




MINERALS PROGRAM INSPECTION REPORT
PHONE: (303) 866-3567

The Division of Reclamation, Mining and Safety has conducted an inspection of the mining operation noted below. This report documents observations concerning compliance with the terms of the permit and applicable rules and regulations of the Mined Land Reclamation Board.

MINE NAME: Willis Pit	MINE/PROSPECTING ID#: M-1992-003	MINERAL: Sand and gravel	COUNTY: Huerfano
INSPECTION TYPE: Surety-Related Inspection	INSPECTOR(S): Patrick Lennberg	INSP. DATE: May 26, 2021	INSP. TIME: 09:00
OPERATOR: Silver Mountain Preserve, Inc.	OPERATOR REPRESENTATIVE: Charles Bryant	TYPE OF OPERATION: 110c - Construction Limited Impact	
REASON FOR INSPECTION: Surety Release Request	BOND CALCULATION TYPE: None	BOND AMOUNT: \$14,900.00	
DATE OF COMPLAINT: NA	POST INSP. CONTACTS: None	JOINT INSP. AGENCY: County	
WEATHER: Clear	INSPECTOR'S SIGNATURE: 	SIGNATURE DATE: May 27, 2021	

GENERAL INSPECTION TOPICS

This list identifies the environmental and permit parameters inspected and gives a categorical evaluation of each. No problems or possible violations were noted during the inspection. The mine operation was found to be in full compliance with Mineral Rules and Regulations of the Colorado Mined Land Reclamation Board for the Extraction of Construction Materials and/or for Hard Rock, Metal and Designated Mining Operations. Any person engaged in any mining operation shall notify the office of any failure or imminent failure, as soon as reasonably practicable after such person has knowledge of such condition or of any impoundment, embankment, or slope that poses a reasonable potential for danger to any persons or property or to the environment; or any environmental protection facility designed to contain or control chemicals or waste which are acid or toxic-forming, as identified in the permit.

(AR) RECORDS----- <u>N</u>	(FN) FINANCIAL WARRANTY----- <u>N</u>	(RD) ROADS----- <u>N</u>
(HB) HYDROLOGIC BALANCE----- <u>Y</u>	(BG) BACKFILL & GRADING----- <u>Y</u>	(EX) EXPLOSIVES----- <u>N</u>
(PW) PROCESSING WASTE/TAILING---- <u>N</u>	(SF) PROCESSING FACILITIES----- <u>N</u>	(TS) TOPSOIL----- <u>Y</u>
(MP) GENL MINE PLAN COMPLIANCE- <u>Y</u>	(FW) FISH & WILDLIFE----- <u>N</u>	(RV) REVEGETATION---- <u>Y</u>
(SM) SIGNS AND MARKERS----- <u>N</u>	(SP) STORM WATER MGT PLAN---- <u>N</u>	(RS) RECL PLAN/COMP-- <u>Y</u>
(ES) OVERBURDEN/DEV. WASTE----- <u>N</u>	(SC) EROSION/SEDIMENTATION--- <u>Y</u>	(ST) STIPULATIONS----- <u>N</u>
(AT) ACID OR TOXIC MATERIALS----- <u>N</u>	(OD) OFF-SITE DAMAGE----- <u>N</u>	

Y = Inspected / N = Not inspected / NA = Not applicable to this operation / PB = Problem cited / PV = Possible violation cited

OBSERVATIONS

The Willis Pit was inspected by Patrick Lennberg with the Division of Reclamation, Mining and Safety (Division/DRMS). The inspection was completed as part of a full release request, submitted in accordance with Rule 4.17, received by the Division on February 3, 2021. A Notice of Weather Delay was issued on March 24, 2021 extending the decision date for the release request to May 31, 2021. The site was previously inspected by the Division on August 26, 2020 as part of the Division's routine monitoring. Charles Bryant with Huerfano County accompanied me during the release inspection. The weather was cloudy and calm.

The Willis Pit is located in Huerfano County approximately 5 miles northwest of La Veta, Colorado. The mine is a 110 construction materials permit for 8.6 acres. The primary commodity that was mined at the site was gravel. The approved post-mining land use is rangeland. The mine site is located at the foothills of Rough and Silver Mountains and the land surrounding the pit is rangeland.

Per Rule 4.17.2(1) the Division sent notice of the release request to the Huerfano County Government, Huerfano County Commissioners, Huerfano County Planning Department, the Upper Huerfano Conservation District and the landowners. The Huerfano County Planning Department requested their Noxious Weed Manager be present during the inspection. Aside from Planning Department the Division did not receive any comments from the noticed parties. The Operator has requested the full release of the permitted area.

