | Heating System Year Installed: | 1995 | LED or CFLs currently installed: | 71 |
| Existing R-Value: | 5 | Heating System Fuel: | Natural Gas | Florescent Tubes: | 3 |
| Recommended R-Value: | 20 | Efficiency Rating (AFUE): | | Refrigerator ENERGY STAR: | |
| Secondary Foundation: | | Recommended AFUE (or equiv.): | | Refrigerator kWh Usage per Year (est.): | 539 |
| Percentage of Total: | % | Secondary Heating System: | Furnace-Wall | Second Fridge ENERGY STAR: | |
| Existing R-Value: | 0 | Cooling System Type: | None | Second Fridge kWh Usage per Year: | |
| Recommended R-Value: | | Efficiency Rating (SEER): | | Freezer ENERGY STAR: | |
| Primary Wall Construction: | Wood Frame | Recommended SEER: | | Freezer kWh Usage per Year (est.): | |
| Exterior Finish: | Wood Siding | Fireplace Type: | Natural Gas | Dishwasher ENERGY STAR: | |
| Existing R-Value: | 15 | Hot Water System: | Storage | Clothes Washer ENERGY STAR: | |
| Recommended R-Value: | 38 | Hot Water System Year Installed: | 1995 | Clothes Dryer ENERGY STAR: | |
| Recommended Continuous R-Value: | 10 | Hot Water System Fuel: | Natural Gas | Clothes Dryer Fuel Source: | Natural Gas |
| Secondary Wall Construction: | | Set Temperature: | | Heat Tape Length (ft): | |
| Exterior Finish: | | Solar Thermal Assist: | N/A | Heat Tape Estimated kWh per month: | 0 |
| Existing R-Value: | | Pipes Insulated?: | No | Hot Tub Capacity: | |
| Recommended R-Value: | | Efficiency Rating: | | Hot Tub Estimated kWh per month: | 0 |
| Recommended Continuous R-Value: | | Recommended Efficiency: | | If Electric Baseboard, Length (ft): | |

**CRESTED BUTTE FIRE PROTECTION DISTRICT**
306 MAROON AVENUE ● *P.O. BOX 1009*
*CRESTED BUTTE, CO 81224*
*(970) 349-5333*
*ADMINISTRATION FAX: (970) 349-3420 ● OPERATIONS FAX: (970) 349-0438*
*WEBSITE: WWW.CBFPD.ORG*

August 10, 2025

Town Council
Town of Crested Butte
507 Maroon Avenue
Crested Butte, CO 81224

**Re: Consideration of 2024 International Fire Code and Coordination with Crested Butte Fire Protection District**

Dear Mayor Billick and Members of the Town Council,

On behalf of the Crested Butte Fire Protection District (CBFPD), thank you for the opportunity to engage in the Town's upcoming review and potential adoption of the 2024 editions of the International Code Council (ICC) codes. As the fire protection authority serving the Town of Crested Butte, and over 200 square miles of unincorporated Gunnison County, we strive to deliver consistent and effective fire and life safety services across our entire response area.

We would like to express our strongest interest in partnering with the Town on the adoption of the International Residential Code (IRC)—particularly as it relates to residential fire sprinkler provisions, outlined in Section R313 and first introduced in the 2009 edition and carried forward since. Residential fire sprinklers are a critical life safety measure, especially in modern homes built with lightweight engineered lumber, synthetic components, and glue-laminated assemblies. While these construction methods offer cost and energy advantages, they burn faster, produce more toxic smoke, and are far more prone to rapid structural failure under fire conditions than traditional materials. These hazards drastically shorten the time available for safe escape and rescue—often to less than 10 minutes. In these scenarios, no fire department, regardless of proximity or resources, can reliably respond and intervene in time to prevent loss of life. Residential sprinkler systems are the only tool that activates immediately at the source of the fire, controlling or extinguishing it in its earliest stages, minimizing toxic smoke production, and maintaining structural integrity long enough for residents to escape and responders to safely operate.

Beyond their life safety benefits, residential sprinklers also offer additional flexibility within other sections of the IRC. When homes are protected throughout with a sprinkler system designed in accordance with NFPA 13D, certain construction requirements may be reduced—such as increased allowable open space between dwellings, relaxed fire-resistance ratings for exterior walls, and expanded design options for site planning. These allowances can reduce

construction costs, offer more design freedom for builders, and make infill development more feasible, all while maintaining or even enhancing public safety.

As the Town considers its IRC adoption strategy, we are eager to support efforts around public education, implementation, and potential incentives for these vital systems.

In addition, we understand the Town is also considering adoption of the 2024 International Fire Code (IFC). We respectfully request that the Town consider not adopting the 2024 IFC at this time or in future updates. Instead, we believe there is a mutual opportunity to work toward an agreement in which CBFPD adopts, manages, and enforces the fire code across all jurisdictions we serve. This approach reflects our statutory authority under C.R.S. § 32-1-1002(1)(d)(I) and supports a more consistent and coordinated application of fire protection standards throughout our region.

Currently, Gunnison County does not separately adopt the IFC, instead relying on the District to apply and enforce it. Introducing a different version in the town code would create the potential for discrepancies in plan review, fire prevention, and enforcement, increasing confusion and complexity for property owners, contractors, and developers.

Importantly, the IFC is primarily concerned with multi-family and commercial structures—building types that are common across our district. Delegating adoption and enforcement to the fire district ensures a technically sound, consistent, and specialized approach without burdening the Town's Building Department with the complexities of commercial fire code administration.

That said, we remain fully open to working with the Town on any specific local amendments to the IFC, especially those related to Appendix D – Fire Apparatus Access Roads. We welcome continued collaboration to tailor provisions that meet both public safety and planning needs within the Town.

The District currently enforces the 2018 edition of the IFC and is committed to adopting the 2021 edition by the end of this year—bringing us into alignment with Gunnison County. While we recognize that changes between the 2021 and 2024 editions are relatively minor, we believe the 2021 version remains effective and appropriate until such time that all jurisdictions can update to the same edition—likely the 2024 or 2027 codes. Our longstanding practice is to adopt new code editions on a six-year cycle.

Thank you for your attention and continued collaboration. We welcome the opportunity to support your code adoption process and are happy to participate in any related discussions or public hearings.

Sincerely,





Sean Caffrey, Chief Executive Officer
scaffrey@cbfpd.org

Ric Ems, Fire Marshal
rems@cbfpd.org

# Staff Report
August 18, 2025

**To:** Mayor and Town Council

**Prepared By:** Shea Earley, Public Works Director

**Thru:** Dara MacDonald, Town Manager

**Subject:** Consideration of a Watershed Permit Application from Mount Emmons Mining Company

---

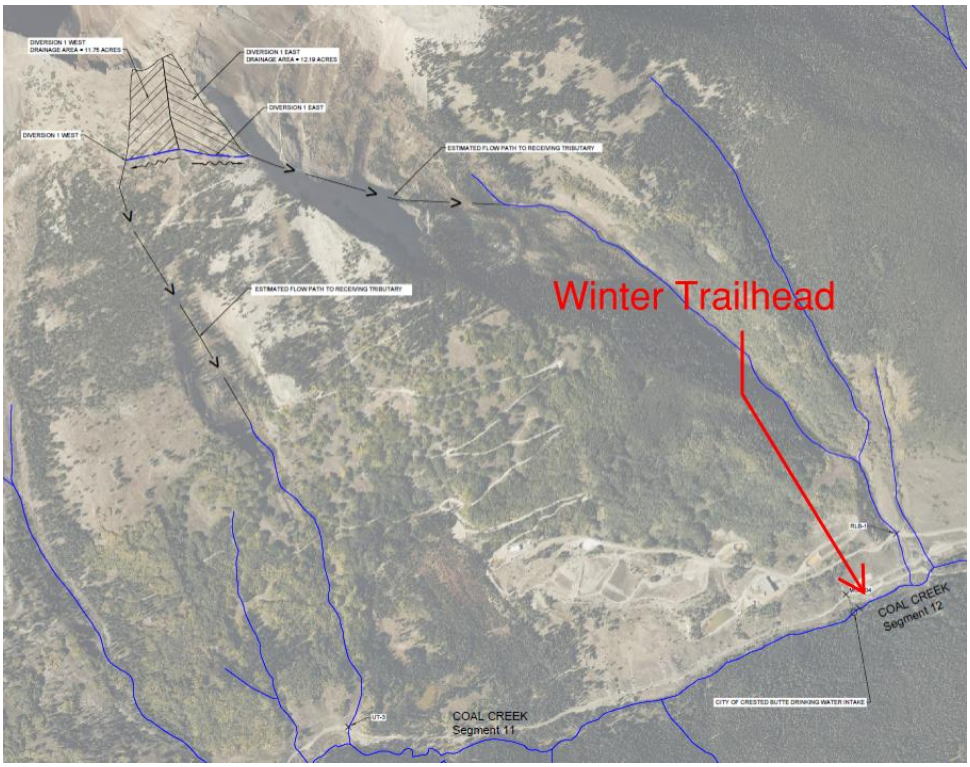
**Summary:**
The Mt Emmons Mining Company (MEMC) is proposing to construct 1,550 feet of lined open channel ditch to convey snow melt/runoff away from existing faults and fractures on Mt Emmons. Pursuant to Chapter 14 of the Town Code and based on the nature of the work, the applicant is required to apply for a Watershed Protection Permit.

**Previous Council Actions:**
Ordinance No 5, Series 1980 – Watershed Protection District Establishment
Ordinance No 1, Series 1996 – Revisions to Code
Ordinance No 6, Series 2008 – Revisions to Code
Ordinance No 4, Series 2013 – Revisions to Code
Ordinance No 6, Series 2023 – Updates to Chapter 14: Watershed Protection District

**Background:**
The purpose of the Watershed Protection District is to protect "the Town waterworks from injury and the municipal water supply from pollution". The Town typically sees between 2-5 applications a year with almost all of them being administratively permitted based on their designation as a residential development and the anticipated minimal disturbance to the watershed. Since MEMC is not considered a residential development, the applicant is required to obtain a watershed permit.

MEMC owns and operates the Keystone Mine site, located on the southern side of Mt Emmons. The property is located within the Coal Creek Watershed and within the Watershed Protection District boundaries.

Figure 1

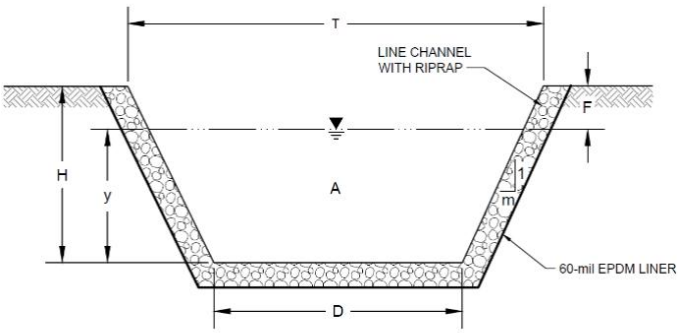



Historically, the property has been administratively managed by the United States Forest Service (USFS), since most of the property was located on federal land. In 2024, a land exchange occurred in which MEMC acquired this federal land, thereby privatizing the property associated with the Keystone Mine workings, tailings impoundments, and industrial water treatment plant. Due to the privatization of this property, the ongoing reclamation and remediation efforts now fall under the Town's Watershed Protection District.

**Discussion:**
MEMC took over management of the site from US Energy in 2016. Prior to the land exchange in 2024, MEMC constructed stormwater diversion structures 2-7, consisting of over 10,000 linear feet of stormwater diversion channels at elevations ranging from 9,980 ft to 11,882 ft. This work was performed in accordance with the Plan of Operations (PoO), which was approved and administered by the USFS. The objective of the stormwater diversion infrastructure is to reduce the infiltration of clean surface water (snow melt/runoff) into the mine workings, thereby avoiding the unnecessary contamination of clean surface water and the subsequent requirement to treat it. If approved, the watershed permit would authorize the remaining Diversion 1 work that was not constructed prior to the land exchange.

The work contemplated in 2025 focuses on the upper most diversion structure (Diversion 1) proposed on the site. See Figure 1. The improvements include approximately 1,550 linear feet of type 1, open channel with a rubber membrane liner and riprap (rock). See Figure 2.

Figure 2




NOTES:
1. ALL TYPE I DIVERSION CHANNELS SHOULD BE LINED, UNLESS SPECIFIED AS UNLINED ON DRAWINGS.

TYPE I DIVERSION CHANNEL TYPICAL CROSS SECTION



*Figure 2: Typical Type 1 open channel cross section drawing*

Based on site topography, it is anticipated that approximately 60% of the diverted water from Diversion 1 will flow east towards Red Lady Basin, which is downstream of the Town's drinking water intake. The remaining 40% of the diversion will carry diverted water west, towards an unnamed tributary, which enters Coal Creek upstream of the Town's drinking water intake. To ascertain what, if any, impacts to water quality would occur, MEMC provided available water quality data from Diversion 2 and the receiving tributaries. Due to "the high-altitude location and challenges with access during the periods of snow melt, water quality at Diversion 1 is not currently measured. However, based on the proximity (approximately 1,500 feet away) of Diversion 1 and Diversion 2, and similar soil characteristics in the area, existing water quality at Diversion 1 is assumed be similar to Diversion 2 water quality." In addition to the water quality data provided from Diversion 2, MEMC provided water quality data on the two receiving tributaries. Based on that data set, as well as the anticipated quantity of water diverted, water quality in Diversion 1 is not anticipated to degrade water quality in the watershed or impact the treatment works.

MEMC has proposed a monitoring schedule that utilizes the Plan To Resolve Uncertainty (PTRU) which supports the Temporary Modifications currently approved by the Water Quality Control Commission. Based on our understanding, the Temporary Modifications may be removed in the coming years due to the fact that MEMC no longer has demonstrated or predicted compliance problem for cadmium. With the uncertainty around the duration of the Temporary Modifications and associated PTRU, Staff recommends sampling and monitoring of Diversion 1 (if possible), Diversion 2, UT-3, and RLB-1 be required as a condition of the permit for at least 5 years after final reclamation of the improvements.

A preapplication conference was held on June 10th, 2025, with representatives from both Town Staff and MEMC present. Subsequently, MEMC provided a Watershed Permit Application on June 27, 2025 and a revised application on August 6, 2025. The Town contracted with Alpine Environmental Consultants to assist in the review of the application.

**Financial Impact:**
A cost reimbursement agreement has been executed with MEMC to cover all cost associated with the review of this application.

**Legal Review:**
The Town Attorney has assisted staff with the review of this application.

**Recommendation:**
Town staff recommend that the permit be approved with conditions. The recommended conditions of approval are as follows:

1) The applicant shall monitor water quality and flow in UT-3 and RLB-1 according to the existing Plan To Resolve Uncertainty for the duration of the temporary modification applied to Coal Creek or five years after final reclamation of all disturbed areas associated with Diversion 1, whichever is longer. The laboratory and field measurements included in the Plan to Resolve Uncertainty are the key indicators for this project.
2) The applicant shall attempt to monitor water quality and flow in Diversion 1 and Diversion 2 on both the east and west outlets at least once per year during spring runoff or other conditions conducive to generating flow in the uppermost diversion ditches. Water quality monitoring and flow measurement shall occur according to the existing Plan To Resolve Uncertainty for the duration of the temporary modification applied to Coal Creek or five years after final reclamation of all disturbed areas associated with Diversion 1, whichever is longer. The laboratory and field measurements included in the Plan to Resolve Uncertainty are the key indicators for this project.
3) The applicant shall provide annual reports to the Town Manager. The annual reports shall identify when MEMC attempted to sample Diversion 1 and Diversion 2, include the raw laboratory and field data, a summary of water quality conditions relative to baseline conditions, and an assessment of whether significant water quality degradation occurred during the monitoring period and potential causes for such degradation for all locations identified in Conditions 1 and 2. During the term of the temporary modifications, the annual report for the Plan To Resolve Uncertainty can be used to satisfy this requirement.

The recommended conditions of approval are necessary to ensure that the Watershed Protection Standards are likely to be satisfied. Specifically, these conditions help ensure that Diversion 1 is not likely cause significant degradation of surface water quality.

**Proposed Motion:**
A Council member should make a “motion to approve with conditions MEMC’s Watershed Protection District Permit with the three conditions provided in the staff report” followed by a second and roll call vote.

**Attachements:**
Exhibit A: Watershed Permit Application
Exhibit B: AEC Completeness Assessment

# Watershed Protection District Permit

For Crested Butte Watershed. Includes Town of Irwin and section of Wildcat Watershed.

Crested Butte, CO 81224
Phone: 970-349-5338
Email: cdegroot@crestedbutte-co.gov

## 1. GENERAL DATA (Completed by the applicant for Certificate of Exemption, FONSI or Watershed Permit)

### A. Applicant Information

Name of Applicant: Mt. Emmons Mining Company, Inc.

Mailing Address: 333 N. Central Avenue, Phoenix, Arizona, 85004

Telephone Number: 602-366-7826

Email Address: wcobb@fmi.com; dgosen@fmi.com; jsisson@fmi.com

Engineer or Constructor (not required) _____
(Provide a letter authorizing agent to represent you, include representative's name, street and mailing address, telephone number, and FAX)

### B. Site Data

Name of Development: Diversion 1

Street Address: 2131 County Rd 12, Crested Butte, CO 81224

Legal Description: Lot 33 Block 31 Subdivision 13 South (attach description)

Disclosure of Ownership: List all owners' names, mortgages, liens, easements, judgments, contracts and agreements that run with the land. (May be in the form of a current certificate from a title insurance company, deed, ownership and encumbrance report, attorney's opinion, or other documentation acceptable to the Town Attorney)

Enc. Attachment 1

I certify that I have read the application form and that the information and exhibits herewith submitted are true and correct to the best of my knowledge.

Signature of applicant/agent _____ Date 11 August 2025

Signature of property owner _____ Date _____

After review by Town of Crested Butte, a preapplication meeting will be setup by email or phone.

Geosyntec consultants

engineers | scientists | innovators

# TOWN OF CRESTED BUTTE WATERSHED PERMIT ATTACHMENT – DIVERSION 1

*Prepared for*

**Mount Emmons Mining Company**
Crested Butte, Colorado 81224

*Prepared by*

Geosyntec Consultants, Inc.
Lakewood Colorado, 80228

Project DE0239

Date: June 27th, 2025
Revised: August 6th, 2025

**TABLE OF CONTENTS**

OVERVIEW ..... 1

SEC. 14-3-10. WATERSHED PERMIT APPLICATION ..... 1

SEC. 14-3-30. INFORMATION DESCRIBING APPLICANT ..... 1

SEC. 14-3-40. INFORMATION DESCRIBING PROPOSED DEVELOPMENT ..... 2

SEC. 14-3-50. PROPERTY RIGHTS, PERMITS, AND OTHER APPROVALS ..... 3

SEC. 14-3-60. TECHNICAL AND FINANCIAL FEASIBILITY OF DEVELOPMENT ..... 3

SEC. 14-3-70. TOWN WATERWORKS AND MUNICIPAL WATER SUPPLY ..... 4

SEC. 14-3-80. SURFACE WATER QUALITY AND QUANTITY ..... 4
- Water quantity analysis ..... 6
  - Watershed Overview and Modeling Extents ..... 6
- Rational Method ..... 6
  - Time of Concentration ..... 7
  - Land Cover/Land Use ..... 7
  - Channel Dimensions ..... 8
  - Input Summary ..... 8
- Results ..... 9

SEC. 14-3-90. GROUNDWATER QUALITY AND QUANTITY ..... 10

SEC. 14-3-100. FLOODPLAINS, WETLANDS, AND RIPARIAN AREAS ..... 10

SEC. 14-3-110. AQUATIC HABITAT ..... 10

SEC. 14-3-120. SOIL AND GEOLOGIC CONDITIONS AND NATURAL HAZARDS ..... 10

SEC. 14-3-130. SPILL PREVENTION, STORAGE, CONTROL, COUNTERMEASURE, AND CONTINGENCY PLAN ..... 11

SEC. 14-3-140. EMERGENCY RESPONSE PLAN ..... 11

SEC. 14-3-150. WATER QUALITY MONITORING AND MITIGATION PLAN ..... 11

SEC. 14-3-160. EROSION AND SEDIMENT CONTROL PLAN ..... 11

SEC. 14-3-170. DRAINAGE PLAN ..... 12

SEC. 14-3-180. GRADING PLAN ..... 12

SEC. 14-3-190. REVEGETATION AND WEED MANAGEMENT PLAN .....12

SEC. 14-3-200. ADDITIONAL SUBMITTAL REQUIREMENTS FOR WATER AND WASTEWATER TREATMENT SYSTEMS .....13

SEC. 14-3-210. ADDITIONAL SUBMITTAL REQUIREMENTS FOR MUNICIPAL AND INDUSTRIAL WATER PROJECTS. .....13

ARTICLE 4 – WATERSHED PROTECTION STANDARDS .....13

## OVERVIEW

Geosyntec Consultants (Geosyntec) has prepared this Attachment to the Watershed Protection District Permit for the Mount Emmons Mining Company (MEMC) for Construction of Diversion 1 (DIV1). Consistent with Crested Butte, Colorado, Municipal Code, Chapter 14 Watershed Protection District, the purpose of this Attachment is to provide the information describing the proposed development and applicable information included in Article 3, (Ord. No. 6, § 2(Exh. A), 4-3-2023).

## SEC. 14-3-10. WATERSHED PERMIT APPLICATION

Per the Watershed Protection District Permit Application for Diversion 1 – Completeness Assessment memorandum (Completeness Memo), the following requirements have been waived by the Town of Crested Butte:

Section 14-3-30 (a)(3), (a)(4), and (a)(5)

## SEC. 14-3-30. INFORMATION DESCRIBING APPLICANT

MEMC. is seeking this Watershed Protection District Permit for Crested Butte Watershed. The agent(s) of the owner are listed below. MEMC and it's agents have 23 years of construction and supervision experience, including 10 years at the former Keystone Mine. MEMC is a subsidiary of Freeport-McMoRan which has a long-standing history of mine and site operations. The Owners Agent will be responsible for hiring a qualified contractor and oversight team to construct the proposed development (DIV1).

**Owner and Agents to Owner:**

William E. Cobb, VP
Mt Emmons Mining Company, Inc.
333 N Central Avenue
Phoenix, Arizona 85004
602-366-7826
wcobb@fmi.com

David Gosen
Mt Emmons Mining Company, Inc.
333 N Central Avenue
Phoenix, Arizona 85004
602-366-7312
dgosen@fmi.com

Jordan Sisson
Mt Emmons Mining Company, Inc.
333 N Central Avenue
Phoenix, Arizona 85004
520-437-8678
jsisson@fmi.com

This report has been prepared by Geosyntec Consultants, a consulting and engineering firm that has supported site operations including water quality sampling, stormwater management

planning, and other water management services since 2007. Additional information requests have been waived by the Town of Crested Butte as described in Section 14-3-10.

## SEC. 14-3-40. INFORMATION DESCRIBING PROPOSED DEVELOPMENT

The proposed development is 1,550 linear feet (LF) of a Type 1, lined open channel. Average size of the trapezoidal open channel is a three feet across the bottom and ten to twelve feet from top crest to crest. Side slopes range between 2 and 3 to 1.

The objective of the channel is to convey snow melt/runoff away from existing faults and fractures on Mt Emmons. DIV 1 includes two sections based on a topographic high point, DIV 1 West, which flows west to an unnamed tributary of Coal Creek, monitored at UT-3, and DIV 1 East, which flows east to the Red Lady Basin drainage, monitored at RLB-1 (**Figure 1, Exhibit A**).

- 425 LF of DIV 1 East were constructed in 2024. This work started at the east end of the channel and included a drainage basin at the edge of Red Lady Basin. There is 475 LF of DIV 1 East planned for construction in 2025.
- 650 LF of DIV 1 West will be constructed in 2025.

There is no wastewater treatment system or water supply required to serve the proposed development.

Existing use of the property is an inactive mine site. Adjacent properties are owned by the United States Forest Service (USFS) and are classified as a National Forest.

One section of DIV 1 East was constructed in Summer 2024. Construction of the remainder of DIV 1 East and West is scheduled to begin in August 2025 and is estimated to take approximately one month.

All development will be performed within the Coal Creek Watershed Protection District which includes Upper Gunnison COGUUG11 (Segment 11) and COGUUG12 (Segment 12) (5 CCR 1002-35).

A vicinity map and site plan of the proposed development is included in **Figure 2, Exhibit A.**

Additional items required per 14-2-40(b) are described in the responses below.

As described further in the final Section, Article 4 – Watershed Protection Standards, of this Watershed Permit Attachment, the proposed development meets the standards described in Article 4 Watershed Protection Standards. DIV 1 is located on MEMC property and does not contact any other mineral rights. DIV1 will not add any new chemical loads to the Coal Creek Watershed. It is an improved drainage channel intended to capture sheet flow/snow melt across the top of the mountain to improve water quality within the watershed and reduce the volume of water treated.

## SEC. 14-3-50. PROPERTY RIGHTS, PERMITS, AND OTHER APPROVALS

A description and documentation of property rights, easements, and conservations easements is provided in the attached **Exhibit B.**

Work will be performed on MEMC's private land and has obtained the property rights and easements necessary for the proposed development.

DIV 1 is part of MEMC's Stormwater Management Plan (SWMP), provided in **Exhibit C**. The SWMP will be updated at the completion of construction to the State of Colorado in February 2026, in accordance with the Colorado Discharge Permit System (CDPS) certification number COR040284 under CDPS Permit No. COR040000 for Stormwater Associated with Metal Mining Industrial Activities. CDPS Permit No. COR040000 was renewed in 2006 and went into administrative extension in 2011. MEMC received CDPS Permit NO. COR040284 in 2016. The COR040000 General Permit and COR040284 Certification remain the effective permit documents until the Colorado Department of Public Health and the Environment (CDPHE)'s Water Quality Control Division (WQCD) renews the permit.. Stormwater permit documents are also provided in **Exhibit C.**

MEMC is currently seeking a Gunnison County Reclamation Permit.

MEMC is not aware of any additional permits that are currently required for the proposed development.

MEMC's 2024 Annual Report for the Plan to Resolve Uncertainty (PTRU) dated March 31, 2025, is provided in **Exhibit D.** This is an annual report provided to CDPHE's WQCD under MEMC's PTRU, which was developed to support the temporary modifications to the cadmium water quality standards in Coal Creek adopted by the Colorado Water Quality Control Commission. The temporary modifications have a limited effectiveness and currently expire December 31, 2027.

A copy of the Spill Prevention, Control, and Countermeasures Plan (SPCC) required under 40 CFR Part 112 is provided in **Exhibit E**.

MEMC has provided the relevant agencies with copies of the above-referenced Exhibits, and they are maintained in MEMC's files. Please note that the Exhibits are not available for public comment as part of this document.

## SEC. 14-3-60. TECHNICAL AND FINANCIAL FEASIBILITY OF DEVELOPMENT

The proposed development is technically and financially feasible. The estimated cost to construct DIV 1 is $156,990.51. MEMC will expense these costs as part of the site's annual operating budget. Construction commenced in 2024. Construction will be completed in approximately 2 months after it has been re-initiated in August 2025. No revenue or operating expenses are expected for the proposed development.

## SEC. 14-3-70. TOWN WATERWORKS AND MUNICIPAL WATER SUPPLY

No facility associated with the Town waterworks will be affected by the proposed development. Water diverted in DIV 1 East will flow towards Red Lady Basin. The receiving tributary, RLB-1, enters Coal Creek downstream of the Town of Crested Butte's municipal water intake. The water diverted in DIV 1 West, will flow towards an unnamed tributary, UT-3, which enters Coal Creek upstream of the Town of Crested Butte's municipal water intake. DIV 1 is an improved drainage of the existing drainage patterns observed prior to construction. The fate of this water is the same receiving tributaries and infiltration into naturally mineralized portions of the mountain and the old mine workings. The objective of DIV 1 is to reduce infiltration into the mountain and mine workings and decrease loading to the Keystone Mine Water Treatment Plant and Coal Creek Watershed. Section 14-3-80 describes the surface water quality and quantity. Based on the water quality analysis described in more detail in Section 14-3-80, flow from DIV 1 has concentrations of metals, such as aluminum and zinc, up to a magnitude lower than what is measured in the receiving streams. Although higher concentrations of total recoverable arsenic were measured in Diversion 2 (DIV 2) West (proxy for DIV 1 West), there is only one data point for this constituent, and dissolved concentrations were below detection limits. Due to the comparatively low volumes of flow anticipated in DIV 1, there are no significant impacts to the Town waterworks anticipated by the proposed development.

## SEC. 14-3-80. SURFACE WATER QUALITY AND QUANTITY

Water flows where DIV 1 will be constructed is anticipated to be a shallow sheet flow that cannot be captured for water quality testing. Due to the high altitude location and challenges with access during the periods of snow melt, water quality at DIV 1 is not currently measured. However, based on the proximity (approximately 1,500 feet away) of DIV1 and DIV 2, and the similar soil characteristics in the area, existing water quality at DIV1 is assumed to be similar to DIV 2 water quality.

Available water quality for DIV 2 East and West (as a proxy for DIV 1 East and West) was compared to average water quality measured in the receiving tributaries at UT-3 (west) and RLB-1 (east) measured during spring runoff. Only one water quality data point on arsenic was available, therefore sampling flow from DIV 1 after installation, as access allows, is recommended.

| Location | Count | Al (TR) µg/L | Al (Diss) µg/L | As (TR) µg/L | As (Diss) µg/L | Cd (Diss) µg/L | Cu (Diss) µg/L | Pb (Diss) µg/L | Mn (Diss) µg/L | Zn (Diss) µg/L |
|---|---|---|---|---|---|---|---|---|---|---|
| DIV2 West | 4 | 84.5 | 23.3 | 1.20 | ND | ND | 0.90 | 0.15 | 11.0 | 2.50 |
| UT-3 | 10 | 328 | 147 | 0.33 | <0.20 | 0.33 | 1.20 | 0.20 | 12.1 | 152 |
| DIV2 East | 1 | 976 | 160 | 2.40 | 1.70 | ND | 1.00 | 1.30 | 30.1 | 3.00 |
| RLB-1 | 10 | 1,075 | 310 | 1.39 | <0.20 | 0.67 | 4.10 | 0.51 | 73.1 | 413 |

Orange shading indicates concentrations that are higher in the Diversion than the receiving tributary.

The Coal Creek Watershed has been extensively studied by the Coal Creek Watershed Coalition (CCWC), Geosyntec (formerly EnviroGroup), Mount Emmons Mining Company, and the United States Environmental Protection Agency (U.S. EPA). As part of the PTRU for the Temporary Modification of stream standards that MEMC has established with the Water Quality Control Commission, annual reports on the ambient water quality in upstream segment 11 and receiving segment 12 are provided to CDPHE's WQCD during the life of the temporary modifications.

Included in the WQCD PTRU are two locations of special interest for the Watershed Protection Plan. These are location UT-3 (called Bog-00 by the CCWC), at the mouth of the unnamed drainage just upstream of the Iron Fen in segment 11, and RLB-1 just above the mine road on the lowermost part of the main Red Lady Basin drainage in segment 12 (**Figure 1, Exhibit A)**. Both locations have been sampled seasonally for many years and the seasonal ambient water quality and comparison to Table Value Standards (TVS) for these two locations is provided in **Exhibit F**. Note that a final Total Maximum Daily Load has not been developed for Coal Creek.

As shown in **Exhibit F**, location UT-3 exceeds TVS for cadmium and zinc in both high flow (April-June) and low flow (July-March) seasons. The elevated cadmium and zinc concentrations are likely due to contributions from the gossan which is located on the west side of the MEMC Keystone vein and former underground mine. Based on the topography, it is assumed that the Iron Fen does not impact water quality in UT-3. These concentrations may be slightly reduced based on flows from DIV1 West.

Arsenic also appears to exceed the water plus fish standard of 0.02 ug/L for this segment in April-June, which is currently subject to a State-wide temporary modification proposed by the WQCD. Aluminum exceeds both chronic and acute TVS for Regulation 31 Basic Standards, which has not been adopted on Coal Creek Segments 11 and 12 .

Ambient chronic copper and lead slightly exceed the chronic TVS for April-June. These concentrations may be slightly reduced based on flows from DIV1 West.

These ambient water quality exceedances for arsenic, cadmium, and zinc in UT-3 are consistent with the 303(d) impairment listing of these three parameters in this segment (Segment 11) as shown in **Exhibit F**.

The flows in this tributary are strongly seasonal, averaging 1.59 cfs in April-June and 0.06 cfs in July-March. Flow contributions from the western portion of surface water Diversion 1 are estimated to be a maximum flow of 0.16 cfs, dominantly during high flow, and comprised of clean snowmelt. The diversion is not expected to change the flow path for snowmelt but merely enhance the volume of runoff. There is expected to be some slight dilution of the ambient metal concentrations in this tributary.

As shown in **Exhibit F,** location RLB-1 exceeds TVS for chronic and acute aluminum, cadmium, copper, and zinc and chronic lead in high flow (April-July) and for chronic and acute zinc during low flow (July-March). The ambient water quality exceedances for cadmium, copper and zinc are consistent with the 303(d) impairment listing for these parameters on this tributary (designated COGUUG12_D) and with the cadmium and zinc impairment in mainstem segment 12 (**Exhibit F)** The aluminum TVS exceedances (Regulation 31) and slight exceedance of the chronic lead TVS during high flow are new findings. Red Lady Basin drains an area of highly altered and mineralized material that contributes metals to the drainage.

The flows in this tributary are strongly seasonal, averaging 5.29 cfs in April-June and 0.156 cfs in July-March. Flow contributions from the eastern portion of surface water DIV 1 are estimated to be 0.17 cfs, dominantly in the high flow season, and comprised of clean snowmelt. The maximum flow measured at DIV 2 is approximately 0.05 cfs, indicating that flows at DIV 1 may be overestimated.

The diversion is not expected to change the flow path for snowmelt but merely enhance the volume of runoff. This flow will cross areas of exposed, altered, mineralized rock and is expected to have a composition similar to the current ambient concentrations in Red Lady Basin.

The current Regulation 35 standards for the two Coal Creek segments are provided in **Exhibit F**. It should be noted that there is a site-specific secondary water supply standard for manganese of 191 ug/L, chronic and acute cadmium Temporary Modifications in segment 12 expiring December 31, 2027, and a chronic arsenic Temporary Modification for both segments expiring December 31, 2029.

## Water quantity analysis

Geosyntec performed a series of calculations to estimate peak flows for DIV1 based on three different storm events: 10-year, 25-year, and 100-year, 24-hours storm events

The Rational Method was used for evaluating the hydrologic peak flows in DIV 1. Rainfall data from National Oceanic and Atmospheric Administration (NOAA) Atlas 14 were used and the National Resource Conservation Service (NRCS) equations for time of concentrations were used, as found in *Water Resource Engineering, 3rd edition by David Chin.*

### Watershed Overview and Modeling Extents

**Figure 1, Exhibit A** provides an overview of the delineated extents for capture of flow routing to each diversion. The extents were delineated based on the available topographic information, as well as slopes, grades, and lengths of flow for time of concentration determination.

## Rational Method

The simplified equation for the Rational Method is as follows:

$$Q = C\ I\ A$$

Where:

Q = peak flow (cubic feet per second)

C = runoff coefficient (assumed to be 0.40 for steep mountain slopes with evergreen forest, sparse undergrowth, and bare rock.)

I = rainfall intensity (inches per hour)

A = Drainage Area (acres)

**Time of Concentration**

Time of concentration was determined using NRCS equations for sheet flow, shallow concentrated flow, and channelized flow through the Diversion. The equations for each parameter of the time of concentration are as follows:

**Time of Concentration**

Equation:

$$t_c = t_{sheet} + t_{shallow\ concentrated} + t_{channelized}$$

$t_c$ = total time of concertation

**Sheet Flow**

Equation:

$$t_{sheet} = \frac{5.5}{\sqrt{P_{24}}}\left(\frac{n\,L_{sheet}}{\sqrt{S_0}}\right)^{\frac{4}{5}}$$

Where:

N = manning's roughness coefficient for overland sheet flow, assumed to be 0.03 given the large boulders and relatively unvegetated sloped terrain.

$L_{sheet}$ = length of sheet flow, assumed to be 330 feet

P = precipitation intensity for the design storm (inches per hour)

$S_0$ = the average slope of sheet flow, measured at approximately 40% on average

**Shallow Concentrated Flow**

Equation:

$$t_{sc} = \frac{L_{sc}}{V_{sc}} = \frac{L_{sc}}{kS_0^{\frac{1}{2}}}$$

Where:

$L_{sc}$ = Length of shallow concentrated flow (ft)

K = flow coefficient, assumed to be 600.24 ft/min. based on the value for alluvial fans in wester mountain regions from Chin, 3rd Ed.

$S_0$ = the average slope of shallow Concentrated flow measured at approximately 40% on average

**Channelized Flow**

Equation:

$$t_{channel} = \frac{L_{channel}}{V_{channel}}$$

L = total length of the channel

V = average velocity of the channel as determined by Manning's Equation for open channel flow

**Manning's Equation for open channel flow**

Equation

$$V = \left(\frac{1.486}{n}\right) R^{\frac{2}{3}} S^{\frac{1}{2}}$$

Where:

V = Average Velocity

n = Manning's roughness coefficient for channelized flow, assumed as 0.055 for rip rap lining

R= hydraulic radius (ft)

S = average slope of the channel (ft/ft)

**Channel Dimensions**

Based on information provided by site measurements and details from the construction of Diversion 1, the following dimensions for the trapezoidal channels were used:

Base width: 3 feet

Height: 1.8 feet

Side slopes: 2.5 feet (horizontal to 1 foot (vertical)

**Input Summary**

The table below summarizes the input parameters for each diversion for that were used in for the Rational Method.

| Diversion | Area (Acres) | Sheet flow length (ft) | Shallow flow length (ft) | Overland flow $S_0$ (%) | Channel flow Length (ft) | Channel flow Slope (%) |
|---|---|---|---|---|---|---|
| Div 1 - East | 12.19 | 330 | 836 | 40% | 785 | 8.2 |
| Div 1- West | 11.75 | 330 | 787 | 40% | 650 | 2.4 |

## Results

Based on the calculations, Geosyntec estimated the peak flows for three design storm events using the Rational Method. The results of this analysis are provided in the table below.

| Diversion | $V_{channel}$ (ft/s) | $t_c$ - 100 yr(min) | $t_c$ - 25 yr (min) | $t_c$ - 10 yr (min) | Q100 (cfs) | Q25 (cfs) | Q10 (cfs) |
|---|---|---|---|---|---|---|---|
| Div 1 East | 2.47 | 33.4 | 37.2 | 40.0 | 11.7 | 8.3 | 6.6 |
| Div 1- West | 2.38 | 32.5 | 36.3 | 39.0 | 11.4 | 8.1 | 6.5 |

Notes:
$V_{channel}$ = velocity in the channel
$t_c$ – 100 year = time of concentration for a 100-year storm
$t_c$ – 25 year = time of concentration for a 25-year storm
$t_c$ – 10 year = time of concentration for a 10-year storm
Q100 = flow for a 100-year storm
Q25 = flow for a 25-year storm
Q10 = flow for a 10-year storm

To estimate the annual volumes of flow being diverted by Diversion 1 East and Diversion 1 West for typical dry, wet, and average years, in addition to evaluating peak flows for stormwater events, Geosyntec utilized daily weather data provided by the National Oceanic and Atmospheric Administration (NOAA) for Crested Butte weather station USC00051959 for precipitation and snowfall. Data from the United States Department of Agriculture Natural Resource Conservation Service (USDA NRCS) SNOTEL database was also used to estimate an average snow water equivalency for the area. Geosyntec aggregated data from 2005 to 2024 to provide robust and recent climate information for estimating the dry, wet, and average years for the site.

Annual rainfall surface runoff volumes were estimated by multiplying the total annual rainfall by the drainage area and the runoff coefficient assumed during the hydrology analysis of 0.4 to roughly estimate anticipated surface runoff. Annual snowfall surface runoff volumes were estimated similarly using snowfall data from SNOTEL for the peak minimum, maximum, and average snow water equivalent snowpack for the Butte, CO (380) station, and multiplying by the drainage area and runoff coefficient. The table below provides a summary of the dry, wet, and average water volumes in each diversion channel.

| Diversion 1 West Water Volumes (acre-feet) | | Diversion 1 East Water Volumes (acre-feet) | |
|---|---|---|---|
| **Wet Year** | 21.43 | **Wet Year** | 22.24 |
| **Dry Year** | 8.99 | **Dry Year** | 9.33 |
| **Average Year** | 16.22 | **Average Year** | 16.83 |

The impervious surface of the land disturbed by the proposed development is less than twelve percent (12%) of the total acreage affected by the proposed development

## SEC. 14-3-90. GROUNDWATER QUALITY AND QUANTITY

The proposed development will not significantly degrade groundwater quality and quantity within the Watershed Protection District. Water will remain in the Coal Creek Watershed. There are no identified seeps or springs in the area of the proposed development.

## SEC. 14-3-100. FLOODPLAINS, WETLANDS, AND RIPARIAN AREAS

There are no wetlands or floodplains within the boundaries of the proposed development and extending at least one hundred (100) feet from the boundaries of the proposed development, therefore the proposed development will not significantly degrade wetlands and riparian areas.

## SEC. 14-3-110. AQUATIC HABITAT

There is no aquatic habitat in the area of the proposed development, therefore no significant adverse effect on the aquatic habitat is expected. Following commencement of the development, the watercourse affected by the proposed development will be kept free of trash, debris, excessive vegetation, and other obstacles that pollute, contaminate, or significantly retard the flow of water through the watercourse. Structures legally located in or adjacent to the watercourse will be maintained so that the structure will not become a hazard to the use, function, or physical integrity of the watercourse.

## SEC. 14-3-120. SOIL AND GEOLOGIC CONDITIONS AND NATURAL HAZARDS

Geologic fracture zones are included on the Site Plan provided on **Figure 2** in **Exhibit A**.

The proposed development is not subject to a significant risk from soil conditions and geologic hazards based on that there are no significant changes to topography, natural drainage patterns, soil erosion potential and floodplains. No changes to stream sedimentation is anticipated.

Occasionally, small avalanches have been reported in the Red Lady Bowl, east of the proposed development (Crested Butte Avalanche Center), however the proposed development is not causing a change to avalanche area and will not create an unstable slope.

## SEC. 14-3-130. SPILL PREVENTION, STORAGE, CONTROL, COUNTERMEASURE, AND CONTINGENCY PLAN

Hazardous materials, pesticides, petroleum products, and other substances will not be used during operation of the proposed development. All construction work will be performed in accordance with the approved SPCC plan required under 40 CFR Part 112. The SPCC plan is provided in **Exhibit E**.

## SEC. 14-3-140. EMERGENCY RESPONSE PLAN

No active operations are included as part of the proposed development. All construction activities will be performed in accordance with applicable health and safety requirements including MEMC's Health and Safety program which includes procedures for timely Emergency Response. MEMC is a Occupational Safety and Health Administration (OSHA) registered site and all operations are performed in accordance with OSHA regulations.

## SEC. 14-3-150. WATER QUALITY MONITORING AND MITIGATION PLAN

Water quality will be monitored in the receiving tributaries at UT-3 and RLB-1 as part of MEMC's PTRU supporting the temporary modifications adopted by the Water Quality Control Commission. Currently monitoring in the receiving streams is performed monthly during spring runoff (April, May, June) and once in quarters three and four. Based on current water quality projections, the proposed development will not cause degradation in receiving tributaries. Initial sampling after DIV 1 is completed, will not be implemented due to the access challenges that are posed by the location of DIV 1. DIV 1 is located at approximately 12,000 feet in elevation, while the Keystone Mine WTP is located at approximately 9,500 feet. The access road is plowed to approximately 10,000 feet, therefore the remaining 2,000 feet would need to be accessed by foot during snow melt. Additionally, there is limited cell service at MEMC providing additional challenges for remote monitoring systems. Lastly, estimating when snowmelt will be flowing into DIV 1 remains a challenge, as demonstrated by the limited data available at DIV 2.

Monitoring water quality at the receiving tributaries will be implemented as part of the existing watershed sampling that is required for the PTRU. These locations have a robust data set that can be used to monitor any water quality changes over time. These water quality changes are provided as part of the annual report for the PTRU. Additional key indicators are not necessary as DIV 1 is intercepting sheet flow from the snowmelt that is only in contact with naturally occurring geology.

Estimated costs for the whole of PTRU monitoring is approximately $200,000 annually.

## SEC. 14-3-160. EROSION AND SEDIMENT CONTROL PLAN

Best Management Practices (BMPs) for erosion and sediment control will be implemented during construction of the proposed development. BMPs for this channel will include:

- Locating and siting channels in areas that minimize impact, footprint, and disturbance to existing landscape.
- When constructing and excavating the channel footprint, all excess soil, slash, and trees are compacted on the side slopes of the channel to stabilize the fill slope and prevent future erosion.
- Maintain a slope of no more than 2:1 with 3:1 or less specified where possible, prior to compacting the side slopes.
- Install wattles or rock socks on steeper areas during construction to help reduce sedimentation from any larger disturbances or material stockpiles.
- Install silt fence around staging area/material stockpile during construction
- Install wattles along the length of the channel or spread wood straw. Wood straw is a heavier wood strand that holds down seed and reduces erosion of recently disturbed soils
- After construction, apply native seed to the benches of the channel and cut/fill slope sides to promote native vegetation for restoring the area.

Construction is currently scheduled to begin in mid-August and take up to two months. The SWMP is provided in **Exhibit C** and will be updated to included DIV 1 after construction is completed.

## SEC. 14-3-170. DRAINAGE PLAN

The proposed development is considered part of the stormwater management system for MEMC to convey flows from snow melt during spring runoff and will be incorporated into MEMC's stormwater management plan for the site. No buildings or facilities are being constructed as part of the proposed development.

## SEC. 14-3-180. GRADING PLAN

The proposed development will not affect any natural features. No temporary roads have been designed for use during the construction period. Excavated material will be used to construct the channel profile. The channel will include a geosynthetic clay liner (GCL) and locally harvested riprap from the excavation on top to stabilize the channel. The 2025 SOW prepared by Trout Unlimited is provided in **Exhibit G**.

## SEC. 14-3-190. REVEGETATION AND WEED MANAGEMENT PLAN

As described in Sec. 14-3-160, construction areas and the bench of the channel will be revegetated through wood straw and application of native seed.

## SEC. 14-3-200. ADDITIONAL SUBMITTAL REQUIREMENTS FOR WATER AND WASTEWATER TREATMENT SYSTEMS

There are no existing domestic water and wastewater treatment facilities in the vicinity of the proposed development. There are no additional submittal requirements for water and wastewater treatment systems.

## SEC. 14-3-210. ADDITIONAL SUBMITTAL REQUIREMENTS FOR MUNICIPAL AND INDUSTRIAL WATER PROJECTS.

The existing use is not a municipal or industrial water project. Therefore, additional submittal requirements are not applicable (N/A).

# ARTICLE 4 – WATERSHED PROTECTION STANDARDS

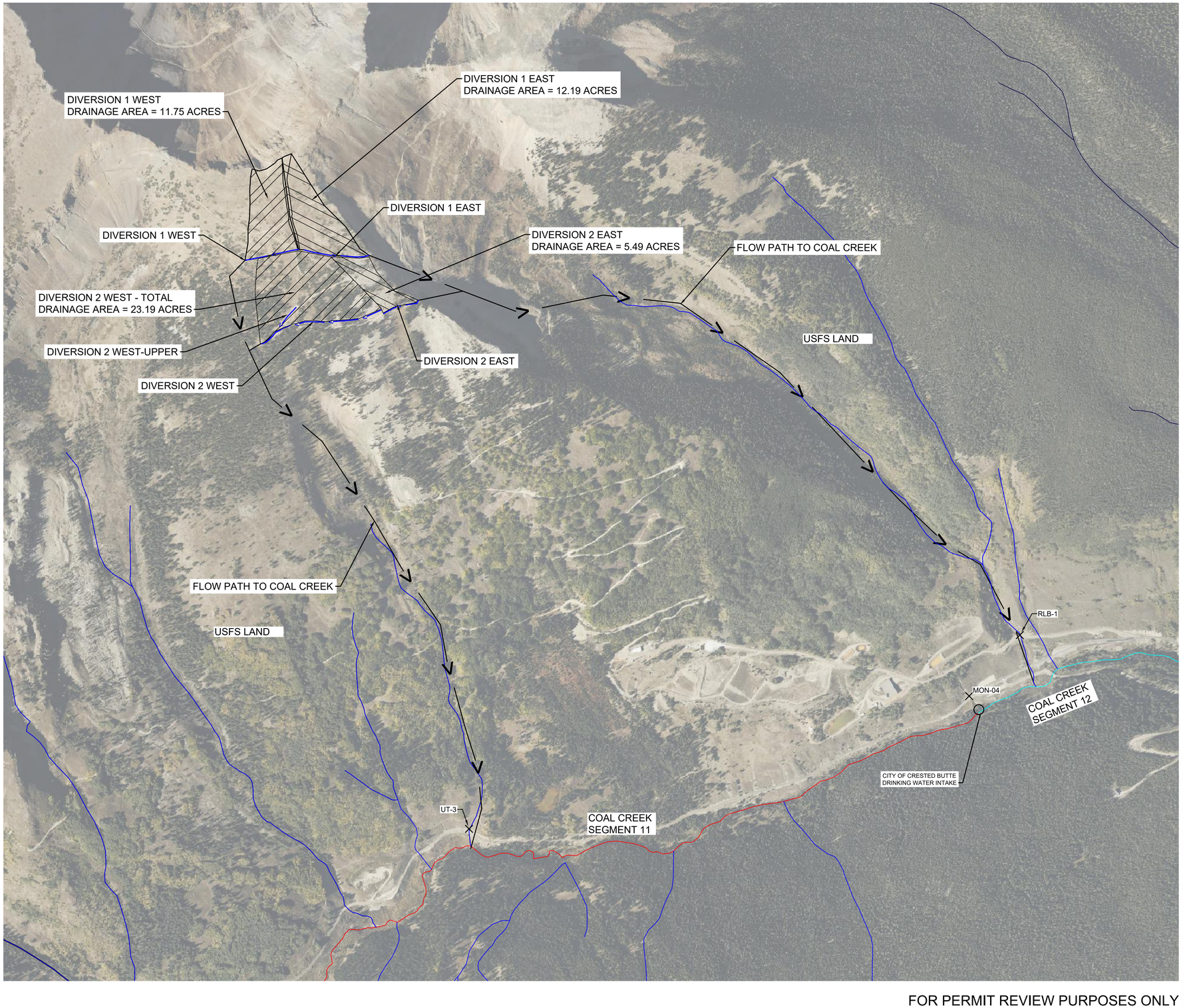
In summary, as described above, the proposed development of DIV 1 involves constructing an improved drainage channel intended to capture sheet flow/snow melt across the top of the mountain to improve water quality within the watershed and reduce the volume of water treated. DIV 1 is located on MEMC property and does not contact any other mineral rights and will not add any new chemical loads to the Coal Creek Watershed. Additional key indicators are unnecessary, as DIV 1 is intercepting sheet flow from the snowmelt that is only in contact with naturally occurring geology. Based on the water quality analysis described in Section 14-3-80, flow from DIV 1 has concentrations of metals up to a magnitude lower than what is measured in the receiving streams. Furthermore, due to the comparatively low volumes of flow anticipated in DIV 1, the proposed development is not anticipated to have any significant impacts to the Town's waterworks.

