# **Question 23. SUPPLEMENTAL INFORMATION UPLOAD**

- Narrative Annual Report Provides detail to answers on annual report questions.
- 2018 Tailing Storage Facility Evaluation Letter from AECOM
- 2018 1 Dam Horizontal Drain As-Built Drawing
- Weed Control Data Tables

Annual Report – 2018 Climax Molybdenum Company - Climax Mine Highway 91 – Fremont Pass Climax, Colorado 80429 Permit No. M-1977-493

According to C.R.S. 34-32-116, each year, on the anniversary date of the permit, an operator shall submit the annual fee, an annual report and map showing the extent of current disturbances to affected land, required monitoring information, reclamation accomplished to date and during the preceding year, any new disturbance that is anticipated to occur during the upcoming year, the dates for the beginning of active operations, and the date active operations ceased for the year.

The 2018 Annual Report for Climax Mine (Climax) follows the format of the questionnaire that is posted on the Division of Reclamation, Mining and Safety's (DRMS) Minerals Reclamation Permit Annual Report webpage. Climax's responses to the questionnaire are provided below. Other supporting documentation including reclamation maps, environmental monitoring data, weed control, and tailing storage facility stability information are included in the upload sections of questions 21, 22, and 23.

Climax Responses to DRMS Annual Report Questionnaire

- 1. Yes. There is an identification sign posted on the east facing wall of the Climax main gate house that is visible from the entrance road.
- 2. Yes. Although boundaries are not marked in remote areas that are generally inaccessible due to the rugged terrain of the site, property boundaries at potential public access points are marked with Do Not Enter and No Trespassing signs. The Climax affected land boundaries also are clearly delineated on publically available maps distributed with the AM-06 application; Climax believes that signage at public access points together with the AM-06 maps meet the intent of Rule 3.1.12(2) and (3).
- 3. No. Climax is not in final reclamation.
- 4. Excavation, hauling, processing, and tailing deposition activities are currently ongoing at Climax. The Annual report form requires a date in the field, so the anniversary date is displayed here (3/4/19)
- 5. Climax operates more than 180 days per year.
- 6. No. Climax has neither requested, nor been granted, approval for Temporary Cessation or Intermittent Operation during the reporting year.
- 7. No. Climax has neither requested, nor been granted, approval for Temporary Cessation or Intermittent Operation during the reporting year.

- 8. There are 4,120.7 acres of currently affected land, including mining and incomplete and/or unreleased reclamation. Climax is permitted for 7,908 acres within the AM-06 affected land boundary.
- 9. Climax has 20.9 acres of newly affected land for the current (2018) report year.
- 10. Climax did reclaim 8.75 acres of affected land during the current (2018) report year. Climax completed Phase I of the Lake Irwin mitigation on Robinson Tailings Storage Facility as approved in TR-26
- 11. Climax estimates that up to 60 acres may become affected in the next (2019) report year.
- 12. Climax does not anticipate any new reclamation occurring in the next (2019) report year. Areas where there is reclamation in progress will remain as indicated in question 13 below. These areas include Robinson TSF, 1 Dam, 2 Dam, areas surrounding Robinson Lake, and areas north of 3 Dam.
- 13. The total acres in various stages of reclamation (not counting the 550.7 acres of bond released reclamation) since permitted mining activities began are as follows:
  - a. Total acres backfilled: NA all reclamation earth-work consists of regrading.
  - b. Total acres graded: 798.6
  - c. Total acres seeded with approved mix: 545.05. In 2018, 8.75 acres were reclaimed for the Lake Irwin constructed wetland. While these fall under the category of "seeded", the area was planted with willow and herbaceous plants.
  - d. Seed Application Method: Hydroseeding for slopes > 50%, Broadcast for all other areas.
  - e. Total acres fertilized with approved fertilizer: 430.0
  - f. Fertilizer application method: Incorporation of Composted Biosolids or Hydroseeder. The annual report form only allows for one entry, so "tractor spreader" is used to describe Incorporation of Composted Biosolids.
  - g. Total acres with topsoil replaced: 110.45
  - h. Topsoil replacement depth: 6 12 inches
  - i. Total acres mulched with approved mulch: 87.6
  - j. Mulch application rate: 1 ton per acre
  - k. Mulch application method: Hydroseeder
- 14. Yes. Weed control was conducted in accordance with the Weed Control Plan submitted in Amendment AM-06 and the weed species and control types are found on the maps

uploaded in question 22. A weed control information narrative is provided in the supplemental information upload section.