The pit has not been actively mined for some time. Stockpiled material is used on the ranch property for maintenance purposes but does not leave the property boundary. In February 2021 TR-01 updated the reclamation plan to allow for the stockpiles to remain and a signed affidavit that material will not leave the property. As noted in Mr. Bryant's report, attached, there are noxious weeds surrounding and slowly infiltrating into permit boundary, however the site is not acting as a source to the surrounding lands. The Division strongly encourages the land owners to engage the county to develop a management plan suppress the spread of weeds.

The pit is in stable condition with the western portion of the pit being graded to 3H:1V or shallower. The eastern portion of the pit has a 500 foot long highwall that has been naturally reclaimed to 1H:1V slope and is 15 to 20 feet in height. The pit is grazed by cattle being kept on the ranch.

Based on observations made during this inspection the request for full release of the permitted area will be approved. Notice of the Division's decision regarding the release request will be sent under a separate cover letter.

Photographs taken during the inspection are attached.

Please contact Patrick Lennberg (303)866-3567 ext. 8114 or email at patrick.lennberg@state.co.us if you have any questions regarding this report.

Inspection Contact Address

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10748 Red Oak Road
Marietta, OK 73448

Enclosure: Huerfano Weed Management - Willis Pit Inspection Report

cc: Jared Ebert, DRMS

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PHOTOGRAPHS



Photo 1: Looking north from the SE corner of pit area, eastern wall of disturbed area to the right of photo



Photo 2: Looking diagonally across the pit area from the SE corner, western wall of disturbed area to the left of photo



Photo 3: Sawmill area located to the south of pit area outside permit boundary



Photo 4: Looking south across the pit area from the northern disturbed area



Photo 5: Looking south along western graded highwall



Photo 6: Looking southeast diagonally across the pit area



Photo 7: Looking north at the haul road entering into pit area



Photo 8: Looking east across the pit area

Enclosure



252 C.R. 451 La Veta, CO

2021

Willis Pit Inspection Report (#M-92-003)



Charles Bryant

**Huerfano\Custer County Noxious
Weed Manager**

Phone: 719-989-1353

Email: cbryant@huerfano.us

5/26/2021

Date of Review: 5-26-2021

Location: Willis Pit (#M-92-003) Huerfano County, CO

Property Address: N/A

LAT\LONG: 37.56031, -105.07240

Site Type: Rangeland

Reviewed By: Charles Bryant-Huerfano County Noxious Weed Manager CDA License #:3322

OVERVIEW: The Huerfano County Noxious Weed Manager accompanied Patrick Lennberg from the Colorado Division of Reclamation Mining and Safety during a site inspection of the Willis Pit (#M-92-003) on 5/26/2021 to determine if the site conditions met release standards. The mine area had a limited distribution of two Colorado B List noxious plant species (leafy spurge, Scotch thistle), while the immediate area surrounding the site was heavily infested with both species mentioned above. A number of C List noxious plant species were documented throughout the mine area including: field bindweed, redstem filaree, cheat grass and perennial sowthistle. These C List species are not subject to control under local regulations. The mine site and surrounding area lies within the 2018 Spring Fire burn scar. The heaviest concentrations of leafy spurge seem to be within areas that experienced post-fire flood events. High concentrations of Scotch thistle were also documented in this area. High concentrations were also found among the former sawmill site that lies south of the mined area.

RECOMMENDATIONS: The Huerfano County Noxious Weed Department determined that the mine area defined in the permit is acceptable for release. The immediate area surrounding the mine site is heavily infested with leafy spurge and Scotch thistle. Control measures are strongly recommended to avoid the exponential spread of the two species B List species listed below, to limit the impact that these invasive species have on our native ecosystems, and **to avoid potential enforcement actions through the provisions set forth in the Colorado Noxious Weed Act of 1991 and the Huerfano County Noxious Weed Plan and Implementation Guide.** To aid the property owner(s) in the containment and suppression of these problematic species, the Huerfano County Noxious Weed Department has provided control option\management guidance in pages 5-9. The property owners are strongly encouraged to contact the Huerfano County Noxious Weed Department to determine the availability of cost-share or other landowner assistance programs to help address noxious plant species throughout the property. Department staff is also available to perform a more in-depth inventory of any noxious species that may be found elsewhere on the property.

DOCUMENTED B LIST SPECIES (Subject to control under the Colorado Noxious Weed Act)

1. Scotch Thistle (*Onopordum Acanthium*)
2. Leafy Spurge (*Euphorbia esula*)

A. MANAGEMENT CONSIDERATIONS

Given the widespread distribution of the **2** documented species throughout the surrounding and neighboring properties, eradication is not feasible. The overall management objectives should be centered around the containment and suppression of existing and future populations of the documented species, as well as curbing the introduction of noxious class A and B weed species that are not well established in the area or not present at this time. Depletion of viable seeds within the soil reserve is necessary to aid in the establishment of desirable species within the site and to prevent future infestations of noxious plant species.

