

APPENDIX A

SEED MIXES

For

Teckla-Osage-Rapid City

230kV Transmission Line Project

BHP, Inc., PAH680

The following information pertains to the approved seed mixes:

Use approved certified noxious weed free seed and mulch. Seed will be tested for noxious weeds at the time of purchase. All species of seed shall be certified and tested noxious free including no cheat grass. All seed shall be Pure Live Seed (PLS). BHP shall be responsible for sampling and testing and all costs associated with the testing at the SDSU Seed Testing Lab in Brookings, South Dakota. All test results shall be mailed to the Black Hills National Forest, Mystic District office. If seed tests for a given lot fail, none of that lot will be allowed to be used on National Forest System lands.

Permission to seed shall be given by the Forest Service.

All ground disturbed areas will be seeded with the following approved certified weed free, pure live seed mixes:

a. High Elevation Uplands

- 25 percent slender wheatgrass (*Elymus trachycaulus*)
- 30 percent annual ryegrass (*Lolium multiflorum*)
- 10 percent Canada wildrye (*Elymus canadensis*)
- 10 percent Canby bluegrass (*Poa canbyi*)
- 20 percent green needlegrass (*Nassella viridula*)
- 5 percent purple prairie clover (*Dalea purpurea*) or American vetch (*Vicia Americana*)

b. Low Elevation Uplands

- 35 percent annual ryegrass (*Lolium multiflorum*)
- 25 percent slender wheatgrass (*Elymus trachycaulus*)
- 15 percent green needlegrass (*Nassella viridula*)
- 5 percent purple prairie clover (*Dalea purpurea*) or American vetch (*Vicia Americana*)
- 20 percent any combination of four warm season grasses, including bluegrama (*Bouteloua gracilis*), switchgrass (*Panicum virgatum*), Indiangrass (*Sorghastrum nutans*), or Sideoats grama (*Bouteloua curtipendula*)

c. Mystic Mix (sod-forming under power lines)

- 32 percent slender wheatgrass (*Elymus trachycaulus*)
- 22 percent western wheatgrass (*Agropyron smithii*)
- 26 percent annual ryegrass (*Lolium multiflorum*)
- 5 percent Sideoats grama (*Bouteloua curtipendula*)
- 10 percent green needlegrass (*Nassella viridula*)
- 5 percent little blue stem (*Schizachyrium scoparium*)

Please note:

All seed should be certified weed free, pure live seed. Seed at the rate of 20 pounds per acre.

Non-native species may not be used, unless they are non-aggressive annuals (e.g.: wheat, oats, rye) or sterile species may be used while native perennials are becoming established or when native species are not available (e.g. during drought years or years when a wildfires burn large acreages).

Other aggressive non-native perennials (e.g. smooth brome, timothy) will not be used. All straw bales, erosion mats, slash mats, etc. must be certified weed-free. No application work shall be done during extremely windy or rainy weather.

No seed shall be applied to frozen ground. Seeding shall occur within 7 days of final disturbance, unless otherwise agreed to by the Forest Service. Areas that do not achieve adequate cover may require additional scarification and reseeding and fertilizing. This shall remain the responsibility of BHP, until approved by the Forest Service.

The **mid-high zone and WIZ areas would be reseeded with the High Elevation Upland seed mix** and the **mid-low zone would be reseeded with the Low Elevation Upland seed mix**. These seed mixes can be found on page 15 of the COM plan. Decommissioned roads and all disturbed areas outside of the ROW should be seeded with either the High Elevation Upland or the Low Elevation Upland mix. **The Mystic Mix described on page 15 of the COM plan should only be used in the ROW or on roads that will be regularly used for powerline maintenance.** Forest Service personnel should regularly inspect seed bags to ensure the proper seed mix is being used. It is important to look at the % seed species on the tags and not the name of the mix because seed companies do not have the same names for their mixes.

USDAFS Approved Seed Mixes	
Project Area (Reference BHP_SeedMix_Areas Shapefile)	Seed Mixes
West of Boles Canyon Road & East of Pactola Lake	Low Elevation Upland Mix
Between Boles Canyon Road and Pactola Lake	High Elevation Upland Mix
Areas Where No Woody Vegetation Is Wanted (i.e. ROW & roads needed for access)	Mystic Mix
WIZ Areas	High Elevation Upland Mix