- 15. Yes. As described in Amendment AM-06, adequate topsoil for reclamation has been identified/reserved within the affected land boundary. However, not all available cover material has been stripped and stockpiled. Climax has been segregating and stockpiling topsoil since 1979 based on areas of disturbance associated with mining activities. Although current soil stockpiles do not currently meet final reclamation needs, soil from future disturbed areas will continue to be stockpiled and Climax will utilize its biosolids composting operation to generate additional nutrient-rich topsoil amendment.
- 16. Yes. Stockpiled topsoil has been vegetated and stabilized.
- 17. N/A. Mining activities have not exposed groundwater.
- 18. Yes. All hazardous materials at Climax are stored within approved spill containment structures.
- 19. Yes. The financial warranty approved with AM-06 is sufficient to cover the cost to complete reclamation.
- 20. Yes. Climax's basis for legal right to enter (as described in AM-06) is still valid.
- 21. Yes. Annual monitoring information is uploaded in question 21. A narrative statement is included as a cover page with the results of groundwater and surface water monitoring in 2018.
- 22. Climax has prepared several maps depicting the permit boundary, current affected area boundary and locations of the acreages specified in items 7 12. The maps included in Appendix 2 attached to this report are as follows:
  - a. Map 1 Depicts the permit boundary, current affected area boundary, the acreage currently affected, the acreage that was newly affected in the reporting year.
  - b. Map 2 Depicts the total acreage that has been reclaimed, and the acreage where reclamation is in progress.
  - c. Map 3 Depicts the acreage where reclamation is in progress that has been graded and/or covered with topsoil.
  - d. Map 4 Depicts the acreage where reclamation is in progress that has been seeded, mulched, or fertilized.
- 23. Information included in this section: This narrative, 2018 annual TSF evaluation letter from AECOM, 2018 1-Dam Horizontal Drain as-builts, and Weed Control information and tables.
- 24. Climax has not drilled any exploration/prospecting holes that have produced artesian flow.



AECOM 6200 S Quebec St Greenwood Village, CO 80111 www.aecom.com 303-694 2770tel303 694 3946fax

February 5, 2019

Mr. Raymond Lazuk Environmental Manager Climax Molybdenum Company- Climax Mine Highway 91 – Fremont Pass Climax, CO 80429

Subject: DRMS Annual (Year 2018) Tailings Storage Facility Evaluation, Tenmile and Mayflower Tailings Storage Facilities, Climax Mine, Permit No. M-1977-493

Dear Mr. Lazuk:

AECOM, through its legacy company URS Corporation, serves as the Engineer of Record (EOR) for the Tenmile and Mayflower Tailings Storage Facilitates (TSF) at the Climax Mine, located near Fremont Pass Colorado. AECOM has prepared this summary of our Annual (2018) TSF Evaluation as required by Section 6 of the Mayflower TSF Operations and Maintenance Manual (OMM) and as stated in the response letter dated June 23, 2014 from Climax Molydenum Company to the Division of Reclamation, Mining, and Safety (DRMS):

DRMS initially requested that the annual TSF inspection/evaluation/certification report be submitted to DRMS within 30 working days of the inspection. Climax has requested that the report be included with the standard annual report for the site. DRMS will allow the submittal of the TSF certification report with the other annual report if Climax will commit to notifying DRMS within 30 days of the inspection (or sooner if possible) of any issues identified in the inspection report that require corrective actions or modification to the existing approved TSF plans.