B. TREATMENT PROCESS

The following treatment process (pages 5-9) follows the integrated vegetation management approach (IVM). IVM is the practice of utilizing a variety of control options to achieve control of the target species. This IVM program utilizes cultural, mechanical and chemical treatment options. Single method treatment programs are rarely successful.

TREATMENT AREA CHARACTERISTICS\CONSIDERATIONS

- 1. Environmentally Sensitive Areas:** Sensitive areas to be aware of include: active well heads, abandoned well heads, established desirable tree\brush species, garden areas, areas known has having a high water table with permeable soils, and areas of standing water. The herbicides recommended in this management plan are of relatively low toxicity to humans, animals, and insects when used as directed. See specific manufacturer MSDS (material safety data sheet) for specific information.
- 2. Registry of Pesticide Sensitive Persons:** According to the 2021 Registry of Pesticide Sensitive Persons (updated annually) there are **NO** registrants within the treatment area or region.
- 3. Endangered and Threatened Species:** The treatment area is not considered critical habitat to any endangered or threatened species as indicated by species distribution mapping provided by the United States Fish and Wildlife Service.
- 4. Flood Prone Areas\Debris Flow Deposits:** Areas that have experienced post-fire flooding will have a higher occurrence of noxious plant species within the site. Viable seed is easily transported by flood waters and debris flows.



Scotch thistle ^

C. CONTROL METHODS BY SPECIES

1. Scotch Thistle

Type: Biennial

Origin: Europe and Asia

Class: B

Seed Life: Up to 38 years

Seeds per Plant: 8,000-40,000

Reproduction: Seed

- (a) **Mechanical:** Given the biennial growth habits\characteristics of Scotch thistle, mechanical controls can be effective in the prevention of seed development. Control options include severing the stalk 3-4 inches under the soil, hand pulling, and mowing prior to bloom. Mechanical controls should be performed frequently to have any effect.
- (b) **Cultural:** **Avoid the transportation of viable seeds by cleaning all machinery\equipment that enters the infested area and avoid the relocation of soils or plant materials from the infested area to un-infested areas.** Avoid allowing livestock to access the infested areas. Disturbed soil sites are highly vulnerable to the establishment of noxious plant species. Disturbed soil sites should be monitored for the presence of noxious plant species and to determine if reseeding is needed should native vegetation not become reestablished.
- (c) **Chemical:** The preferred method of chemical application will be spot spraying and limited broadcast application of ***Opensight*** and ***2,4-D 4lb. Amine*** herbicides with a surfactant. ***Opensight*** herbicide will be applied at the dosage of 2.5oz.\acre. ***2,4-D 4lb. Amine*** herbicide will be applied at the dosage of 3-4 pints\acre. Apply at the rosette to mid-bolt stages when plants are actively growing. **Always use a non ionic or methylated seed oil surfactant with all herbicide mixes. Follow the manufacturer's recommended application rate.**
- (d) **Biological:** None



2. Leafy Spurge

Type: Perennial

Origin: Europe and Asia

Class: B

Seed Life: 8+ Years

Seeds per Plant: 200\per flower head

Reproduction: Seed\root

(a) **Mechanical:** Given the aggressive perennial growth habits\characteristics of leafy spurge, mechanical control is not recommended. Avoid contact with fresh plant material\sap as it may cause skin irritation.

(b) **Cultural:** Avoid the transportation of viable seeds by cleaning all machinery\equipment that enters the infested area and avoid the relocation of soils or plant materials from the infested area to un-infested areas. Avoid allowing livestock to access the infested areas. Examine all hay for the presence of noxious weeds and be vigilant for the establishment of noxious weed species in areas where hay is stored\fed or otherwise broadcast. Livestock will consume small immature plants but leafy spurge is generally avoided if desirable forage is present. Be aware that consumption of mature plants by grazing animals may lead to the development of sores on the tongue and mouth.

(c) **Chemical:** The preferred method of chemical application for non-licensed persons will be spot spraying and limited broadcast application of **Plateau herbicide** and **2,4-D 4lb. Amine** herbicides with a surfactant. **Plateau** herbicide will be applied at the dosage of 3oz.\acre. **2,4-D 4lb. Amine** herbicide will be applied at the dosage of 3-4 pints\acre. Apply at early growth stages or in fall prior to first hard freeze. For licensed applicators; the preferred chemical for treatment will be **Tordon 22k** or other product formulated with **Picloram** applied to early growth through true flower stage. **Tordon 22k** will be applied at 1 to 2 qt.\acre with a surfactant.