As described in this Watershed Permit Attachment, watershed protection standards have been addressed. The proposed development:

- will not have an adverse effect on the Town on the ability of any feature of the Town waterworks to function.
- will not significantly degrade surface water quality within the Watershed Protection District.
- will be managed to control erosion and sedimentation and storm runoff in compliance with the approved Erosion and Sediment Control Plan, the approved Drainage Plan, the approved Grading Plan or an approved state or federal approval requirement that addresses grading, storm runoff, erosion, and sediment control.
- will minimize impervious areas such that the impervious surface of the land disturbed by the proposed development will not exceed twelve percent of the total acreage affected by the proposed development.

- will comply with tiered water feature buffer setbacks.
- will not significantly degrade groundwater quality and quantity within the Watershed Protection District.
- will not have a significant adverse effect on floodplains.
- will not significantly degrade wetlands and riparian areas.
- will not have a significant adverse effect on aquatic habitat.
- will ensure that, following its commencement, the watercourse will be kept free of trash, debris, excessive vegetation, and other obstacles that pollute, contaminate, or significantly retard the flow of water through the watercourse. Structures legally located in or adjacent to the watercourse will be maintained so that the structure will not become a hazard to the use, function, or physical integrity of the watercourse.
- is not subject to a significant risk from soil conditions and geologic hazards.
- is not subject to and will not exacerbate risks from natural hazards.
- will not result in unreasonable risk of releases of hazardous materials. Spill prevention, storage, and containment of substances that have potential to degrade water quality shall be in compliance with the approved Spill Prevention, Storage, Control, Countermeasure, and Contingency Plan.

# EXHIBIT A
## Site Plan and Water Monitoring Figures




## LEGEND

- 25 FT CONTOUR
- FLOW ROUT
- DIVERSION 1
- WATERSHED DRAINAGE
- COAL CREEK SEGMENT 11
- COAL CREEK SEGMENT 12
- DRAINAGE AREA

N

0 600' 1200'

SCALE IN FEET

FOR PERMIT REVIEW PURPOSES ONLY

| REV | DATE | DESCRIPTION | DRN | APP |
|---|---|---|---|---|
| | | | | |

Geosyntec consultants
44 UNION BOULEVARD SUITE 620
LAKEWOOD COLORADO 80228

TITLE: WATERSHED DRAINAGE MAP

PROJECT: DIVERSION 1 EAST AND DIVERSION 1 WEST

SITE: MOUNT EMMONS

| | | | |
|---|---|---|---|
| DESIGN BY: | CJH | DATE: | AUGUST, 2025 |
| DRAWN BY: | CJH | PROJECT NO.: | DE0239 |
| CHECKED BY: | EA | FILE: | |
| REVIEWED BY: | EA | DRAWING NO.: | 1 OF 2 |
| APPROVED BY: | EA | | |

P:\DWG\MM\MCDE0239B\(2025)\05 WATERSHED PERMIT FIGURES - Last Saved by: Caleb.Hogan on 8/5/25

DIVERSION 1 WEST
DRAINAGE AREA = 11.75 ACRES

DIVERSION 1 EAST
DRAINAGE AREA = 12.19 ACRES

DIVERSION 1 EAST

DIVERSION 1 WEST

DIVERSION 2 EAST
DRAINAGE AREA = 5.49 ACRES

ESTIMATED FLOW PATH

DIVERSION 2 WEST - TOTAL
DRAINAGE AREA = 23.19 ACRES

USFS LAND

DIVERSION 2 WEST-UPPER

DIVERSION 2 EAST

DIVERSION 2 WEST

FRACTURE LOCATIONS (TYP.)

ESTIMATED FLOW PATH

USFS LAND

GOSSAN

COAL CREEK
SEGMENT 12

CITY OF CRESTED BUTTE
DRINKING WATER INTAKE

IRON FEN

COAL CREEK
SEGMENT 11

FOR PERMIT REVIEW PURPOSES ONLY

## LEGEND

- 25 FT CONTOUR
- FLOW ROUT
- DIVERSION 1
- WATERSHED DRAINAGE
- COAL CREEK SEGMENT 11
- COAL CREEK SEGMENT 12
- FRACTURED ZONE
- ZONE 1 PUBLIC ACCESS
- ZONE 2 NO PUBLIC ACCESS
- PRIVATE LAND OWNED BY MEMC
- PROPOSED FEDERAL LAND EXCHANGE PARCELS (USA TO MEMC)
- GOSSAN
- IRON FEN

N

0 600' 1200'
SCALE IN FEET

| REV | DATE | DESCRIPTION | DRN | APP |
|---|---|---|---|---|
| | | | | |

Geosyntec consultants

44 UNION BOULEVARD SUITE 620
LAKEWOOD COLORADO 80228

TITLE: WATERSHED PROTECTION - SITE PLAN

PROJECT: DIVERSION 1 EAST AND DIVERSION 1 WEST

SITE: MOUNT EMMONS

| | | | |
|---|---|---|---|
| DESIGN BY: | CJH | DATE: | AUGUST, 2025 |
| DRAWN BY: | CJH | PROJECT NO.: | DE0239 |
| CHECKED BY: | EA | FILE: | |
| REVIEWED BY: | EA | DRAWING NO.: | |
| APPROVED BY: | EA | | 2 OF 2 |

P:\DWG\MM\MEMC\DE0239\R\2025\0805 WATERSHED PERMIT FIGURES - Last Saved by: Caleb.Hogan on 8/5/25

# EXHIBIT B
## Legal Description of Zone 1 and Zone 2

## EXHIBIT A-1 TO CONSERVATION EASEMENT

### (Legal Description of Zone 1 and Zone 2)

ZONE 1 (NORTH)
THAT PORTION OF THE AFOREMENTIONED PARCEL A LYING NORTH OF THE FOLLOWING DESCRIBED LINE:
BEGINNING AT THE SOUTHWESTERLY CORNER OF SAID LOT 33 IN SECTION 31, TOWNSHIP 13 SOUTH, RANGE 86 WEST OF THE SIXTH PRINCIPAL MERIDIAN;
THENCE NORTH 64°18'22" EAST, A DISTANCE OF 300.68 FEET TO THE NORTHWEST CORNER OF SAID PARK CITY NO.1 LODE;
THENCE NORTH 64°28'00" EAST ALONG THE NORTH LINE OF SAID PARK CITY NO.1 LODE, UNION LODE, MY BOYS LODE AND PARK CITY NO.20 LODE, A DISTANCE OF 1839.69 FEET TO THE NORTHEAST CORNER OF SAID PARK CITY NO. 20 LODE;
THENCE SOUTH 45°00'00" EAST, A DISTANCE OF 1500.00 FEET TO THE SOUTHEAST CORNER OF SAID PARK CITY NO. 20 LODE;
THENCE NORTH 76°45'58" EAST, A DISTANCE OF 1057.69 FEET;
THENCE SOUTH 69°36'28" EAST, A DISTANCE OF 1126.71 FEET, MORE OR LESS, TO THE SOUTHEAST CORNER OF SAID SOUTHWEST ¼ OF THE SOUTHWEST ¼ OF SECTION 32, TOWNSHIP 13 SOUTH, RANGE 86 WEST OF THE SIXTH PRINCIPAL MERIDIAN AND THE POINT OF TERMINUS.

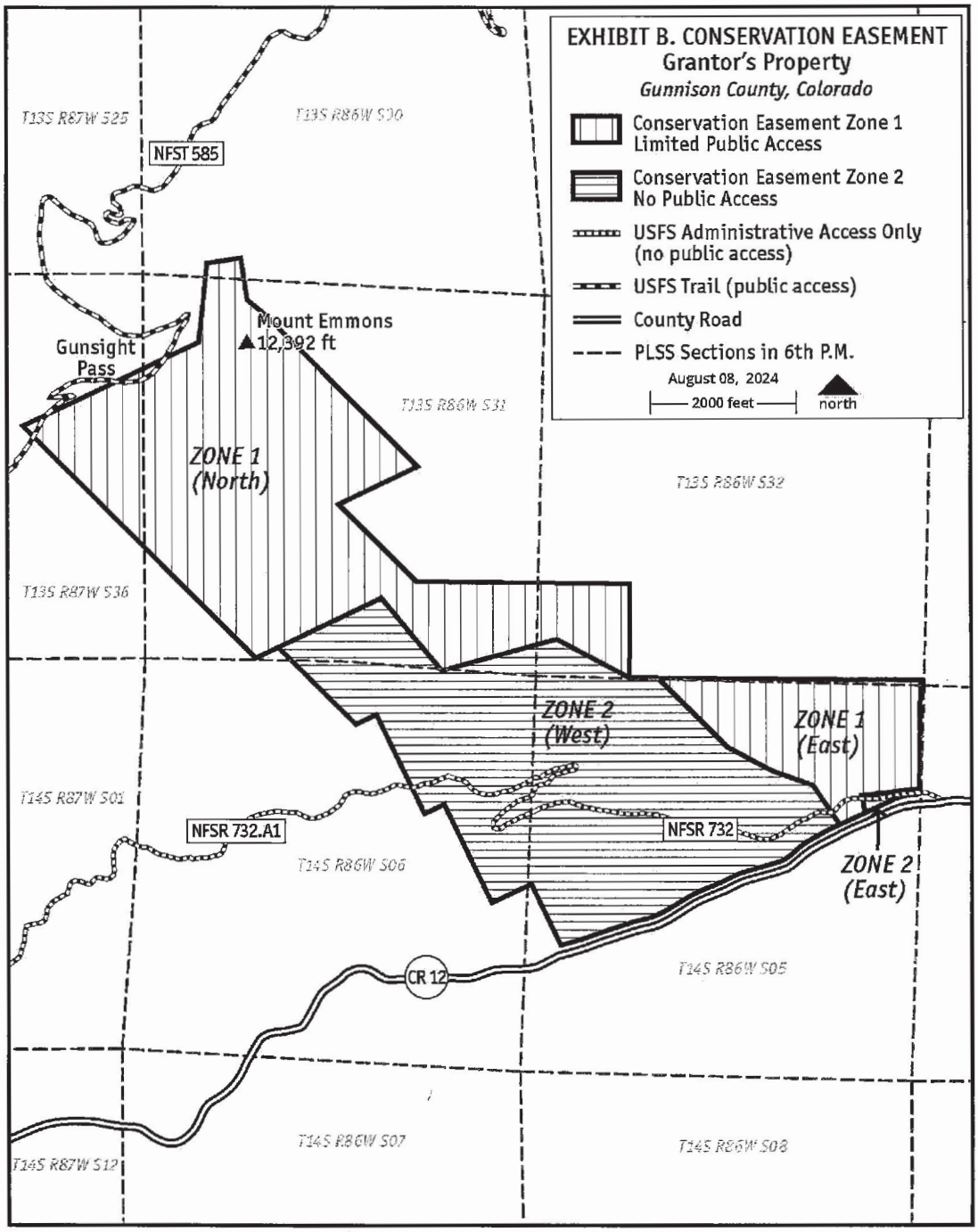
ZONE 1 (EAST)
THAT PORTION OF THE AFOREMENTIONED PARCEL A LYING NORTH OF THE FOLLOWING DESCRIBED LINE:
BEGINNING AT A POINT ON THE SOUTH LINE OF SECTION 32, TOWNSHIP 13 SOUTH, RANGE 86 WEST OF THE SIXTH PRINCIPAL MERIDIAN, FROM WHENCE THE SOUTHEAST CORNER OF THE SOUTHWEST ¼ OF THE SOUTHWEST ¼ OF SAID SECTION 32 BEARS NORTH 89°25'46" WEST, A DISTANCE OF 329.55 FEET;
THENCE SOUTH 43°24'41" EAST, A DISTANCE OF 1291.06 FEET;
THENCE SOUTH 71°36'15" EAST, A DISTANCE OF 1326.26 FEET;
THENCE SOUTH 30°32'48" EAST, A DISTANCE OF 688.56 FEET TO THE NORTH LINE OF SAID GUNNISON COUNTY ROAD NO. 12 EXCEPTION PARCEL;
THENCE NORTH 61°55'38" EAST, A DISTANCE OF 97.44 FEET;
THENCE NORTH 64°29'55" EAST, A DISTANCE OF 139.12 FEET;
THENCE NORTH 66°16'16" EAST, A DISTANCE OF 143.45 FEET;
THENCE NORTH 63°54'51" EAST, A DISTANCE OF 315.08 FEET, THIS AND THE PRECEDING 3 COURSES ARE ALONG THE NORTH LINE OF SAID GUNNISON COUNTY ROAD NO. 12 EXCEPTION PARCEL;
THENCE NORTH 04°20'23" WEST, A DISTANCE OF 162.78 FEET;
THENCE NORTH 85°39'37" EAST, A DISTANCE OF 517.43 FEET, MORE OR LESS, TO THE EAST LINE OF SECTION 5, TOWNSHIP 14 SOUTH, RANGE 86 WEST OF THE SIXTH PRINCIPAL MERIDIAN AND THE POINT OF TERMINUS.

ZONE 2 (WEST)
THAT PORTION OF THE AFOREMENTIONED PARCEL A LYING SOUTH OF THE FOLLOWING DESCRIBED LINE:
BEGINNING AT THE NORTHWESTERLY CORNER OF SAID PARK CITY NO.1 LODE;
THENCE NORTH 64°28'00" EAST ALONG THE NORTH LINE OF SAID PARK CITY NO.1 LODE, UNION LODE,

MY BOYS LODE AND PARK CITY NO.20 LODE, A DISTANCE OF 1839.69 FEET TO THE NORTHEAST CORNER OF SAID PARK CITY NO. 20 LODE;
THENCE SOUTH 45°00'00" EAST, A DISTANCE OF 1500.00 FEET TO THE SOUTHEAST CORNER OF SAID PARK CITY NO. 20 LODE;
THENCE NORTH 76°45'58" EAST, A DISTANCE OF 1057.69 FEET;
THENCE SOUTH 69°36'28" EAST, A DISTANCE OF 1126.71 FEET, MORE OR LESS, TO THE SOUTHEAST CORNER OF SAID SOUTHWEST ¼ OF THE SOUTHWEST ¼ OF SECTION 32, TOWNSHIP 13 SOUTH, RANGE 86 WEST OF THE SIXTH PRINCIPAL MERIDIAN;
THENCE SOUTH 89°25'46" EAST ALONG THE SOUTH LINE OF SAID SECTION 32, A DISTANCE OF 329.55 FEET;
THENCE SOUTH 43°24'41" EAST, A DISTANCE OF 1291.06 FEET;
THENCE SOUTH 71°36'15" EAST, A DISTANCE OF 1326.26 FEET;
THENCE SOUTH 30°32'48" EAST, A DISTANCE OF 688.56 FEET, MORE OR LESS, TO THE NORTH LINE OF SAID GUNNISON COUNTY ROAD NO. 12 EXCEPTION PARCEL AND THE POINT OF TERMINUS.

ZONE 2 (EAST)
ALL THAT TRACT OF LAND LOCATED WITHIN LOT 8 OF SECTION 5, TOWNSHIP 14 SOUTH, RANGE 86 WEST, 6TH P.M., GUNNISON COUNTY, COLORADO, BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:
BEGINNING AT A POINT ON THE EAST LINE OF SAID LOT 8, FROM WHENCE THE NORTHEAST CORNER OF SAID SECTION 5 BEARS NORTH 00°57'37" EAST, A DISTANCE OF 1409.18 FEET;
THENCE SOUTH 00°57'37" WEST ALONG SAID EAST LINE OF LOT 8, A DISTANCE OF 76.37 FEET TO THE NORTH LINE OF SAID GUNNISON COUNTY ROAD NO. 12 EXCEPTION PARCEL.
THENCE SOUTH 84°23'54" WEST, A DISTANCE OF 94.46 FEET TO A POINT OF CURVATURE;
THENCE SOUTHWESTERLY AND DEFLECTING TO THE LEFT, A DISTANCE OF 426.75 FEET ALONG THE ARC OF A CURVE HAVING A RADIUS OF 1192.95 FEET, A DELTA ANGLE OF 20°29'46", A CHORD BEARING OF SOUTH 74°09'23" WEST AND A CHORD LENGTH OF 424.47 FEET;
THENCE NORTH 04°20'23" WEST, A DISTANCE OF 162.78 FEET;
THENCE NORTH 85°39'37" EAST, A DISTANCE OF 517.43 FEET TO THE POINT OF BEGINNING.

# EXHIBIT B TO CONSERVATION EASEMENT
## (Map of Grantor's Property including Zone 1 and Zone 2)



# EXHIBIT C

## 2024 Stormwater Management Plan and Stormwater Permit Documents

*Prepared for:*

**Mt. Emmons Mining Company/**
**Water Treatment Plant**
P.O. Box 629
Gunnison, Colorado 81230

**Physical Address:**
2131 County Road 12
Crested Butte, Colorado 81224

# Stormwater Management Plan

## Mt. Emmons Mining Company/ Water Treatment Plant Crested Butte, Colorado

*Prepared by:*

Geosyntec consultants

engineers | scientists | innovators

11001 W. 120th Ave., Suite 130
Broomfield, CO 80021
Telephone: (303) 790-1340

www.geosyntec.com

Project Number: DE0611

February 2025

Geosyntec consultants

# TABLE OF CONTENTS

**Page**


1. INTRODUCTION ..... 4
   - 1.1 Objectives and Scope ..... 4
   - 1.2 Description of Site Activities and Background ..... 4
2. DESCRIPTION OF SITE DISCHARGE LOCATIONS ..... 6
   - 2.1 Stormwater Discharges ..... 6
   - 2.2 Identification of Discharges Other Than Stormwater ..... 7
   - 2.3 Discharge Monitoring ..... 9
3. SITE MAP ..... 10
4. STORMWATER MANAGEMENT CONTROLS – IDENTIFICATION OF SOURCES AND BEST MANAGEMENT PRACTICES ..... 11
   - 4.1 SWMP Administrator ..... 11
   - 4.2 Identification of Potential Pollutant Sources and Best Management Practices ..... 12
     - 4.2.1 Stormwater Diversion ..... 14
     - 4.2.2 Sediment and Erosion Prevention ..... 14
     - 4.2.3 Other Pollution Prevention Measures ..... 15
     - 4.2.4 Employee Education ..... 15
5. ADDITIONAL SWMP ITEMS FOR SITES SEEKING MINE REMEDIATION / PERMIT TERMINATION ..... 17
6. COMPREHENSIVE INSPECTION ..... 18
7. CONSISTENCY WITH OTHER PLANS ..... 20
8. REVISION HISTORY ..... 21
9. REFERENCES ..... 23

# TABLE OF CONTENTS (Continued)

## LIST OF TABLES

Table 1: History of SWMP Revisions

Table 2: History of Site BMP Revisions

## LIST OF FIGURES

Figure 1: Site Location Map for the Mt. Emmons Project

Figure 2: Water Treatment System Schematic Diagram

Figure 3: Stormwater Management Plan Map

Figure 4: Stormwater Permit Monitoring Locations

## LIST OF APPENDICES

Appendix A: Stormwater Discharge Certification COR040284

Appendix B: Source Assessment and BMP Identification

Appendix C: Training Log for Stormwater Management Plan

Appendix D: Stormwater Inspection Checklist

## TABLE OF CONTENTS (Continued)

## LIST OF ACRONYMS

| | |
|---|---|
| BMPs | Best Management Practices |
| CERCLA | Comprehensive Environmental Response, Compensation, and Liability Act |
| CDPHE | Colorado Department of Public Health and Environment |
| CDPS | Colorado Discharge Permit System |
| ESP | Emergency Surge Ponds |
| gpm | gallons per minute |
| MCP | Materials Containment Plan |
| NID | North Interceptor Ditch |
| SPCC | Spill Prevention Control and Countermeasures |
| SWMP | Stormwater Management Plan |
| USEC | US Energy Corp |
| WQCD | Water Quality Control Division |
| WTP | Water Treatment Plant |

# 1. INTRODUCTION

This Stormwater Management Plan (SWMP) has been developed for the Mt Emmons Water Treatment Plant (WTP) site, which is located near the City of Crested Butte, Colorado in Gunnison County (the "Site") as shown on Figure 1. The Site includes the approximately 877 acres of land that includes the WTP, access roads, and water collection and conveyance systems to deliver mine water to the WTP for treatment (See Figure 2). This SWMP has been developed in accordance with the requirements of Colorado Discharge Permit System (CDPS) General Permit COR040000, Stormwater Discharges Associated with Metal Mining Operations and Mine Waste Remediation, Part 1(C), Stormwater Management Plan, Inactive Mines and Part 1(D) Basic Terms and Conditions. Facilities located on the Site are authorized to discharge through certification number COR040284.

## 1.1 Objectives and Scope

The objective of this SWMP is to identify potential sources of pollution that may reasonably be expected to affect the quality of stormwater discharges associated with the Site. It describes and provides guidelines for implementation of general (baseline) best management practices (BMPs) and Site or activity-specific BMPs designed to reduce the potential for and occurrence of pollution in stormwater leaving the Site.

The scope of this SWMP includes stormwater runoff within the Site that results from precipitation and snow melt events. The plan identifies the stormwater basin (watershed) boundaries, BMPs, and runoff.

## 1.2 Description of Site Activities and Background

The Site is located approximately 2.5 miles west of Crested Butte, Colorado, along Coal Creek and the Kebler Pass Road (Gunnison County Road 12) as shown on Figure 1.

The historic Keystone Mine, which is an inactive, underground lead/zinc mine, was first developed in 1881. A mill was constructed at the Site in the mid-1950s and operated until the early 1970s. The original Keystone Mine tailing ponds were graded, capped, and revegetated in 1977 and 1978 and reclaimed. In 1979 the current water treatment plant was constructed to treat water discharging from the historic mine workings.

The WTP has been in operation since 1980 treating elevated concentrations of metals in mine water discharging from the historic Keystone Mine, 2000-level, and 2160-level portals. In addition, the WTP treats water collected from the toe drain along the base of the tailings dam and up to 88 gallons per minute (gpm) of snow melt and stormwater

collected from the reclaimed tailings area. This water is collected in a series of four decant structures, which are metallic structures located across the reclaimed tailings area (figure 2). When stormwater flows from the decant structures exceed 88 gpm, the excess volume is diverted through a manhole to discharge directly to the Outfall Ditch, which comingles with treated WTP effluent and discharges to Coal Creek. Water entering the plant is treated using a traditional lime precipitation process followed by tertiary treatment using sand or walnut shell filters. Treated water is discharged through a permitted outfall pursuant to a CDPS permit.

Other stormwater from the Site is managed with standard BMPs (described in Section 4) and discharges to Coal Creek. The primary stormwater collection and discharge is associated with the North Inceptor Ditch (NID) at the Site as shown on Figure 3.

The approximate total acreage of the Site is 877.

## 2. DESCRIPTION OF SITE DISCHARGE LOCATIONS

The following section provides a description of the stormwater discharges and non-stormwater discharges from the Site.

### 2.1 Stormwater Discharges

Stormwater discharges consist of the following:

- Stormwater runoff from the reclaimed tailings area reports to a series of decant risers and delivery pipes and a collection ditch along the base of the reclaimed tailings. Up to approximately 88 gpm of this flow is diverted to the Retention Pond and treated in the WTP. Under high run-off conditions, stormwater from the reclaimed tailings in excess of 88 gpm is diverted to a direct discharge that comingles with treated WTP effluent in the energy dissipator (Figure 2). Monitoring of this discharge in the event of high run-off conditions occurs at the monitoring location 007 (Figure 4).

- An interceptor ditch, designed to collect stormwater runoff, exists along the northern perimeter of the main access road that runs through the Site (Access Road) and switchbacks up the mountain to above the 2000-level portal. This ditch, referred to as the NID, provides run-on control for the Site. The NID conveys stormwater runoff (which does not require treatment in the WTP) from the forested hillside, located north and upslope of the Site to Coal Creek. Flow intercepted by the NID combines with the WTP effluent immediately upstream of the monitoring location 004 (Figure 4) prior to discharging from the Site. Flow in the NID is monitored at monitoring point 006 (Figure 4), located upstream of the confluence of the NID and WTP effluent ditches.

- As shown on Figure 3, there are stormwater intercept features constructed in 2021, 2022, and 2024 along the Access Road, uphill from the 2000 Level Portal, which are designed to intercept and divert stormwater away from fractures and faults located along the hillside. The intention of these stormwater features is to reduce the volume of water that infiltrates into the historic mine workings. Stormwater collected by these features is diverted to multiple discharge locations along the upper hillside. Additionally, stormwater diversion channels located south of the 2160 level portal and to the west of the reclaimed tailings area divert stormwater that accumulates in this location, directing it away from the reclaimed tailings area and discharging it to the hillside south of this portion of the Site.

- In 2015, the prior Site owner, US Energy Corp. (USEC), installed a perforated pipe in the subsurface upslope of the reclaimed tailings area, as shown on Figures 2 and 3 (North Tailing Drainage). This pipe intercepts shallow, subsurface flow prior to entering the reclaimed tailings area. Flow captured in this pipe from the west side of Dam No. 2 is diverted to a surface discharge point downhill from the reclaimed tailings area, flow captured from the east side of Dam No. 2 is discharged to location KS-06 just west of the NID and east of the Flume House degrit pond (Figure 2).

Disturbed or affected areas covered under this SWMP include historic surface mine workings and surface facilities, the reclaimed tailings area, water treatment ponds, waste rock piles, soil piles, ditches, roads, parking lots, and storage areas. The total acreage of the WTP Site within the Coal Creek drainage that is subject to stormwater permit requirements is approximately 877 acres.

## 2.2 Identification of Discharges Other Than Stormwater

The following non-stormwater discharges occur at the Site and are covered under the Site's CDPS point source discharge Permit CO-0035394.

The WTP handles mine water that discharges from the upper workings of the historic Keystone Mine, and other sources on Site. Specifically, mine drainage from the 2000 and 2160 level portals[1], treated sanitary flow (from the on-Site Sewer Treatment Plant), toe drain flow from the reclaimed tailings area, and decant flow (at flow rates of 88 gpm or less) from the reclaimed tailings area are treated at the WTP. Effluent from the WTP is monitored at monitoring location 001 in the WTP (Figure 4), prior to being discharged at Outfall 001 in the (Figure 2). WTP effluent is conveyed in the Outfall Ditch where it eventually comingles with NID discharge, before reporting to Coal Creek.

Other mine waters are permitted to discharge in an emergency at the Retention Pond spillway and the Emergency Surge Pond (ESP) spillway (Figure 2). These locations collect surge flows from the mine and other areas. An emergency overflow from the Retention Pond spillway would combine with potential excess stormwater runoff from the reclaimed tailings area (i.e. decant flow in excess of 88 gpm) and comingle with treated WTP effluent in the energy dissipator (Figure 2). Stormwater interceptor ditches around both ponds prevent stormwater runoff from entering the ponds during precipitation events, reducing the probability of a discharge from the emergency

[1] Since January 2012, a valve that had been installed in a concrete plug at the 2000 level approximately 5,000 feet from the portal has been open allowing for water to exit the mine.

spillways. Neither location has ever had a known discharge. Complete details of the WTP collection, flow and treatment are in the Plan of Operations document for the WTP.

Additionally, the 2160 Level Portal emergency overflow pond and degrit pond were constructed in 1998 to provide excess surge capacity and settling for mine water prior to treatment at the WTP.

As stated in the Summary of Rationale for CDPS Permit CO-0035394 (July 15, 2008), non-stormwater discharges to the WTP at the Site include the following:

- Mine drainage, reclaimed tailings pile decant water, and sanitary wastewater are treated at the WTP. Sanitary wastewater undergoes initial treatment at a small, extended aeration domestic wastewater package plant (Sewer Treatment Plant, located to the southwest of the WTP (Figure 2), prior to discharge to the Retention Pond and treatment at the WTP.

- The prior Site owner, USEC, also constructed a pipeline to route approximately 10 gpm of flow from the toe drain at the base of the reclaimed tailings area for treatment by the WTP. Previously, this flow entered the Retention Pond, prior to treatment in the WTP.

- Beginning in the summer of 2007, the piping system used for collecting tailings decant water was modified to route this flow to the Retention Pond for treatment in the WTP. Initially, flow through the bypass conveying tailings decant water to the Retention Pond was regulated by a ¾" flow-restricting orifice at the head of the bypass pipe. The orifice was rebuilt in 2014, the piping system was modified again to increase the flow through the bypass. The orifice has been increased to 3" with a knife valve and is inside the 12" PVC pipe for flow control. Based on the elevation drop (65 feet), utilizing the 3" orifice and the diameter of the bypass pipe (12"), the maximum available flow rate through the bypass pipe was increased from approximately 30 gpm to approximately 88 gpm. Flows above 88 gpm are directed to the energy dissipator and mixed with the WTP effluent prior to being discharged to Coal Creek. These excess flows are sampled at monitoring point 007 (Figure 4).

- Stormwater flow up to 30 gpm that enters the stormwater ditch on the North side of the Retention Pond is also collected in the Retention Pond for treatment in the WTP. Flows above 30 gpm would report to the energy dissipator to mix with WTP effluent for discharge to Coal Creek.

## 2.3 Discharge Monitoring

Monitoring of discharges for the WTP are in accordance with CDPS Permit CO-0035394, Part I.B.1.c. Monitoring of stormwater discharges are in accordance with Certification COR040284 for a General Permit under Colorado COR040000 that includes locations 002, 004, 006, 007, C9.5 and C6.5 as shown on Figure 4 and noted in the attached copy of the permit in Appendix A.

Monitoring requirements for each of the points are referenced in the attached permit. This includes frequencies, wet sampling conditions, dry sampling conditions, storm events, sample types and requirements, and sampling of holding ponds. These sampling requirements are carefully followed and documented as required by the permit.

Observations and flow measurements or estimations collected at the Site in 2012, 2013, 2014, 2015, and 2018 indicate that both the Outfall Ditch and the NID convey light flows (exclusive of WTP discharges) during dry weather (i.e., non-storm-event, non-snow melt) conditions. Depending on the time of year, these flows may be attributable to a combination of naturally occurring groundwater seeps and springs entering through the bottom and sides of the ditch, lingering surface water flows in the ditches, and specifically for the NID, the delayed appearance of precipitation-related surface infiltration coming from up-slope areas.

Sampling results for monitoring points have been submitted to the Colorado Department of Public Health and Environment (CDPHE) Water Quality Control Division (WQCD) on monthly discharge monitoring reports since fourth quarter 2008. The results show varying flow rates and metals concentrations at the various locations.

## 3. SITE MAP

The general stormwater permit Part 1(C), requires that the SWMP include a generalized Site map or maps, which include any of the following that may be applicable:

- mining/milling Site boundaries and access and haul roads;
- equipment storage, fueling and maintenance areas;
- materials handling areas;
- areas used for storage of overburden, materials, soils, tailings or wastes;
- areas used for outdoor manufacturing, heap leach pads, storage or disposal of materials;
- location of mine drainage or other process water;
- tailings piles and ponds;
- an estimate of the direction(s) of surface flow;
- stormwater outfalls and an approximate outline of the areas draining to each outfall;
- existing structural control measures to reduce pollutants in stormwater runoff;
- springs, streams, wetlands and other surface waters; and
- areas of soil disturbance.

As such, the following figures are included with this SWMP:

Figure 1 - Site Location Map

This map illustrates the location of the Site in relation to the local drainage (Coal Creek) and nearby towns (Crested Butte).

Figure 2 – Water Treatment System Schematic Diagram

This diagram illustrates drainage patterns and the relationships between water treatment plant piping, water management structures (e.g., ponds, degrit ponds, piping, ditches, etc.), and the locations of potential sources of pollutants.

Figure 3 - Stormwater Management Plan Map

This map shows drainage patterns and general BMP locations for the stormwater management areas.

Figure 4 –Stormwater Permit Monitoring Locations

This drawing shows discharge monitoring locations at the Site.

# 4. STORMWATER MANAGEMENT CONTROLS – IDENTIFICATION OF SOURCES AND BEST MANAGEMENT PRACTICES

Part 1(C) of the general permit requires that a description of appropriate stormwater quality controls be developed and implemented for the Site. The appropriateness and priorities of controls in this SWMP reflect identified potential sources of pollutants. The description of stormwater quality controls addresses the following minimum components, including a schedule for implementation.

## 4.1 SWMP Administrator

The SWMP Administrators/Environmental Coordinators are **Todd Marshall** and **Keith Nunn**. Their office line is (970) 349-6681 and their cell numbers are (970) 290-9593 and (970) 209-5918, respectively.

Responsibilities of the SWMP Administrator(s) include coordinating training, implementing this SWMP, overseeing updates to the SWMP and BMPs, conducting visual inspections, approving construction projects, and guiding stormwater control projects.

Pollution Prevention Team members include four WTP operators and one environmental contractor:

WTP Operators:

- Keith Nunn, Office – (970) 349-6681; cell – (970) 209-5918.

  Responsibilities: Visual inspections of stormwater BMPs and conveyance structures. Maintenance of Site stormwater controls. Site implementation and compliance with this SWMP.

- Eric Dahlin, Office – (970) 349-6681; cell – (970) 275-6590.

  Responsibilities: Visual inspections of stormwater BMPs and conveyance structures. Maintenance of Site stormwater controls. Site implementation and compliance with this SWMP.

- Jessica Miller, Office – (970) 349-6681; cell – (815) 858-4472

  Responsibilities: Visual inspections of stormwater BMPs and conveyance structures. Maintenance of Site stormwater controls. Site implementation and compliance with this SWMP.

- Mario Wells, Office – (970) 349-6681; cell – (970) 275-2220

  Responsibilities: Visual inspections of stormwater BMPs and conveyance structures. Maintenance of Site stormwater controls. Site implementation and compliance with this SWMP.

Environmental Contractor:

- Todd Marshall, Frank Environmental Services. Office - (970) 349-6681; cell - (970) 290-9593.

  Responsibilities: Manage implementation of and compliance with SWMP.

## 4.2 Identification of Potential Pollutant Sources and Best Management Practices

This section identifies potential sources of pollutants at the Site and describes appropriate BMPs to reduce the potential of these sources to contribute pollutants to stormwater discharges. BMPs are identified on Figure 3, and detailed descriptions of specific BMPs located around the Site can be found in Appendix B.

At a minimum, each of the following has been evaluated for their reasonable potential for contributing pollutants to runoff:

- outdoor storage of chemicals or equipment;
- on-Site waste disposal practices;
- overburden, raw material, intermediate products, byproducts, finished products or waste products; and
- disturbed areas.

Factors that were considered include the toxicity of the material; quantity of chemicals used; the likelihood of contact with stormwater; and history of significant drainage, leaks, or spills of toxic or hazardous pollutants.

Potential pollutant sources include the exposed significant materials, defined in the CDPS General Permit COR040000 as: raw materials; fuels; materials such as metallic products; hazardous substances designated under section 101(14) of Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA); fertilizers; pesticides; and waste products such as ashes, slag and sludge that have the potential to be released with stormwater discharge. No storage of exposed significant materials exists within the designated stormwater boundaries at the Site, with the exception of the following:

- Historic mining operations at the Keystone Mine have left behind small areas of waste rock, cleared areas where soil and vegetation were removed, and abandoned roadways. Between 2018 and 2021, significant efforts have been made to reclaim waste rock areas at the Site. This includes reclamation of the waste rock areas at the 1370 and 1670 level portals in 2018, and additional reclamation work at the 2000 and 2160 level portals between 2019 and 2020. This reclamation work consisted of revegetation, regrading, relocation of waste rock, construction of new drainage channels, and installation of wattles. Additional reclamation work was also completed in the reclaimed tailings area during this time period. This consisted of revegetation and regrading in reclaimed tailings areas 1, 2, and 4, and the addition of limestone and rock cap installed in the crest of reclaimed tailings area 4 (See March 31, 2022 Annual Report to CDPHE). A visual examination of these areas for preparation of this SWMP update indicated that no observable detrimental effect on stormwater exists.

- There are several areas where construction and excavation of water treatment ponds have generated soil materials that are stockpiled within the stormwater boundaries of the Site. Soil materials include glacial till, colluvium, and other native soils. The soil stockpiles are located up gradient from BMPs (such as vegetative filters or degrit ponds) such that runoff is controlled. A visual examination of the soil storage areas during the preparation of this SWMP update indicated that no observable detrimental effect on stormwater exists due to the properly functioning BMPs.

- The water control systems at the Site, as currently designed, minimize the potential for spills to have a detrimental effect on waters of the State of Colorado. Materials stored and used at the Site are managed within primary containment structures such as tanks or drums, which are, in turn, contained by secondary structures such as berms, reinforced concrete structures, floor drains and sumps, or a combination of the above. There have been no reportable spills prior to this update of the SWMP.

- Outdoor storage of chemicals, and the potential for equipment spills and leaks are minimized at the Site. Chemicals are stored indoors to prevent uncontrolled spills or releases. Equipment that is stored outdoors is located in selected areas: west of the water treatment plant building, east of the water treatment plant building and east of the core storage building. The general parking lots are located east of the water treatment building and east of the core building. Oil containing transformers are located west of the 2160 level portal, and southwest of the WTP. Transformers are inside of concrete secondary containment structures, or adjacent to berms that

would contain a discharge of oil from the unit, preventing it from migrating to other areas of the Site. A fuel island is located to the southwest of the water treatment plant building, on-Site fuel loading and unloading generally occurs within the immediate vicinity of the island.

### 4.2.1 Stormwater Diversion

Natural stormwater is diverted around the property with the use of interceptor ditches, culverts, and other structures as shown on Figures 2 and 3, and as further described in Section 2.1.

### 4.2.2 Sediment and Erosion Prevention

Disturbed soil areas are reseeded with maintenance seed (if it is temporary) or permanent, high-altitude seed mix.

On slopes steeper than approximately 5:1, installation of erosion blankets/matts/wattles are considered on a case-by-case basis, with decisions based on the length, exposure, and texture of the soils on the slope, or as practicable depending on existing conditions at the given location.

Design, specification, and construction of slopes steeper than 2:1 are avoided. Where such slopes are unavoidable, rock protection (e.g., riprap), wattles and/or excelsior mats with netting designed for such applications are installed, unless installation is determined to be impracticable based on the existing conditions at the given location, or non-beneficial with regards to controlling sediment and erosion in the area.

Riprap, overlying a layer of suitable bedding, should be installed in water flow channels where the design flow will exceed approximately 2 feet per second. The bedding should be graded coarse, granular soils or aggregate with a maximum size of 2-3 inches and a minimum size of sand.

The time that bare soil is exposed before reclamation is minimized.

The disturbance of existing vegetation is minimized. Where possible, existing vegetation is used to filter water flow.

The requirements of this SWMP are incorporated into construction contracts by reference.

### 4.2.3 Other Pollution Prevention Measures

Other pollution prevention measures for stormwater BMPs at the Site include visual inspections, spill prevention control and countermeasures (SPCC), a materials containment plan (MCP), and training. Requirements for visual inspections are described in Section 6. SPCC and MCP are discussed in Section 7. The requirements for training are described in Section 4.2.4 and a log sheet for recording training events is included in Appendix C. Copies of the SPCC and MCP are maintained in the WTP main building and are readily available to on-Site personnel in the event of a spill or discharge.

Spill remediation kits are located in the water treatment building and the core storage building. Each spill kit has materials to absorb active leaks, cleanup spills, and contain flowing fluids. Spill kits are inspected on a regular basis and supplies are replenished, as needed.

Good housekeeping and preventative maintenance tasks must be undertaken during routine and comprehensive inspections conducted at the Site by trained personnel. Specific good housekeeping and preventative maintenance tasks for various locations around the Site are detailed in Appendix B.

### 4.2.4 Employee Education

The following personnel are trained on the topics covered by this plan:

- Environmental Coordinator and Pollution Prevention Team members
- Plant operators and / or supervisors
- Employees involved in surface maintenance, construction, and materials handling

Training occurs at least once per year at regularly scheduled refresher meetings, task training sessions, or safety meetings. Training is documented by way of a sign in sheet, which includes a description of the materials covered in the training, the name of the person responsible for providing the training and a list of trainees. Copies of training logs shall be kept with the SWMP on file in the WTP main building.

There are two options for training as follows:

- Option 1 - Group session directed by the Environmental Coordinator.
- Option 2 - Self-study course where employees read through appropriate sections of the plan and answer questions presented by the Environmental Coordinator.

The minimum course content is:

- Introduction to CDPS stormwater permit requirements;
- Definition of stormwater;
- Requirements and purpose of stormwater management;
- Status of Site;
- Site drainage drawings, emphasizing:
    - limits of WTP process areas;
    - locations of stormwater outfalls and sheet flow discharges;
    - locations of specific potential pollutant sites and the outfalls that would be affected;
    - erosion control zones and specific BMPs; and
    - the need to protect exposed materials from stormwater contact (example: re-vegetation of topsoil stockpiles);
- General and Site specific BMPs;
- Inspection sheets for specific pollution sites and the nature of the potential pollutants at each site;
- Procedures for assessing and recording new potential pollution sites;
- Procedures for identifying appropriate BMPs for new sites;
- Implementation and inspection procedures; and
- General enforcement penalties and possible enforcement actions.

## 5. ADDITIONAL SWMP ITEMS FOR SITES SEEKING MINE REMEDIATION / PERMIT TERMINATION

CPDS Permit COR040000 imposes additional requirements in the event that the permittee wishes to remediate the inactive mine Site and terminate permit coverage. CDPHE WQCD will be notified of the intention to change status. Notification will be made prior to the implementation of the remediation work, if possible, and this SWMP will be amended to include each of the items described in the permit, prior to implementation of the remediation work.

## 6. COMPREHENSIVE INSPECTION

The SWMP Administrator or designee inspects the Site semi-annually to identify potential or developing erosion sources, both natural and manmade. Items included in the semi-annual inspection are:

- New erosion scarps;
- Oil spills and/or other material dumped by others;
- Deterioration or damage to water control structures;
- Dying vegetation that may indicate an otherwise undetectable spill;
- Spill kits; and
- Management and maintenance of BMPs

Two inspections of the stormwater management areas are conducted each year in the spring/early summer and late summer/fall. The spring/early summer inspection is conducted during or shortly after snowmelt runoff, if possible, to facilitate further assessment of potential pollutant sources, and to evaluate the appropriateness and performance of existing BMPs to manage potential impacts from these pollutant sources. If deemed necessary, existing BMPs will be repaired, or new BMP's will be implemented to manage potential impacts. The late summer/fall inspection is intended to evaluate whether new BMPs have been implemented as designed, that existing BMPs are still performing as intended, and that the Site is prepared for runoff the following spring. The timing of the late summer/fall inspection allows enough time before winter to perform modifications or corrections, if necessary. The late summer/fall inspection also provides the data necessary for completing the annual report, which is due February 15th, the following year.

Visual inspections of major water diversion structures such as roadside ditches and interceptor ditches are made at least weekly during periods of snowmelt runoff. Specific inspections of contractor work areas are conducted as necessary to evaluate if BMPs are being implemented. Visual inspections of ditches are made within 24 hours after the end of major storm events[2] for signs of erosion and damage to water control structures.

An example copy of the Stormwater Inspection Checklist is included in Appendix D. The form is to be used in conjunction with Figure 3. If new pollutant sources are discovered

[2] The definition of major storm is a rain event that measures greater than one inch over a 24-hour period.

or if new BMPs are established, the inspection form and the map will be revised accordingly as soon as practicable following the discovery or when new BMPs are established.

Completed inspection forms will be maintained on file in the Environmental Coordinator's office.

## 7. CONSISTENCY WITH OTHER PLANS

An SPCC Plan and an MCP are maintained for the Site. The SPCC Plan and MCP outline procedures for minimizing pollution risk within the areas under the authority of the CDPS Permit No. CO-0035394. Spill prevention and material containment procedures should be used to augment the BMPs presented herein for stormwater management. The SPCC Plan and MCP are therefore incorporated into this SWMP by reference. The most stringent provisions of either of these plans will apply. The requirements of these plans are incorporated into construction contracts by reference and specific remedies, or corrective actions are required for noncompliance.

## 8. REVISION HISTORY

A history of revisions to this SWMP and to the Site BMPs is summarized in the following tables.

**Table 1 – History of SWMP Revisions**

| Date of Revisions | Revisions Summary |
|---|---|
| March 1, 2006 | Change of Site ownership. |
| July 1, 2008 | Change of Site ownership. |
| October 15, 2010 | General updates. |
| November 15, 2010 | General updates. |
| March 23, 2011 | Updates to discussion of non-stormwater discharges. |
| October 4, 2011 | Updates to discussion of sediment and erosion control. |
| February 22, 2013 | Updates to address requirements of new stormwater permit and Pollution Prevention Team members. |
| March 19, 2014 | Updates to Site name and address. |
| April 9, 2015 | General updates. |
| April 29, 2016 | Change of Site ownership and plan reorganization. |
| September 2018 | General updates. |
| February 2023 | General updates, including addition of SW diversion features on upper portions of mine Access Road |
| February 2025 | General updates, including addition of new SW diversion features near upper portions of mine Access Road |

| Table 2 – History of Site BMP Revisions | |
|---|---|
| **Date of Revisions** | **Revisions Summary** |
| November 15, 2010 | Remove BMP 3B, Forest Fire Area and BMP 8A, Line Interceptor Ditches; add BMP 12E, Equipment and Parking Area; and bring BMPs up to date with field practice and controls. |
| October 4, 2011 | Add wattles to control measures. |

## 9. REFERENCES

COR040000 - CDPS General Permit, Stormwater Discharges Associated with Metal Mining Operations And Mine-Waste Remediation, Authorization To Discharge Under The Colorado Discharge Permit System. August 28, 2006.

CO-0035394 - Authorization to Discharge under the Colorado Discharge Permit System. September 1, 2008.

COR040284 – Certification to Discharge Under CDPS General Permit COR040000 Stormwater Associated with Mining Activities – February 16, 2016

Plan of Operation for the Mt. Emmons Wastewater Treatment Plant, August 24, 2018.

Mt. Emmons Mining Company, 2022, Annual Report to CDPHE, March 31, 2022.