It is our understanding you will include this annual letter to DRMS in compliance with your other annual reporting. Presented below is a summary of key observations made during 2018.

Majority of the tailings deposition occurred at the Mayflower TSF in 2018. Deposition through the leadoffs or cutouts at Mayflower TSF occurred in January thru May and in September, November and December. Spigot deposition at Mayflower TSF occurred from May 31 thru November 8. A ten-day leadoff deposition campaign occurred at the Tenmile TSF in November. Otherwise, there was no spigot deposition or other leadoff or cutout deposition campaigns at Tenmile TSF in 2018.

AECOM completed monthly site inspections of the active TSF(s) from June to October 2018. Personnel from DRMS participated in one of these reviews on August 15. The reviews included meeting with operations personnel and reviewing production and operational logistics, operational plans, tailings management challenges, and future plans for operating the dams. Our site visits included reviewing tailings dam instrumentation, specifically reviewing piezometric elevations. We also completed a monthly walking tour of the dam observing the active and inactive tailings beach, dam crest, abutments, downstream slope, and toe area. We also conducted a review of the horizontal and foundation drain outfalls, as accessible and applicable.



Mr. Raymond Lazuk Climax Molybdenum Company February 5, 2019 Page 2

Monitoring of the Mayflower Seepwater pipeline leak, identified in September 2017, continues as part of the daily site observations and AECOMs monthly review. As stated with the notification Climax provided in 2017, the pipeline leak had no impacts on 5 Dam stability, either currently or in the foreseeable future. No significant issues were identified in 2018 during the EOR site visits that required notification to the DRMS by Climax. Any maintenance issues during the EOR site visits were discussed with the Climax tailings operations staff and corrective action plans were developed and implemented.

The Tenmile and Mayflower TSFs appear to be functioning as designed and within the established design criteria. This judgment is based on observations made during site visits, as well as information provided and reported by Climax tailings operations staff such as deposition quantity, water surface elevations, and other parameters.

The remote monitoring system provides continuous monitoring of piezometric elevations. The system incorporates alarms based on piezometric elevation changes identified as either rate of change or threshold elevations. Rate of change alarms are triggered when predetermined elevation changes occur over a prescribed period of time. Action levels and threshold elevations are specific to individual piezometers. Threshold levels are established based on the results of slope stability analyses and provide redundant warnings should piezometric elevations rise above prescribed predetermined elevations. The monitoring system triggers alarms requiring immediate review.

AECOM reviews the piezometric data monthly on both the Tenmile and Mayflower TSFs. Piezometers levels are tracking in accordance with the design. AECOM reviewed the annual movement monument and inclinometer data and found movement within the tolerance expected.

Continued diligence in monitoring embankment construction, decant pond levels, and instrumentation is essential to long term safety and performance of the structure. Correct operation of the tailings storage facility is essential and it is incumbent upon Climax to maintain proper training and personnel. AECOM will continue to work with the Climax team to monitor the performance of the TSFs.

AECOM represents that our services are performed within the limits prescribed by the Client in a manner consistent with the level and skill ordinarily exercised by other consultants under similar circumstances. No representation to the Client, expressed or implied, and no other warranty or guarantee is included or intended.

Please do not hesitate to call us with any questions or comments.

