INTERNATIONAL GEOSYNTHETICS SOCIETY

This project supports these UN Sustainability Goals

Improving Water Safety and Conservation in Nevada with Geomembranes

The area of Fernley in Nevada, USA, has naturally high levels of arsenic, which is processed, removed from the water supply and sent to landfill by the City of Fernley's Water Treatment Facility. Here, Pond #2 was scheduled for improvements. This involved lining the pond with a specialized geomembrane to strengthen containment and prevent contents from leaching into the environment, as well as deploying floor ballast trenches.

Company: AGRU America, Inc
Client: City of Fernley
Location: Fernley, Nevada, USA
Application: Upgrading containment of natural toxins in the water supply using specialized geomembrane and geotextile
Benefits: Improves safety, conserves natural resources

The core product used was 41,806 m2 of AGRU 60 mil HDPE geomembrane and 3,707 m2 of cushion geotextile. Installation also included 1,208 m2 of 60mm-wide geocomposite venting strips beneath the liner, 1.2m perimeter air/gas vents, four safety ladders, 9.4m long sand-filled ballast tubes, and more than 186m2 of sand-filled ballast trenches.

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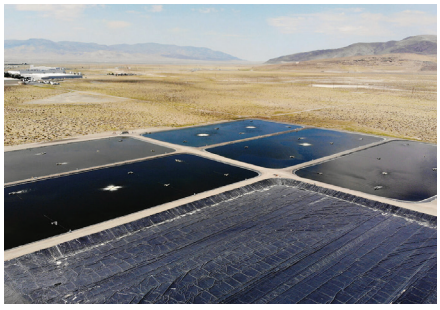
The International Geosynthetics Society (IGS) is a learned society dedicated to the scientific and engineering development of geotextiles, geomembranes, related products, and associated technologies. We are registered as a non-profit corporation.

To accommodate the earthwork contractor's task of backfilling the floor ballast trenches, the installation sequence of the HDPE panels was modified to provide access to their equipment. Also, work on the trench cap welding was carried out in the cooler mornings to streamline installation and minimize complications. The project was completed in a timely manner despite these project needs.

In addition to product familiarity, the AGRU geomembrane was chosen due to the manufacturing site's proximity to the project site, ensuring cost-effective logistics and enhanced quality control. The geomembrane not only improved water safety by supporting the removal of toxic minerals but also helped protect wellbeing for the local environment by ensuring high concentrations of toxic slurry would not leech into surrounding soils.



To find out more, contact AGRU America by emailing Yuse Lajiminmuhip at yuse@agruamerica.com.

The IGS Sustainability Committee is committed to communicating the positive environmental impact of using geosynthetics, improving worldwide understanding of the sustainability benefits of geosynthetic materials, and supporting the geosynthetics industry maximize the sustainability potential of their projects. For more information, visit our webpage at www.geosyntheticssociety.org/sustainability.

Would you like your product or initiative featured here? Contact IGS Secretariat Manager Elise Oatman at igssec@geosyntheticssociety.org.