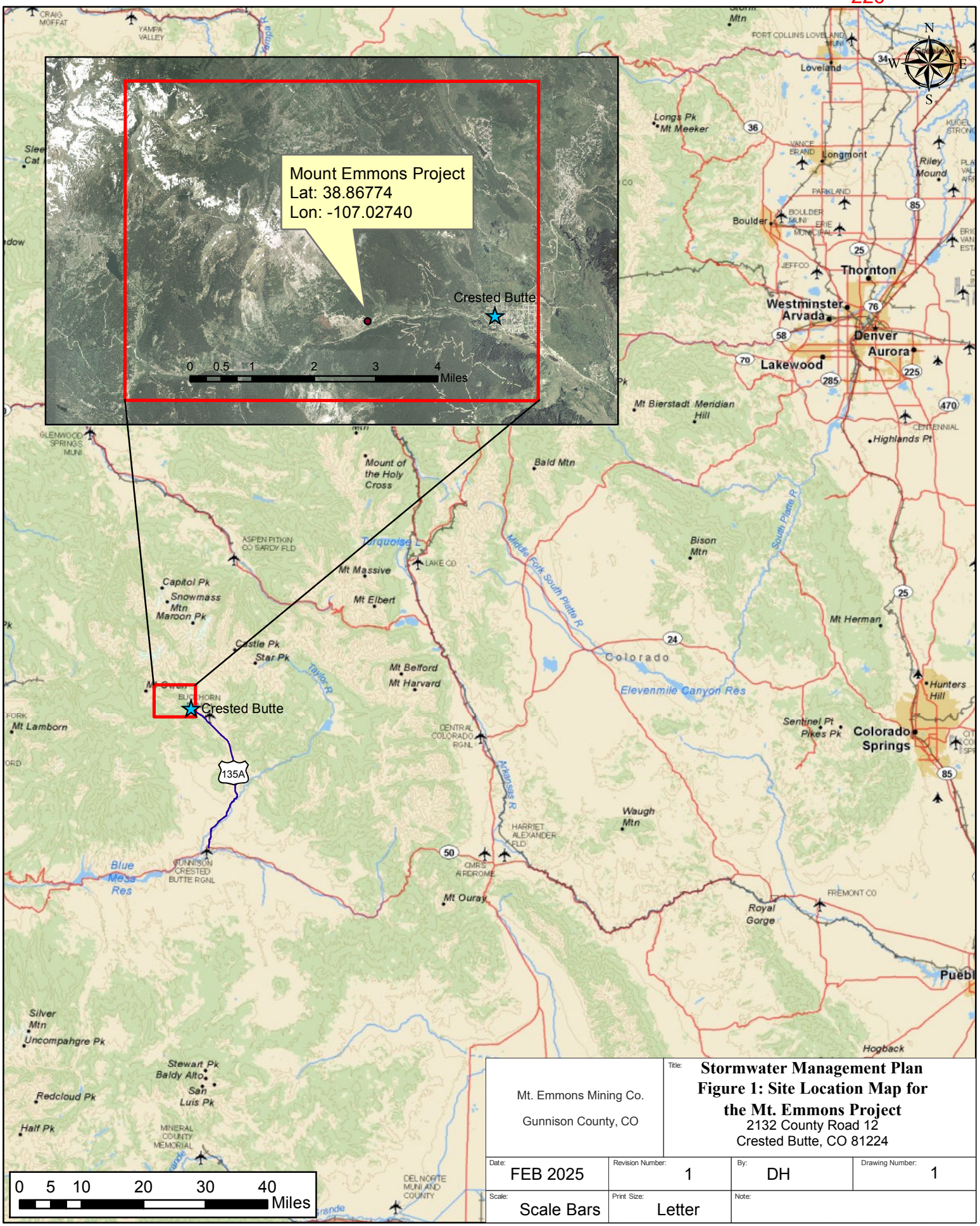
Spill Prevention Control and Countermeasures Plan, Mt. Emmons Facility, Crested Butte, Colorado. June 2022.

Materials Containment Plan, Mt. Emmons Facility, Crested Butte, Colorado. June 2022.

Geosyntec
consultants

# FIGURES

Original Drawings prepared by Colorado Cadworks in 1995
Revised by W.W. Wheeler and Associates in 1999
Revision by Ellis Environmental Engineering, Inc. in September 2003
Revised by U.S. Energy Corp. in 2006, 2008 and 2010
Revised by Mt. Emmons Mining Co. 2016
Revised by Geosyntec Consultants in 2018, 2023, and 2025




| | | | |
|---|---|---|---|
| Mt. Emmons Mining Co.<br>Gunnison County, CO | Title: **Stormwater Management Plan**<br>**Figure 1: Site Location Map for the Mt. Emmons Project**<br>2132 County Road 12<br>Crested Butte, CO 81224 | | |
| Date: FEB 2025 | Revision Number: 1 | By: DH | Drawing Number: 1 |
| Scale: Scale Bars | Print Size: Letter | Note: | |

North Interceptor Ditch
Emergency Surge Bldg.
Emergency Surge Pond
Equalization Pond
Emergency Surge Pond Spillway
Degrit Pond
Blower House
Secondary Emergency Surge Pond
Core Building
2000 Portal
Old Flume House
Decant Line
Flume House
Mine Effluent Lines
Trapper's Way
Sewer Treatment Plant
2160 Portal
Degrit Pond
Decant Diversion Manhole
Emergency Overflow Pond
North Tailings Drainage
Reclaimed Tailing Areas
Toe Drain
Pump House
Outfall Ditch to Coal Creek
Retention Pond
Water Treatment Plant
Retention Pond Spillway
Outfall 001
Energy Dissipator
County Rd 12
Coal Creek

**Legend**

- Decants
- Decant Divesrion Manhole
- Portals
- Channelized Surface Flow or Stream
- Process Water Pipeline Flow
- Mine Water Pipeline
- North Tailings Drainage
- Sewer Treatment Plant Discharge
- Tailings Decant Lines
- East and West Toe Drains
- Culverts
- Road
- Streams
- Watewater Treatment Plant Boundary

N

0 250 500
Feet

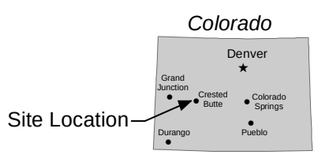
**Water Treatment Plant Storage Quantities**
Sulfuric Acid Storage (5000 gal)
Flocculants (3600 gal)
Hazardous Waste Storage (<30 gal)
Various Laboratory Chemicals
Various Cleaners, Pints, Penetrants
Spill Kits and Clean-up Materials
Lime Slurry Storage (17,000 gal)

**Mt. Emmons Mining Company**
Mt. Emmons Property

**Storm Water Management Plan**
**Water Treatment System**
**Schematic Diagram**

| | FIGURE 2 | FEB 2025 |
|---|---|---|
| | | 11x17" |

**Key Map**




Document Path: N:\GIS\MEMC\SWMP_Update_2023\mxd\fig2_Water Treatment Sys - Schematic.mxd

| BMP Label | Description |
|---|---|
| 1A | Manage Water at Portals |
| 3A | Erosion Control Activity |
| 3C | 2000 Level Culvert |
| 4A | Stabilize Topsoil Stockpile |
| 6A | Clay Cap (Seal) on Tailing Areas |
| 6B | Manage Water on Waste Rock Dumps |
| 7A | Interception and Bypass System |
| 10A | Manage Water in Basins and Ponds |
| 11A | Material Compatibility |
| 12A | Management of Liquid Storage |
| 12B | Management of Dry Material Storage |
| 12C | 2160 Portal Surge Pond and Piping |
| 12D | Minewater Delivery Pipes |
| 12E | Equipment/Vehicle Parking |

**Legend**

- Decants
- Check Dam Sediment Basin
- Culverts
- Channelized Surface Flow or Stream
- Portals
- County Road 12
- Buried Collection Pipe in Lined Channel
- Sheet Flow
- Wastewater Treatment Plant Boundary
- BMP - Best Management Practices Indexed to SWMP (See Reference Table to Left)
- Reclaimed Waste Rock Piles
- Dam Road
- Reclaimed Waste Rock Dumps - Tailings Embankments
- Mine Access Roads
- Coal Creek
- North Tailing Drainage

**Topography - 50 ft.**

- Contour Line, Major

0 250 500 1,000 Feet

N

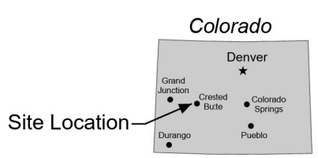
1370 Portal
1670 Portal
2000 Portal
2160 Portal Transformer
Vegetative Filter BMP
Interceptor Ditch
North Interceptor
48" Culvert
DAM No. 1
DAM No. 2
DAM No. 3
DAM No. 4
Toe Drain
Storage Area
Sludge Transfer Area
Spillway
Culverts 3-18" HDPE and Concrete Headwall
Transformers
Fuel Island
Approximate Location of 18" Corr. HDPE
See Figure 2 for detail of area
Key Ditch
Kebler Pass Road
Coal Creek

**Mt. Emmons Mining Company**
Mt. Emmons Property

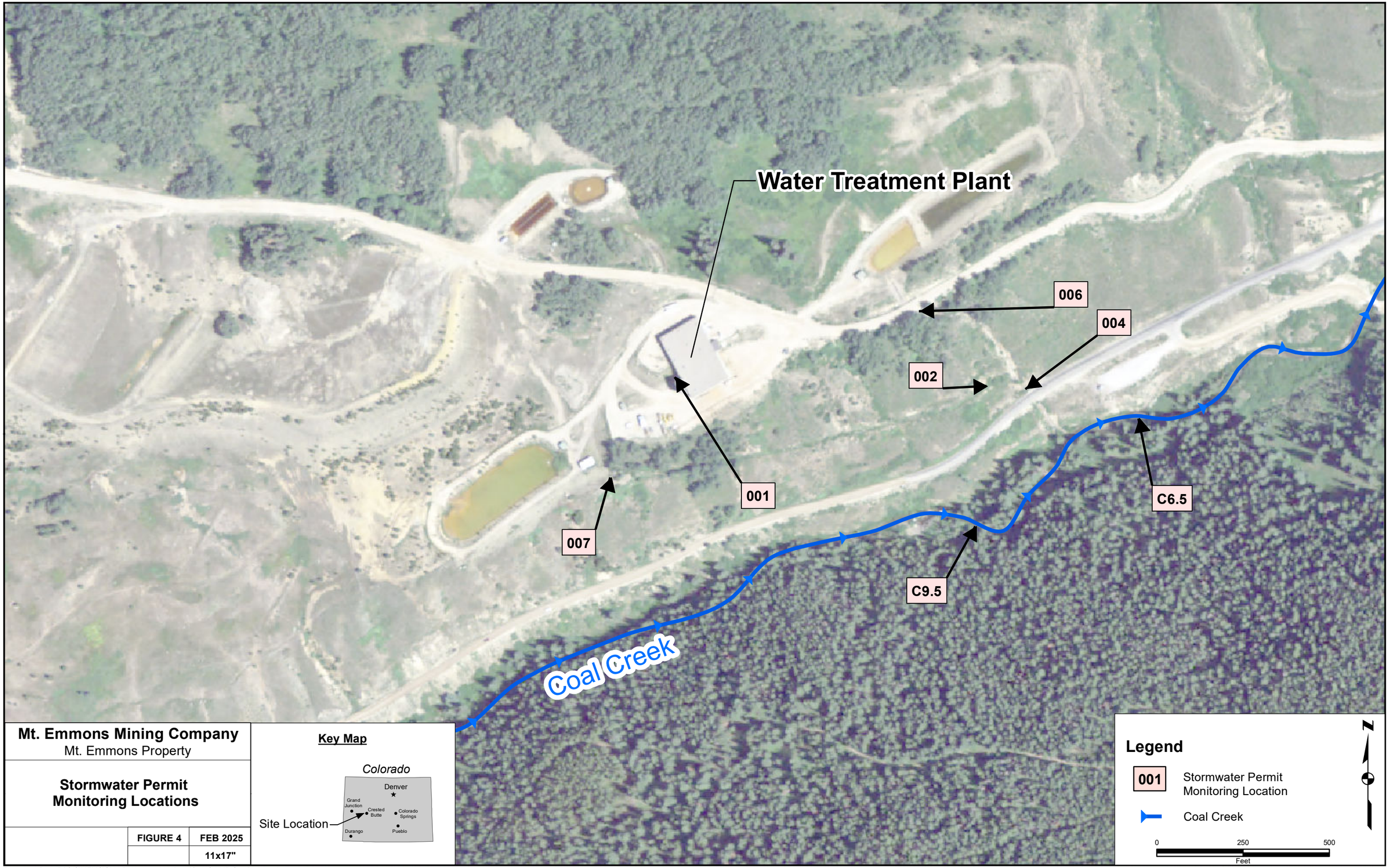
**Storm Water Management Plan Map**

| | FIGURE 3 | FEB 2025 |
|---|---|---|
| | | 11x17" |

**Key Map**




Document Path: P:\GIS\MEMC\MEMC Master\MEMC Master.aprx




**Mt. Emmons Mining Company**
Mt. Emmons Property

**Stormwater Permit Monitoring Locations**

| | FIGURE 4 | FEB 2025 |
|---|---|---|
| | | 11x17" |

**Key Map**




**Legend**

001 Stormwater Permit Monitoring Location

Coal Creek

N

0 250 500
Feet

Document Path: P:\GIS\MEMC\SMWP_Update_2023\mxd\fig4_SWMP-Site Bndy.mxd

Geosyntec consultants

# APPENDIX A

# STORMWATER DISCHARGE CERTIFICATION COR040284

COLORADO
Department of Public Health & Environment

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

William Cobb, Vice President
Mt. Emmons Mining Company
333 N Central Ave
Phoenix, AZ 85004

**TO:** Mt Emmons Mining Company

**DIVISION CONTACTS**
Kathy Rosow Environmental Protection Specialist 303-692-3521
Loretta Houk Admin 303-692-3531

**DATE:** 2/16/2016

**RE:** **Transfer Certification, Colorado Discharge Permit System**
**General Permit No**. COR040000, **Certification Number:** COR040284 formerly COR040174
**Mt. Emmons Mining Company - Mt Emmons Project**

This modification transfers permit coverage from **US Energy Corp** to **Mt Emmons Mining Company**. The permit number was modified to facilitate maintenance of electroic records and electroic reporting

**General Information**

- **Permit Action Fees:** There is no fee for this action.
- **Certification Records Information:** The table below provides the information contained in Division records for this certification. Any changes to the contacts listed below must be provided to the Division on a "Notice of Change of Contacts" form, and must be signed by the legal contact. This form is available on the Division's website at www.coloradowaterpermits.com.



4300 Cherry Creek Drive S., Denver, CO 80246-1530 P 303-692-2000 www.colorado.gov/cdphe
John W. Hickenlooper, Governor | Larry Wolk, MD, MSPH, Executive Director and Chief Medical Officer

**Facility**: Mt Emmons Project

**County**: Gunnison County

**Industrial Activities**: Operation and maintenance of mine water collection and treatment facilities.

**SIC Code**: 1031

**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 as appropriate ]*

William Cobb, Vice President
Mt. Emmons Mining Co.
333 N Central Ave
Phoenix, AZ 85004
Phone number: 602-366-7826
Email: william_cobb@fmi.com

**Facility Contact**: *Contacted for general inquiries regarding the facility*

David P Gosen, Mgr
Mt. Emmons Mining Co.
333 N Central Ave
Phoenix, AZ 85004
Phone number: 602-366-7312
Email: david_gosen@fmi.com

**Billing Contact**:

David P Gosen, Mgr
Mt. Emmons Mining Co.
333 N Central Ave
Phoenix, AZ 85004
Phone number: 602-366-7312
Email: david_gosen@fmi.com

**DMR Contact** :

David P Gosen, Mgr
Mt. Emmons Mining Co.
333 N Central Ave
Phoenix, AZ 85004
Phone number: 602-366-7312
Email: david_gosen@fmi.com

- The General Permit for Stormwater Discharges Associated with Metal Mining Operations and Mine-Waste Remediation expired on September 30, 2011. This permit is administratively continued and remains in effect under Section 104(7) of the Administrative Procedures Act, C.R.S. 1973, 24-4-101, et seq (1982 repl. vol. 10) until a new permit/certification is issued and effective. The renewal for this facility will be based on the application that was received on 8/5/2011.

COLORADO
Department of Public Health & Environment

**CERTIFICATION TO DISCHARGE**
**UNDER**
**CDPS GENERAL PERMIT COR040000**
**STORMWATER ASSOCIATED WITH METAL MINING INDUSTRIAL ACTIVITIES**

Certification Number: **COR040284**

**This Certification to Discharge specifically authorizes:**
**Mt. Emmons Mining Company**
to discharge stormwater from the facility identified as
**Mt Emmons Project**
**to:**
**Coal Creek to Slate River**

**Facility Located at:** 213 CR 12, Crested Butte, Gunnison County, CO 81224

| Permitted Features | | | |
|---|---|---|---|
| **ID** | **Limit Set** | **Type** | **Description** |
| 007 | WA | Internal Outfall | Outfall 007 is located in the "concrete box" prior to mixing with discharged water from the WTP, at Latitude 38.86682, Longitude -107.02825. |
| 007 | DA | | |
| 002 | WA | Internal Outfall | Outfall 002 is the same location as discussed in individual permit CO0035394 (i.e., at a location in the unlined channel [containing effluent from the WTP], approximately 100 feet upstream from the confluence with the North Interceptor Channel and approximately 150 feet before passing under County Road 12 (Kebler Pass Road)), at Latitude 38.867644, Longitude -107.023679. |
| 002 | DA | | |
| 006 | WA | Internal Outfall | Outfall 006 is located in the North Interceptor Ditch, approximately 363 feet upgradient from the confluence with the unlined channel (which contains the MON2 sampling location), at the inlet to the access road culvert for the North Interceptor Ditch (NID), at Latitude 38.86819, Longitude -107.02512. |
| 006 | DA | | |
| 004 | WA | External Outfall | Outfall 004 is located just upstream of the County Road 12 culvert, before the combined discharge is conveyed through the culvert under County Road 12 to Coal Creek, at Latitude 38.86755, Longitude -107.02402. |
| 004 | DA | | |
| C9.5 | WA | Receiving Water (ambient) | Outfall C9.5 is a upgradient instream location approximately 100 meters upstream of the Keystone Mine WWTF outfall, near the location of Coal-10 as discussed in individual permit CO0035394; Latitude 38.86700, Longitude -107.02380. |
| C9.5 | DA | | |
| C6.5 | WA | Receiving Water (ambient) | Outfall C6.5 is a downgradient instream location, located approximately half-way between the WTP discharge point to Coal Creek and the Coal 5 location, at the bottom of access ramp from the parking lot on Kebler Pass Road, at Latitude 38.86741, Longitude -107.02289. |
| C6.5 | DA | | |



4300 Cherry Creek Drive S., Denver, CO 80246-1530 P 303-692-2000 www.colorado.gov/cdphe
John W. Hickenlooper, Governor | Larry Wolk, MD, MSPH, Executive Director and Chief Medical Officer

**Stormwater Discharge Monitoring Requirements applicable to Outfalls:**
**007WA, 007DA, 002WA, 002DA, 006WA, 006DA, 004WA, 004DA, C9.5WA, C9.5DA, C6.5WA, C6.5DA**

| Effluent Parameter | Monitoring Frequency | Sample Type | Discharge Limitation |
|---|---|---|---|
| Aluminum, Total Recoverable, ug/l<br>01104 | monthly | Grab | Report |
| Arsenic, Total Recoverable, ug/l<br>00978 | monthly | Grab | Report |
| Cadmium, Potentially dissolved, ug/l<br>01313 | monthly | Grab | Report |
| Copper, Potentially dissolved, ug/l<br>01306 | monthly | Grab | Report |
| Iron, Dissolved, ug/l<br>01046 | monthly | Grab | Report |
| Iron, Total Recoverable ug/l<br>00980 | monthly | Grab | Report |
| Lead, Potentially dissolved, ug/l<br>01318 | monthly | Grab | Report |
| Manganese, Potentially dissolved, ug/l<br>01319 | monthly | Grab | Report |
| Mercury, Total, ug/l<br>71900 | monthly | Grab | Report |
| Molybdenum, Total Recoverable, ug/l<br>01129 | monthly | Grab | Report |
| Uranium, Potentially dissolved, ug/l<br>01326 | monthly | Grab | Report |
| Zinc, Potentially dissolved, ug/l<br>01303 | monthly | Grab | Report |
| Hardness, mg/l as $CaCO_3$<br>00900 | monthly | Grab | Report |
| Total Dissolved Solids, mg/l<br>70295 | monthly | Grab | Report |
| Sulfate, mg/l<br>81020 | monthly | Grab | Report |
| Sulfide as $H_2S$, mg/l<br>51202 | monthly | Grab | Report |
| pH, s.u.<br>00400 | monthly | In-situ | Report |
| Flow, mgd<br>50050 | monthly | Instantaneous or continuous | Report |

**Stormwater Discharge Monitoring Requirements applicable to Outfall 004WA and 004DA**

| Effluent Parameter | Monitoring Frequency | Sample Type | Discharge Limitation |
|---|---|---|---|
| Radium 226+228, Total, pCi/l<br>11503 | quarterly | Grab | Report |



4300 Cherry Creek Drive S., Denver, CO 80246-1530 P 303-692-2000 www.colorado.gov/cdphe
John W. Hickenlooper, Governor | Larry Wolk, MD, MSPH, Executive Director and Chief Medical Officer

**Additional Monitoring Requirements**

On the effective date of this certification, the Mt Emmons Project facility is subject to the monitoring requirements discussed below at each discharge point of stormwater from the facility.

Monitoring Frequency: This permit certification requires that two samples be collected each month, one in a **Wet** condition and one in a **Dry** condition, regardless of the number of measureable storm events. However, if additional samples are collected during the month, these additional samples must also be included in the DMR summary as described below.

Wet condition sampling:

- Rain event. The permittee must conduct rain event monitoring on a storm event that results in a discharge from an outfall (measurable storm event), and that follows the preceding measurable storm event by at least 72 hours (3 days). This requirement is applicable to both internal and external outfalls, as designated in the Permitted Features table in this certification.
- Snowmelt event. The permittee must conduct snowmelt monitoring at a time when snowmelt results in a discharge from an outfall. This requirement is applicable to both internal and external outfalls, as designated in the Permitted Features table in this certification.

Dry condition sampling:

- The permittee must conduct monitoring of outfall discharges that occur during dry conditions. Such discharges are not associated with a rain or snowmelt event, i.e., are discharges that occur between precipitation events when no snowmelt is occurring.

Storm Event Information

- Rain event. The permittee must document the information below for each monitored event.
  i. The date, time of the start of the discharge, time of sampling, duration (in hours) of the rainfall event, and magnitude (in inches) of the storm event sampled;
  ii. The duration between the storm event sampled and the end of the most recent storm event that produced a discharge.
- Snowmelt monitoring. The permittee must document the date of the sampling event for each monitored snowmelt event.

Sample Type and Requirements

- Grab samples shall be used for all monitoring and shall not be combined.
- Permittees must take a minimum of one grab sample from a discharge resulting from a measurable storm event (i.e., **Wet** condition) and from a discharge not associated with a precipitation or snowmelt event but that results in a discharge from the facility (i.e., **Dry** condition). If the permittee, using an approved analytical method, monitors any parameter more frequently than specified in the Monitoring Requirements table above, then the results of such monitoring shall be included in the calculation and reporting of the values required in the Discharge Monitoring Report Form (DMRs).
- Grab samples must be collected within the first 30 minutes of a measurable storm event. If it is not possible to collect the sample within the first 30 minutes of a measurable storm event, the sample must be collected as soon as practicable after the first 30 minutes, and documentation must be kept with the SWMP explaining why it was not possible to take samples within the first 30 minutes.
- In the case of snowmelt, samples must be taken during a period with a measurable discharge.
- All discharge samples at a facility must be taken during the same storm event, if feasible.

Holding ponds:

- Sampling from facility holding ponds or other impoundments must be performed at the outlet from the pond. If the pond does not discharge, no sampling is necessary.
- If any process water mixes with stormwater, the resulting mixture is all considered process water, and must be covered under a CDPS industrial wastewater discharge permit.



4300 Cherry Creek Drive S., Denver, CO 80246-1530 P 303-692-2000 www.colorado.gov/cdphe
John W. Hickenlooper, Governor | Larry Wolk, MD, MSPH, Executive Director and Chief Medical Officer

**Certification is modified and re-issued**: 2/16/2016
Modified to transfer from U S Energy Corp to **Mt. Emmons Mining Company** and to Admistratively change the certification number from COR040174 to **COR040284**

**Certification Expires:** 10/1/2012
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.

Certification Approved By:
Janet Kieler
Section Manager
Permits Section
Water Quality Control Division



4300 Cherry Creek Drive S., Denver, CO 80246-1530 P 303-692-2000 www.colorado.gov/cdphe
John W. Hickenlooper, Governor | Larry Wolk, MD, MSPH, Executive Director and Chief Medical Officer

Geosyntec consultants

# APPENDIX B

# SOURCE ASSESSMENT AND BMP IDENTIFICATION

**MOUNT EMMONS FACILITY**
**STORM WATER MANAGEMENT PLAN**
**SOURCE ASSESSMENT AND BMP IDENTIFICATION**

| **LOCATION** | |
|---|---|
| **N** | **E** |

| Date of Identification: 07/20/1995 | By: confirmed by FC 11-8-10 | Reference Drawing Number: Figure 3 in SWMP |
|---|---|---|
| Type or Character of Potential Pollutant: **Mine drainage (acid and metals).** | | Area Supervisor: TODD MARSHALL |

| **BMP** | | **Detailed Control, Practice or Activity** |
|---|---|---|
| ☐ | Good Housekeeping | -<br>-<br>- |
| ☑ | Preventative Maintenance | - Maintain & repair collection facilities inside portals that collect and convey mine discharge to WWTP.<br>- Maintain & repair collection structures inside the 2160 portal.<br>- Maintain & repair structures at other portals that are designed to collect and divert drainage into the mine collection system.<br>- Maintain & repair structures and grading that prevents storm water from entering mine.<br>- |
| ☑ | Inspection Frequency | - Inspect portal collection trench and piping at the 2160 portal on rounds.<br>- Inspect & evaluate effectiveness of barriers that prevent influx of storm water to mine semi-annually. |
| ☑ | Spill Prevention Of Containment | - Collection sumps at 2000 level and 2160 level portals.<br>- Implement SPCC/MCP as revised June 2022.<br>-<br>- |
| ☐ | Sediment and Erosion Control | -<br>-<br>-<br>- |
| ☑ | Designated Drainage Patterns or Runoff Management | - Construct and maintain a positive topographic barrier at all portals that will prevent flow into the mine and spills to storm water.<br>-<br>-<br>- |
| ☐ | Other Specific Activities | -<br>-<br>- |

**COMMENTS:** - This BMP reflects BMP Item 1 of the CDPS permit. The intent of this BMP is twofold.
- 1. Ensure that the mine drainage is collected and diverted to the treatment plant.
- 2. Ensure that the influx of surface water into portals does not occur.
-

| **Description: MANAGE WATER AT PORTALS** | **BMP KEY NO.: PS – 1A** |
|---|---|

**MOUNT EMMONS FACILITY**
**STORM WATER MANAGEMENT PLAN**
**SOURCE ASSESSMENT AND BMP IDENTIFICATION**

| **LOCATION** | |
|---|---|
| **N** | **E** |

| | | |
|---|---|---|
| Date of Identification: 07/21/1995 | By: confirmed by FC 10-4-11 | Reference Drawing Number: Figure 3 in SWMP |
| Type or Character of Potential Pollutant: **Sediment.** | | Area Supervisor: TODD MARSHALL |

| **BMP** | | **Detailed Control, Practice or Activity** |
|---|---|---|
| ☑ | Good Housekeeping | - Clear debris from ditches that could cause overtopping and erosion.<br>-<br>- |
| ☑ | Preventative Maintenance | - Repair any scarps that develop by erosion blankets/matts.<br>- Armor ditches with concrete if necessary<br>-<br>-<br>- |
| ☑ | Inspection Frequency | - After major storm events.<br>- Regular semi-annual inspection during snow runoff. |
| ☐ | Spill Prevention Of Containment | -<br>-<br>-<br>- |
| ☑ | Sediment and Erosion Control | - Divert stormwater away from disturbed areas- Armor steep/high velocity channels with riprap, check dams, waddles.<br>- Install waddles below all construction zones.<br>- |
| ☐ | Designated Drainage Patterns or Runoff Management | -<br>-<br>-<br>- |
| ☑ | Other Specific Activities | - Check detention basins where appropriate. Add new structures at disturbed areas.<br>-<br>- |

| **COMMENTS:** | - This BMP reflects Item 3 of the CDPS permit. It provides a format for inspection and implementation of diversion and stabilization of disturbed areas, and supplements the recommendations provided in the BASELINE BMP section.<br>-<br>- |
|---|---|

| **Description: EROSION CONTROL ACTIVITIES THROUGHOUT SITE** | **BMP KEY NO.: ES – 3A** |
|---|---|

**MOUNT EMMONS FACILITY**
**STORM WATER MANAGEMENT PLAN**
**SOURCE ASSESSMENT AND BMP IDENTIFICATION**

| LOCATION | |
|---|---|
| N | E |

| | | |
|---|---|---|
| Date of Identification: 07/25/1997 | By: confirmed by FC 11-8-10 | Reference Drawing Number: Figure 3 in SWMP |
| Type or Character of Potential Pollutant: **Erosion and sediment from North Interceptor 2000 level culvert.** | | Area Supervisor: TODD MARSHALL |

| BMP | | Detailed Control, Practice or Activity |
|---|---|---|
| ☑ | Good Housekeeping | - Remove trash and debris from inlet grate daily during live flow.<br>-<br>- |
| ☑ | Preventative Maintenance | - Remove accumulated sediment, rocks, etc. in inlet box to prevent overtopping.<br>- Clean out accumulated rocks and debris in energy dissipater when required.<br>-<br>-<br>- |
| ☑ | Inspection Frequency | - Daily during heavy runoff.<br>- Before/after winter closure. |
| ☐ | Spill Prevention Of Containment | -<br>-<br>-<br>- |
| ☐ | Sediment and Erosion Control | -<br>-<br>-<br>- |
| ☑ | Designated Drainage Patterns or Runoff Management | - System conveys runoff through pipe to bypass erosive area.<br>-<br>-<br>- |
| ☑ | Other Specific Activities | - Structural components, including HDPE pipe, a precast inlet (with grate), an energy dissipater, in a concrete channel.<br>-<br>- |

| | |
|---|---|
| **COMMENTS:** | - This system was updated in 2008 due to open channel washed out and replaced by buried HDPE pipe for a culvert.<br>-<br>- |

| | |
|---|---|
| **Description: 2000 LEVEL SWITCHBACK CULVERT** | **BMP KEY NO.: ES – 3C** |

**MOUNT EMMONS FACILITY**
**STORM WATER MANAGEMENT PLAN**
**SOURCE ASSESSMENT AND BMP IDENTIFICATION**

| LOCATION | |
|---|---|
| N | E |

| | | |
|---|---|---|
| Date of Identification: 07/20/1995 | By: confirmed by FC011-8-10 | Reference Drawing Number: Figure 3 in SWMP |
| Type or Character of Potential Pollutant: **Erosion/Sedimentation.** | | Area Supervisor: TODD MARSHALL |

| | BMP | Detailed Control, Practice or Activity |
|---|---|---|
| ☐ | Good Housekeeping | -<br>-<br>- |
| ☐ | Preventative Maintenance | -<br>-<br>-<br>-<br>- |
| ☐ | Inspection Frequency | -<br>- |
| ☐ | Spill Prevention Of Containment | -<br>-<br>-<br>- |
| ☑ | Sediment and Erosion Control | - Stabilize by vegetation.<br>-<br>-<br>- |
| ☐ | Designated Drainage Patterns or Runoff Management | -<br>-<br>-<br>- |
| ☑ | Other Specific Activities | - Identify local sources of topsoil.<br>-<br>- |

| | |
|---|---|
| **COMMENTS:** | - This BMP reflects Item 4 of the CDPS permit. Its purpose is to maintain onsite, or readily available, sources of topsoil for use in revegetation and erosion control.<br>-<br>- |

| | |
|---|---|
| **Description: TOPSOIL STOCKPILE** | **BMP KEY NO.: ES - 4A** |

**MOUNT EMMONS FACILITY**
**STORM WATER MANAGEMENT PLAN**
**SOURCE ASSESSMENT AND BMP IDENTIFICATION**

| LOCATION | |
|---|---|
| N | E |

| | | |
|---|---|---|
| Date of Identification: 07/20/1995 | By: confirmed by FC 11-8-10 | Reference Drawing Number: Figure 3 in SWMP |
| Type or Character of Potential Pollutant: **Acid drainage from reclaimed tailings co-mingling with runoff.** | | Area Supervisor: TODD MARSHALL |

| | **BMP** | **Detailed Control, Practice or Activity** |
|---|---|---|
| ☑ | Good Housekeeping | - Remove any accumulated debris from inlets of decant towers so that water will not pond on top of the clay barrier.<br>-<br>- |
| ☑ | Preventative Maintenance | - Repair any deterioration in clay cap on surface of tailing.<br>- Repair deterioration of decanter system.<br>-<br>-<br>- |
| ☑ | Inspection Frequency | - Inspect clay cap each year.<br>- Inspect decanter system as often as practical. |
| ☐ | Spill Prevention Of Containment | -<br>-<br>-<br>- |
| ☑ | Sediment and Erosion Control | - Provide checks or water bars, if necessary, to prevent erosion of clay cap.<br>-<br>-<br>- |
| ☑ | Designated Drainage Patterns or Runoff Management | - Divert clear water runoff away from tailing area.<br>-<br>-<br>- |
| ☑ | Other Specific Activities | - Piping structures and components of the decant collection system.<br>-<br>- |

| | |
|---|---|
| **COMMENTS:** | - This BMP reflects Item 6 of the CDPS permit. Its intent is to manage the clay seal barrier that was constructed over the tailing ponds.<br>-<br>-<br>- |

| | |
|---|---|
| **Description: CLAY CAP (SEAL) ON TAILING AREAS** | **BMP KEY NO.: PS - 6A** |

**MOUNT EMMONS FACILITY**
**STORM WATER MANAGEMENT PLAN**
**SOURCE ASSESSMENT AND BMP IDENTIFICATION**

| LOCATION | |
|---|---|
| N | E |

| | | |
|---|---|---|
| Date of Identification: 07/20/1995 | By: confirmed by FC 10-4-11 | Reference Drawing Number: Figure 3 in SWMP |
| Type or Character of Potential Pollutant: **Sediment and leaching from surface of dumps.** | | Area Supervisor: TODD MARSHALL |

| BMP | | Detailed Control, Practice or Activity |
|---|---|---|
| ☑ | Good Housekeeping | - Remove debris that blocks channels and hinders runoff.<br>-<br>- |
| ☑ | Preventative Maintenance | - Grade ditches and swales to eliminate & maintain rapid removal of stormwater from dump areas, but without erosion.<br>- Fill pools level with compacted clean soils, where practical.<br>-<br>-<br>- |
| ☑ | Inspection Frequency | - Before winter and before/after snowmelt season.<br>- Daily during major storm events. |
| ☐ | Spill Prevention Of Containment | -<br>-<br>-<br>- |
| ☑ | Sediment and Erosion Control | - Construct sediment traps using coarse aggregate to prevent mobilization of dump soils.<br>- Use erosion blankets/ waddles where practical, to control erosion.<br>-<br>- |
| ☐ | Designated Drainage Patterns or Runoff Management | -<br>-<br>-<br>- |
| ☐ | Other Specific Activities | -<br>-<br>- |

| COMMENTS: | |
|---|---|
| | -<br>-<br>-<br>- |

| Description: MANAGE WATER ON MINE DUMPS | BMP KEY NO.: PS – 6B |
|---|---|

**MOUNT EMMONS FACILITY**
**STORM WATER MANAGEMENT PLAN**
**SOURCE ASSESSMENT AND BMP IDENTIFICATION**

| LOCATION | |
|---|---|
| N | E |

| | | |
|---|---|---|
| Date of Identification: 07/20/1995 | By: confirmed by FC 11-8-10 | Reference Drawing Number: Figure 3 in SWMP |
| Type or Character of Potential Pollutant: **Sediment from mine wastes & pollutant leaching.** | | Area Supervisor: TODD MARSHALL |

| BMP | | Detailed Control, Practice or Activity |
|---|---|---|
| ☑ | Good Housekeeping | - Remove debris from culvert inlets and flow channels to prevent overtopping.<br>-<br>- |
| ☑ | Preventative Maintenance | - Regrade interceptor ditches as necessary to maintain drainage network.<br>- Repair inlet/outlet damage at culverts.<br>- Armor ditches with concrete<br>-<br>- |
| ☑ | Inspection Frequency | - Before winter closeout. Before/after snowmelt runoff.<br>- After major storm events. |
| ☑ | Spill Prevention Of Containment | - Ensure that adequate freeboard is provided at the ditch bank to prevent overtopping into the process area during runoff and flood events.<br>-<br>- |
| ☑ | Sediment and Erosion Control | - Riprap armoring in high velocity channels.<br>-<br>-<br>- |
| ☑ | Designated Drainage Patterns or Runoff Management | - Intercept storm water flows at boundary of waste dump areas and convey the flow directly to the nearest interceptor ditch to minimize contact with dump soils (see BMP 6B). Provide a positive topographic divide at all boundaries between process and storm water zones.<br>- |
| ☑ | Other Specific Activities | - Size culverts for maximum flow.<br>- Maintain stable slopes on ditch banks. 3:1 to 2:1 max. slope.<br>- |

| | |
|---|---|
| **COMMENTS:** | - This BMP reflects Item 7 of the CDPS permit. It relates to the diversion of unpolluted runoff around mine wastes.<br>-<br>-<br>- |

| | |
|---|---|
| **Description: INTERCEPTION AND BYPASS SYSTEM** | **BMP KEY NO.: PS - 7A** |

**MOUNT EMMONS FACILITY**
**STORM WATER MANAGEMENT PLAN**
**SOURCE ASSESSMENT AND BMP IDENTIFICATION**

| LOCATION | |
|---|---|
| N | E |

| Date of Identification: 07/20/1995 | By: confirmed by FC 11-8-10 | Reference Drawing Number: Figure 3 in SWMP |
|---|---|---|
| Type or Character of Potential Pollutant: **Process Water.** | | Area Supervisor: TODD MARSHALL |

| BMP | | Detailed Control, Practice or Activity |
|---|---|---|
| ☐ | Good Housekeeping | -<br>-<br>- |
| ☑ | Preventative Maintenance | - Maintain and repair pump systems that remove water from ponds to treatment.<br>-<br>-<br>-<br>- |
| ☑ | Inspection Frequency | - Daily check of water levels.<br>- |
| ☑ | Spill Prevention Of Containment | - Maintain water levels in ponds and basins at the lowest practical level to minimize the probability of a spill.<br>-<br>-<br>- |
| ☐ | Sediment and Erosion Control | -<br>-<br>-<br>- |
| ☑ | Designated Drainage Patterns or Runoff Management | - Prepare for snowmelt runoff by minimizing the storage levels in ponds.<br>-<br>-<br>- |
| ☑ | Other Specific Activities | - Create a procedure log of actions that have proved successful during snow and rain storm events and adopt the procedures for future use.<br>- |

| **COMMENTS:** | - This BMP reflects Item 10 of the CDPS permit. It relates to the management of water levels to minimize the chance that these ponds will spill through their constructed spillways into Coal Creek.<br>-<br>- |
|---|---|

| **Description: MANAGE WATER IN BASINS/PONDS** | **BMP KEY NO.: PS - 10A** |
|---|---|

**MOUNT EMMONS FACILITY**
**STORM WATER MANAGEMENT PLAN**
**SOURCE ASSESSMENT AND BMP IDENTIFICATION**

| LOCATION | |
|---|---|
| N | E |

| | | |
|---|---|---|
| Date of Identification: 07/20/1995 | By: confirmed by FC 11-8-10 | Reference Drawing Number: Figure 3 in SWMP |
| Type or Character of Potential Pollutant: **Process Water.** | | Area Supervisor: TODD MARSHALL |

| BMP | | Detailed Control, Practice or Activity |
|---|---|---|
| ☐ | Good Housekeeping | -<br>-<br>- |
| ☑ | Preventative Maintenance | - Remove and replace materials and equipment when incompatibility is suspected.<br>-<br>-<br>-<br>- |
| ☑ | Inspection Frequency | - Inspect for corrosion that would indicate material incompatibility whenever/wherever maintenance is performed.<br>- |
| ☐ | Spill Prevention Of Containment | -<br>-<br>-<br>- |
| ☐ | Sediment and Erosion Control | -<br>-<br>-<br>- |
| ☐ | Designated Drainage Patterns or Runoff Management | -<br>-<br>-<br>- |
| ☑ | Other Specific Activities | - Prepare a schedule of acceptable materials for various exposure conditions at the site.<br>- (e.g. stainless steel for low pH, HDPE for low pH, no brass for caustic soda, etc.)<br>- |

| | |
|---|---|
| **COMMENTS:** | - This BMP reflects Item 11 of the CDPS permit. It relates to the choice of materials, particularly in the collection and conveyance systems that will avoid corrosion and failure of pipes and equipment that could result in spills and leaks.<br>-<br>- |

| | |
|---|---|
| **Description: MATERIAL COMPATIBILITY** | **BMP KEY NO.: LS - 11A** |

**MOUNT EMMONS FACILITY**
**STORM WATER MANAGEMENT PLAN**
**SOURCE ASSESSMENT AND BMP IDENTIFICATION**

| LOCATION | |
|---|---|
| N | E |

| | | |
|---|---|---|
| Date of Identification: 07/20/1995 | By: confirmed by FC 11-8-10 | Reference Drawing Number: Figure 3 in SWMP |
| Type or Character of Potential Pollutant: **Fuel/Oil, Battery acid, Reagents, Process Water.** | | Area Supervisor: TODD MARSHALL |

| BMP | | Detailed Control, Practice or Activity |
|---|---|---|
| ☑ | Good Housekeeping | - Clean up spills as soon as possible according to procedures of SPCC Plan.<br>-<br>- |
| ☑ | Preventative Maintenance | - Maintain and repair tanks and liquid storage/conveyance equipment to prevent deterioration and leakage.<br>- Separate and remove rainwater from spill sumps prior to winter and dispose of as required by company procedures & policy.<br>-<br>-<br>- |
| ☑ | Inspection Frequency | - Inspect for deterioration of spill sumps semi-annually.<br>- Inspect for spills during daily rounds. |
| ☑ | Spill Prevention Of Containment | - Spill secondary containment for outside storage of reagents and fuel/oil (see SPCC).<br>- Store freeze-sensitive materials and equipment (batteries) and liquids in heated areas.<br>-<br>- |
| ☐ | Sediment and Erosion Control | -<br>-<br>-<br>- |
| ☑ | Designated Drainage Patterns or Runoff Management | - Where possible and feasible, locate exterior tanks away from primary stormwater channels to maximize the available reaction time and distance before spills would reach the channel.<br>-<br>- |
| ☐ | Other Specific Activities | -<br>-<br>- |

| | |
|---|---|
| **COMMENTS:** | - This BMP reflects Item 12 of the CDPS permit as it relates to exterior storage of liquid materials.<br>-<br>-<br>- |

| | |
|---|---|
| **Description: MAINTENANCE/MANAGEMENT OF LIQUID STORAGE** | **BMP KEY NO.: LS - 12A** |

**MOUNT EMMONS FACILITY**
**STORM WATER MANAGEMENT PLAN**
**SOURCE ASSESSMENT AND BMP IDENTIFICATION**

| LOCATION | |
|---|---|
| N | E |

| Date of Identification: 07/20/1995 | By: confirmed by FC 11-8-10 | Reference Drawing Number: Figure 3 in SWMP |
|---|---|---|
| Type or Character of Potential Pollutant: **Dry materials, waste products, and reagents.** | | Area Supervisor: TODD MARSHALL |

| BMP | | Detailed Control, Practice or Activity |
|---|---|---|
| ☑ | Good Housekeeping | - Clean up spills of dry materials in a timely fashion in accordance with the SPCC/MCP.<br>-<br>- |
| ☑ | Preventative Maintenance | - Maintain bins and docks where dry materials are stored to prevent deterioration and collapse that would result in a spill.<br>-<br>-<br>-<br>- |
| ☑ | Inspection Frequency | - Semi-annually.<br>- |
| ☑ | Spill Prevention Of Containment | - Store dry materials in containers designed to hold the weight and characteristic of the material.<br>- Store materials received in paper containers inside, or cover to prevent soaking by precipitation.<br>- Store dry materials on elevated docks to prevent contact with ponded storm water.<br>- |
| ☐ | Sediment and Erosion Control | -<br>-<br>-<br>- |
| ☐ | Designated Drainage Patterns or Runoff Management | -<br>-<br>-<br>- |
| ☑ | Other Specific Activities | - Prepare procedures for clean-up, handling, disposal and reclamation of oxide solids that settle out in the degrit chambers or are cleaned from pipelines and equipment as scale.<br>- |

| **COMMENTS:** | - This BMP reflects Item 12 of the CDPS permit, as it relates to management of the storage of dry materials.<br>-<br>-<br>- |
|---|---|

| **Description: MANAGEMENT OF DRY MATERIAL STORAGE** | **BMP KEY NO.: DS – 12B** |
|---|---|

**MOUNT EMMONS FACILITY**
**STORM WATER MANAGEMENT PLAN**
**SOURCE ASSESSMENT AND BMP IDENTIFICATION**

| LOCATION | |
|---|---|
| N | E |

| Date of Identification: 07/20/1995 | By: confirmed by FC 11-8-10 | Reference Drawing Number: Figure 3 in SWMP |
|---|---|---|
| Type or Character of Potential Pollutant: **Process water and oxide scale.** | | Area Supervisor: TODD MARSHALL |

| BMP | | Detailed Control, Practice or Activity |
|---|---|---|
| ☑ | Good Housekeeping | - Remove trash and debris from inlets, flumes, and spillways.<br>-<br>- |
| ☑ | Preventative Maintenance | - Clean accumulations of oxide scale and sediment from degrit chamber and surge pond as needed.<br>- Repair, grease, and maintain valves and diversion structures.<br>-<br>-<br>- |
| ☑ | Inspection Frequency | - Fully inspect semi-annually<br>- Daily inspection for upset conditions as part of normal rounds. |
| ☑ | Spill Prevention Of Containment | - Spillways are included in outlet vault, degrit chamber, and surge pond.<br>- Ensure that all spillways are functional.<br>-<br>- |
| ☐ | Sediment and Erosion Control | -<br>-<br>-<br>- |
| ☑ | Designated Drainage Patterns or Runoff Management | - Keep surge storage as low as possible to maximize availability of storage during upset conditions.<br>-<br>-<br>- |
| ☑ | Other Specific Activities | - Test underdrain system to ensure that leakage from the degrit chamber and the surge pond is not occurring.<br>-<br>- |

| **COMMENTS:** | - System was installed in 1998 and commissioned in 1999 for absorbing unexpected surges from the 2160 portal..<br>-<br>-<br>- |
|---|---|

| **Description: 2160 PORTAL SURGE POND AND PIPING** | **BMP KEY NO.: PS – 12C** |
|---|---|

**MOUNT EMMONS FACILITY**
**STORM WATER MANAGEMENT PLAN**
**SOURCE ASSESSMENT AND BMP IDENTIFICATION**

| LOCATION | |
|---|---|
| N | E |

| | | |
|---|---|---|
| Date of Identification: 07/20/1995 | By: confirmed by FC 11-8-10 | Reference Drawing Number: Figure 3 in SWMP |
| Type or Character of Potential Pollutant: **Process water.** | | Area Supervisor: TODD MARSHALL |

| BMP | | Detailed Control, Practice or Activity |
|---|---|---|
| ☑ | Good Housekeeping | - Clean debris from pipe inlets and channels.<br>-<br>- |
| ☑ | Preventative Maintenance | - Clean pipe scale on scheduled basis to prevent blockage and spills.<br>-<br>-<br>-<br>- |
| ☑ | Inspection Frequency | - Detailed inspection semi-annually of pipe flow conditions.<br>- Inspection for upset conditions as part of rounds. |
| ☐ | Spill Prevention Of Containment | -<br>-<br>-<br>- |
| ☐ | Sediment and Erosion Control | -<br>-<br>-<br>- |
| ☐ | Designated Drainage Patterns or Runoff Management | -<br>-<br>-<br>- |
| ☑ | Other Specific Activities | - Attention to control, cleanup, and disposal of pipe scale during pipe pigging or flushing operations.<br>-<br>- |

| COMMENTS: | - Back-up pipe was constructed in 1998 for delivery of mine drainage from 2160 portal to Equalization Pond.<br>-<br>- |
|---|---|

| **Description: MINEWATER DELIVERY PIPES** | **BMP KEY NO.: PS – 12D** |
|---|---|

**MOUNT EMMONS FACILITY**
**STORM WATER MANAGEMENT PLAN**
**SOURCE ASSESSMENT AND BMP IDENTIFICATION**

| LOCATION | |
|---|---|
| N | E |

| | | |
|---|---|---|
| Date of Identification: 07/20/1995 | By: confirmed by FC 11-8-10 | Reference Drawing Number: Figure 3 in SWMP |
| Type or Character of Potential Pollutant: **Spill and leaks from parking area.** | | Area Supervisor: TODD MARSHALL |

| BMP | | Detailed Control, Practice or Activity |
|---|---|---|
| ☑ | Good Housekeeping | - Pick up trash.<br>-<br>- |
| ☑ | Preventative Maintenance | - Repair equipment leaks when possible/practical.<br>-<br>-<br>-<br>- |
| ☑ | Inspection Frequency | - Daily inspection on site rounds.<br>- |
| ☐ | Spill Prevention Of Containment | -<br>-<br>-<br>- |
| ☐ | Sediment and Erosion Control | -<br>-<br>-<br>- |
| ☐ | Designated Drainage Patterns or Runoff Management | -<br>-<br>-<br>- |
| ☑ | Other Specific Activities | - Look for leaks originating from equipment or vehicles and repair.<br>- Place absorbent pad under equipment/vehicles that have a leak.<br>- |

| **COMMENTS:** | -<br>-<br>-<br>- |
|---|---|

| **Description: EQUIPMENT & VEHICLE PARKING AREA** | **BMP KEY NO.: PS – 12E** |
|---|---|

Geosyntec consultants

# APPENDIX C

# TRAINING LOG FOR STORMWATER MANAGEMENT PLAN

**Training Log for Storm Water Management Plan**
**Mt Emmons Facility, Crested Butte, Colorado**

Name of Trainer

Topics covered in this training exercise: (1) Definition of Storm Water, (2) Review requirements and purpose of storm water management, (3) Review site drainage drawings, (4) Review inspection sheets, (5) Review general BMP and site specific BMP measures, (6) Inspection and Implementation requirements

Other training topics:

| Employee's Printed Name | Employee's Signature | Employee Number | Date of Training |
|---|---|---|---|
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |

Note: This form should be filled out and kept on file with the Mt Emmons Facility Storm Water Management Plan. Training is required for oil-handling personnel on an annual basis per 40 CFR 112.7(f)(3).