Sincerely,

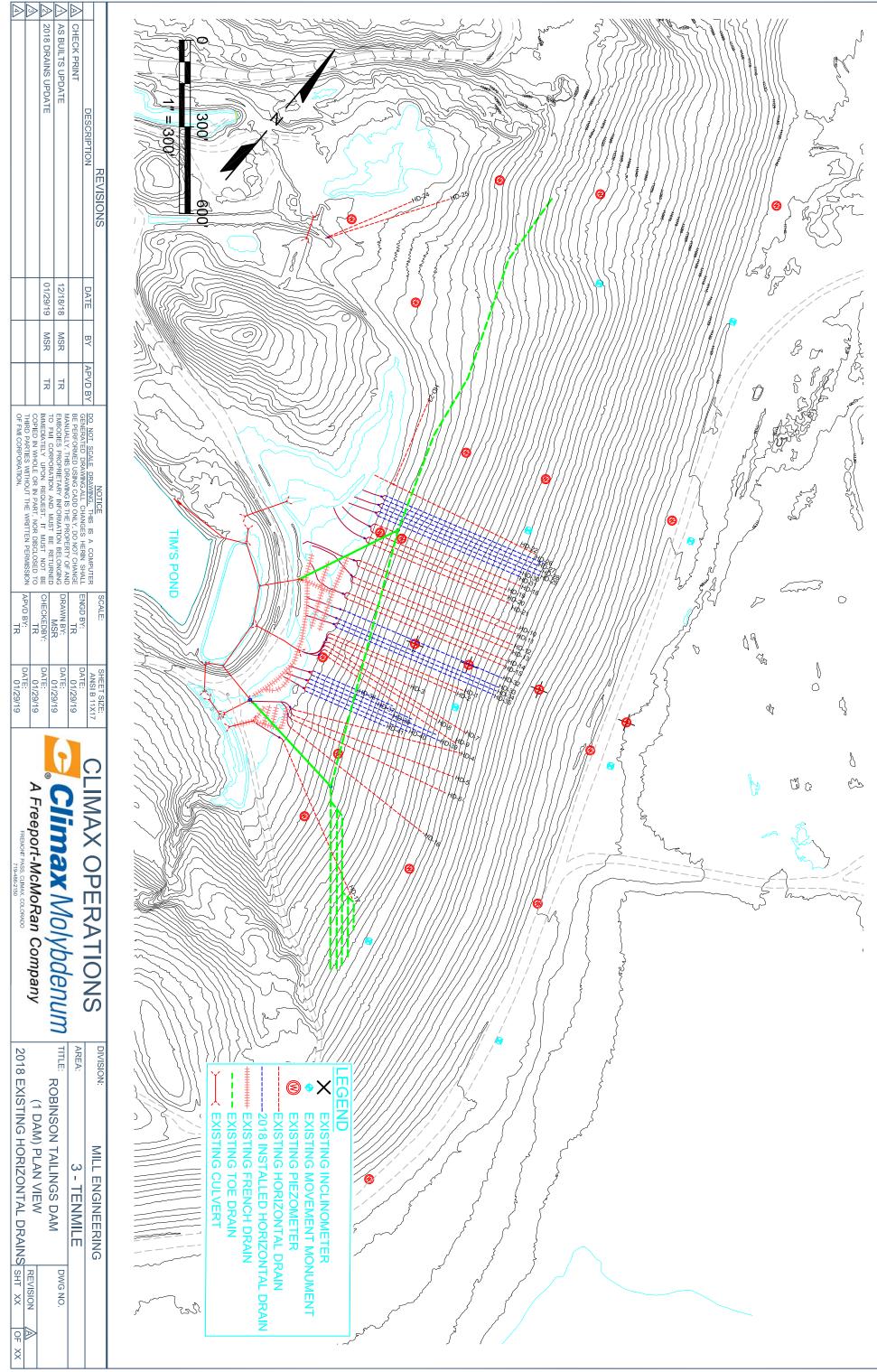
Yen

Lisa R. Yenne, PE Project Manager

Kilkal

Richard R. Davidson, PE Senior Principal Engineer

M:\DCS\RESOURCES\WTR\MINING\CLIMAX GENERAL INFORMATION\DRMS ANNUAL REPORT\2018\2018 TSF ANNUAL REVIEW\_REV 0.DOCX



G:\ENGINEERING- R. Valentine\2018 Projects\Horizontal Drains\_2018\04-Technical\Existing 1 Dam HDs.DWG mrahl1 1/29/2019 10:54AM

Commercial Herbicide Applicator (CO #11318)

