

Foundry Sand Reused for Environmental Benefits



Clay may seem like an uninteresting topic, but for many industries having a supply of the proper type of clay can be critical. The landfill industry, among others including the agriculture and general construction industries, have applications which demand low hydraulic conductivity barriers. These barriers are constructed to be impermeable to the flow of water and have been historically built from mined native clays.

Today, Waupaca Foundry offers these industries a sustainable ground-barrier alternative made from our reused foundry sand. The environmental benefits are threefold.

- 1 Historically, foundry sand was considered a waste and disposed of in non-hazardous landfills. But thanks to research and planning, our foundry sand can be kept out of landfills and reused as a replacement for native clay, which needs to be mined as a virgin natural resource.
- 2 Foundry sand, as a by-product of our green sand casting process, contains up to 15 percent clay and is readily available from our three Waupaca, Wisconsin, foundries. When compacted, our foundry sand has proven to block environmental contamination and waste runoff, ensuring our soil, groundwater and surface waters remain safe.
- 3 Our compacted foundry sand meets and exceeds the impermeability requirements applied to native clays used for barrier construction. In many areas of the U.S., native clays may not be naturally abundant. Foundry sand can be used as a sustainable alternative for a variety of beneficial uses in road construction, geotechnical fill, transportation facility embankments, agricultural development, landfill caps and much more.

Through Waupaca Foundry's testing and documentation, data is available upon request to demonstrate our foundry sand's effectiveness in use as a sustainable, cost-effective replacement for native clay in construction projects requiring impermeability barriers.

Waupaca Foundry has designed, developed and documented the effective reuse of foundry sand as an impermeable construction material.

- Foundry sand exceeds the environmental barrier requirements for Wisconsin landfill construction projects.
- Acts as an impermeable barrier to prevent contamination of soil and groundwater.
- Conserves landfill airspace, eliminates dependency on opening additional native clay mining sites, and offers savings for the user of the material.



Waupaca Foundry is leading the industry in environmental innovations and sustainable practices.

Connect with our team at green@waupacafoundry.com