Geosyntec consultants

# APPENDIX D

# STORMWATER INSPECTION CHECKLIST

| Mt. Emmons (Keystone Mine) STORMWATER INSPECTION CHECKLIST (page 1 of 2) revised Feb. 2025 | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Inspected By:<br>Date: | | | | |
| BMP No. | Description of BMP's | Working Properly? | Actions Required | Time frame | Who's Responsible | House-Keeping | Preventative Maintenance | Spill Prevention | Sed/Eros Control | Runoff Mgmnt. |
| PS-1A<br>Comments: | Manage Water Portals | Y/N | | | | ☐ | ☐ | ☐ | ☐ | ☐ |
| ES-3A<br>Comments: | Site wide Erosion Control Activities | Y/N | | | | ☐ | ☐ | ☐ | ☐ | ☐ |
| ES-3C<br>Comments: | 2000 Level Switchback Piping | Y/N | | | | ☐ | ☐ | ☐ | ☐ | ☐ |
| ES-4A<br>Comments: | Topsoil Stockpile | Y/N | | | | ☐ | ☐ | ☐ | ☐ | ☐ |
| PS-6A<br>Comments: | Cap on Tailings Areas | Y/N | | | | ☐ | ☐ | ☐ | ☐ | ☐ |
| PS-6B<br>Comments: | Manage Water on mine dumps | Y/N | | | | ☐ | ☐ | ☐ | ☐ | ☐ |
| PS-7A<br>Comments: | Interceptors and Bypass System | Y/N | | | | ☐ | ☐ | ☐ | ☐ | ☐ |
| PS-10A<br>Comments: | Manage Water In Basins and Ponds | Y/N | | | | ☐ | ☐ | ☐ | ☐ | ☐ |

| Mt. Emmons (Keystone Mine) STORMWATER INSPECTION CHECKLIST (page 2 of 2) revised Feb. 2025 | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Inspected By: Date: | | | | | |
| BMP No. | Description of BMP's | Working Properly? | Actions Required | Time frame | Who's Responsible | House-Keeping | Preventative Maintenance | Spill Prevention | Sed/Eros Control | Runoff Mgmnt. |
| LS-11A<br>Comments: | Choosing Materials that are Compatible | Y/N | | | | ☐ | ☐ | ☐ | ☐ | ☐ |
| LS-12A<br>Comments: | Maintenance and Mgnt. Of Stored Liquids (outside) | Y/N | | | | ☐ | ☐ | ☐ | ☐ | ☐ |
| DS-12B<br>Comments: | Maintenance and Mgnt. Of Dry Materials | Y/N | | | | ☐ | ☐ | ☐ | ☐ | ☐ |
| PS-12C<br>Comments: | 2160 Level Portal Surge Pond and Piping | Y/N | | | | ☐ | ☐ | ☐ | ☐ | ☐ |
| PS-12D<br>Comments: | Mine water Delivery Pipes | Y/N | | | | ☐ | ☐ | ☐ | ☐ | ☐ |
| PS-12E<br>Comments: | Equipment and Vehicle | Y/N | | | | ☐ | ☐ | ☐ | ☐ | ☐ |
| ADDDITIONAL COMMENTS: | | | | | | | | | | |

# EXHIBIT D

## 2024 Report, Plan to Resolve Uncertainty

# Temporary Modification Progress Update – Mt. Emmons Mining Company

| | |
|---|---|
| **Segment(s)** | COGUUG12 (Upper Gunnison Segment 12) |
| **Temporary Modification(s)** (parameter, duration (acute/chronic/DM/MWAT), operative value and seasonal and/or spatial extent) | Cadmium (acute/chronic) = 3.5/2.79 µg/L<br>4/1-6/30 on Coal Creek |
| **Original Adoption Date(s) and Date(s) of Any Revisions** | Cadmium (acute): adopted 6/12/2017; extended 6/14/2022<br>Cadmium (chronic): adopted 6/12/2006; revised 6/12/2017; extended 6/14/2022 |
| **Expiration Date** | 12/31/2027 |
| **Types of Uncertainty that Apply** | ☒ Water quality standard necessary to protect uses<br>☒ Extent to which existing quality is the result of natural/irreversible human-induced conditions |
| **Rulemaking Hearing, Phase, and Exhibit Number under which Most Recent Plan to Resolve Uncertainty was Submitted** (e.g., Reg. 38 2020, PHS, Exhibit 3) | Reg. 35 2022, Rebuttal, Exhibit 12[1] |
| **When will this temporary modification next be reviewed?** (i.e., date of rulemaking hearing) | Temporary modifications review hearings, including in June 2026 |
| **Water quality and effluent data attached?** | ☒ Yes: Water quality and effluent data are included in Attachments B through F<br>☐ No (if no, why not): |

Attachments are available for download here: https://drive.google.com/drive/folders/1YYV14xCjllHAzrGFhRoPg2w_Nbeq56-q

## I. Demonstrated or Predicted Waterbody Non-attainment

Data are included in Attachment D and E.

While there are substantial exceedances of the table value standard (TVS) for acute and chronic cadmium in both the upstream segment Upper Gunnison Segment 11 (COGUUG11) and in Upper Gunnison Segment 12, concentrations in Segment 12 (Attachment E) are generally lower than the concentrations in the upstream Segment 11 (Attachment D), and the 95th percentile lower confidence limits (LCLs) are close to the established temporary modifications.

In addition to demonstration with instream data, nonattainment can be demonstrated where there is a relevant 303(d) listing for the parameter.[2] In 2021 the Water Quality Control Commission

[1] Temporary Modification Plan to Resolve Uncertainty, Mt. Emmons Mining Company (MEMC) (May 4, 2022), https://drive.google.com/file/d/1SSMMChvTillIvyWcahSyXbqRO9tco4OD/view ("2022 PTRU").
[2] *See* Water Quality Control Division (WQCD), Temporary Modification Checklist and Guidance, p. 8, (rev. Mar. 12, 2021), https://drive.google.com/file/d/15k0aQQbFjF_lc59jCAksv1A5bijiZ_TI/view.

(WQCC) retained the mainstem of Coal Creek (portion COGUUG12_C) on the state's 303(d) list as impaired for cadmium.[3]

## II. Demonstrated or Predicted Non-compliance

As explained in the 2022 and 2023 Update,[4] the discharge permit for the Keystone Mine Water Treatment Plant (WTP) has been in administrative extension since 2013. For this update, Geosyntec Consultants recalculated the predicted water quality-based effluent limitations (WQBELs) in a future permit renewal based on the current calculated water quality standards (using a mean hardness of 52 mg/L). (See Attachments B and F).

Improvements at the site have now resulted in lower WTP discharge concentrations of cadmium. Based on the most recent five years of data (2020 to 2024) for April to June, there is no longer predicted noncompliance with the TVS for 30-day average (chronic) or daily maximum (acute) cadmium for these months.

Table 1 – Chronic cadmium, Keystone Mine WTP Discharge Results 2011-2015 (2017 Basin Hearing)

| | **April to June** | | |
|---|---|---|---|
| | **Upstream Background** | **WTP Discharge 2011-2015** | **Chronic WQBEL** |
| Metal | **chronic** | **Maximum 30-day average** | |
| | ug/L | ug/L | ug/L |
| **Cadmium** | **4.1** | **0.83** | **0.42** |
| **Hardness** | | | **47.7 mg/L** |

Table 2 – Chronic cadmium, Keystone Mine WTP Discharge Results 2020–2024

| | **April to June** | | |
|---|---|---|---|
| | **Upstream Background** | **WTP Discharge 2020-20243** | **Chronic WQBEL** |
| Metal | **chronic** | **Maximum 30-day average** | |
| | ug/L | ug/L | ug/L |
| **Cadmium** | **4.27** | **0.28** | **0.44** |
| **Hardness** | | | **52 mg/L** |

[3] *See* WQCC Reg. 93, § 93.3.
[4] MEMC's Temporary Modification Progress Update for 2022 (Apr. 3, 2023) ("2022 Update"), https://drive.google.com/drive/folders/10gjugFwFcKalw2CFfpvSeHynSOHh9CGA; MEMC's Temporary Modification Progress Update for 2023 (Mar. 31, 2024) ("2023 Update"), https://drive.google.com/drive/folders/1U9uPHCPmoHaOLLy_5nLZuwnbuV-Wke0P.

Table 3 – Acute cadmium, Keystone Mine WTP Discharge Results 2011-2015 (2017 Basin Hearing)

| | April to June | | |
|---|---|---|---|
| | **Upstream Background** | **WTP Discharge 2011-2015** | **Acute WQBEL** |
| Metal | **acute** | **Maximum daily** | |
| | ug/L | ug/L | ug/L |
| **Cadmium** | **4.5** | **1.02** | **0.89** |
| **Hardness** | | | **47.7 mg/L** |

Table 4 – Acute cadmium, Keystone Mine WTP Discharge Results 2020–2024

| | April to June | | |
|---|---|---|---|
| | **Upstream Background** | **WTP Discharge 2019-2023** | **Acute WQBEL** |
| Metal | **acute** | **Maximum daily** | |
| | ug/L | ug/L | ug/L |
| **Cadmium** | **5.07** | **0.36** | **0.97** |
| **Hardness** | | | **52 mg/L** |

## III. Description of Remaining Uncertainty

There are numerous anthropogenic and natural loading sources to Coal Creek, Upper Gunnison Segment 9 (COGUUG09) and Upper Gunnison Segments 11 and 12, which were more thoroughly discussed in MEMC's filings in the June 2022 RMH,[5] and summarized briefly in Attachment A, Section 2. The anthropogenic sources include abandoned mines in the Independence Basin area (Segment 9), the Forest Queen Mine (Segment 9), the Standard Mine Superfund Site (Segment 11), the Keystone Mine (including the combined discharge from the WTP and overflow from the reclaimed tailings area) (Segment 12), and the Jokerville Coal Mine (Segment 12). Natural sources include the fen and gossan (Segment 11), the Red Lady Basin (Segment 12), and extensive surface exposures of the mineralized vein on the Keystone Mine property. While MEMC and the stakeholders have taken many actions to reduce several of these loading sources, and the Keystone Mine WTP discharge data show improvements, time is needed to fully determine to what extent the water quality will improve as a result.

In particular, the Standard Mine Superfund Site is a major source of remaining uncertainty (note that MEMC is not directly involved with the Standard Mine Superfund Site). EPA's actions at the Standard Mine Superfund Site are anticipated to improve water quality in Segment 11, which should also result in improved water quality in Segment 12. However, at this time there is uncertainty about the ultimate water quality in Segment 11 as a result of potential EPA actions at this site.

[5] *See* MEMC's Proponent Prehearing Statement (PPHS) and MEMC Exhibits 7 and 10, *submitted in the June 2022 RMH.*

While MEMC is not directly involved with the Standard Mine Superfund Site, EPA activities at the Site are believed to extend for several more years.[6] On June 16, 2023, EPA closed the concrete bulkhead that had been installed in October 2016 (the bulkhead had previously been closed for a 6-month period in 2018). EPA issued a minor modification to its cleanup plan for the Site, which continues surface water quality monitoring through 2027 to evaluate impacts of an extended bulkhead closure.[7] EPA is currently conducting a Five-Year review of this Superfund Site.

Also, since the water quality is likely to improve but the extent of improvement is not yet known, there is significant uncertainty about the appropriate standards to protect the uses on Segment 12. It may be appropriate to adopt site-specific standards in the future when water quality has stabilized following these activities, and other potential activities in the watershed.

### IV. Maintenance of Status Quo

Data to characterize the status quo were included in the June 2022 RMH.[8] Updated data are being submitted as Attachment B and E.

As explained in MEMC's PPHS and Exhibit 5 from the June 2022 RMH, the loading sources to upstream Segments 9 and 11 and to Segment 12 are both significant and numerous. In the 2021 Regulation 93 hearing, several upstream waterbodies were added to or retained on the 303(d) list for cadmium, including drainage from the natural fen (COGUUG09_G), the Segment 11 portion of Coal Creek (COGUUG11_D), and Elk Creek and its tributaries (COGUUG11_B) (which joins Coal Creek at the top of Segment 11).[9] These 303(d) listings support a conclusion that poor water quality from the upstream loading sources is impacting the concentrations of cadmium in Segment 12. Attachment D to this Update includes Segment 11 data, which shows that the water quality in Segment 11 during April-June is worse than downstream Segment 12, and has appeared to become worse since the 2017 hearing.

As described in past annual updates, and in the materials in the June 2022 RMH, MEMC and the stakeholders have been working on reducing loading to both Coal Creek and to the WTP. As MEMC is not actively mining, effluent quality is likely a result of these anthropogenic and natural loading sources, via stormwater infiltrating the mine workings. MEMC's 2022 PTRU contemplates additional actions to further reduce loading to Coal Creek and the WTP from these natural and anthropogenic sources. These activities include implementing tailings-centric controls to reduce stormwater residence times, implementing mine-centric stormwater controls to direct clean water away from faults and fractures, potentially revegetating the gossan, and continued work towards potential construction of a water treatment plant as necessary. As indicated above, the most recent five years of data are showing reduced concentrations of cadmium in the WTP effluent.

In addition, EPA's closure of the bulkhead at the Standard Mine on June 16, 2023, could have an impact on water quality data results instream Coal Creek.

The continued variability and poor water quality from the upstream sources further support the uncertainty regarding what standards are appropriate for this site, until further actions are taken (including by EPA, MEMC, and the other stakeholders) to improve water quality.

---

[6] *See* U.S. EPA, Standard Mine Superfund Site - Home Page, https://cumulis.epa.gov/supercpad/cursites/csitinfo.cfm?id=0801669.
[7] *See id.*
[8] See MEMC Exhibit 4b and MEMC Exhibit 5, *submitted in the June 2022 RMH.*
[9] *See, e.g.*, Reg. 93, §§ 93.3, 93.19.

## V. Provide a Progress Update on the Plan to Resolve Uncertainty

See MEMC's Annual Report for 2024, included as Attachment A.

## *VI.* Discussion of Findings thus Far

MEMC continues to implement its Adaptive Management Plan to resolve uncertainty with the standards. Additional time is needed to determine specific findings. See MEMC's Annual Report for 2024, Attachment A.

**Table 5 Summary of Progress on Proposed Timeline of Activities from Plan to Resolve Uncertainty**

| Anticipated Date of Completion | Activity | Resulting Deliverables | Delays incurred* | Notes on Tasks Accomplished thus Far |
|---|---|---|---|---|
| 2022 | Finish recontouring of tops of Dams 1, 2, 3, and 4 | Annual progress report | No | MEMC finished recontouring the tops of Dams 1, 2, 3, and 4 in 2022. In 2024, MEMC conducted additional recontouring and revegetation to promote positive drainage and reduce sediment transport. See Attachment A, Section 4.1.1. |
| 2022 | Geotechnical investigations of tailings | Annual progress report | Partially | This activity is ongoing and additional data analysis and planning will continue into 2025. See Attachment A, Section 4.1.3. |
| 2022-2023 | Complete up-mountain diversions including Diversions 3 and 6, and potentially Diversion 5 | Annual progress report | No | Diversions 3, 5, and 6 were completed in 2022. Diversion 7 was completed in 2024. The eastern portion of Diversion 1 was installed in 2024, with completion currently planned for 2025. In addition, the extension of 1370 diversion, rehabilitation of diversion 5, and installation of the 6B diversion extension were completed in 2024. See Attachment A, Sections 4.1.2 and 4.2.2. |
| 2022-2023 | Continue work towards potential alternative of replacing the WTP | Annual progress report | Partially | Planning and siting work commenced in 2024, with design work planned to commence in mid-2025. This work is ongoing through 2025 and beyond. See Attachment A, Section 4.1.4. |

| | | | | |
|---|---|---|---|---|
| 2022-2023 | Explore possibility of revegetating a portion of the Gossan | Annual progress report | Partially | This work is ongoing and is now anticipated for 2025-2028. See Attachment A, Sections 4.1.5 and 4.3.2. |
| TBD | Additional investigations of the mine tailings and evaluations of engineering improvements at the site | Annual progress report | n/a | This work is anticipated to be concluded in 2025, and implementation may begin as early as 2026. See Attachment A, Section 4.2.1. |
| TBD | Continue assessing the improvements related to reclamation of waste rock piles, and ditch, road, and slope improvements | Annual progress report | n/a | See Attachment A, Section 4.2.3. |
| TBD | Continue implementing interim and long-term stormwater controls | Annual progress report | n/a | See Attachment A, Section 4.2.4. |
| TBD | Evaluate EPA work related to remediation of the Standard Mine Superfund Site | Annual progress report | n/a | MEMC anticipates that more may be known about the status of the Standard Mine in Fall 2025. See Attachment A, Sections 4.1.6 and 4.2.5. |
| TBD | Evaluate, select, and implement additional alternatives as warranted (including potential new WTP) | Annual progress report | n/a | Planning and siting work commenced in 2024, with design work planned to commence in mid-2025. See Attachment A, Sections 4.1.4 and 4.2.6. |
| 2022-2027 | Collect and analyze water quality data | Annual progress report; data files | No | See Attachment A, Section 4.3.1, and Attachments B through F. |
| 2022-2027 | Evaluate regulatory pathways | Annual progress report | No | See Attachment A, Section 4.3.3. |
| 2022-2027 | Stakeholder communication and collaboration, including periodic stakeholder meetings; annual progress reports to the Division and Stakeholders; and water quality monitoring. | Annual progress reports | No | See Attachment A, Sections 4.3.4 and 4.3.5. |
| 2024 and 2026 | Update Commission on Temporary Modifications status | Hearing submittals | No | An update was provided in 2024 and will be provided in 2026. See Attachment A, Section 4.3.4. |

| | | | | |
|---|---|---|---|---|
| 2027 | Propose regulatory approach to resolving temporary modifications, if warranted | Proposal and rationale documents | No | See Attachment A, Section 4.3.3. |

*For any milestone not met on schedule, please provide justification

**Figure 1 Site Map**

*See attached copy of MEMC's 2022 PTRU (2022 Exhibit 12.c, at page 4).*

**Table 6 Sampling Location Coordinates**

*See attached copy of MEMC's 2022 PTRU (2022 Exhibit 12.c, at pages 1-2).*

MEMC Exhibit 12.c

MEMC/CCWC COAL CREEK WATERSHED SURFACE WATER SAMPLING LOCATIONS AND FREQUENCY

| | | | Frequency | | | | | |
|---|---|---|---|---|---|---|---|---|
| **Sample Location** | **Coordinates** | **Description** | **April** | **May** | **June** | **3rd QTR** | **4th QTR** | **Sample Type** |
| IR-00 | 38.8752482344 N<br>107.1006508 W | Lake Irwin outfall into an unnamed tributary, referred to as "Irwin Creek" approximately 250 feet downstream of the Lake Irwin pump house. | | X | X | X | | Grab |
| Coal 30 | 38 52 0.3648 N<br>107 5 37.068 W | Coal Creek downstream of Irwin town site and the Forest Queen Mine. Accessed from Forest Road 826, park about 0.25 miles below the entrance (marked with signs and memorabilia) to the Irwin Town site. | | X | X | X | | Grab |
| Coal 20 | 38 51 21.1913996 N<br>107 03 36.4514664 W | 20 meters above Elk Creek confluence | X | X | X | X | X* | Grab |
| Coal 15 | 38 51 21.9172275 N<br>107 03 31.0521244 W | 100 meters downstream of confluence with Elk Creek | X | X | X | X | X* | Grab |
| Elk Creek (ELK-00) | 38.857018 N<br>107.059889 W | Elk Creek at CO-12 crossing approximately 100 meters upstream of confluence with Coal Creek just about 50 ft above Kebler Pass Road | X | X | X | X | X* | Grab |
| Coal 12 | 38 51 43.5 N<br>107 02 45.6 W | Above iron fen 1/10 mile upstream of Bog-00 outfall. There is a parking area on the (south) side of road. Follow small trail down to water. Look for two dead clusters of trees on south bank of stream. | X | X | X | X | X* | Grab |
| BOG-00 (UT-3) | 38.862891 N<br>107.044846 W | Bog drainage (a local name for an unnamed tributary to Coal Creek that drains a small portion of the southern flank of Mt. Emmons. The wagon road ditch, which is breached in several locations also contributes flow to the tributary) sampled upstream of the culvert on Kebler Pass road. The Wagon Road Trail begins about 180 feet west of the BOG-00 site and there is a small parking spot right next to the site. | X* | X | X | X | X* | Grab |
| Culvert # 2 | 38.8626011 N<br>107.0410217 W | Second culvert downstream of BOG-00 (KD-07 of MEMC) | X | X | | | | Grab |
| Coal 11.5 | 38 51 44.64 N<br>107 02 23.7 W | Below iron fen and above the gossan. Upstream of the discharge from the culvert for KD-04 and downstream from the culvert for KD-07. Approximately 400 feet east of the UT-3 (Bog-00) drainage | X | X | X | X | X* | Grab |
| Culvert # 3 | 38.862883 N<br>107.038005 W | Third culvert downstream of BOG-00 (KD-04 of MEMC) | X | X | | | | Grab |
| Culvert #5 | 38.863448 N<br>107.035534 W | Fifth culvert downstream of BOG-00 (KD-03 of MEMC) | X | X | | | | Grab |
| Coal 11 | 38 51 50.4 N<br>107 02 01.5 W | Coal Creek below iron fen and gossan and approximately 20 meters upstream of the Carbon Creek Trail ford. | X | X | X | X | X* | Grab |
| KEY-Culvert | 38.864883 N<br>107.030163 W | Culvert that drains the Keystone hillslope, sampled at culvert outfall near Coal Creek. The culvert is about 320 meters downstream of mile marker 29 on Kebler Pass road (KD-02 of MEMC). | X | X | | | | Grab |
| KEY Ditch | 38.867503 N<br>107.024074 W | Kebler Pass Roadside Ditch immediately west and upstream of the Keystone Outfall (KD-01 of MEMC) | X | X | | | | Grab |
| Coal 9.5 | 38.86700N<br>107.02380W | Downstream of the Crested Butte water supply intake and approx. 100 feet upstream of WTP Outfall (which contains MON-04) | X | X | X | Monthly for Permit | Monthly for Permit | Composite |
| MON-06 | 38 52 5.46 N<br>107 01 30.96 W | In the North Interceptor Ditch in the culvert on the north side of the access road to the Water Treatment Plant | X | X | X | Monthly for Permit | Monthly for Permit | Composite |

MEMC/CCWC COAL CREEK WATERSHED SURFACE WATER SAMPLING LOCATIONS AND FREQUENCY

| | | | Frequency | | | | | |
|---|---|---|---|---|---|---|---|---|
| **Sample Location** | **Coordinates** | **Description** | **April** | **May** | **June** | **3rd QTR** | **4th QTR** | **Sample Type** |
| MON-02 | 38.867611 N<br>107.024159 W | In the unlined ditch conveying WTP discharge on the north side of the access road approximatley 75 feet upstream of the confluence with the NID discharge ditch | X | X | X | Monthly for Permit | Monthly for Permit | Composite |
| Coal 6.5 | 38.86741N<br>107.02289W | Downstream of WTP Discharge. Located at the bottom of access ramp down to river from parking lot on Kebler Pass Road. | X | X | X | Monthly for Permit | Monthly for Permit | Composite |
| RLB-1 | 38 52 10.86 N<br>107 01 20.52 W | Main Red Lady Basin tributary upstream of Wildcat Trail Bridge and above Keblar Pass Rd. (above KEY-OPP location of CCWC) | X | X | X | X | X | Grab |
| Coal 05 | 38.868376 N<br>107.020514 W | Coal Creek approximately 30 feet downstream of Wildcat Trail bridge. Access site at junction of Wildcat Trail Road and County Rd. 12. | X | X | X | X | X | Composite |
| Coal 04 | 38 52 9.54 N<br>107 00 37.92 W | Downstream of Red Lady Basin drainages and upstream of Coon Basin drainages and Wildcat Creek | X | X | X | X | X | Grab |
| Coal 03 | 38 52 07.9 N<br>106 59 41.7 W | Upstream of both Spann-Nettick and Halazon irrigation diversion ditches from Coal-02.Access the same way as Coal-02 but continue past the first metal diversion and past the second wooden diversion. | X | X | X | X | X | Grab |
| Wild-00 (Wildcat Creek) | 38 52 08.7383624 N<br>107 00 32.0216044 W | About 8/10 mile past mile marker 31 on Keblar Pass Rd. Look on south side of road for a drainage culvert and parking pullout (small) on the right. Measure upstream 50 meters. | X flow only | X flow only | X flow only | X flow only | X flow only | |
| Far-06 (Far Creek) | 38 52 0.87 N 107 00 16.7 W | traverse pipeline that goes across the creek between WILD-00 and FAR-06 with metal supports around it. Measure flow at both braids of Far Ceek | X flow only | X flow only | X flow only# | X flow only | X flow only | |
| DWR-1A | 38 52 9.42 N<br>106 59 38.34 W | Below Spann Nettick Diversion and above Town Reservoir Overflow and Halazon Diversion | X | X | X | X | X | Grab |
| Coal 02 | 38.868976 N<br>106.992721 W | Coal Creek upstream of Crested Butte, upstream of Whiterock bridge. Drive on Whiterock, as you approach the bridge over Coal Creek at the start of Kebler Pass/CR-12 road, pull over and park. Walk across the bridge access the creek from the river right (i.e. walk down the fillslope near the end of the Kebler Pass guardrail). | X | X | X | X | X | Grab |
| Coal 01 | 38.870962 N<br>106.98587 W | Coal Creek at Totem Pole Park downstream of the pedestrian bridge and stormwater discharge | X | X | X | X | X | Grab |
| USGS gage 09111250 | 38 52 17.60 N<br>106 59 07.07 W | Coal Creek above McCormick Ditch at Crested Butte (since August 2018) | | bimonthly by USGS | | bimonthly by USGS | bimonthly by USGS | Composite |

* Subject to access in winter

# Subject to access in high

In addition to sampling conducted under this LTMP EPA samples ELK-00 twice per year, typically in June and September.

**Samples collected in the 3rd and 4th quarter should vary the month sampled each year**

BOG-00 is also sampled by MEMC twice per year in Spring and late summer/early Fall with sample designation UT-3

USGS samples at this gage on a rotating bimonthly basis where in the course of two years each month is sampled once.

TABLE 2.

FIELD AND LABORATORY WATER QUALITY PARAMETERS - LONG TERM MONITORING PLAN SAMPLING
MT. EMMONS, CRESTED BUTTE, COLORADO

**FIELD**

| Parameter | Units |
|---|---|
| Flow | cubic feet per second (cfs) |
| pH | standard units (s.u.) |
| Specific Conductance | milliSeimens per centimeter (mS/cm) |
| Temperature | degrees Celsius |
| Oxidation Reduction Potential (ORP) | millivolt (mV) |
| Dissolved Oxygen (DO) | percent (%) and mg/L |

**LABORATORY**

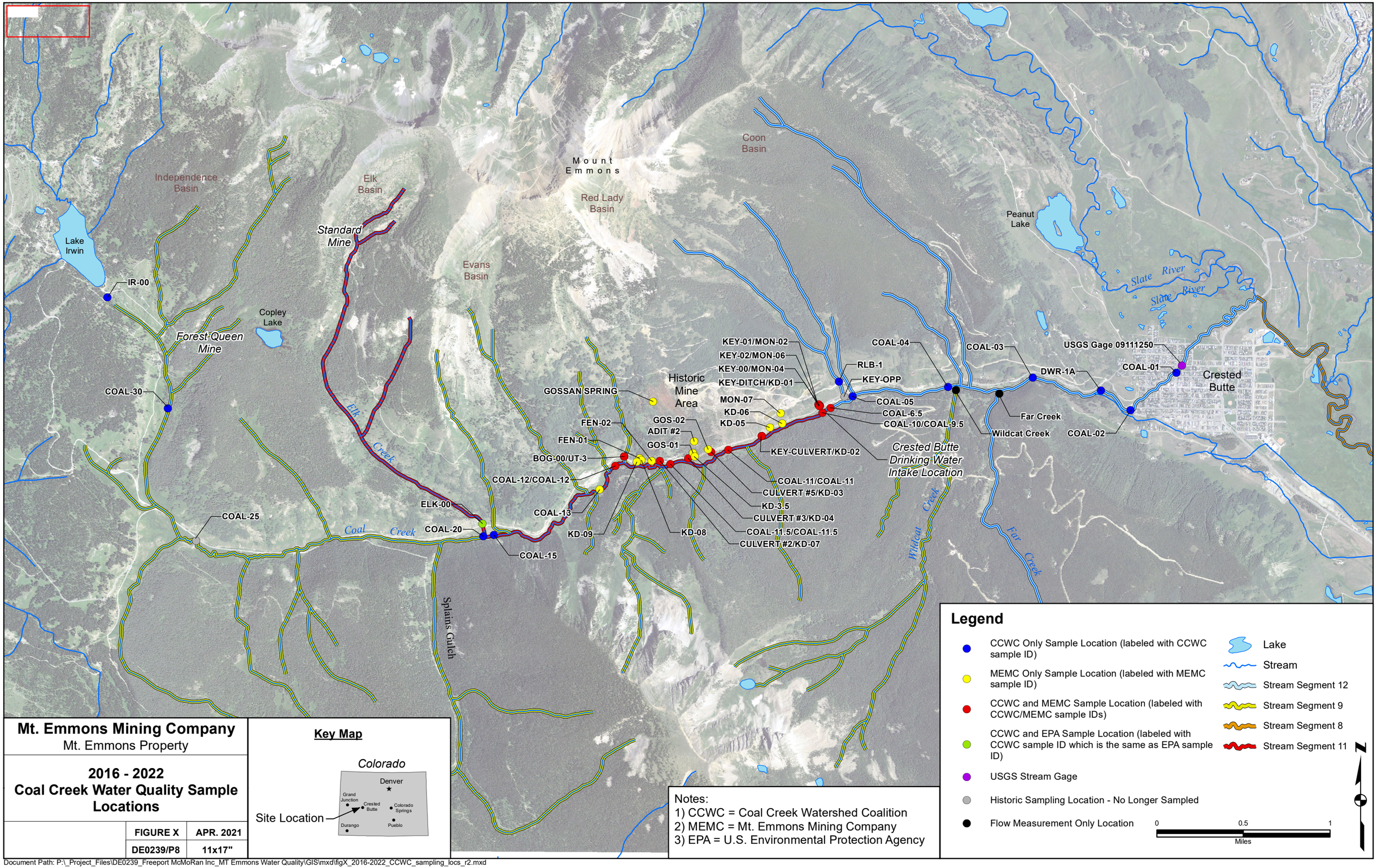
| Analyte | Method | Reporting Limit[1] |
|---|---|---|
| Aluminum (TR and Dissolved) | EPA 200.8 ICP-MS | 0.005 mg/L |
| Arsenic (Total and Dissolved) | EPA 200.8 ICP-MS | 0.0002 mg/L |
| Cadmium (Total and Dissolved) | EPA 200.8 ICP-MS | 0.00005 mg/L |
| Copper (Dissolved) | EPA 200.8 ICP-MS | 0.0008 mg/L |
| Iron (TR and Dissolved) | SM 3111-B or EPA 200.8 ICP-MS | 0.007 mg/L |
| Lead (Total and Dissolved) | EPA 200.8 ICP-MS | 0.0001 mg/L |
| Manganese (Dissolved) | EPA 200.8 ICP-MS | 0.0004 mg/L |
| Molybdenum (TR) | EPA 200.8 ICP-MS | 0.0002 mg/L |
| Zinc (Dissolved) | EPA 200.8 ICP-MS | 0.006 mg/L |
| Sulfate | SM4500 / EPA 300.0 | 0.4 mg/L |
| Fluoride | M300.0 | 0.05 mg/L |
| Calcium | SM 3111-B | 0.1 mg/L |
| Magnesium | SM 3111-B | 0.2 mg/L |
| Sodium | SM 3111-B | 0.2 mg/L |
| Potassium | SM 3111-B | 0.2 mg/L |
| Alkalinity (Carbonate, Bicarbonate) | SM2320B | 2 mg/L |
| Hardness | SM2340B | Calculation |
| Total suspended solids (TSS) | M160.1 | 5 mg/L |
| Total dissolved solids (TDS) | M160.1 | 20 mg/L |
| Dissolved organic carbon (DOC) | SM5310B | 1 mg/L |

Notes:

1) mg/L - milligrams per liter.

2) [1] - Reporting limits (RL) may vary between laboratories and may be elevated due to sample dilutions Laboratory RLs must be below water quality standards.

3) TR - Total recoverable.




**Mt. Emmons Mining Company**
Mt. Emmons Property

**2016 - 2022**
**Coal Creek Water Quality Sample Locations**

| | FIGURE X | APR. 2021 |
|---|---|---|
| | DE0239/P8 | 11x17" |

**Key Map**




Notes:
1) CCWC = Coal Creek Watershed Coalition
2) MEMC = Mt. Emmons Mining Company
3) EPA = U.S. Environmental Protection Agency

**Legend**

- CCWC Only Sample Location (labeled with CCWC sample ID)
- MEMC Only Sample Location (labeled with MEMC sample ID)
- CCWC and MEMC Sample Location (labeled with CCWC/MEMC sample IDs)
- CCWC and EPA Sample Location (labeled with CCWC sample ID which is the same as EPA sample ID)
- USGS Stream Gage
- Historic Sampling Location - No Longer Sampled
- Flow Measurement Only Location
- Lake
- Stream
- Stream Segment 12
- Stream Segment 9
- Stream Segment 8
- Stream Segment 11

0 0.5 1 Miles

N

Document Path: P:_Project_Files\DE0239_Freeport McMoRan Inc_MT Emmons Water Quality\GIS\mxd\figX_2016-2022_CCWC_sampling_locs_r2.mxd

Attachment A

# Progress Update on Adaptive Management Plan to Resolve Uncertainty for 2024 Temporary Modifications on Coal Creek, Upper Gunnison Segment 12 (COGUUG12)

**Mt. Emmons Mining Company**

**March 31, 2025**

# 1. Introduction

This document serves as Mt. Emmons Mining Company's ("MEMC's") Progress Update on its Adaptative Management Plan to Resolve Uncertainty with the acute and chronic cadmium temporary modifications on Coal Creek, Upper Gunnison Segment 12 (COGUUG12), for the 2024 calendar year ("2024 Update"). This is based on the Adaptive Management Plan to Resolve Uncertainty that was submitted in the 2022 Regulations 34 and 35 Basin hearing ("the 2022 Plan").[1]

This 2024 Update includes a background of the site, which provides context on source loading to Coal Creek (Section 2), as well as an explanation of the Adaptive Management Plan approach (Section 3). Update on activities since the 2023 Update[2] are included in Section 4, with subsections corresponding to the numbering scheme included in the 2022 Plan.

# 2. Background

## 2.1 Background on temporary modifications

In February of 2016, MEMC acquired the Keystone Mine including its water treatment infrastructure from U.S. Energy, Inc. In the time since acquisition, MEMC has undertaken various actions to further its understanding of surface and subsurface conditions, improve those conditions, and monitor the corresponding effect on the environment. Additional study and site improvements are planned.

In the 2017 Regulation 35 Rulemaking Hearing regarding classifications and standards in the Gunnison River Basin, the Water Quality Control Commission ("Commission") adopted revised seasonal temporary modifications on the mainstem of Coal Creek in the Upper Gunnison River sub-basin, Upper Gunnison Segment 12 (COGUUG12). In the 2022 Regulation 35 Rulemaking Hearing regarding classifications and standards in the Gunnison River Basin, the Commission deleted the acute copper and chronic zinc temporary modifications based on data provided by MEMC. The acute and chronic cadmium temporary modifications were extended to December 31, 2027:

- Cadmium (acute) = 3.5 µg/L
- Cadmium (chronic) = 2.79 µg/L

[1] https://drive.google.com/file/d/1SSMMChvTilIIvyWcahSyXbqRO9tco4OD/view.

[2] Temporary Modification Progress Update – Mt Emmons Mining Company (March 31, 2024), https://drive.google.com/drive/folders/1U9uPHCPmoHaOLLy_5nLZuwnbuV-Wke0P.

These temporary modifications apply April to June.

In the 2017 hearing, MEMC submitted a Revised Plan to Eliminate Temporary Modifications and Resolve Uncertainty ("2017 Plan").[3] The 2017 Plan was designed to have an organized process to assess potential sources of metals loading to Coal Creek and reducing loadings where they are from Keystone Mine sources; the sources of metals include tailings decant overflow, waste rock piles, the North Interceptor Ditch ("NID"), treated effluent from the water treatment plant; and other on-site sources. Based on MEMC's understanding in 2017, it proposed to focus first on the Tailings Storage Facility and waste rock.

MEMC submitted an updated plan for the cadmium temporary modifications in the 2022 Hearing, Temporary Modification Plan to Resolve Uncertainty ("2022 Plan").[4] Both the 2017 and 2022 Plans provided "a flexible, adaptive framework to conduct actions believed to be effective in achieving desired quality for water from the site," and used an "evaluate – implement – monitor" approach to its work.

An update on MEMC's progress on the various items included in the *2022 Plan* is included below in Section 4.

### 2.2 Relevant water quality segments

The relevant portions of Coal Creek include both Upper Gunnison Segment 11 (COGUUG11) and Upper Gunnison Segment 12. These segments are described as follows:

> COGUUG11: Mainstem of Coal Creek from a point immediately above the confluence with Elk Creek to a point immediately above the Keystone Mine discharge (38.867117, -107.023627). Elk Creek and its tributaries and wetlands from its source to its confluence with Coal Creek.
>
> COGUUG12: Mainstem of Coal Creek, including all tributaries and wetlands from a point immediately above the Keystone Mine discharge (38.867117, -107.023627) to the confluence with the Slate River, with the exception of Wildcat Creek.

[3] https://drive.google.com/file/d/1djSKtRKXa7Vw2Cx2bH-UyT-fIlxEQMe3/view.
[4] https://drive.google.com/file/d/1SSMMChvTilIIvyWcahSyXbqRO9tco4OD/view.

As indicated by the descriptions, Segment 11 is the upstream segment that flows into Upper Gunnison Segment 12. The Keystone Mine WTP discharge is at the upstream end of Segment 12.

In addition, Upper Gunnison Segment 9 (upstream of Elk Creek) contributes to loading in Coal Creek. That segment is described as:

> COGUUG09: All tributaries and wetlands to the Slate River except for specific listings in Segments 1, 10a, 10b, 11, 12 and 13.

### 2.3 Metals loading sources

Based on a 2016 report, U.S. Energy identified multiple anthropogenic and natural metals loading sources to Coal Creek.[5] Sources of metals loading to Coal Creek include:

| | **Anthropogenic sources** | **Natural sources** |
|---|---|---|
| **Segment 9** | • Abandoned mines in the Independence Basin area<br>• Forest Queen Mine | |
| **Segment 11** | • Standard Mine Superfund Site | • Fen<br>• Gossan |
| **Segment 12** | • Jokerville Coal Mine<br>• Keystone Mine, including the combined discharge from the WTP and overflow from the reclaimed tailings area | • Red Lady Basin<br>• Mineralized areas on the Keystone Mine property. |

### 2.4 Water quality permit

The Keystone Mine WTP is permitted to discharge to Upper Gunnison Segment 12 under CDPS Permit No. CO0035394. The permit was first issued in 1979 and has been renewed several times. The most recent renewal permit was issued in 2008. The permit went into administrative extension in 2013, meaning that it continues to be the effective discharge permit.

[5] 2015 Metals Study Plan Report (May 26, 2016), *submitted as* MEMC Exhibit 10 in the 2022 RMH, https://drive.google.com/drive/folders/18gvi7DlJ1Ptg2DRBGaTRRKfv7raPn6ss.

## 3. Adaptive Management Approach

The 2017 Plan was designed to be an adaptive management plan. As stated in the 2017 Plan on page 1:

> This approach provides a flexible, adaptive framework to conduct actions believed to be effective in achieving desired quality for water from the site. The approach relies on an 'evaluate - implement – monitor' cycle by which existing and future site data will be used to determine conditions, evaluate technologies and techniques, and select and implement actions. Results of these actions will be monitored to determine the effectiveness. If monitoring indicates additional future actions are required to achieve desired effectiveness, the cycle will be repeated as appropriate. This provides for a flexible and adaptive path forward for assessing and reducing sources of metals loading to Coal Creek (Upper Gunnison Segment 12, COGUUG12).

In its 2022 Plan, MEMC proposed to continue using an adaptive management approach going forward, as it has resulted in extensive collaboration between stakeholders and numerous improvements and changes to the mine site.

## 4. Progress Update on Anticipated Plan Elements and Time Frames

As explained in the 2022 Plan, MEMC anticipated the following plan elements over the duration of the temporary modifications (some continuing from the 2017 Plan efforts) to further evaluate whether existing quality is the result of natural/irreversible human-induced conditions; to make reductions in point and non-point source sources of metals loading; and to resolve the temporary modifications through a regulatory pathway or otherwise.

### 4.1 Update on activities originally planned for 2022 and 2023

MEMC describes 2024 activities completed and those anticipated for 2025 below. Timing and decisions on work continue to depend on several factors, including the water quality outcomes of past and ongoing work, funding, adjacent land owner permissions, weather, supply chain and labor supply issues

#### 4.1.1 Finish surface recontouring of tops of Dams 1, 2, 3, and 4, to improve the quality of the water that reaches Coal Creek – *to be completed in 2024*

In 2022, MEMC finished interim recontouring the tops of Dams 1, 2, 3, and 4, to minimize the residence time of accumulated water on Dam surfaces, by shortening flow

paths and promoting drainage. Finger drains were installed on Dam 3 in addition to recontouring to drain accumulating near-surface water. These drains discharge into the decant structures and are routed to the WTP.

- Minimization of residence time is anticipated to improve the water quality during those few weeks of spring runoff when discharge to Coal Creek occurs.
- Minimization of residence time will minimize infiltration and promote dam stability.
- In 2024, MEMC conducted additional recontouring and revegetation to promote positive drainage and reduce sediment transport.

These activities are considered "interim" as a long-term tailing storage facility management strategy and subsequent construction/modification is reliant on the outcome of geotechnical investigations described in Section 4.1.3.

#### 4.1.2 Complete the up-mountain diversions to improve water quality and reduce infiltration to the underground mine –*2022 to 2024*

For the past several years, MEMC has been working (in collaboration with others) on the up-mountain diversions. These diversions will potentially improve water quality of mine water influent to the WTP and of seeps/springs entering the North Interceptor Ditch ("NID") below the projected diversions. The intent of up-mountain diversions is to divert flows around faults, veins, or fractures to promote a reduction of surface water and shallow groundwater infiltration into the mine workings and thus becoming a load to the WTP, or manifested in seeps and springs at lower elevations.

- Diversion 2 was completed in 2021. Diversions 3, 5 and 6 were completed in 2022.
    - Diversion 3 is above the 1370 level. Work on this diversion started in 2021.
    - Diversion 5 was completed in 2022 extending the existing drainage approximately 700 feet west of the 1370 Level portal.
    - Diversion 6 extends the drainage previously installed at the 1670 level further west across the areas of faulting and fracturing, terminating to the west of the gossan.
- Given the late spring construction season start, no diversion work was completed in 2023.

- The lowest elevation diversion, Diversion 7, was completed in 2024. The eastern portion of Diversion 1, at the highest elevation, was installed in 2024. The extension of 1370 diversion, rehabilitation of diversion 5, and installation of the 6B diversion extension were completed in 2024.

- 2025 plans include completion of Diversion 1 and modifications to a portion of lower Diversion 3.

    - The majority of metals loading to the WTP originates in the mine workings in front of the 2000 Level bulkhead, but the majority of the flow comes from behind the bulkhead. Diversion 1 is intended to reduce infiltration entering mine workings behind the bulkhead.

    - Diversion 7 is intended to further divert sheet flow from spring snowmelt away from the zones of faulting and fracturing immediately upslope from the 2000 Level portal. This diversion terminates on USFS land to the west of the gossan.

- In 2025 and beyond, further evaluate the likely effects of selective diversion on seasonal water quality and quantity ultimately routed to the WTP or manifested in lower elevation seeps and springs. Several years of monitoring may be required to adequately understand the quality and quantity effects of this surface water diversion work on mine and surface flow.

#### 4.1.3 Geotechnical investigations – *completed in 2024 and anticipated for 2025*

In 2023, we completed field work to gather additional information regarding tailings storage facility ("TSF") construction specifically under dam crests and exterior slopes, and the extent and characteristics of tailing material in these locations. Specifically, 16 borings were advanced to install piezometers, and conduct geotechnical testing.

Additional geotechnical investigations:

- As a result of the 2023 work, MEMC conducted further geotechnical investigations to understand ground stability in and around the tails, evaluate risks, and develop a long-term plan for improved surface water conveyance on and around the tails. Data analysis and conceptual planning will continue into 2025.

- Some of these additional investigations were originally planned for 2020, and then postponed to 2021, and then spring 2022, because of COVID-19, labor shortages, and supply chain issues.

- Geotechnical work commenced in April 2022, and the field work was completed in 2023.

As a follow-on to fill data gaps identified in the 2023 work, additional piezometers were installed in fall of 2024 upgradient and downgradient of the TSF.

There is no 2025 geotechnical work planned.

#### 4.1.4 Continue work towards potential alternative of replacing the water treatment plant – *anticipated for 2024 and beyond*

MEMC will continue its studies to determine the feasibility of constructing a new WTP.

- In January 2022, MEMC solicited a request for qualifications from a wide swath of engineering firms to begin the process of down-selecting a design engineer for the water treatment plant.

- An engineer was selected in Fall 2023, potential planning and siting work commenced in 2024, with design work starting in mid 2025.

- Ultimate design of any new WTP is dependent on the results of the surface water diversion work described in Section 4.1.2.

- Construction of any new WTP will be sequenced to consider any tailings storage facility construction/modification work described in Section 4.1.1.

#### 4.1.5 Explore the possibility of revegetating a portion of the gossan, an identified natural source of metals loading to upstream Segment 11 – *anticipated for 2025–2028*

Grant money is available from the Standard Mining Company Natural Resource Damage ("NRD") Settlement in Bonita Peaks for reclamation projects. On April 1, 2022, the Coal Creek Watershed Coalition ("CCWC") submitted an application, partnering with MEMC and the Town of Crested Butte, the USFS, and Division of Reclamation, Mining and Safety ("DRMS"), for grant money to fund an effort to revegetate the gossan.

- DRMS will likely provide project management support.

- The Town will provide appropriate in-kind service support.
- MEMC would provide funding to leverage matching funds from the Standard Mining Company NRD Settlement and other funding sources and coordinate work on MEMC land with work occurring on USFS land.

#### 4.1.6 Review EPA Standard Mine data to determine future work related to the Standard Mine Superfund Site –*timing uncertain*

MEMC believes the U.S. Environmental Protection Agency ("EPA") conducted spring and summer sampling in 2024. MEMC anticipates that more may be known about the status of the Standard Mine in the Fall of 2025, if and when these data are available, and once EPA makes a decision regarding the need for passive treatment to achieve the water quality goals in the Record of Decision ("ROD"). However, the timing of EPA's actions is uncertain, and the water quality results of any such actions are also uncertain. It is our understanding that EPA closed the bulkhead at the Standard Mine on June 16, 2023 for a planned long-term (2-3 year) closure test (https://cumulis.epa.gov/supercpad/SiteProfiles/index.cfm?fuseaction=second.cleanup&id=0801669#Status).

### 4.2 Activities planned or anticipated, timing contingent

MEMC has multiple activities that are planned and/or anticipated that do not yet have a timeframe for completion. This is intentional as part of the adaptive management plan approach, and this work will be completed as needed and/or as timing allows to help resolve uncertainty about the temporary modifications and to improve water quality.

Where possible, MEMC has indicated whether an activity is planned (meaning it currently intends to undertake the activity, but the timing is not yet certain) or anticipated (meaning that both the possibility of the activity, as well as its timing, are not certain). MEMC intends to provide further information on these planned and/or anticipated activities in its annual updates.

#### 4.2.1 Investigations of the mine tailings and evaluations of engineering improvements at the site

While MEMC is uncertain of the timing of this activity, it does plan to continue its investigations and evaluations, as follows:

- Bring to conclusion investigations of the mine tailings to determine additional tailing reclamation measures that can be implemented to ensure the continued

stability of the reclaimed tailings dams, as well as managing and improving water quality conditions.

- Continue evaluating options for engineering improvements in the tailing storage facilities, surrounding water management features, and the potential closure of decant structures in the Mt. Emmons tailings storage facilities.

- Evaluate the feasibility and effectiveness of potential long-term measures including reconstructing the access road with a stormwater conveyance sized to probable maximum storm event, permanently regrading the top of the tailing storage facilities, and/or managing surface water through above-grade ditches and channels either enhancing existing drainages or constructing new drainages to meet design flow criteria.

The timing of these additional evaluations depends on the results of the geotechnical investigations (§ 4.1.3 above) and whether there are changes to the water quality resulting from the diversion improvements (§ 4.1.2 above). We anticipate this work to be concluded in 2025 with a final tailings storage facility management plan and conceptual design. Implementation may begin as early as 2026.

#### 4.2.2 Evaluate additional surface water diversion improvements

MEMC anticipates that there may be a need to evaluate additional surface water diversion improvements.

- These evaluations are contingent on the efficacy of previous work as well as work planned for 2025 (as described in § 4.1.2 above).

- The effects of this completed and planned work are expected to take three to five seasons to understand and quantify, which contributes to the uncertainty of the need for—and timing of—this activity.