Herbicide Application Record



Location: Climax Mine County: Summit\_

PDWTP & Lower Mayflower

Date: 7/9/2018 10:26 AM to 4:00 PM

Customer: Climax Mine and Mill Hwy 91 Leadville, CO 80461

Qualified Supervisor: Matt Clark #29724

Applicators: Matt Clark, Joe Bakker, Collin Jones

Weather: Sunny 682 degrees F. Wind: 2 mph out of NW

Site/Crop: Reclamation/Revegetation Area

**Target Plants:** Oxeye daisy - Leucanthemum vulgare - List B, Thistle, Canada - Cirsium arvense - List B, Toadflax, Yellow-Linaria vulgaris - List B

Application Equipment: Orange Kubota #3 Application Method: Spot-Spraying Carrier: Water

Herbicide Applied	Application Rate	<b>Total Amount Applied</b>	Dilution Rate
Escort XP - 352439 - Metsulfuron Methyl	1.5 fl oz per acre	0.75 fl oz	0.04 fl oz per gallon
Induce - Adjuvant	10 fl oz per acre	5 fl oz	0.25 fl oz per gallon
Spray Indicator - Blue Dye	12 fl oz per acre	6 fl oz	0.30 fl oz per gallon

Total Application: 0.5 acre

**Application Notes:** 

# NPDES COMPLIANCE (Only Applicable to Aquatic Sites)

Aquatic site: No

Use Pattern: Weeds and Algae

Is equipment properly calibrated?

Did you conduct visual monitoring for adverse incidents?

Commercial Herbicide Applicator (CO #11318)

Herbicide Application Record



Location: Climax Mine County: Summit\_

Lower & Upper Mayflower East Side, Ten Mile East Intercepter

Date: 7/10/2018 6:11 AM to 2:22 PM

Customer: Climax Mine and Mill Hwy 91 Leadville, CO 80461

Qualified Supervisor: Matt Clark #29724

Applicators: Matt Clark, Joe Bakker, Collin Jones

Weather: Clear 46 degrees F. Wind: 2 mph out of NW

Site/Crop: Reclamation/Revegetation Area

**Target Plants:** Oxeye daisy - Leucanthemum vulgare - List B, Thistle, Canada - Cirsium arvense - List B, Toadflax, Yellow-Linaria vulgaris - List B

#### Application Equipment: Orange Kubota #3 Application Method: Spot-Spraying Carrier: Water

Herbicide Applied	Application Rate	Total Amount Applied	Dilution Rate
Induce - Adjuvant	10 fl oz per acre	5 fl oz	0.25 fl oz per gallon
Escort XP - 352439 - Metsulfuron Methyl	1.5 Oz (weight) per acre	0.75 Oz (weight)	0.04 Oz (weight) per gallon
Spray Indicator - Blue Dye	12 fl oz per acre	6 fl oz	0.30 fl oz per gallon

Total Application: 0.5 acre

Application Notes: Treated lower and upper Mayflower utility road corridors and burms.

# NPDES COMPLIANCE (Only Applicable to Aquatic Sites)

Aquatic site: No

Use Pattern: Weeds and Algae

Is equipment properly calibrated?

Did you conduct visual monitoring for adverse incidents?

Commercial Herbicide Applicator (CO #11318)

Herbicide Application Record



#### Location: Climax Mine County: Summit & Eagle

Robinson Dam, Eagle Reservoir, Chalk Mountain Reservoir, 1 Dam

Date: 7/11/2018 6:02 AM to 2:11 PM

Customer: Climax Mine and Mill Hwy 91 Leadville, CO 80461

Qualified Supervisor: Matt Clark #29724

Applicators: Matt Clark, Joe Bakker, Collin Jones

Weather: Clear 46 degrees F. Wind: 2 mph out of NE

Site/Crop: Reclamation/Revegetation Area

**Target Plants:** Oxeye daisy - Leucanthemum vulgare - List B, Thistle, Canada - Cirsium arvense - List B, Toadflax, Yellow-Linaria vulgaris - List B

