



STATE OF
COLORADO

Gagnon - DNR, Nikie <nikie.gagnon@state.co.us>

Adequacy Review, 110c Construction Materials Application, Ritchey Sand Pit Reclamation, File no. M-2023-027

1 message

Shirley Deason <shirley.deason@ycconservation.com>

Tue, May 14, 2024 at 1:42 PM

To: nikie.gagnon@state.co.us

Cc: Tanya Fell <yccd77@gmail.com>, tandersen@co.yuma.co.us

Attached are the Adequacy Review, 110c Construction Materials Application, Ritchey Sand Pit Reclamation, File No. M-2023-027 forms signed by Dollie Gonzales, Resource Team Lead 18 for Yuma & Washington Counties and Jake Prather, Resource Conservationist for Yuma County, along with the grass seeding recommendation.

If anything further is needed, please let me know.

Shirley Deason

Shirley Deason, Office Assistant

Yuma County Conservation District

247 N Clay Street

Wray, CO 80758

(970) 630-3117

shirley.deason@ycconservation.com



Ritchey Sand Pit Reclamation.pdf

725K



Natural Resources Conservation Service
247 N Clay #1
Wray CO 80758
Office 970-332-3107 ext. 3

May 10, 2024

To: Yuma County Conservation District; Tanya Fell, Manager

Subject: Adequacy Review, 110c Construction Materials Application, Ritchey Sand Pit Reclamation, File No. M-2023-027

The primary objective of this reclamation plan will be to stabilize soils and restore the plant community similar to its historic climax or the desired plant community once mining has been completed. Specific plant species selected for this site will be based on; dominant soils found on site, plant species suitability, availability of plant species, and plant species which are native to the project site.

Weed Management:

Weed control is critical for the purpose of; restoring native plant species and protecting soils from soil erosion. When perennial noxious weeds or other winter annuals are present, they will be controlled prior to seeding the grass mix. Weed management prior to grass planting is critical because control methods become much more restrictive while seedlings are in the process of establishing.

Site Preparation:

All sites will need to be formed and shaped in a way that is representative of the surrounding terrain. Slope should not exceed 33% (3:1) on sites that will be planted using a grass drill. Top soil will be brought in to restored the surface of the disturbed site. During this process, attention should be given that the soil has not become over-compacted by machinery, but will be firm and well settled so that correct seed depth may be attained during seeding. Removal of materials such as rocks and trash should also be conducted in order not to interfere with planting. The seedbed shall also be reasonably free of weeds so competition does not inhibit seedling establishment.

In order to establish an approved cover, a crimping method (not disking) is recommended immediately after the site has been seeded. Crimping involves using a disk like implement that will pass over a prepared biomass layer allowing one end to be vertically pressed in to the soil (approximately 4") while the other end sticks straight up (approximately 12" out of the ground). This practice should be implemented as a cross-slope application method with a maximum of 20" between rows of vertically pressed biomass. The established level of biomass should equal approximately 2,600 - 3,000 pounds per acre. A few of the considerations when selecting a biomass type are; select a straw that is clean and weed-free, select a straw that was a sterile crop and won't re-grow, select a straw that is ligneous or rigid in nature that will stand up to wind and blowing snow, and select straw that will be manageable to work with.

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Seeding Plan:

The following comments are intended to support the attached Grass Seeding Recommendation. Seeding recommendations included in this plan are designed to be drilled directly into the approved cover which will be established on the project site. The seed varieties and seeding rates are also specific to this project site and shall be adhered to when implementing this seed plan. It is also critical that the specified planting date prior to June 1, 2024 is followed in order to ensure proper seed germination. The attached grass seeding mix is only formulated for one-acre and will need to be adjusted for the total area requiring seeded. When broadcast seeding is used, the pure live seed (PLS) rates will be doubled.

If you have any questions, please feel free to contact me at 970-345-2364 ext. 3 or email me at dollie.gonzales@usda.gov.

Regards,

DOLLIE
GONZALES

Digitally signed by DOLLIE GONZALES
Date: 2024.05.16 15:53 -0500

Dollie A Gonzales
Resource Team Lead 18
Yuma & Washington Counties

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United States Department of Agriculture

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If you have any questions, please feel free to contact me at 970-332-3107 ext. 3 or email me at jake.prather@usda.gov

Regards,

A handwritten signature in black ink, reading "Jake Prather", is written over the typed name.

Jake Prather
Resource Conservationist
Yuma County

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GRASS SEEDING RECOMMENDATION						CO-ECS-5	
Producer	Reclamation - Drilled Rate					Date	12/21/2020
Tract						Field	Dryland
Practice Name	Range Seeding					Acres	1.0
						Soil	
						Range Site:	DEEP SAND
SPECIES	VARIETY	Recommend % of species in mixture	Allowed % of mixture in seeding	Required Pure Live Seed (PLS) seeding rate for 100% seeding per acre	PLS seeding rate per species per acre	Total PLS lbs. planned	
Sand bluestem	Elida, Woodward, Garden	20%	15 to 25	15.8	3.16	3.2	
Yellow indiangrass	Llano, Holt, Cheyenne, Oto	5%	5 to 15	10.2	0.51	0.5	
Switchgrass	Grenville, Nebraska 28, Blackwell, Pathfinder	10%	5 to 15	4	0.40	0.4	
Prairie sandreed	Goshen	20%	5 to 15	6.4	1.28	1.3	
Sideoats grama	Butte, Niner, El Reno, Haskell, Trailway, Vaughn	10%	5 to 15	9.1	0.91	0.9	
Little bluestem	Pastura	10%	0 to 15	6.7	0.67	0.7	
Blue grama	Lovington, Hachita	10%	5 to 10	2.5	0.25	0.3	
Western wheatgrass	Arriba, Barton, Rosana	15%	10 to 20	16	2.40	2.4	
	Total %	100%			PLS per ac.	Total PLS	
					9.58	7.2	

NRCS recommends 2300 lb/ac of mulch - clean, seed free straw - crimped in or blown on after seeding. Best seeding dates are after Nov. 1 and the soil temps are below 40 degrees and before April 30. Area should be protected from livestock until grasses are established, which may take three growing seasons.

* If Broadcast then double rate.