#### 4.2.3 Continue assessing improvements related to reclamation of waste rock piles, and ditch, road, and slope improvements

While MEMC is uncertain of the timing, it plans to continue assessing improvements including the following:

- 1370 and 1670 Levels: In 2018, DRMS and Trout Unlimited ("TU") completed reclamation and revegetation at the 1370 and 1670 levels. Routine inspection and maintenance will continue for the next three to five years until robust vegetation is established.

- 2000 and 2160 Levels: In 2019, DRMS and TU completed revegetation efforts including regrading and revegetation of the slope area between the 2000 level and the 2160 level, closed an ore drop, and made stormwater channel improvements. Long-term benefits of these actions continue to be evaluated.

- 2160 Level Portal and Dam 1: In 2020, additional regrading, revegetation, and stormwater channel improvement work was completed between the 2160 Level portal and Dam 1. Long-term benefits of these actions are still being evaluated, including through seep and spring monitoring for the next few years.

In 2021 and 2022, DRMS and TU started dam recontouring and revegetation, as well as other surface diversion work. Benefits of these actions are still being evaluated and maintenance is ongoing.

#### 4.2.4 Continue stormwater controls

While MEMC is uncertain of the timing as well as the extent of the need for additional stormwater controls, it currently plans to continue, or anticipates continuing, implementing stormwater controls, which include:

- Implementing tailings-centric controls based on the results of investigations described above. Stormwater controls may include:
  - Interim work to reduce stormwater residence times (including as discussed above).
  - Long-term measures based on the outcome of studies described above.
- Implementing mine-centric stormwater controls, including work on the mountain to direct clean water away from faults and fractures (as discussed above).

Timing of these activities will likely depend on any water quality changes, including but not limited to water quality and quantity changes as a result of the surface recontouring (§ 4.1.1 above) and diversion improvements (§ 4.1.2 above).

#### 4.2.5 Evaluate any EPA activities related to the Standard Mine Superfund Site

While MEMC is uncertain of the timing, it plans to evaluate any EPA activities at the Standard Mine:

- EPA is expected to continue remediation at the Standard Mine and has recently (June 2023) made changes to the operation of the flow through bulkhead at the Site that could impact water quality in Coal Creek

- The timing of this activity is contingent on when EPA takes actions at the Standard Mine, and timing of EPA actions is currently uncertain.

#### 4.2.6 Evaluate, select, and implement additional alternatives as warranted.

While MEMC is both uncertain of timing and the extent to which additional alternatives may need to be evaluated, it currently plans to continue, or anticipates continuing, evaluating alternatives. This could include:

- Evaluating the feasibility and improvements expected if the WTP were replaced.
    - The need and timing of construction of a WTP will in part be dictated by other improvements at the site including whether ongoing diversion construction and other stormwater controls can reduce metals loading and/or can reduce the amount of flow that may need to be treated by a new WTP.
    - Siting of any new WTP will be dependent on the final configuration of any long-term tailing storage facility design and construction.
    - Depending on the results of other improvements planned and/or anticipated at the site, if replacement of a WTP is pursued as a viable alternative, a preliminary schedule could be as follows:
        - Treatment plant siting work in 2024–2026.
        - Treatment plant design work in 2024–2026.
        - Final design in 2026-2027.
        - Potentially begin construction of treatment plant as early as 2027.
- Evaluating any planned or future standards changes in Coal Creek that could impact treatment or other proposed alternatives for improving water quality in Coal Creek.
    - Design and construction of a WTP would need to take into account any new limits that may be included in a future renewal permit.

- Evaluating whether there are any other pollution control alternatives that would be feasible to implement.

    - The timing and need for this activity will be influenced by planned and ongoing activities and their resulting water quality benefit, if any; these activities include surface recontouring (§ 4.1.1), diversion improvements (§ 4.1.2), geotechnical investigations (§ 4.1.3), revegetation of the gossan (§§ 4.1.5 and 4.3.2), and any EPA actions at the Standard Mine (§§ 4.1.6 and 4.2.5).

### 4.3 Activities to occur throughout duration of the temporary modifications (2022–2027)

The following activities will occur throughout the duration of the temporary modifications, 2022 through 2027, on an ongoing basis or an annual basis, or other, as described below.

#### 4.3.1 Continue collecting water quality data – *2022–2027*

MEMC will continue the following water quality data collection:

- MEMC and stakeholders will continue collecting water quality data at various locations along Coal Creek at the frequency and locations described in the Long-Term Monitoring Plan, Exhibit 12.c.

    - Data collection will facilitate the assessment of loading from the natural sources (such as the fen and the gossan in Segment 11, and the Red Lady Basin in Segment 12) and to assess whether human-induced conditions are irreversible (including sampling related to the Standard Mine EPA Superfund Site in Segment 11, and the Keystone Mine in Segment 12).

- MEMC will report data from its stormwater monitoring locations (MON-01, MON-02, MON-04, MON-06, and MON-07).

#### 4.3.2 Continue potential gossan revegetation work and evaluating improvements in water quality – *2022–2027*

As discussed above, MEMC along with CCWC, DRMS, USFS, the Town, and Gunnison County will utilize the awarded matching funds from the Standard Mining Company NRD settlement to perform gossan revegetation effort for 2025 to 2028.

- Continued work through the duration of the temporary modifications includes evaluating improvements in water quality that may result from the potential revegetation of the gossan.

#### 4.3.3 Evaluate site-specific regulatory pathways – *2022–2027*

MEMC will continue evaluating the potential regulatory pathways. This will include:

- Evaluating and analyzing water quality resulting from the various improvements at the site, as well as from Standard Mine remediation by EPA, if any.
- Determining whether site-specific regulatory pathways would apply, including but not limited to:
    - Potential development of ambient-based water quality standards.
        - If ambient-based water quality standards are the appropriate regulatory pathway, develop a comprehensive alternatives analysis and review consistent with Regulation 31, Section 31.7(1)(b)(ii)(B).
    - Potential development of feasibility-based water quality standards.
        - If feasibility-based standards are the appropriate regulatory pathway, develop a comprehensive alternatives analysis and review consistent with Regulation 31, Section 31.7(1)(b)(ii)(B).
    - Evaluation of the use classifications of the segment as part of its evaluation of all regulatory options, and as a prerequisite to ambient-based and feasibility-based standards, as well as whether a discharger specific variance ("DSV") is warranted.
    - Evaluation of potential re-segmentation to facilitate appropriate use classifications on the segment.
    - Evaluation of the highest attainable uses.
    - Evaluation of whether a DSV would be warranted, consistent with Regulation 31, Section 31.7(4).
- Evaluating any planned or future new standards that could impact the appropriate regulatory pathway for resolving the temporary modifications.

- Proposing a regulatory solution by the 2027 basin hearing, as needed.

#### 4.3.4 Provide updates on temporary modifications – *annually*

MEMC will continue preparing annual reports that are provided by March 31 of the following year. MEMC will prepare supplemental updates as requested by the Division.

MEMC will also participate in Temporary Modifications Review Hearings on the biennial schedule, assuming that these continue to occur. This included participation in the June 2024 rulemaking and an anticipated June 2026 rulemaking.

#### 4.3.5 Stakeholder communication and collaboration – *annually*

MEMC is committed to continued collaboration with the stakeholders, including annual progress reports to the Division and stakeholders, periodic stakeholder meetings, and continued collaboration on water quality data collection. There are ongoing collaborations with the CCWC, USFS, DRMS, and TU, among others.

2024 activities included the following:

| **Date** | **Activity** |
|---|---|
| March 31, 2024 | Annual update provided to the Division |
| April 3, 2024 | Responsive prehearing statement filed in June 2024 Temporary Modifications hearing, providing update on the temporary modifications to the Commission and the public. |
| June 10-12, 2024 Basin and Temporary Modifications Hearing | Participation in the Temporary Modifications hearing |
| June 29-30, 2024 | MEMC, BLM, DNR, Secretary of the Interior, Senator Michael Bennet, HCCA, Wilderness Society, Gunnison County, and city officials toured portions of the Thompson Divide/Mt. Emmons Mineral Withdrawal |

# EXHIBIT E

## Spill Prevention Spill Prevention, Control, and Countermeasures Plan

*Prepared for*

**Mt. Emmons Mining Company**
333 North Central Avenue
Phoenix, Arizona 85004

# SPILL PREVENTION CONTROL & COUNTERMEASURE PLAN

## Mt. Emmons Facility
## 2131 County Road 12
## Crested Butte, CO 81224

*Prepared by*

Geosyntec consultants

engineers | scientists | innovators

5670 Greenwood Plaza Blvd, Suite 540
Greenwood Village, CO 80111

Project Number DE0241

March 2020
June 2022, Rev. 1

# TABLE OF CONTENTS


1. MANAGEMENT APPROVAL ..... 1

2. ENGINEERING CERTIFICATION ..... 2

3. GENERAL APPLICABILITY: §112.1 ..... 2

4. SPCC PLAN ADMINISTRATION: §112.3, §112.4, AND §112.5 ..... 4
   - 4.1 Requirement to Prepare: §112.3 ..... 4
   - 4.2 Amendment by Regional or State Administrator: §112.4 ..... 4
   - 4.3 SPCC Plan Amendment by Owner/Operator: §112.5 ..... 6

5. SPCC PLAN GENERAL REQUIREMENTS: §112.7 ..... 7
   - 5.1 General Facility Description ..... 7
   - 5.2 SPCC Plan Conformance and Deviations: §112.7(a)(1) and (2) ..... 9
   - 5.3 Facility Layout: §112.7(a)(3) ..... 9
   - 5.4 Oil Storage Capacity: §112.7(a)(3)(i) ..... 9
   - 5.5 Discharge Prevention Measures: §112.7(a)(3)(ii) ..... 10
   - 5.6 Discharge or Drainage Controls: §112.7(a)(3)(iii) ..... 10
   - 5.7 Countermeasures for Discharge Discovery, Response, and Cleanup: §112.7(a)(3)(iv) ..... 11
   - 5.8 Recovered Materials Disposal: §112.7(a)(3)(v) ..... 11
   - 5.9 Contact List and Notification Phone Numbers: §112.7(a)(3)(vi) ..... 12
   - 5.10 Reporting and Notification Procedures: §112.7(a)(4) ..... 12
   - 5.11 Spill Response Procedures: §112.7(a)(5) ..... 12
   - 5.12 Discharge Analysis: §112.7(b) ..... 13
   - 5.13 Spill Containment: §112.7(c) ..... 13
   - 5.14 Spill Containment Practicability: §112.7(d) ..... 14
   - 5.15 Inspections, Tests, and Records: §112.7(e) ..... 14
   - 5.16 Personnel Training and Discharge Prevention Procedures: §112.7(f) ..... 15
   - 5.17 Security: §112.7(g) ..... 16
   - 5.18 Facility Tank Car and Tank Truck Loading/Unloading: §112.7(h) ..... 16
   - 5.19 Brittle Fracture Analysis: §112.7(i) ..... 17
   - 5.20 Applicable Requirements: §112.7(j) ..... 18
   - 5.21 Qualified Oil-Filled Equipment: §112.7(k) ..... 18

## TABLE OF CONTENTS (Continued)

6. REQUIREMENTS FOR ONSHORE (NON-PRODUCTION) FACILITIES: §112.8 ..... 19
6.1 Facility Drainage: §112.8(b) ..... 19
6.2 Bulk Storage Containers: §112.8(c) ..... 20
6.2.1 Inspections: ..... 22
6.2.2 Integrity Testing: ..... 22
6.2.3 Records: ..... 22
6.3 Facility Transfer Operations, Pumping, and In-Facility Process: §112.8(d) ..... 24

## TABLE OF CONTENTS (Continued)

### LIST OF TABLES

Table 1: Summary of Oil Containers, Potential Discharge Volumes, and Pathways

### LIST OF FIGURES

Figure 1: Site Location Map
Figure 2: Site Layout Map – Mt. Emmons Facility

### LIST OF APPENDICES

Appendix A: Exceptions to the SPCC Plan Engineering Certification
Appendix B: Certification of Substantial Harm Determination
Appendix C: SPCC Plan Review Document
Appendix D: Safe Loading and Unloading Procedure for Oil
Appendix E Inspection Procedure for Oil Storage Containers
Appendix F: Visual Inspection Checklists
Appendix G: Spill Response Procedures
Appendix H: Spill Prevention Training Attendance Log
Appendix I: Secondary Containment Calculations

## 1. MANAGEMENT APPROVAL

This Spill Prevention, Control, and Countermeasure (SPCC) Plan (Plan) has the full approval of the owner and operator for Mt. Emmons Mining Company (MEMC) and will be implemented in accordance with 40 CFR 112. Management approval has been extended at a level with authority to commit the necessary resources to implement this Plan.

Pursuant to §112.7(d), this is the written commitment of MEMC to provide the manpower, equipment, and materials required to expeditiously control and remove any quantity of oil discharged that may be harmful. This Plan will be fully implemented as herein described and the Plan will be physically maintained at the Site.

_____ _____

Name: Dave Gosen Date
Title: Manager, Remediation Projects
Mt. Emmons Mining Company

Date of Full Implementation:_____
Management Initials: _____

## 2. ENGINEERING CERTIFICATION

Pursuant to §112.3(d) and by means of this SPCC certification, I attest that:

(i) I am familiar with the requirements of the SPCC rule (40 Code of Federal Regulations [CFR] Part 112);

(ii) I, or my agent, have visited and examined the Site;

(iii) the Plan has been prepared in accordance with good engineering practice, including consideration of applicable industry standards, and with the requirements of the SPCC rule;

(iv) procedures for required inspections and testing have been established; and

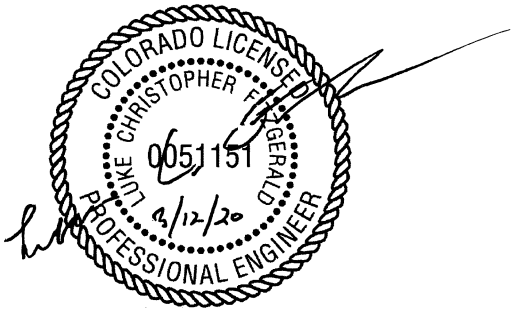
(v) the Plan is adequate for the facility with exceptions noted in Appendix A.

Luke Christopher Fitzgerald

Luke Christopher Fitzgerald, P.E.

3/12/20

Signature of Registered Professional Engineer
Registration No. 0051151 State: CO



## 3. GENERAL APPLICABILITY: §112.1

The Oil Pollution Prevention Regulations (40 CFR Part 112) require preparation of an SPCC Plan for facilities that have discharged or could reasonably be expected to discharge "harmful quantities" of oil into or upon navigable waters of the United States or adjoining shorelines. The Oil Discharge Regulations (40 CFR Part 110) define harmful quantities of oil as any amount that affects water quality, causes a film, sheen, or discoloration of the water surface or upon water or adjoining shorelines, or causes a sludge or emulsion to be deposited beneath the surface of the adjoining shorelines.

Specifically, §112.1(d)(2)(ii) requires an SPCC Plan to be developed for a facility where the aggregate storage capacity of oil is greater than 1,320 gallons (including containers with thresholds of 55 gallons or greater). The Mt. Emmons Facility (Facility or Site) located outside of Crested Butte, Colorado stores an aggregate aboveground oil storage quantity of greater than 1,320 gallons; therefore, the Site is required to develop, implement, and maintain an SPCC Plan for this Facility in accordance with 40 CFR Part 112. This SPCC Plan has been developed for the Site in response to the regulations listed above.

The primary objective of the SPCC Plan is to prevent any oil, or oil related substances, from reaching navigable waters of the state. This Plan addresses contingency planning, implementation of operating procedures, and best management practices to prevent and control the discharge of pollutants from spill events as a result of construction activities. All facilities regulated under 40 CFR Part 112 must conduct an initial screening to determine whether the facility, because of its location, could reasonably be expected to cause substantial harm to the environment and whether the facility is required to develop a Facility Response Plan (FRP) under §112.20. These requirements are not applicable to the Site. The checklist used to certify that these requirements are not applicable is provided in Appendix B.

# 4. SPCC PLAN ADMINISTRATION: §112.3, §112.4, AND §112.5

## 4.1 Requirement to Prepare: §112.3

The Mt. Emmons Facility has oil storage capacity that exceeds the threshold requiring development and implementation of a SPCC Plan. The pertinent Site information related to the Mt. Emmons Facility is listed below:

| | |
|---|---|
| Name of Operator: | Mt. Emmons Mining Company |
| Mailing Address: | 333 North Central Ave.<br>Phoenix, AZ 85004 |
| Location: | 2131 County Road 12<br>Crested Butte, CO 81224 |
| Date of Initial Operation: | Facility began operation in 1980 |

In accordance with §112.3(e)(1) and (2), a complete updated copy of this SPCC Plan will be maintained at the Mt. Emmons Facility. During normal working hours, the SPCC Plan will be available to authorized representatives of local, state, or federal governing agencies for on-site review and a copy will be submitted if requested.

## 4.2 Amendment by Regional or State Administrator: §112.4

MEMC must submit a report to the United States Environmental Protection Agency (USEPA) Region VIII and the Colorado Department of Public Health and Environment (CDPHE) whenever requested by the agencies or within 60 days of a discharge of oil into navigable waters, which exceeds 1,000 gallons of oil in a single incident; or 42 gallons of oil in each of two incidents within any consecutive 12-month period. The report must contain the following information:

- §112.4(a)(1): Facility name;
- §112.4(a)(2): Name of designated person accountable for oil spill prevention at facility;
- §112.4(a)(3): Facility location;
- §112.4(a)(4): Maximum storage capacity and daily throughput at facility;

- §112.4(a)(5): Description of corrective action and countermeasures taken;
- §112.4(a)(6): Adequate description of the facility including maps and stormwater flow diagrams;
- §112.4(a)(7): Cause of the discharge(s), including an analysis of the failed system;
- §112.4(a)(8): Description of additional preventive measures taken or contemplated to prevent recurrence; and
- §112.4(a)(9): Other pertinent information.

The USEPA Regional Administrator (RA) may require that the SPCC Plan to be amended:

- After reviewing a report submitted in response to one of the above referenced discharges, or
- Following a USEPA on-site review of the SPCC Plan, the agency finds that the SPCC Plan does not meet the requirements of 40 CFR 112 or that an amendment is needed to prevent and contain discharges from the site.

If the USEPA RA subsequently proposes by certified mail or personal delivery that this Plan be amended, MEMC will either: (i) submit arguments and supporting information in response to the proposed amendments within 30 days of receipt of notice; or (ii) amend this Plan within 30 days and implement the amended Plan within 6 months, unless otherwise authorized by the RA.

As required by §112.3(d), technical changes made to the Plan will be certified by a Professional Engineer.

## 4.3 SPCC Plan Amendment by Owner/Operator: §112.5

MEMC must amend this Plan as needed, if one of the following events occurs:

1. There is a change in facility design, construction, operation, or maintenance that materially affects its potential for a discharge to a waterbody. The following may be considered changes requiring a Plan update:

    a. Commissioning or decommissioning fixed storage containers (not portable containers);

    b. Replacement, reconstruction, or movement of a fixed storage container;

    c. Replacement or reconstruction of portable storage tanks;

    d. Construction or demolition of secondary containment structures; or

    e. Revisions to standard operating or maintenance procedures.

2. A review of the Plan indicates that more effective field-proven prevention and control technology is available and will significantly reduce the likelihood of a discharge.

MEMC must amend the Plan to address such facility modifications prior to or concurrent with the changes being implemented.

In addition, MEMC must review the Plan at a minimum once every five years from the date of the last review. The Plan must be amended within 90 days of the review and changes implemented as soon as possible, but no later than six months following the amendment to the Plan. Each review must be documented in Appendix C and include a signed statement if the Plan was amended. A Professional Engineer must certify any technical amendments to the Plan.

# 5. SPCC PLAN GENERAL REQUIREMENTS: §112.7

*General Requirements for Spill Prevention, Control and Countermeasure Plans*

*If you are the owner or operator of a facility subject to this part you must prepare a Plan in accordance with good engineering practices. The Plan must have the full approval of management at a level of authority to commit the necessary resources to fully implement the Plan. You must prepare the Plan in writing. If you do not follow the sequence specified in this section for the Plan, you must prepare an equivalent Plan acceptable to the Regional Administrator that meets all of the applicable requirements listed in this part, and you must supplement it with a section cross-referencing the location of requirements listed in this part and the equivalent requirements in the other prevention plan. If the Plan calls for additional facilities or procedures, methods, or equipment not yet fully operational, you must discuss these items in separate paragraphs, and must explain separately the details of installation and operational start-up.*

Section 5.0 of this Plan presents facility-specific details associated with the general requirements for SPCC Plans outlined in §112.7. As previously indicated in Sections 1.0, and 2.0, this Plan has been prepared in accordance with good engineering practice, with management approval at a level with authority to commit the necessary resources for full implementation, and in the sequence of the rule.

## 5.1 General Facility Description

The Mt. Emmons Facility is located approximately two miles east of the town of Crested Butte, Colorado in Sections 4 and 5, of Township 14 South, Range 86 West in Gunnison County. The Facility is situated on both private property and national forest lands, managed by the United States Forest Service (USFS). The Site consists of a main building where MEMC operates a water treatment plant (WTP), numerous support buildings, typically used for housing equipment and other materials, ponds, and other features associated with historic underground mining activities in the area.

The Mt. Emmons Facility has aboveground storage tanks (ASTs) located at various locations around the Site. There is a fuel storage vault located southwest of the WTP building, and s used oil drum storage area in the northeast corner of the WTP building. Additionally, there are three electrical transformers located across the Site. Two transformers are located southwest of the WTP building, and one transformer is located near the 2160 Portal in the western portion of the Site. There are additional non-oil chemical storage areas located across the Site. Procedures related to storage and spill control for these chemicals is discussed separately in the Mt. Emmons Facility Materials Containment Plan (MCP).

The topography of the Site is varied. Reclaimed tailing areas in the central portion of the Site, and other areas where ponds designed to control the flow of mine drainage are located, are relatively flat. However, the topography varies outside of these areas from gradual to steep slopes, which increase further up the mountain in the northwest portion of the Site. Storm water in the northern portion of the Mt. Emmons Facility generally drains by sheet flow to a network of storm water interceptor ditches across the Site. These ditches direct stormwater to a channel which combines with treated effluent from the WTP, and flows into Coal Creek. Stormwater that enters the reclaimed tailing areas either infiltrates into the subsurface where it is captured by subsurface toe drains, or into a set of decant structures. The toe drains and decant structures drain into the retention pond located in the south-central portion of the site. Stormwater that collects in the retention pond is treated at the WTP, prior to being discharged to Coal Creek. Under high run-off conditions, stormwater from the reclaimed tailings area in excess of 88 gallons per minute (gpm) is diverted to a direct discharge that comingles with WTP treated water effluent in the energy dissipator at the monitoring location MON-07.

A significant spill from any location at the Site would not be reasonably expected to encounter surface water based on the use of secondary containment features at the Site. The nearest source of surface water to the Mt. Emmons Facility in the direction of surrounding topographic flow is Coal Creek, located approximately 500 feet to the southeast. A site layout map showing the locations of oil storage features at the Site is provided in Figure 2. This figure identifies Site components covered by this SPCC Plan.

This Plan covers the tanks and containers listed in Table 1.

## 5.2 SPCC Plan Conformance and Deviations: §112.7(a)(1) and (2)

> *(a)(1) Include a discussion of your facility's conformance with the requirements listed in this part. (a)(2) Comply with all applicable requirements listed in this part. Your Plan may deviate from the requirements in paragraphs (g),(h)(2) and (3), and (i) of this section and the requirements in subparts B and C of this part, except the secondary containment requirements in paragraphs (c) and (h)(1) of this section, and §§112.8(c)(2), 112.8(c)(11), 112.9(c)(2), 112.10(c), 112.12(c)(2), 112.12(c)(11), 112.13(c)(2), and 112.14(c), where applicable to a specific facility, if you provide equivalent environmental protection by some other means of spill prevention, control, or countermeasure. Where your Plan does not conform to the applicable requirements in paragraphs (g),(h)(2) and (3), and (i) of this section, or the requirements of subparts B and C of this part, except the secondary containment requirements in paragraphs (c) and (h)(1) of this section, and §§112.8(c)(2), 112.8(c)(11), 112.9(c)(2), 112.10(c), 112.12(c)(2), 112.12(c)(11), 112.13(c)(2), and 112.14(c), you must state the reasons for nonconformance in your Plan and describe in detail alternate methods and how you will achieve equivalent environmental protection. If the Regional Administrator determines that the measures described in your Plan do not provide equivalent environmental protection, he may require that you amend your Plan, following the procedures in §112.4(d) and (e).*

This Plan conforms with and does not deviate from the requirements of §112.7.

## 5.3 Facility Layout: §112.7(a)(3)

> *(a)(3) Describe in your Plan the physical layout of the facility and include a facility diagram, which must mark the location and contents of each container. The facility diagram must include completely buried tanks that are otherwise exempted from the requirements of this part under §112.1(d)(4). The facility diagram must also include all transfer stations and connecting pipes.*

Figure 2 illustrates the location and contents of the applicable containers, and transfer locations. A summary of the applicable facility containers and their contents is presented on Table 1.

## 5.4 Oil Storage Capacity: §112.7(a)(3)(i)

> *(a)(3) You must also address in your Plan: (i) The type of oil in each container and its storage capacity;*

A summary of the containers, substances, and substance quantities is provided in Table 1.

## 5.5 Discharge Prevention Measures: §112.7(a)(3)(ii)

> *(a)(3) You must also address in your Plan: (ii) Discharge prevention measures including procedures for routine handling of products (loading, unloading, and facility transfers, etc.);*

Discharge prevention measures that are currently utilized or will be implemented at the Site include the following:

- Written procedures for the handling of oil which include loading/unloading transfer operations (See Appendix D);
- Discharge prevention training for operations and maintenance personnel (Section 5.16);
- Routine visual inspections of aboveground containers (Appendix E);
- Regularly scheduled formal inspections and integrity testing of aboveground tanks (Section 6.2); and
- Preventive maintenance and repair program for oil or oil product storage containers and associated piping (Section 6.2).

## 5.6 Discharge or Drainage Controls: §112.7(a)(3)(iii)

> *(a)(3) You must also address in your Plan: (iii) Discharge or drainage controls such as secondary containment around containers and other structures, equipment, and procedures for the control of a discharge;*

The Mt. Emmons Facility utilizes secondary containment features (i.e., Double-walled tanks, floor trenches, etc.) as well as procedures for the control of discharges and drainage for the Mt. Emmons Facility. These controls include the following:

- Double-walled bulk storage tanks;
- Concrete floor sumps/trenches inside of buildings with ASTs;
- Spill kits containing absorbent materials; and
- General secondary containment such as berms.

## 5.7 Countermeasures for Discharge Discovery, Response, and Cleanup: §112.7(a)(3)(iv)

> *(a)(3) You must also address in your Plan: (iv) Countermeasures for discharge discovery, response, and cleanup (both the facility's capability and those that might be required of a contractor);*

The Mt. Emmons Facility has adequately trained personnel and equipment to contain and clean up minor to moderate volumes of spilled materials. Oil and fuel spill response is the responsibility of all personnel, who are specifically trained to respond, contain, and clean up minor volumes of spilled materials. On-site equipment and materials include, but are not limited to, spill kits, shovels, and some absorbent materials (dry absorbent material, spill pads, etc.) that may be used to dike, contain, and remove minor to moderate spills/releases. Larger spills are controlled through secondary containment structures and floor trenches/sumps. If necessary, temporary structures such as booms or earthen berms can be deployed or constructed to contain larger spills/releases from moving toward a drainage system. In case of a spill, Appendix G should be referenced for oil spill incident notification phone numbers and oil spill response procedures. A Spill Report must then be completed and shall be maintained in Appendix G.

For spills into streams, lakes, or other waterbodies containing standing or flowing water, regardless of size, the Site must promptly notify the National Response Center (NRC) (within one hour). Contact information for the NRC is included in Appendix G.

## 5.8 Recovered Materials Disposal: §112.7(a)(3)(v)

> *(a)(3) You must also address in your Plan: (v) Methods of disposal of recovered materials in accordance with applicable legal requirements;*

Materials recovered during a spill event will be containerized appropriately. Soils and other solids will be placed in 55-gallon drums or roll-off containers, as warranted. Liquids will be placed in 55-gallon drums or will be collected in a vacuum truck using industrial power vacuuming. Recovered materials will be labeled, characterized, and disposed/recycled in accordance with applicable federal, state, and local regulations. Recovered oil will be transferred to a used oil tank for recycling.

## 5.9 Contact List and Notification Phone Numbers: §112.7(a)(3)(vi)

> *(a)(3) You must also address in your Plan: (vi) Contact list and phone numbers for the facility response coordinator, National Response Center, cleanup contractors with whom you have an agreement for response, and all appropriate Federal, State, and local agencies who must be contacted in case of a discharge as described in §112.1(b).*

The contact list for spill response activities is provided in Appendix G of this Plan.

## 5.10 Reporting and Notification Procedures: §112.7(a)(4)

> *(a)(4) Unless you have submitted a response plan under §112.20, provide information and procedures in your Plan to enable a person reporting a discharge as described in §112.1(b) to relate information on the exact address or location and phone number of the facility; the date and time of the discharge, the type of material discharged; estimates of the total quantity discharged; estimates of the quantity discharged as described in §112.1(b); the source of the discharge; a description of all affected media; the cause of the discharge; any damages or injuries caused by the discharge; actions being used to stop, remove, and mitigate the effects of the discharge; whether an evacuation may be needed; and, the names of individuals and/or organizations who have also been contacted.*

MEMC has developed reporting and notification procedures that should be followed in the event of a spill at the Mt. Emmons Facility (see Appendix G). These procedures also address applicable state and federal reporting and notification requirements. The Primary Coordinator or Secondary Coordinator should be consulted if there are any questions concerning proper reporting and notification protocol.

## 5.11 Spill Response Procedures: §112.7(a)(5)

> *(a)(5) Unless you have submitted a response plan under §112.20, organize portions of the Plan describing procedures you will use when a discharge occurs in a way that will make them readily usable in an emergency, and include appropriate supporting material as appendices.*

In the event of an oil or fuel spill, the Oil Spill Response, Reporting, and Notification Procedure provided in Appendix G shall be followed. The procedure outlines response management structure, initial response steps, reporting requirements, follow-up activities, and sustained actions for implementation following a spill or other release.

## 5.12 Discharge Analysis: §112.7(b)

> *(b) Where experience indicates a reasonable potential for equipment failure (such as loading or unloading equipment, tank overflow, rupture, or leakage, or any other equipment known to be a source of a discharge), include in your Plan a prediction of the direction, rate of flow, and total quantity of oil which could be discharged from the facility as a result of each type of major equipment failure.*

Based on the materials stored and processes utilized at the facility, spill mitigation procedures and response guidelines address the following scenarios:

- Tank puncture/leak;
- Failure of transfer equipment or hoses, as appropriate;
- Tank overfill/failure;
- Piping/hose rupture/leak;
- Explosion and/or fire; and
- Equipment failure (e.g., pumping system failure, relief valve failure).

Predictions of the direction, rate of flow, and total quantity of substances that could be discharged from the facility storage are presented in Table 1.

## 5.13 Spill Containment: §112.7(c)

> *(c) Provide appropriate containment and/or diversionary structures or equipment to prevent a discharge as described in §112.1(b), except as provided in paragraph (k) of this section for qualified oil-filled operational equipment. The entire containment system, including walls and floor, must be capable of containing oil and must be constructed so that any discharge from a primary containment system, such as a tank or pipe, will not escape the containment system before cleanup occurs. At a minimum, you must use one of the following prevention systems or its equivalent:*
>
> *(1) For onshore facilities: (i) Dikes, berms, or retaining walls sufficiently impervious to contain oil; (ii) Curbing; (iii) Culverting, gutters, or other drainage systems; (iv) Weirs, booms, or other barriers; (v) Spill diversion ponds; (vi) Retention ponds; or (vii) Sorbent materials.*
>
> *(2) For offshore facilities: (i) Curbing or drip pans; or (ii) Sumps and collection systems.*

Appropriately sized and/or general secondary containment is provided for each of the oil containers located on-site, with exceptions, as noted below. No sized secondary containment is provided for the two transformers located to the southwest of the WTP building; however, a berm is maintained on the south side of these transformers which would prevent a potential discharge from either of these transformers from migrating downhill to the south, and entering the WTP discharge ditch.

The used oil drums in the WTP building are located on a containment pallet. As shown in Appendix I, the pallet will contain approximately 59% of a single drum's volume. In the event of discharge of the total volume form one of the drums, the excess volume would be contained inside of the WTP building, and by the building's sump. The volume of containment for each potential source is provided in Table 1.

## 5.14 Spill Containment Practicability: §112.7(d)

*(d) Provided your Plan is certified by a licensed Professional Engineer under §11.3(d) or in the case of a qualified facility that meets the criteria in §112.3(g), the relevant sections of your Plan are certified by a licensed Professional Engineer under §112.6(d), if you determine that the installation of any of the structures or pieces of equipment listed in paragraphs (c) and (h)(1) of this section, and §112.8(c)(2), 112.8(c)(11), 112.9(c)(2), 112.10(c), 112.12(c)(2), and 112.12(c)(11) to prevent a discharge as described in §112.1(b) from any onshore or offshore facility is not practicable, you must clearly explain in your Plan why such measures are not practicable; for bulk storage containers, conduct both periodic integrity testing of the containers and periodic integrity and leak testing of the valves and piping; and, unless you have submitted a response plan under §112.20, provide in your Plan the following:*

*(1) An oil spill contingency plan following the provisions of part 109 of this chapter.*
*(2) A written commitment of manpower, equipment, and materials required to expeditiously control and remove any quantity of oil discharged that may be harmful.*

No discussions related to practicability are warranted because this Plan does not deviate from the requirements of §§112.7(c), 112.7(h)(1), 112.8(c)(2), 112.8(c)(11), 112.9(c)(2), 112.10(c), 112.12(c)(2), and 112.12(c)(11).

## 5.15 Inspections, Tests, and Records: §112.7(e)

*(e) Inspections, tests, and records. Conduct inspections and tests required by this part in accordance with written procedures that you or the certifying engineer develop for the facility. You must keep these written procedures and a record of the inspections and tests, signed by the appropriate supervisor or inspector, with the SPCC Plan for a period of three years. Records of inspections and tests kept under usual and customary business practices will suffice for purposes of this paragraph.*

The Mt Emmons Facility maintains a preventive maintenance program to detect faults in its aboveground storage tanks. Maintenance records are kept of all periodic integrity testing as well as other repair or alteration work on tanks for a period of not less than three years. Visual inspections are conducted by Site personnel on a routine basis to observe signs of deterioration, potential leaks, and the accumulation of material. A full discussion of inspection and integrity testing protocol for containers addressed by this Plan is provided in Section 6.2. Written inspection procedures for storage containers and oil-filled operational equipment are provided in Appendix E. Documentation of formal inspections or inspections noting deficiencies are maintained on file at the WTP building.

## 5.16 Personnel Training and Discharge Prevention Procedures: §112.7(f)

> *(f) Personnel, training, and discharge prevention procedures.*
> *(1) At a minimum, train your oil-handling personnel in the operation and maintenance of equipment to prevent discharges; discharge procedure protocols; applicable pollution control laws, rules, and regulations; general facility operations; and, the contents of the facility SPCC Plan.*
> *(2) Designate a person at each applicable facility who is accountable for discharge prevention and who reports to facility management.*
> *(3) Schedule and conduct discharge prevention briefings for your oil-handling personnel at least once a year to assure adequate understanding of the SPCC Plan for that facility. Such briefings must highlight and describe known discharges as described in §112.1(b) or failures, malfunctioning components, and any recently developed precautionary measures.*

Personnel working in areas covered by the Plan are required to have spill prevention and response training. Additional training is conducted whenever new spill regulations are promulgated, standby equipment is placed in operation, new equipment is added, existing operating equipment is modified, personnel responsibilities change, or the Plan is updated. The Spill Coordinator is the designated person accountable for overseeing spill prevention training at the Site.

Annual training is held to update employees on changes in the regulations, laws, or in-house procedures. Training records will be maintained at the site for three years. Sign-in sheets and topics of discussion at each briefing are maintained for documentation (Appendix H).

## 5.17 Security: §112.7(g)

*(g) Security (excluding oil production facilities).*
*(1) Fully fence each facility handling, processing, or storing oil, and lock and/or guard entrance gates when the facility is not in production or is unattended.*
*(2) Ensure that the master flow and drain valves and any other valves permitting direct outward flow of the container's contents to the surface have adequate security measures so that they remain in the closed position when in non-operating or non-standby status.*
*(3) Lock the starter control on each oil pump in the "off" position and locate it at a site accessible only to authorized personnel when the pump is in a non- operating or non-standby status.*
*(4) Securely cap or blank-flange the loading/unloading connections of oil pipelines or facility piping when not in service or when in standby service for an extended time. This security practice also applies to piping that is emptied of liquid content either by draining or by inert gas pressure.*
*(5) Provide facility lighting commensurate with the type and location of the facility that will assist in the: (i) Discovery of discharges occurring during hours of darkness, both by operating personnel, if present, and by non-operating personnel (the general public, local police, etc.); and (ii) Prevention of discharges occurring through acts of vandalism.*

Access to Mt Emmons facility is via a US Forest Service private use road NFSR 732 that is secured by means of a locked gate. All site buildings are locked. Daytime patrols by plant personnel are conducted routinely 7 days a week. The plant is shut-down when the operators are not onsite (generally 4 p.m. to 6 a.m.). The status of the plant can be remotely monitored by plant operators during nighttime hours. Exterior lighting on the outside of the plant buildings and interior lighting in the plant provide illumination of areas where environmentally sensitive materials are stored. Radios, cell phones, and telephones inside of site buildings are used for communications. WTP building doors are alarmed and monitored for any unauthorized entry, in the event of an alarm the security company will notify authorities and plant operators.

## 5.18 Facility Tank Car and Tank Truck Loading/Unloading: §112.7(h)

*(h) Facility tank car and tank truck loading/unloading rack (excluding offshore facilities).*
*(1) Where loading/unloading area drainage does not flow into a catchment basin or treatment facility designed to handle discharges, use a quick drainage system for tank car or tank truck loading and unloading areas. You must design any containment system to hold at least the maximum capacity of any single compartment of a tank car or tank truck loaded or unloaded at the facility.*
*(2) Provide an interlocked warning light or physical barrier system, warning signs, wheel chocks, or vehicle break interlock system in loading/unloading areas to prevent vehicles from departing before complete disconnection of flexible or fixed oil transfer lines.*
*(3) Prior to filling and departure of any tank car or tank truck, closely inspect for discharges the lowermost drain and all outlets of such vehicles, and if necessary, ensure that they are tightened, adjusted, or replaced to prevent liquid discharge while in transit.*

The requirements of §112.7(h) are not considered applicable to the Site because there are no loading racks per USEPA's guidance provided at the 31 March 2004, SPCC Stakeholder Meeting. However, the Site does utilize certain best management practices (BMPs) for loading and unloading operations.

Loading and unloading of either gasoline or diesel fuel occurs on the southern side of the Enviro-Vault tank, located west of the WTP building. Should a release occur during loading or unloading operations, spilled material will flow to the south. To prevent a spill during loading operations from flowing downhill and reaching the WTP discharge ditch, a berm must be maintained on the south side of the fuel loading area. The tank truck unloading procedures (Appendix D) include a barrier system (i.e., wheel chocks) to prevent vehicles from departing prior to complete disconnection of oil transfer lines. The lowermost drains and outlets on tank trucks will be inspected prior to departure to ensure no discharges can occur. These drains and outlets will be tightened, adjusted, or replaced to prevent liquid discharges while in transit.

## 5.19 Brittle Fracture Analysis: §112.7(i)

> *(i) If a field-constructed aboveground container undergoes a repair, alteration, reconstruction, or a change in service that might affect the risk of a discharge or failure due to brittle fracture or other catastrophe, or has discharged oil or failed due to brittle fracture failure or other catastrophe, evaluate the container for risk of discharge or failure due to brittle fracture or other catastrophe, and as necessary, take appropriate action.*

There are no field-constructed aboveground containers at the Site that are used to store oil or oil products; therefore, the requirements of §112.7(i) do not apply.

## 5.20 Applicable Requirements: §112.7(j)

> *(j) In addition to the minimal prevention standards listed under this section, include in your Plan a complete discussion of conformance with the applicable requirements and other effective discharge prevention and containment procedures listed in this part or any applicable more stringent State rules, regulations, and guidelines.*

Section 6.0 of this Plan provides further detailed discussions of conformance with the applicable federal and state requirements and other effective discharge prevention used at the facility.

## 5.21 Qualified Oil-Filled Equipment: §112.7(k)

> *k) Qualified Oil-filled Operational Equipment. The owner or operator of a facility with oil-filled operational equipment that meets the qualification criteria in paragraph (k)(1) of this sub-section may choose to implement for this qualified oil-filled operational equipment the alternate requirements as described in paragraph (k)(2) of this subsection in lieu of general secondary containment required I paragraph (c) of this section.*
>
> *(1) Qualification Criteria – Reportable Discharge History: The owner or operator of a facility that has had no single discharge as described in 112.1(b) from any oil-filled operational equipment exceeding 1,000 U.S. gallons or no two discharges as described in 112.1(b) from any oil-filled operational equipment each exceeding 42 U.S. gallons within any twelve month period in the three years prior to the SPCC Plan certification date, or since becoming subject to this part if the facility has been in operation for less than three years (other than oil-filled discharges as described in 112.1(b) that are the result of natural disasters, acts of war or terrorism); and (2) Alternative Requirements to General Secondary Containment. If secondary containment is not provided for qualified oil-filled operational equipment pursuant to paragraph (c) of this section, the owner or operator of a facility with qualified oil-filled operational equipment must: (i) Establish and document the facility procedures or inspections or a monitoring program to detect equipment failure and /or a discharge; and (ii) Unless you have submitted a response plan under 112.20, provide in your Plan the following: (A) An oil spill contingency plan following the provisions of part 109 of this chapter. (B) A written commitment of manpower, equipment, and materials required to expeditiously control and remove any quantity of oil discharged that may be harmful.*

Oil-filled equipment at the site includes outdoor transformers containing cooling oil, as listed in Section 5.3, and Table 1. Not all transformers at the Site are provided with containment due to potential safety hazards associated with standing water accumulating around an electrical source. Each transformer is inspected for leaks during the monthly and annual inspections.

# 6. REQUIREMENTS FOR ONSHORE (NON-PRODUCTION) FACILITIES: §112.8

> *If you are the owner or operator of an onshore facility (excluding a production facility), you must: (a) Meet the general requirements for the Plan listed under §112.7, and the specific discharge prevention and containment procedures listed in this section.*

This Plan conforms with and does not deviate from the requirements of 40 CFR §112.7. Section 6.0 of this Plan presents facility-specific details associated with the requirements for onshore non-production facilities outlined in §112.8.

## 6.1 Facility Drainage: §112.8(b)

> *(b)(1) Restrain drainage from diked storage areas by valves to prevent a discharge into the drainage system or facility effluent treatment system, except where facility systems are designed to control such discharge. You may empty diked areas by pumps or ejectors; however, you must manually activate these pumps or ejectors and must inspect the condition of the accumulation before starting, to ensure no oil will be discharged.*
> *(b)(2) Use valves of manual, open-and-closed design, for the drainage of diked areas. You may not use flapper-type drain valves to drain diked areas. If your facility drainage drains directly into a watercourse and not into an on-site wastewater treatment facility, you must inspect and may drain uncontaminated retained stormwater, as provided in paragraphs (c)(3)(ii), (iii), and (iv) of this section.*

No dikes exist at the site, therefore, no discussion related to §112.8(b)(1) is warranted.

> *(b)(3) Design facility drainage systems from undiked areas with a potential for a discharge (such as where piping is located outside containment walls or where tank truck discharges may occur outside the loading area) to flow into ponds, lagoons, or catchment basins designed to retain oil or return it to the facility. You must not locate catchment basins in areas subject to periodic flooding.*

Drainage from areas of the site that are outside of secondary containment (i.e., "undiked areas") with a potential for a discharge of oil due to operations at the site, include the transformers and the fuel loading/unloading area. Ruptures or leaks from the WTP transformers, loading/unloading area at the Mt. Emmons Facility would be contained by berms maintained on the southern (downhill) sides of their locations.

Additional stormwater collected by interceptor ditches on-site is from areas where potential for a discharge is not anticipated due to SPCC applicable storage containers not

being present in these locations. This additional stormwater is discharged to Coal Creek under Colorado Discharge Permit System (CDPS) number COR040284.

> *(b)(4) If facility drainage is not engineered as in paragraph (b)(3) of this section, equip the final discharge of all ditches inside the facility with a diversion system that would, in the event of an uncontrolled discharge, retain oil in the facility.*

Undiked areas will be managed in accordance with best management practices, therefore, no discussion related to §112.8(b)(3) is warranted.

> *(b)(5) Where drainage waters are treated in more than one treatment unit and such treatment is continuous, and pump transfer is needed, provide two "lift "pumps and permanently install at least one of the pumps. Whatever techniques you use, you must engineer facility drainage systems to prevent a discharge as described in §112.1(b) in case there is an equipment failure or human error at the facility.*

The Mt. Emmons Facility does not treat drainage waters in more than one treatment unit; therefore, the requirements of §112.8(b)( 5) do not apply.

## 6.2 Bulk Storage Containers: §112.8(c)

Aboveground containers that qualify as bulk storage containers, used for the storage of oil and oil products at the Mt. Emmons Facility, are listed in Section 5.3, Table 1. Therefore, the following discussion pertaining to the requirements of federal, state, and local regulations is limited to these ASTs.

> *(c)(1) Not use a container for the storage of oil unless its material and construction are compatible with the material stored and conditions of storage such as pressure and temperature.*

All construction materials for bulk storage tanks, associated piping and valves, and other appurtenances are compatible with stored products. Temperature, pressure, concentration, trace contaminants, shelf life, vapor/liquid interfaces, and other characteristics are considered when selecting materials of construction.

*(c)(2) Construct all bulk storage container installations (except mobile refuelers) so that you provide a secondary means of containment for the entire capacity of the largest single container and sufficient freeboard to contain precipitation. You must ensure that diked areas are sufficiently impervious to contain discharged oil. Dikes, containment curbs, and pits are commonly employed for this purpose. You may also use an alternative system consisting of a drainage trench enclosure that must be arranged so that any discharge will terminate and be safely confined in a facility catchment basin or holding pond.*

Secondary containment is provided for the tanks, containers, and drums at the Facility as described in Section 5.6 of this Plan. The secondary containment volumes are listed in Table 1, and full secondary containment calculations are provided in Appendix I. The tanks are stored within a secondary containment volume that is greater than the maximum storage volume of the largest tank, and the volume from a 24-hour, 25-year precipitation event, or provided with general secondary containment as described in Section 5.13 of this Plan.

Secondary containment structures are sufficiently impervious for the products stored.

*(c)(3) Not allow drainage of uncontaminated rainwater from the diked area into a storm drain or discharge of an effluent into an open watercourse, lake, or pond, bypassing the facility treatment system unless you: (i) Normally keep the bypass valve sealed closed. (ii) Inspect the retained rainwater to ensure that its presence will not cause a discharge as described in §112.1(b). (iii) Open the bypass valve and reseal it following drainage under responsible supervision; and (iv) Keep adequate records of such events, for example, any records required under permits issued in accordance with §§122.41(j)(2) and 122.41(m)(3) of this chapter.*

The secondary containment system for the Enviro-Vault fuel ASTs at the site are designed to exclude rainwater as the tanks are double-walled. The system is inspected as described in Appendix E.

*(c)(4) Protect any completely buried metallic storage tank installed on or after January 10, 1974 from corrosion by coatings or cathodic protection compatible with local soil conditions. You must regularly leak test such completely buried metallic storage tanks.*

The Mt. Emmons Facility has no buried metal storage tanks that are subject to 40 CFR 112; therefore, the requirements of §112.8(c)(4) do not apply.

*(c)(5) Not use partially buried or bunkered metallic tanks for the storage of oil, unless you protect the buried section of the tank from corrosion. You must protect partially buried and bunkered tanks from corrosion by coatings or cathodic protection compatible with local soil conditions.*

The Mt. Emmons Facility has no partially buried or bunkered metal storage tanks as addressed by this Plan; therefore, the requirements of §112.8(c)(5) do not apply.

> *(c)(6) Test each aboveground container for integrity on a regular schedule, and whenever you make material repairs. The frequency of and type of testing must take into account container size and design (such as floating roof, skid-mounted, elevated, or partially buried). You must combine visual inspection with another testing technique such as hydrostatic testing, radiographic testing, ultrasonic testing, acoustic emissions testing, or another system of non-destructive shell testing. You must keep comparison records and you must also inspect the container's supports and foundations. In addition, you must frequently inspect the outside of the container for signs of deterioration, discharges, or accumulation of oil inside diked areas. Records of inspections and tests kept under usual and customary business practices will suffice for purposes of this paragraph.*

### 6.2.1 Inspections:

Formal inspections of tanks and containers are conducted on a monthly basis in accordance with the procedure provided in Appendix E and are documented using the inspection forms provided in Appendix F.

### 6.2.2 Integrity Testing:

The Steel Tank Institute (STI) Standard for the Inspection of Aboveground Storage Tanks, SP-001, indicates that monthly visual inspection is sufficient for steel containers with a continuous release detection (e.g., concrete foundation).

The Mt. Emmons Facility maintains that periodic visual inspections provide equivalent environmental protection for the following reasons: 1) the containers are on concrete foundations and are visible on all sides; 2) internal corrosion poses minimal risk of failure; and 3) periodic visual inspections of the containers are sufficient to detect and promptly correct leaks associated with the integrity of these containers.