#### Application Equipment: Orange Kubota #3 Application Method: Spot-Spraying Carrier: Water

Herbicide Applied	Application Rate	<b>Total Amount Applied</b>	Dilution Rate
Induce - Adjuvant	10 fl oz per acre	7.5 fl oz	0.25 fl oz per gallon
Spray Indicator - Blue Dye	10 fl oz per acre	7.5 fl oz	0.25 fl oz per gallon
Escort XP - 352439 - Metsulfuron Methyl	1.5 Oz (weight) per acre	1.125 Oz (weight)	0.04 Oz (weight) per gallon

Total Application: 0.75 acre

Application Notes: Treated areas below Robinson Dam. Treated areas below Eagle Reservoir and north end of 1 Dam.

# NPDES COMPLIANCE (Only Applicable to Aquatic Sites)

#### Aquatic site: No

Use Pattern: Weeds and Algae

Is equipment properly calibrated?

Did you conduct visual monitoring for adverse incidents?

Commercial Herbicide Applicator (CO #11318)

Herbicide Application Record



Location: Climax Mine County: Summit, Lake & Eagle

Robinson Tailings Pond, Billy BLVD, Arkansas River

Date: 7/12/2018 5:58 AM to 11:02 AM

Customer: Climax Mine and Mill Hwy 91 Leadville, CO 80461

Qualified Supervisor: Matt Clark #29724

Applicators: Matt Clark, Joe Bakker, Collin Jones

Weather: Partly Cloudy 45 degrees F. Wind: 2 mph out of NE

Site/Crop: Reclamation/Revegetation Area

**Target Plants:** Oxeye daisy - Leucanthemum vulgare - List B, Thistle, Canada - Cirsium arvense - List B, Toadflax, Yellow-Linaria vulgaris - List B

Application Equipment: Orange Kubota #3 Application Method: Spot-Spraying Carrier: Water

Herbicide Applied	Application Rate	Total Amount Applied	Dilution Rate
Induce - Adjuvant	10 fl oz per acre	2.5 fl oz	0.25 fl oz per gallon
Spray Indicator - Blue Dye	12 fl oz per acre	3 fl oz	0.30 fl oz per gallon
Escort XP - 352439 - Metsulfuron Methyl	1.5 fl oz per acre	0.375 fl oz	0.04 fl oz per gallon

Total Application: 0.25 acre

**Application Notes:** Treated around Robinson Tailings Pond, above the slug plant, Billy BLVD road corridor and along the Arkansas River.

# NPDES COMPLIANCE (Only Applicable to Aquatic Sites)

#### Aquatic site: No

Use Pattern: Weeds and Algae

Is equipment properly calibrated?

Did you conduct visual monitoring for adverse incidents?

Commercial Herbicide Applicator (CO #11318)

Herbicide Application Record



Location: Climax Mine County: Summit\_County\_

Robinson Dam

Date: 8/27/2018 9:18 AM to 3:00 PM

Customer: Climax Mine and Mill Hwy 91 Leadville, CO 80461

Qualified Supervisor: Matt Clark #29724

Applicators: Matt Clark, Jess Feeback, Collin Jones

Weather: Partly Cloudy 45 degrees F. Wind: 6 mph out of W

Site/Crop: Disturbed Area

Target Plants: Oxeye daisy - Leucanthemum vulgare - List B, Thistle, Canada - Cirsium arvense - List B, Toadflax, Yellow-Linaria vulgaris - List B, Mayweed chamomile - Anthemis cotula - List B, Perennial pepperweed- Lepidium latifolium- List B

Application Equipment: Orange Kubota #3 Application Method: Spot-Spraying Carrier: Water

Herbicide Applied	Application Rate	<b>Total Amount Applied</b>	Dilution Rate
Induce - Adjuvant	16 fl oz per acre	16 fl oz	0.40 fl oz per gallon
Spray Indicator - Blue Dye	12 fl oz per acre	12 fl oz	0.30 fl oz per gallon
Telar XP - 352654 - Chlorsulfuron	1.5 Oz (weight) per acre	1.5 Oz (weight)	0.04 Oz (weight) per gallon
Transline - 62719-259 - Clopyralid	10 fl oz per acre	10 fl oz	0.25 fl oz per gallon

Total Application: 1 acre

Application Notes: Treated below Robinson Dam and north end of 1 Dam. Identify perennial pepperweed.