(d) **Biological:** There are six insect species that are approved for release in Colorado. *Aphthona flava*, *Aphthona cyparissiae* and *Aphthona nigriscutis* are flea beetles that defoliate leafy spurge and their larvae feed upon the root system. *Oberea erythrocephala* is a long horned beetle that also feeds upon the foliage as an adult and upon the root system as larvae. *Aphthona czwalinae\lacertosa* and *Aphthona abdominalis* are flea beetles that cause similar damage to leafy spurge as other members in the *Aphthona* species.





Leafy Spurge in bloom-Spring ^

Overview of Control Options

MECHANICAL: This control option is most effective on annual and biennial species but should generally be avoided on the perennial targeted species listed above. Soil disturbance\bare ground areas as a result of mechanical controls should be avoided due to the possibility of noxious weed establishment.

CULTURAL: Prevention and good land use practices are key components of this control option. Avoid the use of contaminated feed, overgrazing, soil disturbance and introduction of noxious weed seeds\plant fragments. The establishment of desirable plant competition is also a key component.

CHEMICAL: In this vegetation management program the application of herbicides in combination with the other methods listed above will prove to be an effective means of achieving the containment and suppression of the targeted species. The chemical application rates listed above are for reference purposes only. The label affixed to the herbicide product will be the official designated source for application rates and proper usage and should be followed should they differ from the recommendations provided in this management plan. **The label provided on the herbicide container is a legal document. Failure to follow all directions is a violation of federal and state law.**

BIOLOGICAL: Consult the Huerfano County Noxious Weed Department for further information and applicability.

INTEGRATED VEGETATION MANAGEMENT

Integrated vegetation management (IVM) is the practice of employing multiple control options to achieve control of a target plant species. Seldom does a singular approach totally control noxious weed infestations. Prevention, early detection, and rapid response are the foundation of a successful management program. The individual control recommendations given for the **2** noxious weed species detailed in this report will conform to integrated vegetation management principals when used in combination with each other.



SAFETY RECOMMENDATIONS FOR CHEMICAL APPLICATIONS

The following is a brief list of recommended safety practices for the safe application of herbicides. This is by no means an exhaustive list; the herbicide container labeling should be referred to for specific usage\safety guidelines.

- 1) **Read the Label!** The herbicide product label should be read and understood in its entirety before the product is used. ***The label provided on the herbicide container is a legal document. Failure to follow all directions is a violation of federal and state law.***
- 2) **Proper PPE (personal protective equipment):** Adhere to the herbicide manufacturers recommendations for proper protective equipment. The recommended PPE for the herbicides prescribed within this management plan require a minimum of: Long sleeved shirt and pants, chemical resistant category A gloves, *shoes plus socks*, and protective eyewear. **Rubber “muck” style boots or the like are suggested given the relative ease of cleaning\removal. Lightweight coveralls are also suggested for these same reasons. Refer to herbicide label(s) for safety guidelines.*
- 3) **Equipment calibration:** Ensure proper calibration of equipment to avoid over\under application of herbicide. ***Contact the Huerfano County Noxious Weed Department if assistance is needed.***
- 4) **Environmental Considerations:** Avoid herbicide drift and off target damage by only applying in low wind conditions (10mph or less) and using the coarsest practical spray droplet size at the lowest practical pressure. Apply as near to the target as possible. The use of a surfactant\adjuvant also aids in off target movement of the herbicide. Applications should not be made within 6-8 hours of expected rainfall. When spraying around trees, do not apply herbicide within the “drip line” of the tree canopy. Proper equipment calibration is necessary to avoid the over\under application of herbicides and the associated negative environmental effects. Periods of abnormally hot and dry weather may affect the performance of herbicides negatively.
- 5) **Container Disposal:** Triple wash all empty herbicide containers to aid in the removal of residues and puncture so that they cannot be reused. Combine the rinsate of the empty container to the application equipments’ tank and apply on treatment area(s). Triple washed containers that are punctured can be safely disposed of with household trash. Never reuse empty herbicide containers.
- 6) **Herbicide Storage:** Do not contaminate water, food, or feed by storage or disposal. Do not ship or store with food, feeds, drugs, or clothing. Avoid freezing.

HUERFANO COUNTY NOXIOUS WEED DEPARTMENT CONTACT:

CHARLES BRYANT @ 719-989-1353, cbryant@huerfano.us

Please do not hesitate to contact the Huerfano\Custer County Noxious Weed Department if you have any questions or concerns. We strive to provide the highest level of service and are dedicated to combating the ever evolving threat that invasive plant species pose to our native ecosystems. ***All photos in this report were taken locally by Department staff***