### 6.2.3 Records:

Records are maintained for a period of not less than three years and can be found in the Mt. Emmons Facility's files onsite.

> *(c)(7) Control leakage through defective internal heating coils by monitoring the steam return and exhaust lines for contamination from internal heating coils that discharge into an open watercourse, or pass the steam return or exhaust lines through a settling tank, skimmer, or other separation or retention system.*

There are no internal heating coils associated with aboveground tanks at the Mt. Emmons Facility; therefore, the requirements of §112.8(c)(7) do not apply.

> *(c)(8) Engineer or update each container installation in accordance with good engineering practice to avoid discharges. You must provide at least one of the following devices: (i) High liquid level alarms with an audible or visual signal at a constantly attended operation or surveillance station. In smaller facilities an audible air vent may suffice. (ii) High liquid level pump cutoff devices set to stop flow at a predetermined container content level. (iii) Direct audible or code signal communication between the container gauger and the pumping station. (iv) A fast response system for determining the liquid level of each bulk storage container such as digital computers, telepulse, or direct vision gauges. If you use this alternative, a person must be present to monitor gauges and the overall filling of bulk storage containers. (v) You must regularly test liquid level sensing devices to ensure proper operation.*

MEMC maintains records of the capacity in the aboveground storage tanks and Site personnel supervise loading operations and are in constant communication with the truck driver.

> *(c)(9) Observe effluent treatment facilities frequently enough to detect possible system upsets that could cause a discharge as described in §112.1(b).*

The effluent treatment plant at the Mt. Emmons Facility is inspected regularly to ensure that equipment and tanks are within operational specification.

> *(c)(10) Promptly correct visible discharges which result in a loss of oil from the container, including but not limited to seams, gaskets, piping, pumps, valves, rivets, and bolts. You must promptly remove any accumulations of oil in diked areas.*

Visible oil, oil product, or other regulated substance discharges are reported upon observation so they can be controlled and immediately corrected. Measures are taken to minimize and mitigate the spill or leak, and the source of the discharge is repaired or otherwise corrected. Accumulations of oil are promptly removed by responding personnel.

> *(c)(11) Position or locate mobile or portable oil storage containers to prevent a discharge as described in §112.1(b). Except for mobile refuelers, you must furnish a secondary means of containment, such as a dike or catchment basin, sufficient to contain the capacity of the largest single compartment or container with sufficient freeboard to contain precipitation.*

All portable oil storage containers are located in adequate secondary containment or inside of buildings.

## 6.3 Facility Transfer Operations, Pumping, and In-Facility Process: §112.8(d)

> *(d)(1) Provide buried piping that is installed or replaced on or after August 16, 2002, with a protective wrapping and coating. You must also cathodically protect such buried piping installations or otherwise satisfy the corrosion protection standards for piping in part 280 of this chapter or a State program approved under part 281 of this chapter. If a section of buried line is exposed for any reason, you must carefully inspect it for deterioration. If you find corrosion damage, you must undertake additional examination and corrective action as indicated by the magnitude of the damage.*

The facility has no buried oil-containing piping subject to 40 CFR 112; therefore, the requirements of §112.8(d) do not apply. Should future installations or replacements of buried piping be necessary, the buried piping will be provided with protective wrapping and coating, as appropriate, according to pipe material and construction. Cathodic protection or other corrosion protection will be provided in accordance with 40 CFR Part 280 or applicable State programs approved under 40 CFR Part 281. Exposed lines will be carefully inspected for deterioration. If corrosion damage is observed, additional examination and corrective action is taken, as appropriate.

> *(d)(2) Cap or blank-flange the terminal connection at the transfer point and mark it as to origin when piping is not in service or is in standby service for an extended time.*

Pipelines will be capped or blank-flanged at terminal connections at the transfer point and will be marked to indicate flow origin if the piping is out of service or in standby service for an extended time.

> *(d)(3) Properly design pipe supports to minimize abrasion and corrosion and allow for expansion and contraction.*

Pipe supports for aboveground pipelines are properly designed to minimize abrasion and corrosion and to allow for expansion and contraction.

*(d)(4) Regularly inspect all aboveground valves, piping, and appurtenances. During the inspection you must assess the general condition of items, such as flange joints, expansion joints, valve glands and bodies, catch pans, pipeline supports, locking of valves, and metal surfaces. You must also conduct integrity and leak testing of buried piping at the time of installation, modification, construction, relocation, or replacement.*

Aboveground valves, pipe supports, pipes, and pipelines are inspected on a routine basis in accordance with the procedure provided in Appendix E. Routine inspections are visual, external, conducted from the ground, and conducted simultaneously with container inspections.

*(d)(5) Warn all vehicles entering the facility to be sure that no vehicle will endanger aboveground piping or other oil transfer operations.*

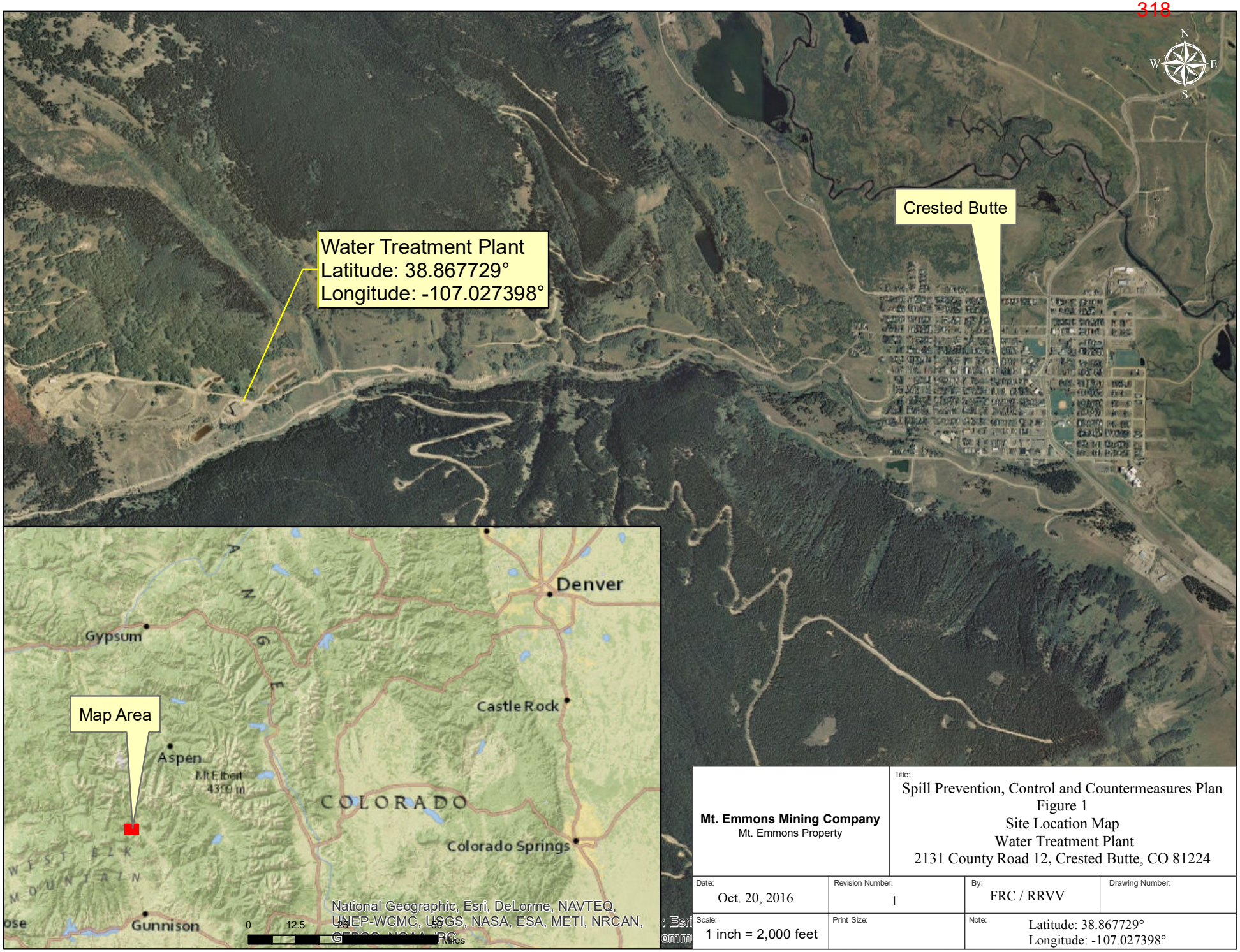
Aboveground piping and terminal connections are clearly visible and protected from vehicular traffic by concrete barriers.

# TABLES

Table 1. Summary of Container Inventory, Substance Quantities, and Prediction of Potential Discharges, Mt. Emmons Facility, Crested Butte, CO.

| Tank ID | Container Contents | Location | Container Volume (gal.) | Tank/Container Construction Type/Material | Secondary Containment Type | Secondary Containment Volume (gal.) | Anticipated Maximum Flow Rate (gal/hr) | Direction and Destination of Flow From Container |
|---|---|---|---|---|---|---|---|---|
| Enviro-Vault – Diesel | Diesel | Southwest of WTP Building | 500 | Steel | Double-walled | N/A | 500 | Flow to the southwest, downhill |
| Enviro-Vault – Gasoline | Gasoline | Southwest of WTP Building | 500 | Steel | Double-walled | N/A | 500 | Flow to the southwest, downhill |
| Used Oil Drums | Used Oil | Northeast Corner of WTP Building | 2 x 55 | Steel | Containment Pallet | 32 | 55 | Contained inside of building/building sump |
| 2160 Level Transformer | Mineral Oil | Southwest of 2160 Portal | 150 | Steel | Concrete | 359 | 200 | Into Degrit/Emergency Overflow Pond |
| WTP Transformer - East | Mineral Oil | Southwest of the WTP building | 350 | Steel | none | N/A | 400 | Flow to the south, towards berm on hillside |
| WTP Transformer - West | Cooling Oil | Southwest of the WTP building | 460 | Steel | none | N/A | 460 | Flow to the south, towards berm on hillside |

# FIGURES




**Mt. Emmons Mining Company**
Mt. Emmons Property

Title:
Spill Prevention, Control and Countermeasures Plan
Figure 1
Site Location Map
Water Treatment Plant
2131 County Road 12, Crested Butte, CO 81224

| Date: | Revision Number: | By: | Drawing Number: |
|---|---|---|---|
| Oct. 20, 2016 | 1 | FRC / RRVV | |

| Scale: | Print Size: | Note: |
|---|---|---|
| 1 inch = 2,000 feet | | Latitude: 38.867729°<br>Longitude: -107.027398° |

1370 Portal

Pole mount transformers - 3 x 20-gallons (exempt - below SPCC limit)

1670 Portal

Pole mount transformers - 3 x 20-gallons (exempt - below SPCC limit)

2000 Portal

North Interceptor Ditch

Used Oil Storage - 2 x 55 gallon drums

Upper Emergency Surge Pond

Equalization Pond

Lower Emergency Surge Pond

Lower Degrit Pond

Trapper's Way

2160 Portal

Transformer - 150 gallons mineral oil

Emergency Overflow Pond

Upper Degrit Pond

Pole mount transformers - 3 x 20-gallons (exempt - below SPCC limit)

Decant Line

Decant Diversion Manhole

East Toe Drain

Retention Pond Interceptor Ditch

Water Treatment Plant Building

Earthen Berm

Discharge Ditch

Outfall to Coal Creek

Crested Butte Water Supply Intake Location

Reclaimed Taling Areas

West Toe Drain

Retention Pond

Transformer - 350 gallons mineral oil

Enviro-Vault Fuel Storage Tank - 500 gallons diesel, 500 gallons gasoline

Metering Cabinet - Execpt - Does Not Contain Oil

Coal Creek

County Rd 12

Transformer - 460 gallons mineral oil

Fuel Loading/Unloading Location

## Legend

- Spill Response Equipment
- Portal
- Culvert
- Transformer
- SPCC Exempt Location
- Oil Storage Location
- Pipeline
- Aboveground Pipeline Section
- Ditch
- Surface Flow Direction
- Building
- Pond Outline
- Trapper's Way (NF 732)
- Other Highway or Road
- Stream

Note: All sections of pipline are buried unless otherwise noted.

0 500 1,000 Feet

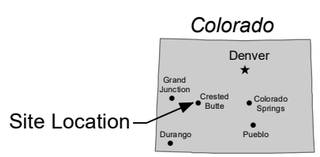
N

**Mt. Emmons Mining Company**
Mt. Emmons Property

**Site Layout Map**
**Mt. Emmons Facility**
**SPCC Plan**

| | FIGURE 2 | JUNE 2022 |
|---|---|---|
| | | 11x17" |

**Key Map**




Document Path: P:_Project_Files\DE0239_Freeport McMoRan Inc_MT Emmons Water Quality\GIS\MCP and SWMP\DRH\2020\202003\mxd\fig2_site_layout_spcc_plan.mxd

# APPENDIX A

# Exceptions to SPCC Plan Engineering Certification and Commitment to Address Deficiencies

# APPENDIX A

## EXCEPTIONS TO SPCC PLAN ENGINEERING CERTIFICATION

The following SPCC Plan deficiencies have been documented with regards to the Mt. Emmons Facility:

1. As shown in Appendix I, general secondary containment at the WTP transformers location must be maintained to ensure a minimum berm height of 2.5 ft on the southern side of the transformers to prevent a discharge from this location from flowing downhill and entering the WTP discharge ditch.

2. A berm must be constructed to the south of the Enviro-Vault fuel storage tank area to prevent discharges that may occur during fuel loading/unloading activities from flowing downhill and entering the WTP discharge ditch. The berm must be a minimum height of 1.2 feet to contain the volume of the delivery truck (2,700 gallons) and potential runoff from a 25-year, 24-hour storm event, as shown in Appendix I. Additionally, a spill kit should be maintained at this location to provide quick response in the event of a spill or leak during loading/unloading operations.

**Commitment to Address Deficiencies**

MEMC is committed to addressing items, above, in the Exceptions to Engineering Certification. Our schedule for making spill prevention improvements is attached.

_____ _____

Name: Dave Gosen Date

Title: Manager, Remediation Projects

**Schedule to Address Deficiencies**

| Deficiency | Planned Corrective Action | Planned Completion Date | Date Completed |
|---|---|---|---|
| 1. | | | |
| 2. | | | |
| 3. | | | |

# APPENDIX B

# Certification of Substantial Harm Determination

# APPENDIX B

## CERTIFICATION OF SUBSTANTIAL HARM DETERMINATION

FACILITY NAME: Mt. Emmons Facility

FACILITY ADDRESS: 2131 County Road 12, Crested Butte, CO 81224

1. Does the facility transfer oil over water to or from vessels and have a total oil storage capacity greater than or equal to 42,000 gallons?

   YES_____ NO ____X____

2. Does the facility have a total oil storage capacity greater than or equal to 1 million gallons and does the facility lack secondary containment that is sufficiently large to contain the capacity of the largest aboveground oil storage tank plus sufficient freeboard to allow for precipitation within any aboveground storage tank area?

   YES_____ NO ____X____

3. Does the facility have a total oil storage capacity greater than or equal to 1 million gallons and is the facility located at a distance (as calculated using the appropriate formula in Attachment C-III to this appendix or a comparable formula[1]) such that a discharge from the facility could cause injury to fish and wildlife and sensitive environments? For further description of fish and wildlife and sensitive environments, see Appendices I, II, and III to DOC/NOAA's "Guidance for Facility and Vessel Response Plans: Fish and Wildlife and Sensitive Environments" (see Appendix E to this part, section 10, or availability) and the applicable Area Contingency Plan.

   YES_____ NO ____X____

4. Does the facility have a total oil storage capacity greater than or equal to 1 million gallons and is the facility located at a distance (as calculated using the appropriate formula in Attachment C-III to this appendix or a comparable formuls[1]) such that a discharge from the facility would shut down a public drinking water intake[2].

   YES_____ NO ____X____

5. Does the facility have a total oil storage capacity greater than or equal to 1 million gallons and has the facility experienced a reportable oil spill in an amount greater than or equal to 10,000 gallons within the last 5 years?

   YES_____ NO ____X____

CERTIFICATION

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document, and that based on my inquiry of those individuals responsible for obtaining this information, I believe that the submitted information is true, accurate, and complete.

_____ _____

Signature Date

Dave Gosen Manager, Remediation Projects

Name (please type or print) Title

[1] If a comparable formula is used, documentation of the reliability and analytical soundness of the comparable formula must be attached to this form.

[2] For the purposes of 40 CFR part 112, public drinking water intakes are analogous to public water systems as described at 40 CFR 143.2(c)

# APPENDIX C

# SPCC Plan Review Documentation

# APPENDIX C

## SPCC PLAN REVIEW CERTIFICATION

In accordance with §112.5(b), this SPCC Plan has been reviewed to determine if more effective prevention and control technology is available to significantly reduce the likelihood of a discharge.

Pursuant to §112.5(b) and by means of this certification, I attest that I have completed a review and evaluation of this SPCC Plan for the Site located at 2131 County Road 12, in Crested Butte, CO, and as a result

_____Will amend the Plan within 90 days of my review and implement the amended Plan within six-months of its completion.

_____ Will Not amend the Plan.

Technical amendments to the Plan have been certified by a Professional Engineer:

_____ _____

Signature, Authorized Facility Representative Date

Dave Gosen

Name (Printed)

Manager, Remediation Projects

Title

# APPENDIX D

# Safe Loading and Unloading Procedure for Oil

# APPENDIX D

## Safe Loading and Unloading Procedure for Oil

**Purpose:** This procedure provides guidelines to be used in the safe and environmentally responsible loading and unloading of oil.

**Scope:** This procedure encompasses those activities involving loading and unloading bulk oils and other materials in a manner such that risks to health, safety and the environment are minimized as much as is practicable. This procedure applies to all materials and in no way countermands requirements for loading/unloading certain specific chemicals, which may be more stringent.

**Procedure:**

1). Operating personnel must be present at all times when any loading or unloading operation is taking place.
2). Observe all tank capacities and contents and ensure that the volumes being added to a bulk tank are not excessive and that the correct material is being added.
3). Make certain that a Safety Data Sheet (SDS) is available for any material that is being loaded or unloaded.
4). Ensure that all pipes and hoses are properly connected and can be observed during any transfer of oil. Both ends of hoses should be visible and should not be used in unlighted areas at night.
6). Any hoses provided by transporters must be capped when not in use.
7). Spill response equipment and spill control devices such as buckets, drip pans, etc. should be available should a leak occur.
8). Vehicle parking brake should be set prior to any transfer activity.
9). Vehicle wheels should be chocked prior to connecting transfer hoses.
10). Should leaks or spills occur, any transfer must immediately be stopped, and the cause of the leak or spill investigated and resolved.
11). All pipes and hoses must be voided of contents prior to disassembly and removal from coupling devices.
12). Vehicle engines should be shut off during loading or unloading unless necessary.

# APPENDIX E

# Inspection Procedure for Oil Storage Containers

# APPENDIX E

# INSPECTION PROCEDURE FOR OIL A STORAGE CONTAINERS

## 1. RESPONSIBILITIES

These procedures establish the requirements for inspections and tests for the oil storage vessels at the Site to minimize the risk of a spill incident. The WTP Operator in Responsible Charge, or their qualified designee is responsible for:

- Conducting the monthly inspections;
- Identifying deficiencies during the inspections; and
- Ensuring deficiencies are properly prioritized and corrected in a timely manner.

The WTP Operator in Responsible Charge (or designee) completes the inspections. Designated personnel will have the authority to commit the resources necessary to carry out a response, if warranted. Operating personnel at the Facility will receive training to familiarize themselves with all aspects of the SPCC Plan, facility operations, the location and characteristics of materials handled at the facility, and the location of all records within the facility.

## 2. PROCEDURES

The WTP Operator in Responsible Charge (or designee) will conduct a visual deficiency inspection of the oil storage containers identified in Table 1 of the SPCC Plan. The personnel performing the inspections will be knowledgeable of the facility operations, aboveground storage containers and the characteristics of contents of the containers. The inspections will be documented using the inspection forms located in Appendix F. The inspections include a visual examination of exterior surfaces for leaks and other deficiencies of the vessel, supports, connected piping and valves, and secondary containment. It also includes visual inspection and monitoring of any leak detection system or other monitoring or warning systems (e.g., level indication/alarm or interstitial space monitoring). If any inspection reveals a leak or equipment deficiency, corrective action must be taken promptly to eliminate the leak or deficiency. Deficiencies noted during the inspection are recorded. The inspector will complete the following:

1. Visually inspect exterior surfaces of storage vessels, along with associated pipes, valves and other appurtenances and identify any leaks, cracks, area of wear, external wall thinning, swelling, excessive corrosion, or mechanical deficiency.

2. Visually inspect vessel/equipment supports and containment structures for excessive settlement, apparent structural weakness, cracks, or other deficiency which would allow the secondary containment to leak.

3. Inspect and monitor existing leak detection systems (for example, observation ports on double-walled tanks), cathodic protection equipment, and other warning systems such as alarms and level gauges.

If, during the inspection, the inspector observes an oil spill they shall immediately initiate the spill response procedure outlined in Appendix G of this SPCC Plan.

# APPENDIX F

# Visual Inspection Checklists

# APPENDIX F

## Monthly Visual Inspection Checklist

Site Name and Address: Mt. Emmons Facility, 2131 County Road 12, Crested Butte, CO 81224
Inspector's Name and Phone Number: _____
Inspection Date: _____
Inspection Areas Covered: _____
Weather Conditions: _____

| | Yes | N/A | No | Corrective Action |
|---|---|---|---|---|
| 1. Are there any corroded or damaged tanks, tank supports, and tank drain valves? | | | | |
| 2. Is there evidence of leakage from any piping system or hoses connected to the tanks? | | | | |
| 3. Are hoses properly stored after use and capped to prevent leakage? | | | | |
| 4. Is there evidence of any damaged or leaking storage totes or drums? | | | | |
| 5. Are drums or totes of oil or hazardous substances stored within secondary containment or on a containment pallet? | | | | |
| 6. Is there evidence of drips or leaks from equipment or machinery on-site that can possibly contact with stormwater? | | | | |
| 7. Are leaks from equipment, vehicles, and containment structures properly handled by using drip pans or other spill prevention measures? | | | | |
| 8. Are spill kits complete and accessible? | | | | |
| 9. Are leak detection systems working properly? | | | | |
| 10. Are containers, including tanks, properly labeled? | | | | |
| 11. Is there water or debris in the secondary containment area? | | | | |
| 12. Are drain valves operating properly and in a closed position? | | | | |
| 13. Is there evidence of cracks, external wall thinning, swelling or mechanical deficiency on the storage tanks? | | | | |
| 14. Is there evidence of excessive settlement, structural weakness, cracks or other deficiencies in the secondary containment for the storage tanks? | | | | |
| 15. Are the tanks fenced and the access gate locked? | | | | |
| 16. Are drain valves secured in the locked position? | | | | |
| 17. Does the facility have adequate lighting? | | | | |
| *Are there any other conditions observed during this inspection that may need to be addressed to maintain compliance with the SPCC Plan? Please provide additional comments.* | | | | |

_____ _____
Inspector Name Inspection Date

# APPENDIX F

## Annual Visual Inspection Checklist

Site Name and Address: Mt. Emmons Facility, 2131 County Road 12, Crested Butte, CO 81224
Inspector's Name and Phone Number: _____
Inspection Date: _____
Inspection Areas Covered: _____
Weather Conditions: _____

| **Aboveground Storage Tanks/Equipment** | **Yes** | **N/A** | **No** | **Corrective Action** |
|---|---|---|---|---|
| 1. Are there any corroded or damaged tanks, tank supports, and tank drain valves? | | | | |
| 2. Is there evidence of leakage from any piping system connected to the tanks? | | | | |
| 3. Is there evidence of cracks, external wall thinning, swelling or mechanical deficiency on the storage tanks? | | | | |
| 4. Is there any evidence of distortions, buckling, denting or bulging on the tank shell or roof? | | | | |
| 5. Is there evidence of drips or leaks from equipment or machinery on-site that can possibly contact with stormwater? | | | | |
| 6. Are materials stored in their designated areas? | | | | |
| 7. Are materials labeled properly? | | | | |
| **Secondary Containment** | **Yes** | **N/A** | **No** | **Corrective Action** |
| 1. Is there evidence of holes, settling, or cracking within any secondary containment area? | | | | |
| 2. Is there water or debris in the secondary containment area? | | | | |
| **Spill Response** | **Yes** | **N/A** | **No** | **Corrective Action** |
| 1. Is there any evidence of spills from the oil storage tank area, raw material storage area, or drum storage area? | | | | |
| 2. Are leaks from equipment, vehicles, and containment structures properly handled by using drip pans or other spill prevention measures? | | | | |
| 3. Are spill kits complete and accessible? | | | | |
| 4. Is waste from spills properly contained and disposed? | | | | |

| Valves, Piping, Venting, and Leak Detection Systems | Yes | N/A | No | Corrective Action |
|---|---|---|---|---|
| 1. Are drain valves operating properly and in a closed position? | | | | |
| 2. Does exposed piping have significant corrosion? | | | | |
| 3. Does buried piping have significant cathodic protection? | | | | |
| 4. Are emergency vents operable? | | | | |
| 5. Have the leak detection systems, including overfill prevention devices, been tested recently to ensure proper operation? | | | | |
| **Recordkeeping** | | | | |
| 1. Have integrity testing (consisting of periodic visual inspection, hydrostatic testing, ultrasonic thickness testing, and/or equivalent integrity testing) been performed by a qualified individual within the past five years? | | | | |
| 2. Are inspection, maintenance, and training records maintained for the past three years? | | | | |
| *Are there any other conditions observed during this inspection that may need to be addressed to maintain compliance with the SPCC Plan? Please provide additional comments.* | | | | |

Inspector Name

Inspection Date

# APPENDIX G

# Spill Response Procedures

# APPENDIX G

# SPILL RESPONSE PROCEDURES

## 1. RESPONSE MANAGEMENT STRUCTURE

The Spill Coordinator and Alternate Spill Coordinator are responsible for implementing response procedures in the event of an oil spill or discharge emergency. These personnel have the authority to commit the resources necessary to carry out a response. However, all personnel at the Mt. Emmons Facility will receive training to familiarize themselves with all aspects of the SPCC Plan, facility operations, the location and characteristics of materials handled at the Mt. Emmons Facility, and the location of all records within the Facility and are responsible for proper implementation of response procedures should the Spill Coordinator or Alternate Spill Coordinator(s) be unavailable.

## 2. INITIAL RESPONSE

Releases at the Site will be discovered through observations made during the course of normal work activities, inspections of work areas and equipment, monitoring devices, or by chance. Discovering a spill is the first step in initiating a response. The individual discovering a release should immediately upon discovery:

1. Assess the basic situation.
2. Stop the source of the release if safely possible using available resources (including spill kits).
3. Restrict ignition sources if the material is flammable.
4. Secure the area as “off limits”.
5. In the event that the incident poses an immediate threat of fire, explosion, or other impact to safety, health, or the environment, contact the local fire department at 911. DO NOT HANG UP after completing the report, let the dispatcher hang up first.
6. Report the release to the Spill Coordinator or an Alternate Spill Coordinator (see attached Notification Phone Numbers).
7. The Spill Coordinator (or alternate) will determine whether the spill incident warrants evacuation of the facility. If so, the procedures outlined in the facility Emergency Response Plan will be followed.

8. The Spill Coordinator (or alternate) will determine whether the spill incident constitutes a discharge as defined in §112.1(b) of the SPCC regulations (see Section 3 below) or exceeds a reportable quantity (see Section 5 below) and will notify appropriate federal, state, and local agencies of the spill/release incident if warranted.

9. If the spill involves five gallons or less, it can be cleaned up by facility personnel provided that: 1) appropriate safety data sheets (SDS sheets) are available for the material spilled; and 2) appropriate personal protective equipment (PPE) is available.

10. If necessary, the spill may have to be cleaned up by a properly certified outside contractor. (See attached list of Clean-up Contractors).

## 3. OIL SPILL EMERGENCY REPORTING

If the spill incident constitutes a discharge as defined in §112.1(b) of the SPCC regulations, it will be considered an Oil Spill Emergency. A discharge involves:

> "a discharge of oil in quantities that may be harmful, as described in Part 110 of this chapter, into or upon the navigable waters of the United States or adjoining shorelines, or into or upon the waters of the contiguous zone, or in connection with activities under the Outer Continental Shelf Lands Act or the Deepwater Port Act of 1974, or that may affect natural resources belonging to, appertaining to, or under the exclusive management authority of the United States (including resources under the Magnuson Fishery Conservation and Management Act)."

In summary, if a spill incident directly affects surface water or groundwater at the Facility, it must be considered reportable incident. Reporting and notification requirements for releases are attached.

The following information must be provided to the listed entities:

1. Name, address, and telephone number of person reporting.
2. Name, address, and telephone number of person responsible for the discharge or release, if known.
3. Date and time of the discharge or release.
4. Type or name of substance discharged or released.
5. Estimated amount of the discharge or release.
6. Location or address of discharge or release.

7. Source and cause of the discharge or release.
8. Size and characteristics of area affected by the discharge or release.
9. Containment and cleanup actions taken to date.
10. Other persons or agencies contacted.

## 4. APPLICABLE FEDERAL REPORTING REQUIREMENTS

The National Response Center (1-800-424-8802) shall be notified immediately for discharges of oil into the navigable waters of the United States, adjoining shorelines, or into waters of the contiguous zone that **(1) violate applicable water quality standards;** or **(2) cause a film or sheen upon or discoloration of the surface of the water or adjoining shorelines or cause a sludge or emulsion to be deposited beneath the surface of the water or upon adjoining shorelines.**

## 5. APPLICABLE STATE REPORTING REQUIREMENTS

The Colorado Department of Public Health and Environment shall be notified of a release that may enter waters of the state of Colorado. Waters of the state of Colorado include surface water, groundwater, dry gullies, and storm sewers leading to surface waters. Additionally, any accidental discharge to the sanitary sewer system must be reported immediately to the local sewer authority and the affected wastewater treatment plant.

Colorado also has state regulations dealing with aboveground and underground storage tanks. These are defined in the Code of Colorado Regulations, 1101-14 Section 3-6. However, the Facility does not have any regulated storage tanks which store oil. Therefore, these regulations are not applicable to an oil spill.

## 6. FOLLOW-UP ACTIVITIES

After the initial response, reporting, and notification associated with a spill incident, the Spill Coordinator (or alternate) will prepare a written report (See Spill Report Form at the end of this Appendix) which includes following:

1. Time and date of the incident.
2. Source and exact location of the spill.
3. Material involved.
4. Cause of the incident.
4. Estimated spill volume and direction of flow.

6. Names of any waterways involved.
7. Description of all media impacted by the spill.
8. Description of damages or injuries caused by the spill.
9. Actions taken to stop, remove, and mitigate the effects of the material spilled.
10. Names of individuals and organizations contacted (time, day, who received call, who called from the Site, and pertinent notes).
11. Who reported to the scene from federal, state, and local agencies (time, day, etc.).

In addition, whenever more than 1,000 gallons of oil are discharged in a single incident or more than 42 gallons of oil have been discharged in each of two incidents over a 12-month period, the Site will submit a report to the U.S. Environmental Protection Agency (USEPA) Regional Administrator (RA) within 60 days as outlined in Section 5.2 of the SPCC Plan.

## 7. SUSTAINED ACTIONS

Where prolonged mitigation and recovery actions are required in response to a spill or release, the Spill Coordinator (or alternate) will manage the activities with any or all of the following, as warranted:

1. An outside contractor – See list of Clean-up Contractor in the contact list below.
2. An environmental/engineering consultant – Geosyntec Consultants (303) 790-1340.
3. Any outside vendor responsible for the incident.
4. The appropriate local, state, and federal agencies.

Most spill/release incidents at the Site are expected to be handled without implementing sustained actions.

# SPILL REPORT FORM

Who discovered spill?_____ Phone Number:_____

Who completed this form?_____ Phone Number:_____

Date of Spill:_____ Time:_____

Location of Spill: _____

Material Involved:_____ Quantity_____

Did spill leave building or leave an impervious surface? ☐ Yes ☐ No

If yes, did it enter: Storm Drain ☐ Quantity_____

Sanitary Sewer ☐ Quantity_____

Ditch ☐ Quantity_____

Dirt Area ☐ Quantity_____

(*Include maps if necessary to depict location and flow)*

Who was notified?_____What Time?_____Phone #_____

Individual You Spoke to:_____

*If multiple parties notified, provide information on additional sheets.*

Describe how spill happened (*Include maps if necessary*):_____

_____

_____

Describe actions taken to contain release:_____

_____

_____

Describe any medical problems associated with the release:_____

_____

Describe clean-up procedure, and how material was disposed of:_____

_____

_____

What corrective action countermeasures have been taken? What further preventative measures can you suggest in order to avoid spills of this type? _____

_____

_____

Signed:_____ Date:_____

## OIL SPILL INCIDENT NOTIFICATION PHONE NUMBERS

In the event of a discharge of oil at the Mt. Emmons Facility, contact the following internal personnel:

| SPCC Designation | Name | Title | Contact Info |
|---|---|---|---|
| Spill Coordinator | Todd Marshall | Water Treatment Plant Operator in Responsible Charge | Office: (970) 349-6681<br>Mobile: (970) 290-9593 |
| Alternate Spill Coordinator | Keith Nunn | Water Treatment plant Environmental Coordinator | Office: (970) 349-6681<br>Mobile: (970) 209-5918 |

## AGENCY EMERGENCY TELEPHONE NUMBERS

| | |
|---|---|
| CDPHE 24-Hour Reporting Hotline | (877) 518-5608 |
| National Response Center | (800) 424-8802 |
| Crested Butte Fire Protection District | (970) 349-5333 |
| Crested Butte Marshal's Department | (970) 349-5231 |
| Gunnison Valley Health Hospital (Gunnison, CO) | (970) 641-1456 |
| Gunnison County LEPC | (970) 641-2481 |
| USEPA, Region VIII Emergency Response Hotline | (800) 277-8917<br>(303) 312-6312 |

## CLEAN-UP CONTRACTOR TELEPHONE NUMBERS

| | |
|---|---|
| RMCAT (Rocky Mountain Catastrophe) | (800) 930-0011 |

# APPENDIX H

# Spill Prevention Training Attendance Log

# APPENDIX H

## SPILL PREVENTION TRAINING ATTENDANCE LOG

| INSTRUCTOR: | DATE: |
|---|---|
| | |

| EMPLOYEE | TITLE | SIGNATURE |
|---|---|---|
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |

Note: Affix a copy of the Training Materials or an outline of the subject matter and maintain the training roster and training documentation in the Mt. Emmons Facility SPCC files.

# APPENDIX I
# Secondary Containment Calculations

**Mt. Emmons Facility Secondary Containmnet Calculations**

Crested Butte, CO

24 Hr - 25 Yr Precipitation event: 2.77 in 0.23 ft

**2160 Transformer**

**Volume**

| ID | Contents | Vol (gal) |
|---|---|---|
| Transformer | Mineral Oil | 150 |

**Displacements**

| Description | Length (ft) | Width (ft) | Height (ft) | Vol (cu ft) |
|---|---|---|---|---|
| Pedestal | 9 | 8 | 1 | 72.0 |
| Precipitation | 13 | 12 | 0.231 | 36.0 |

**Sized Secondary Containment Dimensions**

| | | |
|---|---|---|
| Length | 13 | ft |
| Width | 12 | ft |
| Depth | 1 | ft |
| Vol | 48 | cu ft |
| Vol | 359 | gal |
| Req Vol | 150 | gal |
| **Containment** | **239** | **%** |
| **Sufficient?** | **Yes** | |

**Used Oil Containment Pallet**

**Volume**

| ID | Contents | Vol |
|---|---|---|
| Used Oil Drum 1 | Used Oil | 55 |
| Used Oil Drum 2 | Used Oil | 55 |

**Sized Secondary Containment Dimensions**

| | | |
|---|---|---|
| Length | 4.33 | ft |
| Width | 2 | ft |
| Depth | 0.5 | ft |
| Vol | 4.33 | cu ft |
| Vol | 32 | gal |
| Req Vol | 55 | gal |
| **Containment** | **59** | **%** |
| **Sufficient?** | **No** | |

**WTP Transformers General Secondary Containment**

| | | |
|---|---|---|
| Approximate Area around transformer: | 700 | sq ft |
| Area of potential stormwater runoff: | 3500 | sq ft |
| Volume of Largest Transformer: | 460 gallons | 61.5 cu ft |
| Precip Volume: | 6043.6 gallons | 807.9 cu ft |
| Total Volume: | 6503.6 gallons | 869.4 cu ft |
| Approximate Required Berm Height: | | 2.5 ft |

(Assuming area has a constant slope from north to south)

**Enviro-Vault General Secondary Containment**

| | | |
|---|---|---|
| Approximate Area around tank: | 3500 | sq ft |
| Area of potential stormwater runoff: | 7000 | sq ft |
| Volume of Truck: | 2700 gallons | 360.9 cu ft |
| Precip Volume: | 12087.2 gallons | 1615.8 cu ft |
| Total Volume: | 14787.2 gallons | 1976.8 cu ft |
| Approximate Required Berm Height: | | 1.2 ft |

(Assuming area has a constant slope from north to south)

# EXHIBIT F
## Water Quality Data and Standards

# REGULATION #35 STREAM CLASSIFICATIONS and WATER QUALITY STANDARDS

## Upper Gunnison River Basin

11. Mainstem of Coal Creek from a point immediately above the confluence with Elk Creek to a point immediately above the Keystone Mine discharge (38.867117, -107.023627). Elk Creek and its tributaries and wetlands from its source to its confluence with Coal Creek.

| COGUUG11 | Classifications |
|---|---|
| **Designation** | Agriculture |
| Reviewable | Aq Life Cold 1 |
| | Recreation E |
| | Water Supply |

**Qualifiers:**

**Other:**

Temporary Modification(s):

Arsenic(chronic) = hybrid

Expiration Date of 12/31/2029

*Uranium(acute) = See 35.5(3) for details.

*Uranium(chronic) = See 35.5(3) for details.

| Physical and Biological | DM | MWAT |
|---|---|---|
| Temperature °C | CS-I | CS-I |
| | **acute** | **chronic** |
| D.O. (mg/L) | --- | 6.0 |
| D.O. (spawning) | --- | 7.0 |
| pH | 6.5 - 9.0 | --- |
| chlorophyll a (mg/m$^2$) | --- | TVS |
| E. coli (per 100 mL) | --- | 126 |

| Inorganic (mg/L) | acute | chronic |
|---|---|---|
| Ammonia | TVS | TVS |
| Boron | --- | 0.75 |
| Chloride | --- | 250 |
| Chlorine | 0.019 | 0.011 |
| Cyanide | 0.005 | --- |
| Nitrate | 10 | --- |
| Nitrite | --- | 0.05 |
| Phosphorus | --- | TVS |
| Sulfate | --- | WS |
| Sulfide | --- | 0.002 |

| Metals (ug/L) | acute | chronic |
|---|---|---|
| Arsenic | 340 | --- |
| Arsenic(T) | --- | 0.02 |
| Cadmium | TVS | TVS |
| Cadmium(T) | 5.0 | --- |
| Chromium III | --- | TVS |
| Chromium III(T) | 50 | --- |
| Chromium VI | TVS | TVS |
| Copper | TVS | TVS |
| Iron | --- | WS |
| Iron(T) | --- | 1000 |
| Lead | TVS | TVS |
| Lead(T) | 50 | --- |
| Manganese | TVS | TVS/WS |
| Mercury(T) | --- | 0.01 |
| Molybdenum(T) | --- | 210 |
| Nickel | TVS | TVS |
| Nickel(T) | --- | 100 |
| Selenium | TVS | TVS |
| Silver | TVS | TVS(tr) |
| Uranium | varies* | varies* |
| Zinc | TVS | TVS |

12. Mainstem of Coal Creek, including all tributaries and wetlands, from a point immediately above the Keystone Mine discharge (38.867117, -107.023627) to the confluence with the Slate River, with the exception of Wildcat Creek.

| COGUUG12 | Classifications |
|---|---|
| **Designation** | Agriculture |
| Reviewable | Aq Life Cold 1 |
| | Recreation E |
| | Water Supply |

**Qualifiers:**

**Other:**

Temporary Modification(s):

Arsenic(chronic) = hybrid

Expiration Date of 12/31/2029

Cadmium(ac/ch) = 3.5/2.79* 4/1 - 6/30

Expiration Date of 12/31/2027

*Uranium(acute) = See 35.5(3) for details.

*Uranium(chronic) = See 35.5(3) for details.

*TempMod: Cadmium(4/1 - 6/30) = Coal Creek. Adopted 6/12/2017(ac) and 6/12/2006(ch).

| Physical and Biological | DM | MWAT |
|---|---|---|
| Temperature °C | CS-I | CS-I |
| | **acute** | **chronic** |
| D.O. (mg/L) | --- | 6.0 |
| D.O. (spawning) | --- | 7.0 |
| pH | 6.5 - 9.0 | --- |
| chlorophyll a (mg/m$^2$) | --- | TVS |
| E. coli (per 100 mL) | --- | 126 |

| Inorganic (mg/L) | acute | chronic |
|---|---|---|
| Ammonia | TVS | TVS |
| Boron | --- | 0.75 |
| Chloride | --- | 250 |
| Chlorine | 0.019 | 0.011 |
| Cyanide | 0.005 | --- |
| Nitrate | 10 | --- |
| Nitrite | --- | 0.05 |
| Phosphorus | --- | TVS |
| Sulfate | --- | WS |
| Sulfide | --- | 0.002 |

| Metals (ug/L) | acute | chronic |
|---|---|---|
| Arsenic | 340 | --- |
| Arsenic(T) | --- | 0.02 |
| Cadmium | TVS | TVS |
| Cadmium(T) | 5.0 | --- |
| Chromium III | --- | TVS |
| Chromium III(T) | 50 | --- |
| Chromium VI | TVS | TVS |
| Copper | TVS | TVS |
| Iron | --- | WS |
| Iron(T) | --- | 1000 |
| Lead | TVS | TVS |
| Lead(T) | 50 | --- |
| Manganese | TVS | TVS/191 |
| Mercury(T) | --- | 0.01 |
| Molybdenum(T) | --- | 150 |
| Nickel | TVS | TVS |
| Nickel(T) | --- | 100 |
| Selenium | TVS | TVS |
| Silver | TVS | TVS(tr) |
| Uranium | varies* | varies* |
| Zinc | TVS | TVS |

All metals are dissolved unless otherwise noted.
T = total recoverable
t = total
tr = trout
sc = sculpin

D.O. = dissolved oxygen
DM = daily maximum
MWAT = maximum weekly average temperature
See 35.6 for further details on applied standards.

Listed portion: **COGUUG09_C** Mainstem of Washington Gulch

| Affected Use | Analyte | Category / List | Proposed Action | Priority |
|---|---|---|---|---|
| Aquatic Life Use | Temperature | 3b. - M&E list | Retain | NA |
| Water Supply Use | Arsenic (Total) | 5. - 303(d) list | Retain | H |
| Recreational Use | E. coli | 5. - 303(d) list | 303(d) / New | H |

Listed portion: **COGUUG09_E** All tributaries and wetlands to the Slate River, excluding Coal Creek (above Elk Creek) and Washington Gulch.

| Affected Use | Analyte | Category / List | Proposed Action | Priority |
|---|---|---|---|---|
| Recreational Use | E. coli | 3b. - M&E list | M&E / New | NA |
| Water Supply Use | Arsenic (Total) | 5. - 303(d) list | Changes due to database errors | L |

Listed portion: **COGUUG09_F** All tributaries and wetlands to Coal Creek except those specified in COGUUG09_G, and segments COGUUG11 and COGUUG12.

| Affected Use | Analyte | Category / List | Proposed Action | Priority |
|---|---|---|---|---|
| Water Supply Use | Arsenic (Total) | 5. - 303(d) list | Retain | L |

Listed portion: **COGUUG09_G** Drainage from natural iron fen (38.863897, -107.041530) tributary to Coal Creek.

| Affected Use | Analyte | Category / List | Proposed Action | Priority |
|---|---|---|---|---|
| Aquatic Life Use | Zinc (Dissolved) | 5. - 303(d) list | 303(d) / New | H |
| Aquatic Life Use | Lead (Dissolved) | 5. - 303(d) list | 303(d) / New | H |
| Aquatic Life Use | Cadmium (Dissolved) | 5. - 303(d) list | 303(d) / New | H |
| Water Supply Use | Manganese (Dissolved) | 5. - 303(d) list | 303(d) / New | L |
| Water Supply Use | Iron (Dissolved) | 5. - 303(d) list | 303(d) / New | L |
| Water Supply Use | Arsenic (Total) | 5. - 303(d) list | Retain | L |
| Water Supply Use | Cadmium (Total) | 5. - 303(d) list | 303(d) / New | L |

COGUUG10a 10a. Mainstem of Oh-Be-Joyful Creek from the boundary of the Raggeds Wilderness Area to the confluence with the Slate River.

Listed portion: **COGUUG10a_A** Mainstem of Oh-Be-Joyful Creek from the boundary of the Raggeds Wilderness Area to the confluence with the Slate River.

| Affected Use | Analyte | Category / List | Proposed Action | Priority |
|---|---|---|---|---|
| Aquatic Life Use | Cadmium (Dissolved) | 5. - 303(d) list | Retain | H |
| Aquatic Life Use | Copper (Dissolved) | 5. - 303(d) list | Retain | H |
| Aquatic Life Use | Lead (Dissolved) | 5. - 303(d) list | Retain | H |
| Aquatic Life Use | Zinc (Dissolved) | 5. - 303(d) list | Retain | H |
| Aquatic Life Use | Macroinvertebrates | 5. - 303(d) list | Retain | H |

COGUUG10b 10b. All tributaries, including wetlands, to Redwell Creek.

Listed portion: **COGUUG10b_A** All tributaries, including wetlands, to Redwell Creek.

| Affected Use | Analyte | Category / List | Proposed Action | Priority |
|---|---|---|---|---|
| Aquatic Life Use | pH | 3b. - M&E list | Retain | NA |
| Aquatic Life Use | Silver (Dissolved) | 3b. - M&E list | Retain | NA |
| Aquatic Life Use | Cadmium (Dissolved) | 5. - 303(d) list | Retain | H |
| Aquatic Life Use | Lead (Dissolved) | 5. - 303(d) list | Retain | H |
| Aquatic Life Use | Zinc (Dissolved) | 5. - 303(d) list | Retain | H |
| Aquatic Life Use | Copper (Dissolved) | 5. - 303(d) list | Retain | H |
| Aquatic Life Use | Macroinvertebrates | 5. - 303(d) list | Retain | H |

COGUUG11 11. Mainstem of Coal Creek from a point immediately above the confluence with Elk Creek to a point immediately above the Keystone Mine discharge (38.867117, -107.023627). Elk Creek and its tributaries and wetlands from its source to its confluence with Coal Creek.

Listed portion: **COGUUG11_B** Elk Creek and its tributaries

| Affected Use | Analyte | Category / List | Proposed Action | Priority |
|---|---|---|---|---|
| Aquatic Life Use | Dissolved Oxygen | 3b. - M&E list | M&E / New | NA |
| Aquatic Life Use | Cadmium (Dissolved) | 5. - 303(d) list | Retain | H |
| Aquatic Life Use | Zinc (Dissolved) | 5. - 303(d) list | Retain | H |
| Water Supply Use | Arsenic (Total) | 5. - 303(d) list | Retain | H |
| Aquatic Life Use | Macroinvertebrates | 5. - 303(d) list | 303(d) / New | H |

Listed portion: **COGUUG11_D** Mainstem of Coal Creek from a point immediately above the confluence with Elk Creek to a point immediately above the Keystone discharge (38.867117, -107.023627) .

| Affected Use | Analyte | Category / List | Proposed Action | Priority |
|---|---|---|---|---|
| Aquatic Life Use | Zinc (Dissolved) | 5. - 303(d) list | Retain | H |
| Water Supply Use | Arsenic (Total) | 5. - 303(d) list | Retain | L |
| Aquatic Life Use | Macroinvertebrates | 5. - 303(d) list | 303(d) / New | H |
| Aquatic Life Use | Cadmium (Dissolved) | 5. - 303(d) list | 303(d) / New | H |

COGUUG12 12. Mainstem of Coal Creek, including all tributaries and wetlands from a point immediately above the Keystone Mine discharge (38.867117, -107.023627) to the confluence with the Slate River, with the exception of Wildcat Creek.

Listed portion: **COGUUG12_C** Mainstem of Coal Creek, from a point immediately below the Keystone discharge (38.867117, -107.023627) to the confluence with the Slate River.

| Affected Use | Analyte | Category / List | Proposed Action | Priority |
|---|---|---|---|---|
| Water Supply Use | Manganese (Dissolved) | 1a. - Attaining | 303(d) / Remove | L |
| Recreational Use | E. coli | 3b. - M&E list | M&E / New | NA |
| Aquatic Life Use | Cadmium (Dissolved) | 5. - 303(d) list | Retain | H |
| Aquatic Life Use | Zinc (Dissolved) | 5. - 303(d) list | Retain | H |
| Water Supply Use | Arsenic (Total) | 5. - 303(d) list | Retain | L |

Listed portion: **COGUUG12_D** Unnamed tributary draining Red Lady Basin to Coal Creek

| Affected Use | Analyte | Category / List | Proposed Action | Priority |
|---|---|---|---|---|
| Aquatic Life Use | pH | 3b. - M&E list | M&E / New | NA |
| Aquatic Life Use | Zinc (Dissolved) | 5. - 303(d) list | 303(d) / New | H |
| Aquatic Life Use | Copper (Dissolved) | 5. - 303(d) list | 303(d) / New | H |
| Aquatic Life Use | Cadmium (Dissolved) | 5. - 303(d) list | 303(d) / New | H |

COGUUG15a 15a. All tributaries and wetlands to the Gunnison River from its inception at the confluence of the East and Taylor Rivers to the County Road 32 road crossing near the inlet of Blue Mesa Reservoir except for the specific listings in Segments 1, 15b, 16a, 16b, 17 through 24, and 26.