# NPDES COMPLIANCE (Only Applicable to Aquatic Sites)

Aquatic site: No

Use Pattern: Weeds and Algae

Is equipment properly calibrated?

Did you conduct visual monitoring for adverse incidents?

Commercial Herbicide Applicator (CO #11318)

Herbicide Application Record



# Location: Climax Mine County: Summit

Lake Irwin, West Interceptor Road, PDWTP

Date: 8/28/2018 7:00 AM to 2:00 AM

Customer: Climax Mine and Mill Hwy 91 Leadville, CO 80461

Qualified Supervisor: Matt Clark #29724

Applicators: Matt Clark, Jess Feeback, Collin Jones

Weather: Sunny 40 degrees F. Wind: 1 mph out of N

Site/Crop: Reclamation/Revegetation Area

**Target Plants:** Thistle, Canada - Cirsium arvense - List B, Toadflax, Dalmatian - Linaria dalmatica/genistifolia- List B, Toadflax, Yellow- Linaria vulgaris - List B, Mayweed chamomile - Anthemis cotula - List B, Thistle, Plumeless - Carduus acanthoides - List B B

Application Equipment: Orange Kubota #3 Application Method: Spot-Spraying Carrier: Water

Herbicide Applied	Application Rate	Total Amount Applied	Dilution Rate
Telar XP - 352654 - Chlorsulfuron	1.5 fl oz per acre	0.75 fl oz	0.04 fl oz per gallon
Transline - 62719-259 - Clopyralid	10 fl oz per acre	5 fl oz	0.25 fl oz per gallon
Induce - Adjuvant	16 fl oz per acre	8 fl oz	0.40 fl oz per gallon
Spray Indicator - Blue Dye	12 fl oz per acre	6 fl oz	0.30 fl oz per gallon

Total Application: 0.5 acre

**Application Notes:** 

# NPDES COMPLIANCE (Only Applicable to Aquatic Sites)

Aquatic site: No

Use Pattern: Weeds and Algae

Is equipment properly calibrated?

Did you conduct visual monitoring for adverse incidents?

Commercial Herbicide Applicator (CO #11318)

Herbicide Application Record



Location: Climax Mine County: Lake\_County\_and\_Summit\_County

PDWTP, East Interceptor Road & Main Gate

Date: 8/29/2018 8:30 AM to 12:14 PM

Customer: Climax Mine and Mill Hwy 91 Leadville, CO 80461

Qualified Supervisor: Matt Clark #29724

Applicators: Matt Clark, Jess Feeback, Collin Jones

Weather: Sunny 50 degrees F. Wind: 10 mph out of N

Site/Crop: Disturbed Area

Target Plants: Oxeye daisy - Leucanthemum vulgare - List B, Thistle, Canada - Cirsium arvense - List B, Toadflax, Yellow-Linaria vulgaris - List B

Application Equipment: Orange Kubota #3 Application Method: Spot-Spraying Carrier: Water

Herbicide Applied	Application Rate	Total Amount Applied	Dilution Rate
Telar XP - 352654 - Chlorsulfuron	1.5 fl oz per acre	0.75 fl oz	0.04 fl oz per gallon
Transline - 62719-259 - Clopyralid	10 fl oz per acre	5 fl oz	0.25 fl oz per gallon
Induce - Adjuvant	16 fl oz per acre	8 fl oz	0.40 fl oz per gallon
Spray Indicator - Blue Dye	12 fl oz per acre	6 fl oz	0.30 fl oz per gallon

Total Application: 0.5 acre

**Application Notes:** Finished treatments around PDWTP building. Treated along East Interceptor Road including Mayflower storage yard. Treated around main gate and security office topsoil piles. Inspected energy company storage yard behind 3 Mill building, however, no noxious weeds were identified.

