



Hayden Landfill Slopes Revegetation



***Hydromulch quickly establishes
vegetation in a challenging climate.***

LOCATION:

Hayden, Colorado

PRODUCT:

*Organic Earth Industries' Earth Essence
HGM² Beta Hydromulch*

PROJECT PARTNERS:

Owner

Xcel Energy

Consultant/Contractor

*Nilex/Haight & Haight Enterprises and
Wagner Rents*

Completion Date

July 2015

Xcel Energy has a two-unit coal-burning power plant in the northwest corner of Colorado, near the town of Hayden. The units produce fly ash as a byproduct, which requires burial in landfill cells. These cells are covered with three feet of soil, but wind and water erosion are key concerns for site managers. Nilex provided advice on cost-effective erosion control.

Challenge

Once covered with material, the landfill relies on vegetation to stabilize the soil and reduce erosion concerns.

In Colorado, landfill vegetation faces a double threat, as the shortened growing season of the cold climate combines with strong winds and low precipitation. The weight of heavy snowfall and powerful spring runoff greets whatever growth was able to establish before winter.

The Xcel site also has relatively steep 3:1 slopes, with poor quality soils and no irrigation system.

Solution

Nilex recommended the Earth Essence Beta HGM² Hydraulic Growth Medium (Beta Hydromulch) from Organic Earth Industries, as it contains a proprietary blend of natural fibers, growth mediums, soil stabilizers and microbial growth stimulators to provide a multi-phased releasing system. Ideally, the first phase of growth would help establish vegetation before winter freeze. The Beta mulch can be combined with a seed mix to establish growth of regionally-sustainable vegetation.

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Installation

One key advantage of Beta Hydromulch is its ease of installation. With only two installers — one driver and one spray operator — the entire seven-acre site was covered in a single day. In a collaborative process, Dryland Pasture Seed Mix was chosen as the additive to the core mulch product mix. Nilex was on-site with an Organic Earth Industries representative to provide technical assistance on the day of application. The client chose a truck-towed spray machine to provide proper access to the entire site.

Results

Within a few days of application, the site experienced heavy rainfall. Technically-inferior hydromulches typically experience sloughing under these conditions as the weight of the soaked absorbent material reacts to site slope.

The project team knew they had a six-to-eight week window for the vegetation to establish before winter conditions set in. Within six weeks, the seeds were sufficiently established to survive and continue their growth in the spring.

The Nilex Advantage

Nilex is committed to unearthing better results. Whether it's for a civil, resource or environmental project, we offer the latest engineered and technically-superior materials and techniques to save our customers time and money, minimize the need to move or remove earth, and reduce the need for granular materials.

With over 35 years of experience, a long-standing commitment to the environment and highly qualified staff, Nilex delivers the products and technologies that give clients an economic advantage with environmental benefit.