Listed portion: **COGUUG15a_A** All tributaries and wetlands to the Gunnison River from the confluence of the East and Taylor Rivers to the inlet of Blue Mesa Reservoir, excluding South Beaver Creek.

| Affected Use | Analyte | Category / List | Proposed Action | Priority |
|---|---|---|---|---|
| Aquatic Life Use | Dissolved Oxygen | 3b. - M&E list | M&E / New | NA |

Listed portion: **COGUUG15a_B** Mainstem of South Beaver Creek from Saguache/Gunnison County Line to the confluence with the Gunnison River.

| Affected Use | Analyte | Category / List | Proposed Action | Priority |
|---|---|---|---|---|
| Aquatic Life Use | Iron (Total) | 3b. - M&E list | Retain | NA |
| Aquatic Life Use | Temperature | 3b. - M&E list | M&E / New | NA |
| Aquatic Life Use | Macroinvertebrates | 5. - 303(d) list | Retain | L |
| Water Supply Use | Iron (Dissolved) | 5. - 303(d) list | Retain | L |
| Water Supply Use | Manganese (Dissolved) | 5. - 303(d) list | Retain | L |

COGUUG16a 16a. Mainstem of Ohio Creek, from the source to a point immediately below 7 Road. All tributaries to Ohio Creek, except for specific listings in Segment 1.

Listed portion: **COGUUG16a_C** Ohio Creek and its tributaries below Baldwin

| Affected Use | Analyte | Category / List | Proposed Action | Priority |
|---|---|---|---|---|
| Water Supply Use | Arsenic (Total) | 3b. - M&E list | M&E / New | NA |

Listed portion: **COGUUG16a_D** Ohio Creek above Baldwin

| Affected Use | Analyte | Category / List | Proposed Action | Priority |
|---|---|---|---|---|
| Recreational Use | E. coli | 3b. - M&E list | Retain | NA |
| Water Supply Use | Arsenic (Total) | 5. - 303(d) list | Retain | H |

COGUUG16b 16b. Mainstem of Ohio Creek from a point immediately below 7 Road to the confluence with the Gunnison River.

Listed portion: **COGUUG16b_A** Mainstem of Ohio Creek from a point immediately below 7 Road to the confluence with the Gunnison River.

| Affected Use | Analyte | Category / List | Proposed Action | Priority |
|---|---|---|---|---|
| Recreational Use | E. coli | 3b. - M&E list | Retain | NA |
| Aquatic Life Use | Iron (Total) | 3b. - M&E list | M&E / New | NA |

| ORG | LOCATION_ID | Sample Date | pH | Flow (cfs) | Hardness (mg/L) | | Al (TR) ug/L | Al (Diss) | As (TR) | As (Diss) | Cd (Diss) | Cu (Diss) | Pb (Diss) | Mn (Diss) | Zn (Diss) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| CCWC | BOG-00 | 4/25/2018 | | 0.11 | 12.0 | | 269 | 212 | <2.5 | <0.5 | 0.53 | 0.81 | 0 | 32.4 | 211 |
| MEMC | UT-3 (TR-01) | 5/22/2018 | | 0.94 | 6.9 | | | | 0 | <0.2 | 0.20 | 1.1 | 0.2 | 9.1 | 72 |
| CCWC | BOG-00 | 6/27/2018 | | 0.038 | 10.0 | | | | | | 0.33 | 0 | 0.191 | 12.1 | 136 |
| CCWC | BOG-00 | 4/29/2019 | 6.91 | 2.10 | 6.0 | | 321 | 72 | 0.60 | <0.2 | 0.20 | 0 | 0.1 | 9.7 | 80 |
| MEMC | UT-3 (TR-01) | 6/6/2019 | | 7.61 | 5.1 | | | | 0 | <0.2 | 0.10 | 1.2 | 0.2 | 7.2 | 53 |
| CCWC | BOG-00 | 6/25/2019 | 6.54 | 0.67 | 3.8 | | 106 | 48 | 0.20 | <0.2 | 0.15 | 0 | 0 | 5.8 | 59 |
| MEMC | UT-3 (TR-01) | 5/20/2020 | | 0.84 | 6.2 | | 100 | 79 | 0 | <0.2 | 0.10 | 0 | 0 | 7 | 61 |
| CCWC | BOG-00 | 6/22/2020 | | NM | 8.1 | | 63 | 47 | 0 | <0.2 | 0.18 | 0 | 0 | 6.7 | 82 |
| Median(Bog-00, UT | | 4/21/2021 | | 0.08 | 13.3 | | 170 | 140 | 0 | <0.2 | 0.32 | 0 | 0 | 8.0 | 153 |
| CCWC | BOG-00 | 5/19/2021 | 6.00 | 0.44 | 7.3 | | 123.0 | 69.1 | 0 | <0.2 | 0.21 | 0 | 0 | 7.0 | 79.6 |
| CCWC | BOG-00 | 6/15/2021 | 6.16 | 0.18 | 7 | | 70.6 | 54.3 | 0 | <0.2 | 0.21 | 0 | 0 | 6.0 | 91.7 |
| Median(Bog-00, UT | | 4/19/2022 | | | 12.45 | | 264 | 135.50 | 0.0 | <0.2 | 0.31 | 0.9 | 0.1 | 11.27 | 131 |
| MEMC | UT-3 (TR-01) | 5/11/2022 | 5.35 | 3.20 | 5.9 | | 227 | 101.0 | 0.0 | <0.2 | 0.10 | 1.1 | 0.5 | 8.2 | 59.0 |
| CCWC | BOG-00 | 5/25/2022 | 6.76 | 0.73 | 6.4 | | 127 | 63.6 | 0.0 | <0.2 | 0.21 | 0 | 0 | 6.68 | 81.5 |
| CCWC | BOG-00 | 6/20/2022 | 6.32 | 0.21 | 8.2 | | 74 | 50.9 | 0.0 | <0.2 | 0.20 | 0 | 0 | 7.53 | 84.3 |
| MEMC | UT-3 (TR-01) | 5/15/2023 | 5.96 | 5.86 | 5.7 | | 393 | 67 | 0.00 | <0.2 | 0.10 | 0 | 0.1 | 7 | 63 |
| CCWC | BOG-00 | 5/25/2023 | 5.32 | 4.24 | 4.9 | | 203 | 77.1 | 0.32 | <0.2 | 0.26 | 0 | 0.2 | 8.49 | 64.6 |
| MEMC | UT-3 (TR-01) | 6/6/2023 | 6.31 | 2.20 | 5.6 | | 106 | 68 | 0 | <0.2 | 0.10 | 0.9 | 0 | 6.6 | 60 |
| CCWC | BOG-00 | 6/21/2023 | 5.47 | 0.62 | 6.6 | | 106 | 60.9 | 0.00 | <0.2 | 0.16 | 0 | 0 | 6.54 | 69.5 |
| CCWC | BOG-00 | 4/11/2024 | 6.35 | 0.06 | 14 | | 178 | 135 | 0 | <0.2 | 0.28 | **9.47** | 0 | 10.1 | 145 |
| Median(Bog-00, UT | | 5/15/2024 | 6.04 | 1.41 | 6.9 | | 118 | 69 | 0.22 | <0.2 | 0.20 | 0.000 | 0.11 | 6.9 | 72 |
| Median(Bog-00, UT | | 6/26/2024 | 7.30 | **0.28** | 7.40 | | 80 | 54 | 0.00 | <0.2 | 0.19 | 0.00 | 0.00 | 7.0 | 82 |
| | | | | | | | | | | | | | | | |
| | | | | | | | | | Note: Copper value on 4/11/2024 appears to be an outlier/error | | | | | | |
| | | | | | | | | | | | | | | | |
| | | **April-June 2018-2024** | | **0.70** | | **Median** | **123** | | **0.00** | | | | | | |
| | | | | | | **85th** | | **135** | | **<0.2** | **0.30** | **1.1** | **0.20** | **10.0** | **135** |
| | | | | | | **95th** | **328** | **147** | **0.334** | **<0.2** | **0.33** | **1.2** | **0.20** | **12.1** | **152** |
| | | | | **1.59** | **7.7** | **Average** | | | | | | | | | |

| | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| CCWC | BOG-00 | 7/25/2018 | | 0.013 | 14.0 | | 170 | 177 | | <0.5 | 0 | | | 20 | 218 |
| CCWC | BOG-00 | 9/20/2018 | | 0.015 | 17.0 | | 245 | 242 | | <0.5 | 0.631 | 0.525 | 0 | 24.7 | 273 |
| CCWC | BOG-00 | 12/12/2018 | | NM | 19.0 | | 350 | 294 | | <0.5 | 0.576 | 0 | 0 | 19.1 | 273 |
| CCWC | BOG-00 | 1/22/2020 | | NM | 17 | | 232 | 242 | <0.2 | <0.2 | 0.51 | 0 | 0 | 8.9 | 251 |
| CCWC | BOG-00 | 7/14/2020 | | 0.050 | 10 | | 74 | 60 | <0.2 | <0.2 | 0.26 | 0 | 0 | 5.6 | 119 |
| CCWC | BOG-00 | 9/17/2020 | | 0.020 | 16 | | 126 | 130 | <0.2 | <0.2 | 0.439 | 0 | 0 | 8.5 | 218 |
| Median(Bog-00, UT | | 7/24/2021 | | 0.070 | 13.20 | | 129.3 | 95.7 | <0.2 | <0.2 | 0.42 | 0 | 0.25 | 9.0 | 168 |
| CCWC | BOG-00 | 10/14/2021 | | NM | 17 | | 185 | 174 | <0.2 | <0.2 | 0.444 | 0 | 0 | 9.8 | 230 |
| MEMC | UT-3 (TR-01) | 8/8/2022 | 6.23 | 0.120 | 13.4 | | 100 | 90 | <0.2 | <0.2 | 0.30 | 1.1 | 0 | 10 | 161 |
| CCWC | BOG-00 | 8/17/2022 | 5.75 | 0.030 | 14 | | 459 | 84 | <0.2 | <0.2 | 0.35 | 0 | 0 | 10.3 | 178 |
| CCWC | BOG-00 | 11/15/2022 | 6.58 | 0.020 | 18 | | 219 | 199 | <0.2 | <0.2 | 0.43 | 0 | 0 | 12.4 | 270 |
| MEMC | UT-3 (TR-01) | 7/26/2023 | 5.69 | 0.170 | 9.2 | | 69 | 61.00 | <0.2 | <0.2 | 0.20 | 0 | 0 | 7.2 | 102 |
| CCWC | BOG-00 | 9/24/2023 | 5.65 | 0.010 | 16 | | 165 | 123 | <0.2 | <0.2 | 0.41 | 0 | 0 | 7.42 | 219 |
| MEMC | UT-3 (TR-01) | 7/16/2024 | 6.84 | 0.18 | 8.8 | | 73 | 61 | <0.2 | <0.2 | 0.2 | 0 | 0 | 10.3 | 125 |
| MEMC | UT-3 (TR-01) | 8/8/2024 | 4.99 | 0.04 | 14.3 | | 94 | 79 | <0.2 | <0.2 | 0.2 | 0 | 0 | 9.9 | 120 |
| | | | | | | | | | | | | | | | |
| | | **July-March 2018-2024** | | **0.04** | | **Median** | **165** | | **<0.2** | | | | | | |
| | | | | | | **85th** | | **238** | | **<0.2** | **0.50** | **0.03** | **0.00** | **18** | **268** |
| | | | | | | **95th** | **383** | **258** | **<0.2** | **<0.2** | **0.59** | **0.73** | **0.09** | **21** | **273** |
| | | | | **0.06** | **14.5** | **Average** | | | | | | | | | |

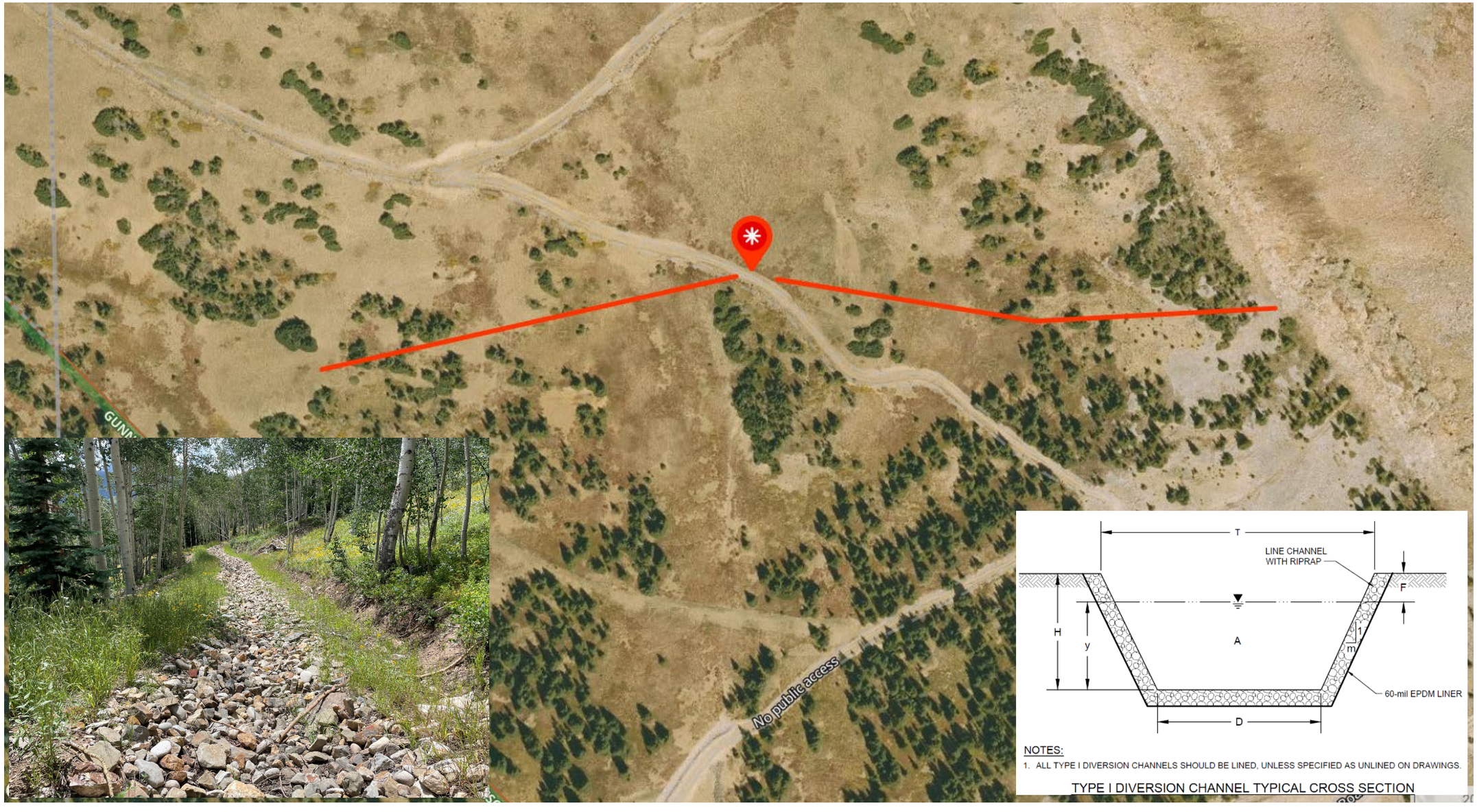
| Sample ID | Location | Segment | Date | Month | Flow (cfs) | pH | Aluminum, Total ug/L | Aluminum, Diss ug/L | Arsenic, Total ug/L | Arsenic, Diss ug/L | Cadmium, Diss ug/L | Copper, Diss ug/L | Lead, Diss ug/L | Manganese, Diss ug/L | Zinc, Diss ug/L | Hardness mg/L | Sulfate | Agency |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| RLB-1 | RLB-1 | 12 | 4/25/2018 | 4 | 1.56 | 7.03 | 226 | 28.7 J | U <2.5 | <0.500 U | 0 U | 1.45 | 0 U | 8.48 | 65.3 | 13 | | CCWC |
| RLB-01 | RLB-1 | 12 | 4/29/2019 | 4 | 4.7 | 6.37 | 441 | 163 | 0.3 B | <0.2 U | 0.3 | 1.8 B | 0 U | 34 | 245 | 13 | 13.4 | CCWC |
| RLB-1 | RLB-1 | 12 | 4/20/2021 | 4 | 0.49 | 6.58 | 57.5 | 20.9 | 0 U | <0.2 U | 0.186 B | 1.02 B | 0 U | 5.82 | 136 | 18 | 18.8 | CCWC |
| KEY-OPP | RLB-1 | 12 | 5/26/2016 | 5 | 19.15 | 5.77 | 997 | 41.6 J | U <2.5 | <0.500 U | 0.293 | 1.74 | 0 U | 52.9 | 227 | 11 | | CCWC |
| RLB-1 | RLB-1 | 12 | 5/9/2017 | 5 | NM | 6.690 | 1160 | 33.4 J | 3.92 JD | <0.500 U | 0 U | 0 U | 0 U | U | 14.3 J | 11 | | CCWC |
| RLB-1 | RLB-1 | 12 | 5/11/2020 | 5 | 5.17 | 6.06 | 616 | 265 | 0.3 | <0.2 U | 0.52 | 2.9 | 0.3 B | 59.1 | 413 | 12 | 15.9 | CCWC |
| RLB-1 | RLB-1 | 12 | 5/19/2021 | 5 | 0.84 | 5.51 | 1070 | 800 | 0.55 | <0.2 U | 0.884 | 5.7 | 0.58 | 96.8 | 660 | 16 | 25.5 | CCWC |
| RLB-1 | RLB-1 | 12 | 6/22/2017 | 6 | 4.28 | 5.84 | 450 | 43.6 J | U <2.5 | <0.500 U | 0.33 | 2.28 | 0.257 | 56.5 | 177 | 11 | | CCWC |
| RLB-1 | RLB-1 | 12 | 6/27/2018 | 6 | 0.072 | 6.65 | | | | <2.50 U | 0.169 J | 0.99 J | 0 U | 20.5 | 118 | 15 | 16.4 | CCWC |
| RLB-1 | RLB-1 | 12 | 6/20/2019 | 6 | 9.92 | 6.42 | 556 | 109 | U <2.5 | <0.2 U | 0.37 | 2.8 | 0.4 B | 55.5 | 205 | 8.9 | 11.6 | CCWC |
| RLB-1 | RLB-1 | 12 | 6/22/2020 | 6 | 0.48 | 7.11 | 59 | 25 | 0 U | <0.2 U | 0.27 B | 0 U | 0 U | 28.6 | 179 | 15 | 15.8 | CCWC |
| RLB-1 | RLB-1 | 12 | 6/14/2021 | 6 | 0.57 | 6.84 | 235 | 70.6 | 0 U | <0.2 U | 0.611 | 1.39 B | 0.12 B | 50.1 | 389 | 17 | 20.2 | CCWC |
| RLB-1 | RLB-1 | 12 | 4/19/2022 | 4 | 0.52 | 6.5 | 216 | 30.4 | 0 U | <0.2 U | 0.13 B | 0.94 | 0 U | 5.75 | 96.4 | 15 | | CCWC |
| RLB-1 | RLB-1 | 12 | 5/25/2022 | 5 | 3.97 | 5.72 | 674 | 284 | 0.3 | <0.2 U | 0.58 | 4.1 | 0.51 | 71.8 | 376 | 12 | | CCWC |
| RLB-1 | RLB-1 | 12 | 6/22/2022 | 6 | 0.51 | 7.13 | 88 | 31.5 | 0 U | <0.2 U | 0.28 | 1.47 | 0 U | 23.9 | 149 | 15 | | CCWC |
| RLB-1 | RLB-1 | 12 | 4/20/2023 | 4 | NM | 5.71 | 267 | 65.5 | 0.41 | <0.2 U | 0.208 B | 1.21 | 0.15 B | 10.1 | 139 | 15 | | CCWC |
| RLB-1 | RLB-1 | 12 | 5/24/2023 | 5 | 38.76 | 5.62 | 768 | 106 | 0.44 | <0.2 U | 0.346 | 2.13 | 0.21 B | 48.6 | 194 | 9.4 | | CCWC |
| RLB-1 | RLB-1 | 12 | 6/20/2023 | 6 | 5.33 | 5.48 | 488 | 76.1 | 0 U | <0.2 U | 0.389 | 2.82 | 0.46 B | 56.9 | 223 | 11 | | CCWC |
| RLB-1 | RLB-1 | 12 | 4/8/2024 | 4 | 0.6 | 6.11 | 83.8 | 22 | 0.21 | <0.2 U | 0.13 B | 1.05 B | 0 U | 4.57 | 102 | 16 | | CCWC |
| RLB-1 | RLB-1 | 12 | 5/14/2024 | 5 | 1.85 | 5.9 | 263 | 53.2 | 0.21 B | <0.2 U | 0.241 B | 1.31 B | 0.14 B | 20.4 | 178 | 13 | | CCWC |
| RLB-1 | RLB-1 | 12 | 6/25/2024 | 6 | 1.75 | 5.85 | 276 | 33.2 | 0 U | <0.2 U | 0.36 | 1.49 B | 0.13 B | 51.1 | 228 | 13 | | CCWC |
| | | | **April-June** | median | 1.75 | 6.11 | **359** | 48.4 | 0.21 | <0.2 | | | | | | | | |
| | | | | 85th | | | | 178 | | <0.2 | **0.52** | **2.8** | **0.40** | **57.2** | **376** | | | |
| | | | | 95th | | | **1075** | 309.8 | 1.39 | <0.2 | **0.61** | **4.1** | **0.51** | **73.1** | **413** | | | |
| | | | | Mean | 5.29 | | | | | | | | | | | **12.64** | | |

| Sample ID | Location | Segment c | Date | Month | Flow (cfs) | pH | Aluminum, Total | Aluminum, Diss | Arsenic, Total | Arsenic, Diss | Cadmium, Diss | Copper, Diss | Lead, Diss | Manganese, Diss | Zinc, Diss | Hardness | | Agency |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| RLB-1 | RLB-1 | 12 | 7/19/2017 | 7 | 0.22 | 7.3 | 61.9 | 27.4 J | <2.5 | <0.500 U | 0.143 J | 0.875 J | 0 U | 16.3 | 103 | 16 | 14.4 | CCWC |
| RLB-1 | RLB-1 | 12 | 7/25/2018 | 7 | 0.036 | 7.03 | 0 <20 | 99.3 | <2.5 | <0.500 U | U <0.5 | U <2.5 | 0 U | 38.7 | 116 | 17 | 17.8 | CCWC |
| RLB-1 | RLB-1 | 12 | 7/18/2019 | 7 | 1.23 | 5.85 | 334 | 59 | 0.2 B | <0.2 U | 0.4 | 2.3 | 0.2 B | 56.8 | 232 | 13 | 14.9 | CCWC |
| RLB-1 | RLB-1 | 12 | 7/14/2020 | 7 | 0.06 | 5.24 | 47 | 18 | 0 U | <0.2 U | 0.16 B | 0 U | 0 U | 4.1 | 134 | 16 | | CCWC |
| RLB-1 | RLB-1 | 12 | 7/20/2021 | 7 | 0.06 | 6.48 | 35.2 | 30.6 | 0 U | <0.2 U | 0.307 | 0 U | 0 U | 24 | 221 | 18 | | CCWC |
| RLB-1 | RLB-1 | 12 | 9/20/2017 | 9 | 0.015 | 6.07 | 26.9 J | 0 <20 | <2.5 | <0.500 U | 0.108 J | 0.891 J | 0 U | 4.21 J | 88.8 | 20 | 16.6 | CCWC |
| RLB-1 | RLB-1 | 12 | 9/20/2018 | 9 | 0.024 | 6.51 | 30.2 J | 0 <20 | <2.5 | <0.500 U | 0.101 J | 0.935 J | 0 U | 11.5 | 97.6 | 19 | 18.1 | CCWC |
| RLB-1 | RLB-1 | 12 | 9/16/2020 | 9 | 0.03 | 7.07 | 36 | 13 | 0 U | <0.2 U | 0.13 B | 0.8 B | 0 U | 2.9 | 120 | 18 | | CCWC |
| RLB-1 | RLB-1 | 12 | 10/13/2021 | 10 | 0.06 | 7.34 | 24.1 | 17.7 | 0 U | <0.2 U | 0.15 B | 0 U | 0 U | 11.6 | 152 | 19 | | CCWC |
| RLB-1 | RLB-1 | 12 | 12/11/2017 | 12 | 0.0124 | 5.78 | 22.1 J | 0 <20 | <2.5 | <0.500 U | 0 U | 0.647 J | 0 U | 92.6 | 102 | 22 | 20.9 | CCWC |
| RLB-1 | RLB-1 | 12 | 12/12/2018 | 12 | NM | 7.800 | 0 <20 | 0 <20 | <2.5 | <0.500 U | 0.104 J | 0.607 J | 0 U | 19.5 | 105 | 23 | 24.1 | CCWC |
| RLB-1 | RLB-1 | 12 | 12/9/2020 | 12 | NM | 6.79 | 16.9 | 12.3 | 0 U | <0.2 U | 0.162 B | 0 U | 0 U | 11.7 | 124 | 23 | | CCWC |
| RLB-01 | RLB-1 | 12 | 1/22/2020 | 1 | NM | 6.470 | 21 | 11 B | 0 U | <0.2 U | 0.12 B | 0 U | 0 U | 11.1 | 114 | 19 | 20.3 | CCWC |
| RLB-1 | RLB-1 | 12 | 8/17/2022 | 8 | 0.13 | 7.07 | 41.3 | 14.9 | 0 U | <0.2 U | 0.15 B | 0.93 | <0.1 U | 20.5 | 115 | 18 | | CCWC |
| RLB-1 | RLB-1 | 12 | 11/17/2022 | 11 | 0.05 | 6.78 | 19.2 | 10.9 | 0 U | <0.2 U | 0.13 B | <0.8 U | <0.1 U | 14.3 | 119 | 21 | | CCWC |
| RLB-1 | RLB-1 | 12 | 9/22/2023 | 9 | 0.06 | 6.77 | 21.2 | 13.4 | 0 U | <0.2 U | 0.091 B | 0.88 | <0.1 U | 38.1 | 109 | 18 | | CCWC |
| RLB-1 | RLB-1 | 12 | 7/16/2024 | 7 | 0.2 | 7.34 | 68 | 33 | 0 U | < U | 0.2 | 1.1 | < U | 26 | 148 | 16 | | MEMC |
| | | | **July-March** | median | 0.06 | 6.78 | 27 | 13 | 0.000 | <0.2 | | | | | | | | |
| | | | | 85th | | | | 32 | | <0.2 | 0.19 | 0.9 | 0.00 | 38 | **150** | | | |
| | | | | 95th | | | 121 | 67 | 0.10 | <0.2 | 0.33 | 1.5 | 0.08 | 64 | **223** | | | |
| | | | | Mean | 0.156 | | | | | | | | | | | **18.59** | | |

# EXHIBIT G

## Trout Unlimited 2025 Diversion Scope of Work

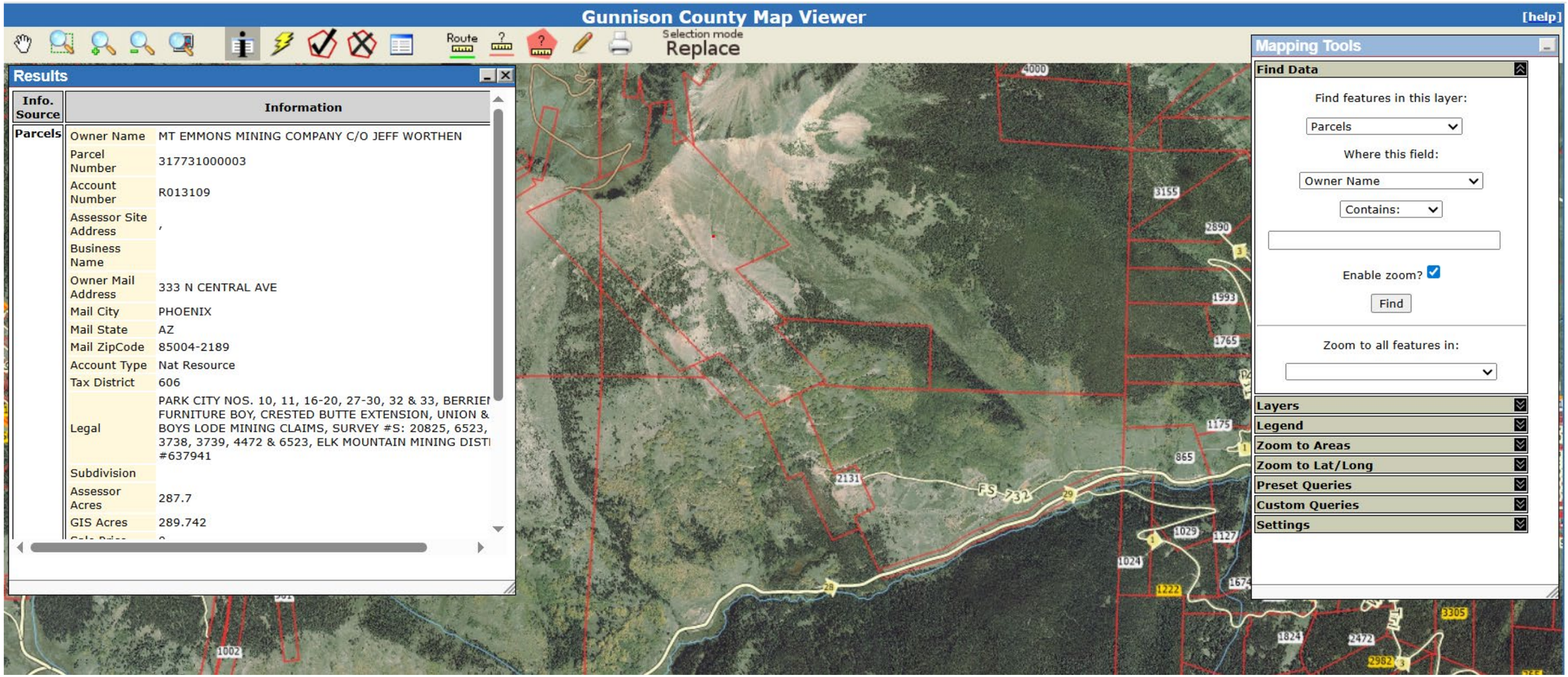
Mt. Emmons Reclamation Permit Supporting Files.




Mt. Emmons is planning to finish construction on two diversions; Diversion 1 East (900 linear feet) and Diversion 1 West (650 LF) this season (Red Lines). Each diversion has a footprint width of 15ft making for a total disturbance of 23,250 square feet. The center of the access roads into these features become the riprap-lined channel (lower right cross section) while the benches are revegetated with native seed/wildflower. The photo on the lower left represents what other similar diversions look like after reclamation of benches and side slopes adjacent to the channel.




Location Map showing where Reclamation permit will take place (Red pin in upper left corner) along with footprint of two diversion channels. Proximity to Crested Butte can be referenced as well as ownership of property in this image.




Plat Map from Gunnison County Assessor web map showing claims owned by Mt. Emmons where work will be taking place.

ALPINE ENVIRONMENTAL CONSULTANTS LLC

WATER QUALITY AND ENVIRONMENTAL SCIENCE EXPERTISE

# MEMORANDUM

**Date:** August 12, 2025

**To:** Shea Earley, Public Works Director

**From:** Ashley Bembenek, Principal Scientist and Owner
Alpine Environmental Consultants LLC

**Re:** **Watershed Protection District Permit Application for Diversion 1- Completeness Assessment**

This memorandum evaluates the preliminary application for a Watershed Permit for the Diversion 1 Project submitted by Mt. Emmons Mining Company, Inc. ("MEMC")[1] for completeness based on the requirements established in Chapter 14- Watershed Protection District of the Town of Crested Butte's Code.[2] Article 3 of Chapter 14 establishes the Watershed Permit Application Submittal Requirements ("Application Requirements"). The Application Requirements and application materials are discussed below. Where necessary, this memo recommends conditions of approval for the Town's consideration. I conferred with Town staff to prepare this memo.

**Sec. 14-3-10.- Watershed Permit Application.**

(a) The preliminary application was not signed. Signatures must be provided on the final application.

(b) To my knowledge, the Town has not informed the applicant that any submittal requirements are not necessary. Where applicable, this memo provides suggestions regarding submittal requirements that could be waived.

**Sec. 14-3-20.- Application Fees and Watershed Permit application costs and expense reimbursement agreement.**

Not considered in this memo.

**Sec. 14-3-30.- Information describing applicant.**

(a)(1) and (a)(2) not considered in this memo.

(a)(3) The preliminary application includes limited information regarding the applicant's financial qualifications, technical expertise, and capability to construct and operate the proposed development. However, the Town could waive this requirement given the positive working relationship between the Town and Applicant since 2016 when the Applicant acquired the Keystone Mine Site. Based on past experience with the applicant and consultant team, the Town has elected to waive this requirement.

[1] The application was initially prepared on June 27, 2025 and revised on August 6, 2025.
[2] Chapter 14 was adopted on April 3, 2023.

(a)(4) The preliminary application states that the "Owners Agent will be responsible for hiring a qualified contractor and oversight team to construct the proposed development" which does not satisfy the submittal requirement. Based on past experience with the applicant and consultant team, the Town has elected to waive this requirement.

(a)(5) Based on past experience with the applicant and consultant team, the Town has elected to waive this requirement.

**Sec. 14-3-40.- Information describing proposed development.**

The submittal requirements established at Sec. 14-2-40(b) apply. Where requirements in Sec. 14-2-40(b) are duplicative of requirements in Article 3, this memo evaluates the requirements established in Article 3.

(4)(a) Complete, the maps provided with the preliminary application are complete, but would benefit from inclusion of Diversion 2 and the associated water quality monitoring locations, as discussed in the water quality section of this memo (Sec. 14-3-80).

(4)(b) Complete, while the maps provided with the preliminary application do not include the Watershed Protection District boundary, the application clearly states the proposed project is within the Watershed Protection District.

(5) Complete

(6) Complete, see appendix B.

(9) Complete, see Article 4 which describes how the proposed project satisfies the watershed protection standards.[3]

**Sec. 14-3-50.- Property rights, permits, and other approvals.**

(a)(1) Property rights were not considered in this memo.

(a)(2) Permits. The project is part of MEMC's stormwater management plan (Exhibit C) and supports compliance with the existing industrial stormwater permit (CDPS Permit Number COR40284).

MEMC is currently seeking a Gunnison County Reclamation Permit.[4]

(a)(3) Complete. The revised application contains the statewide general permit, permit certification for the site, and relevant correspondence with the State related to the industrial stormwater permit for the site (see Exhibit C). The revised application includes the 2024 annual report for the Plan to Resolve Uncertainty (Exhibit D). The revised application contains the Spill Prevention, Control, and Countermeasures Plan (Exhibit E).

(a)(4) Not necessary.

[3] Watershed Permit Attachment – Diversion 1, dated August 6, 2025, at page 13.
[4] Watershed Permit Attachment – Diversion 1, dated August 6, 2025, at page 3.

(a)(5) Not necessary.

**Sec. 14-3-60. - Technical and financial feasibility of development.**

(a)(1). Complete. The application provides an estimated construction cost. The application estimates that construction will take two months.

(2) Complete. The application states that MEMC spends approximately $200,000 annually to implement water quality monitoring for the Plan to Resolve Uncertainty.[5] The Plan to Resolve Uncertainty is a requirement associated with the Temporary Modifications applied to Coal Creek Segment 12. This plan requires water quality sampling at several additional locations. The cost to monitor UT-3 and RLB-3 three times per year is significantly lower, although the application does not specify the cost.

(a)(3) Complete, the proposed project will not create revenue and operating expenses are not expected.

(a)(4) Complete, the applicant will pay for the project as part of the annual operating budget.[6]

(a)(5) Not necessary, the proposed project is not expected to produce revenue or services.

(a)(6) Not necessary, the proposed project is not expected to produce revenue or services.

(a)(7) Not necessary, the proposed project does not include treatment or mitigation facilities.

**Sec. 14-3-70. - Town waterworks and municipal water supply.**

(a)(1) Complete. The revised preliminary application states that "[n]o facility associated with the Town waterworks will be affected by the proposed development", presents water quality in the receiving tributaries, and estimates anticipated flow rates in the proposed diversion ditches. The revised application includes additional information to evaluate the watershed protection standards.[7]

(a)(2) Complete, the preliminary application does not identify potential impacts and therefore does not propose mitigation measures.

**Sec. 14-3-80. - Surface water quality and quantity.**

(a) Complete.

(a)(1) Complete. The application states that water quality at DIV 1 is not currently measured. However, based on the proximity (approximately 1,500 feet away) of DIV 1 and DIV 2, and the similar soil characteristics in the area, existing water quality at DIV 1 is assumed to be similar to DIV 2 water quality".[8] The application provides five samples collected from DIV 2 which is sufficient to characterize existing quality given the elevation and access limitations during snowmelt when most flow in the diversions ditches occurs.

(a)(2) Complete. See Exhibit F.

[5] Watershed Permit Attachment – Diversion 1, dated August 6, 2025, at page 11.
[6] Watershed Permit Attachment – Diversion 1, dated August 6, 2025, at page 3.
[7] Watershed Permit Attachment – Diversion 1, dated August 6, 2025, at page 4.
[8] *id*

(a)(3) Complete. The applicant used flow data from adjacent down-gradient locations to describe existing water quantities and the range of flows and provided sufficient rationale given the existing data set.

(b) Not necessary, the proposed project may slightly alter flows in the UT-3 and RLB-1 tributaries but these tributaries do not have instream flow water rights. Coal Creek has an instream flow right but additional information is not necessary to evaluate the Watershed Protection Standards.

(c) Complete. There are not seeps or springs in the proposed project area.

(d) Complete. A Water Quality Monitoring and Mitigation Plan was prepared (see Sec. 14-3-250).

**Sec. 14-3-90. - Groundwater quality and quantity.**

(a)(1) Complete, the preliminary application states that "[t]he proposed development will not significantly degrade groundwater quality and quantity with the Watershed Protection District".[9]

(a)(2) Complete, the preliminary application does not identify potential impacts to groundwater and therefore does not propose mitigation measures.

**Sec. 14-3-100. - Floodplains, wetlands, and riparian areas.**

(a)(1) Complete, the preliminary application states that there "are no wetlands or floodplains within the boundaries of the proposed development and extending at least one hundred (100) feet from the boundaries of the proposed development, therefore the proposed development will not significantly degrade wetlands and riparian areas."[10]

(a)(2) Not necessary, the proposed project area does not have wetlands and a wetlands report is not necessary.

(a)(3) Complete, the preliminary application does not identify potential impacts to floodplains, wetlands, and riparian areas and therefore does not propose mitigation measures.

(a)(4) Not necessary, the proposed project area does not have water features.

(a)(5) Complete, the preliminary application does not identify potential impacts to floodplains, wetlands, or riparian areas and therefore does not propose mitigation measures.

**Sec. 14-3-110. - Aquatic habitat.**

(a)(1) Complete, the preliminary application states that "[t]here is no aquatic habitat in the area of the proposed development".[11]

(a)(2) Complete, the preliminary application does not identify potential impacts to aquatic habitat and therefore does not propose mitigation measures.

[9] Watershed Permit Attachment – Diversion 1, dated August 6, 2025, at page 10
[10] *id.*
[11] *id.*

**Sec. 14-3-120. - Soil and geologic conditions and natural hazards.**

(a)(1) Complete, the preliminary application includes information sufficient to evaluate the Watershed Protection Standards.

(a)(2) and (a)(3) Complete, the preliminary application did not identify impacts or risks attributed to soil and geologic conditions or natural hazards and therefore does not propose mitigation measures.

**Sec. 14-3-130. - Spill Prevention, Storage, Control, Countermeasure, and Contingency Plan.**

The applicant maintains a Spill Prevention, Control and Countermeasures (SPCC) Plan consistent with the requirements of 40 CFR Part 112.[12] This plan, provided as Exhibit E, includes the information necessary to evaluate compliance with the Watershed Protection Standards.

**Sec. 14-3-140. - Emergency Response Plan.**

Complete. The application states that "all construction activities will be performed in accordance with applicable health and safety requirements including MEMC's Health and Safety program which includes procedures for timely Emergency Response."[13] The application states that all operations are performed in accordance with OSHA regulations.

**Sec. 14-3-150. - Water Quality Monitoring and Mitigation Plan.**

(a)(1) to (a)(8) Complete, although three conditions of approval are recommended, as described below.

The application proposes to use data collected from two locations that are monitored as part of MEMC's Plan to Resolve Uncertainty, which is required to maintain the temporary modification applied to Coal Creek. The temporary modifications are scheduled to expire on December 31, 2027.[14] As a result of improvements at the site, including diversion ditches similar to the proposed Diversion 1, recent data collected from the Keystone Mine Water Treatment Plant indicate that there is no longer a demonstrated or predicted compliance problem.[15]

Because MEMC no longer has a demonstrated or predicted compliance problem, the temporary modification applied to Coal Creek will be removed prior to 2027 or allowed to expire on December 31, 2027. Following the expiration of the temporary modification, MEMC will no longer be obligated to monitor water quality in Coal Creek, including at UT-3 and RLB-3 which are included in the water quality monitoring and mitigation plan.

Because the application does not address the pending expiration of the temporary modification, the Town should consider a condition of approval to assure that water quality monitoring continues for a duration sufficient to assure that "no significant degradation of surface water quality"[16] occurs as a result of the project. The condition of approval should also include language to require the same

[12] Watershed Permit Attachment – Diversion 1, dated August 6, 2025, at page 11.
[13] *Id.*
[14] Watershed Permit Attachment – Diversion 1, dated August 6, 2025, Exhibit D at page 1.
[15] Watershed Permit Attachment – Diversion 1, dated August 6, 2025, Exhibit D at page 2.
[16] Crested Butte Town Code Chapter 14. Sec. 14-4-80.

monitoring components (e.g., laboratory and field measurements) included in the Plan to Resolve Uncertainty and establish key indicators. The Town should consider the following condition of approval:

> The applicant shall monitor water quality and flow in UT-3 and RLB-1 according to the existing Plan To Resolve Uncertainty for the duration of the temporary modification applied to Coal Creek or five years after final reclamation of all disturbed areas associated with Diversion 1, whichever is longer. The laboratory and field measurements included in the Plan to Resolve Uncertainty are the key indicators for this project.

Sec. 14-3-150(a)(5), which requires monitoring "to measure effectiveness of water quality mitigation during the life of the proposed development and five (5) years after final reclamation of all disturbed areas is complete"[17], was used as the basis for the duration of the monitoring period.

As described in the application, the proposed monitoring locations are in tributaries to Coal Creek down-gradient of contributions from the proposed Diversion 1 and Diversion Ditches 2 through 7. While the Town acknowledges the difficulties associated with monitoring the upper diversions structures, this data is critical to understanding potential water quality impacts attributed to the proposed project. To address this concern, the following condition of approval is recommended:

> The applicant shall attempt to monitor water quality and flow in Diversion 1 and Diversion 2 on both the east and west outlets at least once per year during spring runoff or other conditions conducive to generating flow in the uppermost diversion ditches. Water quality monitoring and flow measurement shall occur according to the existing Plan To Resolve Uncertainty for the duration of the temporary modification applied to Coal Creek or five years after final reclamation of all disturbed areas associated with Diversion 1, whichever is longer. The laboratory and field measurements included in the Plan to Resolve Uncertainty are the key indicators for this project.

Additionally, the applicant did not identify a process for reporting to the Town Manager when key indicators are not met, or thresholds are exceeded.[18] To address this, the Town should consider the following condition of approval:

> The applicant shall provide annual reports to the Town Manager. The annual reports shall identify when MEMC attempted to sample Diversion 1 and Diversion 2, include the raw laboratory and field data, a summary of water quality conditions relative to baseline conditions, and an assessment of whether significant water quality degradation occurred during the monitoring period and potential causes for such degradation for all locations identified in Conditions 1 and 2. During the term of the temporary modifications, the annual report for the Plan To Resolve Uncertainty can be used to satisfy this requirement.

[17] Crested Butte Town Code Chapter 14.
[18] *Id* at Section 14-31-50(a)(8)

**Sec. 14-3-160. - Erosion and Sediment Control Plan.**

Complete. The Stormwater Management Plan (Exhibit C) provides the information necessary to evaluate this criterion.

**Sec. 14-3-170. - Drainage Plan.**

Complete. The Stormwater Management Plan (Exhibit C) provides the information necessary to evaluate this criterion.

**Sec. 14-3-180. - Grading Plan.**

Complete. The 2025 Statement of Work prepared by Trout Unlimited (Exhibit G) provides the information necessary to evaluate this criterion.

**Sec. 14-3-190. - Revegetation and Weed Management Plan.**

Complete. The Stormwater Management Plan (Exhibit C) provides the information necessary to evaluate this criterion. Information included in the 2025 Statement of Work prepared by Trout Unlimited (Exhibit G) provides additional information relevant to this criterion

**Sec. 14-3-200. - Additional submittal requirements for water and wastewater treatment systems.**

Not relevant, as stated in the application the proposed Project does not require a wastewater treatment system.

**Sec. 14-3-210. - Additional submittal requirements for municipal and industrial water projects.**

Not relevant, as stated in the application the proposed Project does not require a water supply.

# Staff Report

August 18, 2025

**To:** Mayor and Town Council

**Thru:** Dara MacDonald**,** Town Manager

**From:** Lynelle Stanford, Town Clerk

**Subject:** Ordinance No. 10, Series 2025 - An Ordinance of the Crested Butte Town Council Requiring Energy Assessments for Unlimited Vacation Rental License Holders.

**Date:** August 8, 2025

---

**Background:**

On April 21, 2025, the Town Council formally adopted the Climate Action Plan (CAP), reinforcing the Town's strategic commitment to addressing the urgency of climate change. The CAP outlines specific goals and actionable strategies aimed at reducing greenhouse gas (GHG) emissions by 2030. One of the plan's key focus areas is the buildings sector, recognizing the significant role buildings play in local energy use and emissions.

A primary strategy identified in the CAP is to empower and incentivize the community to take active steps toward reducing energy consumption, electrifying buildings, and promoting efficient land use. These actions are essential to prepare for and maximize the benefits of a future powered by a renewable energy grid. To support this strategy, the CAP proposes a new requirement for energy assessments on unlimited license holders of vacation rental properties. These assessments will help the Town collect valuable data on residential energy use, which can inform broader climate and energy policies moving forward.

To provide context for these efforts, it is important to consider the evolution of building energy codes. The International Energy Conservation Code (IECC) introduced in 2012 marked a significant improvement in energy efficiency standards for new homes. The Town of Crested Butte did not adopt the 2012 IECC. Instead the Town transitioned directly from the 2009 IECC to the 2015 version, effective in January 2017. Homes built under or exceeding the 2015 IECC, especially those verified by programs such as the Home Energy Rating System (HERS) or Energy Star, are generally considered the first wave of modern, energy-efficient construction. More recently, homes constructed to meet the 2021 IECC are regarded as high-performance buildings, offering superior energy performance and long-term environmental benefits.

The Town of Crested Butte adopted the 2015 IECC in 2017, meaning that all residential properties built from that year forward have been subject to the improved energy efficiency standards introduced in the 2015 code. Ordinance No. 10, Series 2025 is in alignment with these standards.

This ordinance would exempt unlimited vacation rental properties from the CAP's energy assessment requirement only if they were constructed under the governance of the 2015 code or later**.** The rationale for this exemption is that homes built to the 2015 IECC standard, effective in 2017, already meet a baseline of modern energy efficiency, reducing the need for additional assessment.

This policy approach allows the Town to focus energy assessment efforts on older housing stock and properties more likely to benefit from efficiency upgrades, while recognizing the relative performance of newer homes already built to updated standards. Through the licensing requirement for vacation rentals, Town can require these properties to obtain an energy assessment. Some owners may choose to act on this information immediately and take steps to improve the efficiency of their homes. At a minimum, the information will help the Town better understand the efficiency upgrade needs in the community and inform incentive programs going forward. Ultimately, this supports the Town's broader goals of emissions reduction, data-informed planning, and community resilience in the face of climate change.

**Summary:**

Ordinance No. 10, Series 2025 establishes a new requirement for unlimited vacation rental license holders to have an energy assessment completed and to submit a copy of the assessment report by the open enrollment deadline in October 2026, for the 2027 license year.

Primary vacation rental license holders are exempt from this requirement to avoid placing an undue burden on these property owners. This exemption also acknowledges that primary rentals are limited to a maximum of ninety nights per year, making their overall environmental impact comparatively lower.

The purpose of this energy assessment requirement is to enable the Town to collect data on residential energy use across residential properties, supporting community-wide efforts to monitor and potentially reduce energy consumption.

**Recommendation:**

To set Ordinance No. 10, Series 2025 for public hearing during the September 2nd, 2025, Council meeting.

**Recommended Motion:**

Motion to set Ordinance No. 10, Series 2025 for public hearing during the September 2nd, 2025, Council meeting.