# NPDES COMPLIANCE (Only Applicable to Aquatic Sites)

Aquatic site: No

Use Pattern: Weeds and Algae

Is equipment properly calibrated?

Did you conduct visual monitoring for adverse incidents?

Commercial Herbicide Applicator (CO #11318)

Herbicide Application Record



Location: Climax Mine County: Summit\_County\_

PDWTP Wetland

Date: 8/29/2018 6:39 AM to 8:30 AM

Customer: Climax Mine and Mill Hwy 91 Leadville, CO 80461

Qualified Supervisor: Matt Clark #29724

Applicators: Matt Clark, Jess Feeback, Collin Jones

Weather: Sunny 40 degrees F. Wind: 2 mph out of N

Site/Crop: Wetland

Target Plants: Thistle, Canada - Cirsium arvense - List B, Toadflax, Yellow- Linaria vulgaris - List B

Application Equipment: Backpack Sprayer Application Method: Spot-Spraying Carrier: Water

Herbicide Applied	Application Rate	Total Amount Applied	Dilution Rate
Weedar_64	1.2 fl oz per gallon	3.6 fl oz	0.04 fl oz per gallon
Vastlan - 62719687 - Triclopyr	1.5 fl oz per gallon	4.5 fl oz	0.05 fl oz per gallon
Induce - Adjuvant	0.5 fl oz per gallon	1.5 fl oz	0.02 fl oz per gallon
Spray Indicator - Blue Dye	0.5 fl oz per gallon	1.5 fl oz	0.02 fl oz per gallon

Total Application: 3 gallon

**Application Notes:** 

# NPDES COMPLIANCE (Only Applicable to Aquatic Sites)

Aquatic site: No

Use Pattern: Weeds and Algae

Is equipment properly calibrated?

Did you conduct visual monitoring for adverse incidents?

Commercial Herbicide Applicator (CO #11318)

Herbicide Application Record



Location: Climax Mine County: Summit, Lake & Eagle

Substations

Date: 8/30/2018 7:23 AM to 12:26 PM

Customer: Climax Mine and Mill Hwy 91 Leadville, CO 80461

Qualified Supervisor: Matt Clark #29724

Applicators: Matt Clark, Jess Feeback, Collin Jones

Weather: Sunny 45 degrees F. Wind: 1 mph out of SW

Site/Crop: Electrical Station

Target Plants: All Vegetation (Bare Ground Treatment)

#### Application Equipment: Orange Kubota #3 Application Method: Broadcast Spraying Carrier: Water

Herbicide Applied	Application Rate	<b>Total Amount Applied</b>	Dilution Rate
MSO - Adjuvant	52 fl oz per acre	130 fl oz	1.30 fl oz per gallon
Spray Indicator - Blue Dye	12 fl oz per acre	30 fl oz	0.30 fl oz per gallon
Ranger Pro - 524517 - Glyphosate	102 fl oz per acre	255 fl oz	2.55 fl oz per gallon
Viewpoint - 352847 - Imazapic	18 Oz (weight) per acre	45 Oz (weight)	0.45 Oz (weight) per gallon

#### Total Application: 2.5 acre

**Application Notes:** Mayflower Sub and transformer, Mayflower 115kv Sub, Warrens Sub, and PDC Sub were treated. The PDWTP Barge Sub and the Domestic Water Treatment Plant Sub treatments were still effective from previous year's treatments, and no applications were necessary on pad at this time. Both the PDWTP Barge Sub and the Domestic Water Treatment Plant Sub perimeters were treated.

# NPDES COMPLIANCE (Only Applicable to Aquatic Sites)

#### Aquatic site: No

Use Pattern: Weeds and Algae

Is equipment properly calibrated?

Did you conduct visual monitoring for adverse incidents?