**ORDINANCE NO. 10**

**SERIES 2025**

**AN ORDINANCE OF THE CRESTED BUTTE TOWN COUNCIL REQUIRING ENERGY ASSESSMENTS FOR UNLIMITED VACATION RENTAL LICENSE HOLDERS**

**WHEREAS**, the Town of Crested Butte, Colorado (the "**Town**") is a home rule municipality duly and regularly organized and now validly existing as a body corporate and politic under and by virtue of the Constitution and the laws of the State of Colorado; and

**WHEREAS**, pursuant to Article XX, Section 6 of the Colorado Constitution, as implemented through the Town of Crested Butte Charter, the Town has the authority to enact and enforce regulations regulating vacation rentals within the Town's jurisdiction; and

**WHEREAS**, the Crested Butte Town Council finds it is necessary and proper to update Chapter 6 of the Crested Butte Municipal Code to require energy assessments for all new and renewing unlimited vacation rental license holders, no later than the deadline for open enrollment in October, 2026 for the 2027 license year, as provided in this ordinance; and

**WHEREAS**, as a mountain town dependent on snowpack, thriving outdoor recreation, and tourism-based economy, the Town of Crested Butte community views climate change as one of the most important current issues; and

**WHEREAS**, the Climate Action Plan (CAP) was adopted by the Town Council on April 21, 2025, which outlines goals and strategies to reduce greenhouse gas emissions by 2030; and

**WHEREAS,** the CAP is guided by the Town of Crested Butte's strategic goal to "act on urgency of climate change"; and

**WHEREAS,** one of the CAP priority actions for buildings is to empower and incentivize the community to reduce energy use, electrify buildings to maximize the future benefits of a renewable-energy grid, and encourage efficient land use policy; and

**WHEREAS,** requiring energy assessments for vacation rentals will allow the Town to collect community-wide energy use data in residential properties; and

**WHEREAS,** the Town of Crested Butte will act on the urgency of climate change by setting the example of what is possible for mountain communities to take responsibility for our climate impacts; and

**WHEREAS**, the Town Council finds that the below amendments are in the best interests of the health, safety, and general welfare of the Town.

**NOW, THEREFORE, BE IT ORDAINED BY THE TOWN COUNCIL OF THE TOWN OF CRESTED BUTTE, COLORADO, THAT,**

**1. Amending Chapter 6, Article 5, Section 30**

Adding the definition of home energy assessment. Home energy assessment shall mean an assessment that includes a home visit by a building performance institute (BPI) certified energy analyst that results in a report that analyzes the current condition and energy usage of a home and provides a list of recommended improvements.

**2. Amending Chapter 6, Article 5, Section 40**

**Section 6-5-40(1),** shall be amended to read as follows:
All new and renewing unlimited vacation rental license applicants or holders shall be required to provide a copy of the energy assessment report for the vacation rental no later than the deadline for open enrollment in October, 2026 for the 2027 license year. If a copy of the assessment report is not provided by the license holder or applicant by the deadline, the existing license will not be renewed nor the new license issued. New applicants for unlimited vacation rental licenses after the 2027 license year shall be required to provide evidence of energy assessments at the time of application. Properties newly constructed with building permits issued after January 1, 2017, are exempt from this requirement.

**INTRODUCED, READ, AND SET FOR PUBLIC HEARING THIS 18TH DAY OF AUGUST, 2025.**

**ADOPTED BY THE TOWN COUNCIL UPON SECOND READING IN PUBLIC HEARING THIS 2ND DAY OF SEPTEMBER , 2025.**

TOWN OF CRESTED BUTTE, COLORADO

By: _____
Ian Billick, Mayor

ATTEST:

[SEAL]

_____
Lynelle Stanford, Town Clerk

# Staff Report
August 18, 2025

**To:** Mayor and Town Council

**From:** Rob Sweeney, Interim Finance and Administrative Services Director

**Thru:** Dara MacDonald, Town Manager

**Subject**: Resolution No. 21, Series 2025 – A Resolution of the Crested Butte Town Council Amending the Fiscal Year 2025 Fee Schedule

---

**Summary:**
Staff annually reviews the various fees charged by the Town as part of the budget cycle. The Fiscal Year 2025 Fee Schedule was adopted by the Town Council via Resolution 27, Series 2024 on December 16, 2024. The 2025 Fee Schedule requires amendment to reflect Council's desire to implement the Save As You Throw (SAYT) Program for residential refuse and recycling collection services.

**Discussion:**
Should the Town Council approve Ordinance 7, Series 2025 to repeal and replace Chapter 13, Article 5 – Refuse and Sanitation System, of the Town Code, applicable changes to the Town's 2025 Fee Schedule are necessary to codify the SAYT Program.

The existing $28.97 fee for refuse and recycling collection is defined as the *Compulsory Refuse Collection Fee* in the 2025 Fee Schedule. Staff seeks to amend this section of the 2025 Fee Schedule to align with the SAYT Program, effective September 22, 2025, as follows:

*Residential Refuse/Recycling Fees (billed by the Town):*
- *32 Gallon Refuse/96 Gallon Recycling: $24.62 (monthly)*
- *64 Gallon Refuse/96 Gallon Recycling: $27.23 (monthly)*
- *96 Gallon Refuse/96 Gallon Recycling: $40.56 (monthly)*

The following fees have not previously been included in the Town's Fee Schedule despite being established in the service agreement with our contractor, Waste Management. Staff recommend incorporating them into the Fee Schedule going forward even though they are collected by the contractor.

*Residential Refuse/Recycling Fees (billed by Town-contracted service provider)*
- *Refuse Container Size Change: $25 (post-SAYT implementation; annually in August)*
- *Lost/Stolen/Damaged Container Replacement: $250*
- *Container Content Overage: $30.05*
- *Container Content Contamination: $5.96*

- *Bulky Pick-up: $50.00*
- *Extra Bags: $6.00 (per bag)*
- *Additional 96 Gallon Refuse Container: $21.38 (monthly)*
- *Additional 96 Gallon Recycling Container: $9.00 (monthly)*

If adopted, the new fee schedule will be implemented with the October 2025 utility billing, which covers the period September 22 to October 21, 2025.

**Financial Impact:**
Once enrollment for various bin sizes has been affirmed and financial impacts understood, staff may bring additional fee changes forward for Council consideration as part of the 2026 budget adoption. Otherwise, fees will be adjusted annually as part of the contract with Waste Management related to consumer price index (CPI) and other commodity factors.

**Legal Review:**
The Town Attorney reviewed the draft Resolution and approved it as to form.

**Recommendation:**
Staff recommends approval of Resolution No. 21, Series 2025 amending the Fiscal Year 2025 Fee Schedule.

**Attachments:**
Resolution 21, Series 2025
2025 Town of Crested Butte Fee Schedule

# RESOLUTION NO. 21
# SERIES 2025

**A RESOLUTION OF THE CRESTED BUTTE TOWN COUNCIL AMENDING THE ADOPTED SCHEDULE OF CERTAIN FEES AND CHARGES FOR THE FISCAL YEAR 2025**

**WHEREAS,** the Town of Crested Butte, Colorado (the "**Town**") is a home rule municipality duly and regularly organized and now validly existing as a body corporate and politic under and by virtue of the constitution and laws of the State of Colorado; and

**WHEREAS**, the Town has determined that costs associated with the Town's providing certain services should be defrayed by specific fees; and

**WHEREAS,** the Town imposes certain rates, charges or fees for services performed or materials provided by the Town; and

**WHEREAS,** the Town Council has established a "Fee Schedule" containing a listing of certain fees and charges to be reviewed annually; and

**WHEREAS,** certain Town rates, charges and fees are required to be set by ordinance and as to such rates, charges and fees the Fee Schedule shall have no application, even though those fees are set forth in the Fee Schedule for informational purposes; and

**WHEREAS**, the Town Council approved Resolution No. 27, Series 2024 adopting the Fiscal Year 2025 Fee Schedule; and

**WHEREAS**, the Town Council seeks to amend the Fiscal Year 2025 Fee Schedule for certain fees and charges.

**NOW, THEREFORE, BE IT RESOLVED BY THE TOWN COUNCIL OF THE TOWN OF CRESTED BUTTE, COLORADO THAT:**

1. The Town's rates, fees or charges for Refuse/Recycling Collection established by Resolution No. 27, Series 2024 are hereby amended, effective September 22, 2025, as set forth in Exhibit "A" attached hereto.

INTRODUCED, READ AND ADOPTED UPON THIS FIRST READING THIS 18th DAY OF AUGUST 2025.

**TOWN OF CRESTED BUTTE, COLORADO**

By: _____
Ian Billick, Mayor

**ATTEST:** **(SEAL)**

_____
Lynelle Stanford, Town Clerk

# EXHIBIT A

## 2025 Town of Crested Butte Fee Schedule

**Effective January 1, 2025, as adopted by Resolution 27, Series 2024 (unless otherwise noted)**

| Administration and Misc | | |
|---|---|---|
| **Record Request Fees:** | | |
| Audio Tapes, CD or DVD | $15.00 | |
| Agendas | No charge for copies of current agendas | |
| Bid Documents | Fee based on reproduction and actual cost | |
| Copies: | No fee for single page | This is the average cost of a copy taking into account the cost of paper, machine time, supplies and personnel time, necessary research time not to exceed 15 minutes |
| | $.25 each additional page | |
| | $1.50 each color page | |
| Certified Copies | $1.25 per page | |
| | $2.25 for color copies | |
| Computer Generated Reports: | | |
| Printed | $1.00 per page | |
| Provided on CD | $25.00 | |
| E-mailed | $.25 per page | |
| Faxes (local or long distance) | $.50 per page excluding cover sheet | 20 page maximum |
| Mailing Fees | actual cost of mailing | |
| Photos | $5.00 plus cost of reproduction | |
| Research and Retrieval Fees | $ 25.00 per hour for requests requiring more than 15 minutes; $225 per hour Town Attorney Research fees | |
| Recording Fee | $13.00 for 1st page and $5.00 for each page after | Fees based on Gunnison County charges and are subject to change |
| Requring Special Programming | $75.00 per hour | |
| **Maps:** | | |
| Standard Map fees: | | |
| Zoning Map | $25.00 | |
| Parcel Map | $15.00 | |
| Open Space map | $25.00 | |
| A -size map (8.5" x 11") | $1.50 | |
| B-size map (11"x17") | $3.00 | |
| C-size map (17"x22") | $15.00 | |
| D-size map (24"x36") | $25.00 | |
| E-size (36"x48") | $30.00 | |
| Custom | $50.00 per hour personnel; with a minimum 1 hour charge plus standard map fee | |
| Custom, non-profit | $40.00 per hour | |
| **Cemetery Fees:** | | |
| Large Cemetery Plot (22' X 11') | $1,000 | |
| Small Cemetery Plot (5.5' X 11') | $300 | |
| Casket Burial | | |
| Weekdays | $400 | |
| Winter Weekdays | $600 | |
| Weekends, Holidays, Emergencies | $550 | |
| Winter Weekends, Holidays, Emergencies | $750 | |
| Cremain Burial | | |
| Weekdays | $200 | |
| Winter Weekdays | $400 | |
| Weekends, Holidays, Emergencies | $350 | |
| Winter Weekends, Holidays, Emergencies | $450 | |
| Grave Disinternment | $600 | |
| **Misc Fees:** | | |
| Returned Check | $15.00 | |
| Lien | $75 late fee | |
| Notary Service | $5.00 per document | No fee for Town documents |
| Snow Cat Permit | $100.00 | Plus $500.00 deposit |
| **Business Fees:** | | |
| Business License | $100.00 per year | |
| Business License Renewal-Late Fee | $25.00 | For renewals received 30 days after expiration of license |
| Sales Tax License | No charge | |
| Transfer of Business License | $25.00 | |
| Cart Vending License | $25.00 | |
| Farmers Market Application | $25.00 | |
| Street performers permit | $25.00 | |
| Annual Vacation Rental License Fee | $800/year | |
| Primary Residence Vacation Rental License Fee | $250/year | |
| **Vending Truck License** | | |

| | | |
|---|---|---|
| Application Fee | $25.00 | |
| License | $400.00 | |
| **Marijuana Establishment License:** | | |
| Transfer of permit to business entity | $1,000.00 | |
| Changes in members | $200/member | |
| New Application | $1,500 per license | |
| Renewal | $500, 1 license/ $750, dual license | |
| Modification of Premise | $50.00 | |
| **Publications:** | | |
| Town Code | $100.00 | |
| Town Code Updates | $1.50 per page | |
| **Special Event Fees:** | | |
| Application Fee | $25.00 | |
| Late Application Fee | $100.00 | |
| Elk Avenue Event Fee | $100 / block closed | Any event that requires a closure of Elk Avenue will be assessed this fee based upon the number of blocks closed |
| Minimal Impact Event Permit Fee | $0.00 | |
| Moderate Impact Event Permit Fee | $50.00 | For recurring moderate impact events that take place 5 or more times in one calendar year: 50% reduction in permit fees |
| Major Impact Event Permit Fee | $200.00 | For recurring major impact events that take place 5 or more times in one calendar year: 25% reduction in permit fees |
| Town Ranch Camping Fee | $150.00 | Town Ranch camping available to Major Special Events and Special Events which take place at Town Ranch only |
| Gravel Pit Permit | $100.00 | Per day |
| Minimal Impact Event Clean-up Deposit | $0.00 | |
| Moderate Impact Event Clean-up Deposit | $50.00 | |
| Major Impact Event Clean-up Deposit | $200.00 | |
| Climate Reponsible Event Fee (No measures taken) | $150.00 | Per event |
| Climate Reponsible Event Fee - Tier I Measures | $100.00 | Per event |
| Climate Reponsible Event Fee - Tier II Measures | $50.00 | Per event |
| Climate Reponsible Event Fee - Tier III Measures | $0.00 | Per event |
| Special Events occuring in Parks will be charged the regular rental rate for that park (see Parks & Recreation below) | | |
| **Liquor License Fees:** | | |
| Liquor Tasting Permit | $50.00 per year | |
| Special Event Local Liquor License | $25.00 per day/per location | |
| Special Event State Liquor License | No Charge | |
| Art Gallery Liquor Application | $3.75 per year | |
| All other liquor application and license fees | Maximum allowed by the State (see attached fee schedule) | |
| **Building & Planning** | | |
| **Design Review Application and Publication:** | | |
| | $120.00 | Insubstantial Design Review - DRC |
| | $1,000.00 | Major Project |
| | $125.00 | Publication Fee for Major Project |
| | $750.00 | Minor Project - small remodel/accessory building |
| | $125.00 | Publication Fee for Minor Project |
| | $700.00 | No Picture Publication for Minor Project / Conditional Use Permit |
| | $60.00 | Publication fee wtihout picture |
| | $750.00 | additional for Special Review Classification |
| Additional DRC Meeting | $100.00 | per meeting for each additional meeting needed beyond the first 2 |
| **P.U.D:** | | |
| Concept Plan Submittal | $750.00 | Fees represent maximum fee dependent on complexity of the submittal. In addition, Design Review and Publication costs will be assessed plus $300 for each full Board meeting and $60 for each DRC meeting beyond 2 for each submittal |
| General Plan Submittal | $2,500.00 | |
| Building Permit Review Submittal | $1,000.00 | |
| Combined General Plan and Building Permit | $1,500.00 | |
| Use Tax Deposit | | Not less than 4.5% of 60% (Total Project Valuation) |
| Performance Deposit | 0.50% | Total Structure Value: building valuation multiplied by .50% |
| **Building Permit / Solar Permit:** | | |
| | $28.42 | $1.00 - $500.00 |
| | $28.42 plus $3.68 per $100 of TSV or fraction | $501.00 - $2,000.00 |
| | $83.74 + $16.95 per $1,000 of TSV or fraction | $2,001.00 - $25,000.00 |
| | $473.79 + $12.18 per $1,000 of TSV or fraction | $25,001.00 - $50,000.00 |
| | $778.58 + $8.47 per $1,000 of TSV or fraction | $50,001.00 - $100,000.00 |
| | $1,202.07 + $6.77 per $1,000 of TSV or fraction | $100,001.00 - $500,000.00 |
| | $3,911.05 + $5.74 per $1,000 of TSV or fraction | $500,001.00 - $1,000,000.00 |
| | $6,781.04 + $4.41 per $1,000 of TSV or fraction | $1,000,001.00 and up |

*The total Structure Value or building valuation for all permit fees shall be based on the building valuation data table of the most current building valuation data document published by the International Code Council, using a regional modifier of 2.70, or other evidence of value, whichever is greater, as determined by the Building Official.*
*Active solar installations-maximum of $500 residential, $1,000 commercial.*

| | | |
|---|---|---|
| Plan Review Fee | 30% Permit Fee Residential/60% Commercial | |
| Work without Permit | $250 up to $1,000 per day | Plus Applicable Permit Fee |
| Construction Documents Examination | 60% | of Permit Fee - Commercial |
| | 30% | of Permit Fee - Residential |
| Special Review and Inspections | Actual | Outside Consultants |
| | $65.00/hr | Other |
| Request for FAR Calculation | Free | Copy of existing FAR calculation on file |
| | $50.00 | FAR from existing plans or submitted plans |
| | $60.00 | Additional calculations or resubmittals |
| Rezoning Application | $2,500.00 | New Fee. A Rezoning application is equivalent to a PUD |
| Application for amendment to Zoning | $250.00 | |
| Right-of-Way Use Permit | $50/ 25 feet of right of way per month | For the months between May 1st and Oct 31st only |
| Tree Cutting Permit | $75.00 | |
| Sign Permit | $20.00 | Plus $2/Sq Ft over 10 Sq. Ft. |
| Payment in Lieu of Parking | $13,000 | Per parking space |
| Condominium Declaration Docs + Plat | $750.00 | |
| **Resident Occupied Affordable Housing:** | | |
| payment assessed on newly constructed non-residential floor area in-lieu of providing ROAH units: | $41.82 | per sq. ft . |
| payment assessed on newly constructed lodging units or short-term residential accomodation units in -lieu of providing ROAH units: | $4,445.76 | per lodging unit |
| **New Residential floor area in-lieu of providing a fraction of a ROAH unit when total size of the residential unit is within the following range:** | | |
| Unit Size Range (sq. ft.) | Annual Payment in-lieu("PIL") per Sq. Ft. | |
| 1 -499 | $1.40 | per sq. ft . |
| 500 - 999 | $1.99 | per sq. ft . |
| 1,000 - 1,499 | $2.14 | per sq. ft . |
| 1,500 - 1,999 | $2.40 | per sq. ft . |
| 2,000 - 2,499 | $2.74 | per sq. ft . |
| 2,500 - 2,999 | $3.14 | per sq. ft . |
| 3,000 - 3,499 | $3.62 | per sq. ft . |
| 3,500 - 3,999 | $4.18 | per sq. ft . |
| 4,000 - 4,499 | $4.83 | per sq. ft . |
| 4,500 or more | $5.50 | per sq. ft . |
| Carbon Mitigation Fee | $2.35 | Per lbs. of CO2 emission per dept. calculation |
| Solid Fuel Burning Device application | $100.00 | |
| Mechanical Permit | $100.00 | |
| **Boiler/Compressor/Absorb. System:** | | |
| Mechanical Exhaust Hood | $200.00 | |
| Inspection after Business Hours | $65.00 | Minimum 2 hour charge |
| Reinspection Fee | $65/hour | Per Inspection. Minimum two hour charge |
| Misc. Inspection | $75.00 | Per hour or inspection |
| Floodplain Development Permit | $100.00 | |
| Annexation petition processing fee | | With the submission requirements for formal annexation petition or petition for annexation election: applicant delivers to the Town an executed annexation cost and expense reimbursement agreement obligating the applicant to remimburse the Town for all costs and expenses whatsoever incurred by the Town in connection with the annexation |
| Concept Annexation Request processing fee | $500.00 | Per request |
| **Subdivision Application Review Fees:** | | |
| Minor Subdivision | $500.00 | |
| Major Subdivision Review: | | With the submittals for subdivision sketch plan: applicant delivers to the Town an executed annexatio cost and expense reimbursement agreement obligating the applicant to reimburse the Town for all costs and expenses whatsoever incurred by the Town in connection with the subdivision |
| Site specific development | | |
| Plan application | $500.00 | |
| Plat Approval | $500.00 | |
| **Capital Expansion Recovery System Fees for land that paid RETT:** | | |
| Parks & Rec. Improvements SFR | $2,510.20 | |
| Parks & Rec. Improvements MFR | $2,382.95 | |
| Parks & Rec. Commercial Res. Unit | $2,070.62 | |
| Fire SFR | $388.79 | |
| Fire MFR | $388.79 | |
| Fire ea Sq. ft. | $0.00 | |
| **Capital Expansion Recovery System Fees for land that did not pay RETT:** | | |

| | | |
|---|---|---|
| Parks & Rec. Improvements SFR | $2,540.41 | |
| Parks & Rec. Improvements MFR | $2,411.63 | |
| Parks & Rec. Commercial Res. Unit | $2,095.55 | |
| Fire SFR | $388.79 | |
| Fire MFR | $388.79 | |
| Fire ea. Sq. ft. business/commercial/tourist | $0.14 | |
| **Snow Plow equipment:** | | per sq ft of R.O.W. (right of way) |
| If RETT has been paid on developed land: | | |
| Single family areas | $0.13 | |
| R2 zoned areas | $0.11 | |
| Multi-family zoned areas | $0.03 | |
| Business/Commercial Tourist areas | $0.05 | |
| If RETT has not been paid on developed land: | | |
| Single family areas | $0.14 | |
| R2 zoned areas | $0.13 | |
| Multi-family zoned areas | $0.07 | |
| Business/Commercial Tourist areas | $0.05 | |
| Calculation of Affordable Housing maximum sales price - new unit | $0.00 | Administrative fee to calculate the maximum sales price of an affordable housing unit when new receipts are provided to the Town after issuance of a certificate of occupancy or when new receipts are provided after an improvement is made |
| Calculation of Affordable Housing maximum sales price - existing unit | Free | Calculation is an update of a previously calculated maximum sales price with no additional receipts |
| **Parks and Recreation:** | | |
| Adult Activities | | Current activity fees can be found online at www.crestedbutterec.com |
| Youth Activities | | Current activity fees can be found online at www.crestedbutterec.com |
| Cancellation/Transfer Fee | $10.00 | Subject to the Parks & Recreation Program Fee Schedule found online at Townofcrestedbutte.com |
| **Facility Rental Rates: All Fields, Facilities, Buildings, Pavilions and Other Recreational Amenities without private leases:** | | |
| Big Mine Ice Arena Winter Ice Slots | $165/hour | Ice slots in Big Mine Ice Arena, minimum 1.5 hours. |
| Big Mine Ice Arena Facility Use Fee | $5/adult $3/child 16 and under | Assessed by CB Nordic upon rental of skates for use at Big Mine Ice Arena |
| Big Mine Ice Arena Summer Use | $50/hour OR $300/day | Any organization, group, or individual up to 299 people who desires to use the facility for a private rental (non-Special Event) |
| Big Mine Open Space for Summer Events | $150/day or $375/three day rental for set up and take down of large tented events | Any organization, group, or individual who desires to use the facility for a private or Special Event event |
| Big Mine Ice Arena for Summer Events with 300-499 people | $500/day or $1200/three day rental for set up and take down of large events | Any organization with a Special Event Application on file with the Town Clerk |
| Depot | $225/half day, $400/full day, $900/three day | Maximum of 49 people in winter and 100 people in summer |
| Totem Pole Park for Summer Special Events | $50/day | Any organization with a Special Event Application on file with the Town Clerk |
| Town Park - Old Town Soccer Field for Summer Special Events | $150/day | Any organization with a Special Event Application on file with the Town Clerk |
| Town Ranch Event Area for Private Events | $550/day or $1350/three day rental for set up and take down of large tented events | Any organization, group, or individual who desires to use the facility for a private event |
| Town Ranch Event Area and Big Mine Ice Arena for Summer Special Events with <300 people | $300/day or $750/three day rental for set up and take down of large events | Any organization with a Special Event Application on file with the Town Clerk |
| Rainbow Park Pavilion | $130/four hour time slot | Any organization, group, or individual up to 100 people who desires to use the facility-additional information on Town website |
| All Other Town-Rented Activity Spaces (Jerry's Gym, Community Room, Fitness Room, Athletic Fields) | $14.00/hour | For programs with a quarterly or yearly contract with the Town, except for Town Ranch Event Area & Big Mine Ice Arena |
| | $30.00 / hour $150 / day | Any organization, group, or individual who does not have a Recurring Use Contract with the Town |
| All Facilities | No Charge | Crested Butte Community School programs |
| All Facilities | $45/hour | Any user-caused issue requiring on site staff attention; will be witheld from deposit or charged in addition if necessary |
| **Facility Deposit Rates: All Fields, Facilities, Buildings, Pavilions and Other Recreational Amenities without private leases, except Big Mine Ice Rink:** | | |
| Depot | $250 | Rules, ammenities and additional information available on Town website |
| Town Hall/Key Deposits & Field Rentals with < 50 people | $50.00 | Deposit for rental of any facility that requires key access, athletic field use, and all reservations for downstairs spaces in Town Hall |

| | | |
|---|---|---|
| Rainbow Pavilion, & Field Rentals with >50 people | $100.00 | Events with less than 100 participants and a total rental time of up to four (4) hours |
| Town Ranch Event Area, Big Mine Ice Arena for Summer Events, Big Mine Open Space, & Town Park with <300 people | $150/single day or $375/three day rental | Rules, ammenities and additional information available on Town website |
| Town Ranch Camping | $150/day | Any organization with a Special Event Application on file with the Town Clerk |
| Town Ranch Event Area, Big Mine Ice Arena for Summer Events, Big Mine Open Space, & Town Park with >300 people | $250/single day or $600/three day rental | Rules, ammenities and additional information available on Town website |
| **Marshals Department:** | | |
| Fingerprints | $10.00 | for Residents or court ordered |
| | $20.00 | Non-residents |
| VIN Inspections | $10.00 | for Residents |
| | $20.00 | for non-Residents |
| Sex Offender Registration | $25.00 | Includes fingerprint cards, photos & paperwork) |
| Sex Offender Re-Registration | $10.00 | |
| Accident Report | $0.25/page or actual costs (including postage), whichever is greater, plus staff time to research, redact information pursuant to statute, retrieve and distribute public records shall be charged at $15 per half hour. | Free for victim (fee applies to emailed reports) |
| Record Request, Non-Accident | $5.00 flat fee & $0.25/page ($5.00 flat if emailed) | Free for victim (fee applies to emailed reports) |
| Link to Body Worn Camera Video | $25.00 per half hour of video - redaction services by outside provider will be subject to their fee schedule | rounded up to nearest half hour |
| Vehicle Impoundment | $50.00 | Plus towing charges |
| Scofflaw list and civil penalty | $50.00 | |
| Review of private event noise control measures | $250.00 | Maximum fee |
| Review of noise supression plan | $250.00 | Maximum fee |
| Towing | $225.00 | |
| Parking violations | $40.00 | |
| Winter Parking violations | $50.00 | |
| Handicap Parking violations | $200 | |
| **Public Works:** | | |
| Dig Permit - Major | $100.00 | $10,000 Bond Required (Project Valuation of $1-$50,000) |
| Snow Storage Permit (commercial) | $500.00 | Plus $250.00 deposit |
| Snow Storage Permit (non-commercial) | $10.00 | Per regular dump truck load (non-commercial hauler) |
| Snow Management Permit | $50.00 | |
| **Equipment:** | | |
| Labor Charges | $50.00 | per hour (Overtime rate = 1.5 x hours) |
| **Sewer and Water:** | | |
| Base Rate - Water | $48.32 | Per EQR- 1st 4000 gallons per EQR base rate |
| Base Rate - Sewer | $62.51 | Per EQR |
| Tap Fee - Water | $13,931 | water per EQR |
| Tap Fee - Sewer | $17,209 | sewer per EQR |
| Sewer Pretreatment | $18.54 | Per EQR |
| Availability of service (water and sewer) | $37.82 | Per EQR |
| *The above rates are based on 1 EQR. An EQR (Equivalent Residential Usage) is the amount of water and sewer used by a standard residential unit of 1875 square feet* | | |
| Block Rates - Water: | | |
| Tier # | Rate Per 1,000 Gallons over base | Gallons |
| 1 | $5.40 | 4,001-9,000 |
| 2 | $6.02 | 9,001-14,000 |
| 3 | $6.67 | 14,001-19,000 |
| 4 | $7.35 | 19,001-24,000 |
| 5 | $8.80 | 24,001-29,000 |
| 6 | $10.87 | 29,001 and above |
| Water Meter Prices: | Cost plus 10% | 5/8 inch meter |
| | Cost plus 10% | 3/4 inch meter |
| | Cost plus 10% | 1 inch meter |
| | Cost plus 10% | 1 1/2 inch meter |
| Water Meter Adapter Prices: | $13.00 | small |
| | $17.00 | large |
| Water Shut Off Fee | $65.00 | |
| Water Reconnect Fee | $65.00 | |
| Fire Hydrant Meter | $45.50 | $80 per month |

| | | |
|---|---|---|
| Hydrant Connection Fee | $32.50 | plus $1,000 deposit (meter price) for commercial use |
| Hydrant Water Fee | $65.00 | per 1,000 gallons |
| Compost | $30.00 | |
| Compost per Pick-up truck load | $30.00 | |
| Septic Tank Sludge, sanitary tanks | $40.00 | plus $0.25 per gallon (emergencies only) |
| RV Septic Tank Dump | $15.00 | |
| RV Water Tank Fill | $7.00 | |
| Non-potable Water Truck Fill Station | $13.00 | per truck fill |
| Watershed Permit | $130.00 | |
| Pretreatment Application Fee | $46.86 | |
| Compulsory Refuse Collection Fee | $28.97 | Effective 1/1/2025 - 9/21/2025; replaced via fees below |
| | | |
| Residential Refuse/Recycling Service Fee: | | Billed by the Town; Effective 9/22/2025; Res. No. 21, Series 2025 |
| 32 Gallon Refuse/96 Gallon Recycling | $24.62 | Monthly |
| 64 Gallon Refuse/96 Gallon Recycling | $27.23 | Monthly |
| 96 Gallon Refuse/96 Gallon Recycling | $40.56 | Monthly |
| | | |
| Residential Refuse/Recycling Fees | | Billed by Waste Mgt; Effective 9/22/2025; Res. No. 21, Series 2025 |
| Refuse Container Size Change | $25.00 | Post-SAYT Program implementation; annually in August |
| Lost/Stolen/Damaged Container Replacement | $250.00 | |
| Container Content Overage | $30.05 | |
| Container Content Contamination | $5.96 | |
| Bulky Pick-up | $50.00 | |
| Extra Bags | $6.00 | Per Bag |
| Additional 96 Gallon Refuse Service Fee | $21.38 | Monthly, in addition to existing 96 Gallon Refuse Service |
| Additional 96 Gallon Recycling Service Fee | $9.00 | Monthly, in addition to existing 96 Gallon Recycling Service |

# City of Gunnison City Council Agenda

**Regular Session**
**Tuesday, August 12, 2025 at 5:30pm**
Council meeting is held at City Hall, 201 West Virginia Avenue, Gunnison, Colorado 2nd floor Council Chambers with Zoom remote access.
Approximate meeting time: 120 minutes

*The public may attend this City Council meeting in-person or via Zoom with phone or computer access. For remote access please use Zoom Registration.*

## I. Presiding Officer Calls Regular Session to Order (silent roll call)

## II. Announcements

Background: Council and/or City Staff may give announcements related to upcoming City events, projects, or acknowledgements.
Staff Contact: Council and City Staff
Public Comment: not applicable.
**Action Requested of Council:** No action requested; updates only.
Estimated Time: 10 minutes

## III. Western Colorado University Liaison Announcements

Background: During the academic year, the Western Colorado University Liaison may give announcements related to upcoming University events and programs.
Public Comment: not applicable.
**Action Requested of Council:** No action requested; updates only.
Estimated Time: 5 minutes

## IV. Public Input

At this time, members of the public may provide comments to Council in English or Spanish on topics that are not on the agenda. Any questions will be received as comments and potentially responded to by the appropriate staff or Council member, following the meeting. Per Colorado Open Meetings Law, no Council discussion or action will take place until a later date, unless an emergency situation is deemed to exist by the City Attorney. Each speaker has a time limit of 3 minutes to facilitate efficiency in the conduct of the meeting and to allow an equal opportunity for everyone wishing to speak.

## V. Consent Agenda

None.

## VI. Proclamations, Recognitions, and Appointments

None.

## VII. Old Business

### A. Update: On-Street Parking

Background: On December 10, 2024, City Council received a presentation regarding on-street parking and current challenges. Multiple public open houses were conducted to provide an opportunity for direct community input. Additionally, a public survey was issued to provided to capture feedback. This update will detail the results of those engagement efforts and conceptually propose possible options for modifying the City's current code to address the concerns.
Staff Contact: Amanda Wilson, City Manager
Public Comment: not applicable.
**Actions Requested of Council:** No action requested; discussion only.
Estimated time: 30 minutes

### B. Ordinance No. 3, Series 2025, First Reading: *An Ordinance of the City Council of the City of Gunnison, Colorado, Repealing and Reenacting Chapter 8.40 of the City of Gunnison Municipal Code*

Background: The City of Gunnison's current liquor code requires revisions and updates to further enhance the City's operational performance. A draft of refined regulations and established procedures to clearly define license requirements, the application process, and the findings needed by Council, acting as the Local Licensing Authority, to make informed licensing decisions was presented at the June 8, 2025, Regular Session. Council input was received and revisions made to the update City of Gunnison Beer and Liquor Regulations and Procedures.
Staff Contact: Erica Boucher, City Clerk
Public Comment: limited to three minutes per speaker
**Action Requested of Council:** 1) Introduce Ordinance No. 3, Series 2025, and read the ordinance by Title only; and 2) Consider a motion to adopt Ordinance No. 3, series 2025 on first reading and order to be published.
Estimated time: 15 minutes

## VIII. New Business

### A. Authorization to Purchase Police Vehicle

Background: The proposed purchase will replace a 14-year-old Ford Explorer and offer an opportunity to evaluate the practicality and effectiveness of a pickup truck for police use in Gunnison.
Staff Contact: Sam Costello, Chief of Police
Public Comment: limited to three minutes per speaker
**Actions Requested of Council:** Consider a motion to authorize the City Manager to proceed with executing a purchase order for one 2025 F-150 from Silsbee Ford for police use in the total amount of $73,158.25.
Estimated time: 5 minutes

**B. Ordinance No. 4, Series 2025, First Reading:** *An Ordinance of the City Council of the City of Gunnison Amending Provisions of Title 2 Administration and Operations, Chapter 2.80 Building Board of Appeals and Title 14 Technical Codes, Chapter 14.10 Building Code*

Background: The City of Gunnison adopts by reference nine International Codes (ICodes) related to real property improvements and repairs collectively referred to as the Building Code contained in Chapter 14.10 of the Gunnison Municipal Code (GMC). Appeals to the actions of the Building Official are currently heard by the Building Board of Appeals. Proposed amendments to the current code would restructure the appeals process and dissolve the Board of Appeals to align to better align with industry practice.
Staff Contact: Anton Sinkewich, Community Development Director
Public Comment: limited to three minutes per speaker
**Action Requested of Council:** 1) Introduce Ordinance No. 4, Series 2025, and read the ordinance by Title only; and 2) Consider a motion to adopt Ordinance No. 4, series 2025 on first reading and order to be published.
Estimated Time: 20 minutes

**C. Impact Fees for Gunnison Valley Regional Transportation Authority (RTA)**

Background: The City of Gunnison is party to an Intergovernmental Agreement with other regional jurisdictions in support of the RTA. At the June 20, 2025 RTA Board Regular Session, discussion resulted in the recommendation for each jurisdiction to consider imposing impact fee(s) for future development on behalf of the RTA to support related transit infrastructure.
Staff Contact: Amanda Wilson, City Manager
Public Comment: not applicable
**Action Requested of Council:** No action requested; discussion only.
Estimated Time: 15 minutes

## IX. Regular Session Meeting Adjournment

The City Council Meeting agenda is subject to change. The City Manager and City Attorney reports may include administrative items not listed. Regular Meetings and Special Meetings are recorded. Meeting minutes are posted at City Hall and on the City website within 10 business days following the meeting at www.gunnisonco.gov. Work sessions are recorded however minutes are not produced. For further information, contact the City Clerk's office at 970-641-8140.

**TO REQUEST INTERPRETATION SERVICES OR TO COMPLY WITH ADA REGULATIONS, PEOPLE WITH SPECIAL NEEDS ARE REQUESTED TO CONTACT THE CITY CLERK 48 HOURS BEFORE ALL MEETINGS AT 970.641.8140.**

City of Gunnison City Council meeting video recordings can be viewed at City of Gunnison Colorado - YouTube City of Gunnison

City Council official audio recordings and publicly noticed meetings minutes can be viewed at www.gunnisonco.gov

**GUNNISON COUNTY BOARD OF COMMISSIONERS**
**REGULAR MEETING AGENDA – REVISION #1**

**DATE:** **Tuesday, August 5, 2025** 
**PLACE:** **Board of County Commissioners' Meeting Room at the Gunnison County Courthouse (REMOTE OPTION BELOW)**

**GUNNISON COUNTY LOCAL LIQUOR LICENSING AUTHORITY MEETING:**

8:30 am

- Call to Order

- Consent Agenda: These items will not be discussed unless requested by a Commissioner or citizen. Items removed from consent agenda for discussion may be rescheduled later in this meeting, or at a future meeting.
    1. Alcohol Beverage License #07-74205-0002; Crested Butte LLC dba Ice Bar/Rest Twister Warming Hse; 7/15/2025 to 7/15/2026
    2. Alcohol Beverage License #26-54026-0000; Black Mesa Lodge LLC dba Black Mesa Lodge; 9/6/2025 to 9/6/2026
    3. Alcohol Beverage License #26-34997-0000; Tre Amici Corp dba Garlic Mike's; 9/14/2025 to 9/14/2026
    4. Alcohol Beverage License #03-20000; Red White & Booze LLC dba Red Mountain Liquors; 10/22/2025 to 10/22/2026
    5. Alcohol Beverage License #05-29384-0002; Crested Butte Nordic Council dba CBNC Magic Meadows Yurt; 9/15/2025 to 9/15/2026
    6. Special Event Liquor Permit #5-2025; Arrowhead Volunteer Fire Department; 8/10/2025 from 1:30 pm to 5:30 pm

- Adjourn

**GUNNISON COUNTY BOARD OF COUNTY COMMISSIONERS REGULAR MEETING:**

8:32 am

- Call to Order; Agenda Review

- Minutes Approval
    1. July 15, 2025 Regular Meeting
    2. July 22, 2025 Special Meeting

- Scheduling

- Consent Agenda: These items will not be discussed unless requested by a Commissioner or citizen. Items removed from consent agenda for discussion may be rescheduled later in this meeting, or at a future meeting.
    1. Small Dollar Grant Award; Emergency Management Performance Grants (EMPG); Department of Public Safety; Emergency Management; 1/1/2025 to 9/30/2025; $48,181
    2. Engagement Letter for Arbitrage Compliance Services; Arbitrage Compliance Specialists; Finance; 6/17/2025 to 6/17/2025; $2,875
    3. Public Service Grant Agreement; Memorandum of Agreement; City of Gunnison; Health and Human Services; 1/1/2025 to 12/31/2025; $7,500
    4. Acknowledgment of County Manager's Signature; Contract Amendment #2; 2025*0120; Health and Human Services; 8/1/2025 to 6/30/2025; $32,544
    5. Facilities Rental Agreement; Queen of all Saints Catholic Church; Health and Human Services; 10/9/2025 from 1:30 pm to 6:30 pm; $1,050
    6. Professional Services Agreement; Robert Whiting; Juvenile Services; 8/5/2025 to 8/30/2026; $50,800
    7. Acknowledgment of County Manager's Signature; Independent Contractor Agreement; Colorado Perinatal Care Quality Collaborative (CPCQC); 22 IHJA 171516; Health and Human Services; 7/1/2025 to 6/30/2026; $110,000
    8. Memorandum of Understanding between partners in support of the Gunnison Basin Cheatgrass Implementation Project; Rocky Mountain Bird Observatory dba Bird Conservancy of the Rockies and U.S. Fish and Wildlife Service; Finance; 7/31/2025 to 7/31/2027

9. Concession, Lease, and Operating Agreement for a Non-Exclusive On-Airport Automobile Rental Concession at Gunnison-Crested Butte Regional Airport; Avis Rent A Car Systems, LLC; Airport; 6/1/2025 to 5/31/2028
10. Concession, Lease, and Operating Agreement for a Non-Exclusive On-Airport Automobile Rental Concession at Gunnison-Crested Butte Regional Airport; Budget Rent A Car Systems Inc.; Airport; 6/1/2025 to 5/31/2028
11. Proposal; Physical Evidence Platform Solution; FileOnQ; Sheriff's Office; $6,800 first year, $5715 after
12. **CORRECTED -** Professional Services Agreement; AML Peer and Mental Health Support; Juvenile Services; 8/5/225 to 7/31/2026; $15,000
13. Professional Services Agreement; Pinnacle Insight LLC; Juvenile Services; 9/1/2025 to 8/30/2026; $4,200
14. Professional Services Agreement; Willow Bay Counseling LLC; Juvenile Services; 9/1/2025 to 8/30/2026; $4,200
15. Funding Agreement & Request for Payment; Gunnison County Metropolitan Recreation District; Health and Human Services; Gunnison Hinsdale Early Childhood Council; 6/1/2025 to 4/31/2026; $10,000
16. Participation Form; National Opioid Settlements; CL-1730875; Purdue

8:35 am

- County Manager's Reports

8:40 am

- Acceptance of County Treasurer/Public Trustee Resignation

8:50 am

- Land Use Change Applications:
    1. Lot Cluster; LUC-24-00032; Alan Powell
    2. Lot Cluster; LUC-24-00061; 60 & 90 Mystery Lane
    3. Discount Storage Expansion of Commercial Use, Major Impact, Preliminary and Final Plan Review; LUC-23-00032; A Resolution Approving LUC-23-00032, A Land Use Change Permit Application for Preliminary and Final Plan Review of a Major Impact Land Use Change for an Expansion of Commercial Use at Discount (aka Centennial) Storage on the Parcel of Land Commonly Known as Parcel No. 3701-250-06-008, 825 State Highway 135, Gunnison, Colorado; Legally Described as Lot 3, Flying Ranch Subdivision, According to the Plat Filed September 17, 2019 at Reception No. 662373, County Of Gunnison, Colorado

9:30 am

- Unscheduled Public Comment: Limit to 5 minutes per item. No formal action can be taken at this meeting.
- Commissioner Items: Commissioners will discuss among themselves activities that they have recently participated in that they believe other Commissioners and/or members of the public may be interested in hearing about.
- Adjourn

Please Note: Packet materials for the above discussions will be available on the Gunnison County website at http://www.gunnisoncounty.org/meetings prior to the meeting.

**ZOOM MEETING DETAILS:**
Join Zoom Meeting: https://gunnisoncounty-org.zoom.us/j/89798905619
One tap mobile
+12532158782,,82753657556#,,,,*471302# US (Tacoma)
+13462487799,,82753657556#,,,,*471302# US (Houston)

*NOTE: This agenda is subject to change, including the addition of items up to 24 hours in advance or the deletion of items at any time. All times are approximate. The County Manager and Deputy County Manager's reports may include administrative items not listed. Regular Meetings, Public Hearings, and Special Meetings are recorded and **ACTION MAY BE TAKEN ON ANY ITEM.** Work Sessions are not recorded and formal action cannot be taken. For further information, contact the County Administration office at 641-0248. If special accommodations are necessary per ADA, contact 641-0248 or TTY 641-3061 prior to the meeting.*

**GUNNISON COUNTY BOARD OF COMMISSIONERS**
**WORK SESSION MEETING AGENDA**

**DATE:** **Tuesday, August 12, 2025** 
**PLACE:** **Board of County Commissioners' Meeting Room at the Gunnison County Courthouse (REMOTE OPTION BELOW)**

8:30 am

- HB 1177 Roundtable Update

8:35 am

- Upper Gunnison River Water Conservancy District Update

9:00 am

- Blue Mesa Reservoir Harmful Algal Bloom (HABs) Study Research Findings

9:30 am

- Colorado River Negotiations and Potential 2026 Emergency Drought Release from Blue Mesa Status Update with Colorado River Commissioner Rebecca Mitchell and Section Chief of Interstate, Federal, and Water Information Section at Colorado Water Conservation Board Amy Ostdiek

- Adjourn

Please Note: Packet materials for the above discussions will be available on the Gunnison County website at http://www.gunnisoncounty.org/meetings prior to the meeting.

**ZOOM MEETING DETAILS:**
Join Zoom Meeting: https://gunnisoncounty-org.zoom.us/j/89798905619
One tap mobile
+12532158782,,82753657556#,,,,*471302# US (Tacoma)
+13462487799,,82753657556#,,,,*471302# US (Houston)

*NOTE: This agenda is subject to change, including the addition of items up to 24 hours in advance or the deletion of items at any time. All times are approximate. The County Manager and Deputy County Manager's reports may include administrative items not listed. Regular Meetings, Public Hearings, and Special Meetings are recorded and **ACTION MAY BE TAKEN ON ANY ITEM.** Work Sessions are not recorded and formal action cannot be taken. For further information, contact the County Administration office at 641-0248. If special accommodations are necessary per ADA, contact 641-0248 or TTY 641-3061 prior to the meeting.*

**From:** Dara MacDonald
**To:** Town Council
**Cc:** Karl J. Hanlon
**Subject:** FW: next weeks meeting
**Date:** Thursday, July 31, 2025 11:45:33 AM

---

Council members,

See below for public comment from Peter Cook.

Dara MacDonald
Town Manager
(970) 349-5338 ext. 102

---

**From:** Acme Liquor <acmeliquorstore@gmail.com>
**Sent:** Monday, July 28, 2025 2:57 PM
**To:** Ian Billick <ibillick@crestedbutte-co.gov>
**Subject:** next weeks meeting

Hi Mr. Billick, I am Peter Cook from Acme Liquor. I see there is a liquor license issue with Clark's on the docket for next week. I am very interested in this matter as a competitor who believes they were unjustly granted a license to begin with and that it should be revoked or at least suspended for 1 year.

Historically, Clarks had a 3.2% beer license. They gave that up when full beer became legal to sell in liquor stores on Sundays (circa 2008??). For several years they did not have a 3.2% beer license. When the state changed things in 2016?, they hurried up and applied for the 3.2% beer license so that they could be grandfathered into carrying full strength beer. At the time of their license hearing, they promised CB Town council that it was not after the grandfathering, but would carry 3.2% beer immediately. THEY NEVER CARRIED A DROP OF 3.2% beer, they just grabbed the grandfathered license. Thus, they long ago established a precedent for being dishonest with the Crested Butte Town Council. Shame on CB Town council for allowing this along with a several hundred signature petition against the granting of their license - The council at the time absolutely went against the desires of the neighborhood!

Retail Liquor Licenses in Colorado are to be granted, revoked, and enforced by the local liquor division, which in our town IS the Crested Butte Town Council. The council is to grant, suspend, repail, revoke, etc. retail liquor licenses based on "the desires of the neighborhood." The last time the voice of the neighborhood was completely ignored by the Town Council.

Knowing that in the state of Colorado, Liquor licenses are issued based on the neighborhood desires, it is my opinion that Clark's Market liquor license in CB cannot be judged upon either way until we know the true desire of the neighborhood. I am proposing that any decision on this matter be postponed 1 month under which time period petitioning of "the neighborhood" desires. It is my opinion that you cannot legally or morally make a decision without such a process, and the definition of "neighborhood" needs to be established in our case - does this include Mt. CB, Skyland, Riverland and CB South, or just CB?

Thank you for considering a full revocation and or suspension of Clark's Market after the neighborhood's desires are effectively established. A postponement for a month should suffice.

Please share with the other members of the Council and this should all be discussed with the CB Town lawyer and manager.

Sincerely,

*Peter Cook*
*Owner*
*ACME Liquor Store*
*970-349-5709*
*Physical Address:*
*510 Belleview Ave*
*Crested Butte, CO 81224*
*Mailing Address:*
*308 S. Colorado St.*
*Gunnison, CO 81230*

**From:** aaron tomcat
**To:** Town Council
**Subject:** Clark's Liquor license
**Date:** Tuesday, August 5, 2025 4:02:30 PM

---

[Some people who received this message don't often get email from tomcaka@gmail.com. Learn why this is important at https://aka.ms/LearnAboutSenderIdentification ]

Hello Council

I am writing to share some thoughts on Clark's Liquor license hearing. I see this as a good opportunity to revoke their license. This is a classic example of why the state and municipalities have been so regulated since prohibition. They either don't know the rules or intentionally tried to cover themselves.

As a liquor store owner for the last 21 years I am very well aware of the regulations needed in order to run a safe business that does not allow underage people purchasing alcohol. All my employees must be trained and at least 21 years of age. Clark's only requires 18 for checkout workers. I stand by my 21 years of a violation free business. How long did it take Clark's?

I also believe if Clark's had less space taken up by beer and wine there would be more food options. This would allow more selection and perhaps more locals shopping at Clark's instead of driving down to Gunnison preventing precious sales tax to leave.

When the wine in grocery store vote took place Gunnison County voters were firmly against the law. Montrose in the last year denied an application for City Market to take over the liquor license of their next door neighbor Corks even after City Market purchased the license.

These are just a few arguments I have. I understand this will probably be discussed during your September session. I look forward to a discussion with you in person.

Thank you for your time and service.
Aaron Tomcak
Mountain Spirits Liquors
Sent from my iPhone