

# Maryland Port Administration

Natrx was awarded an R&D contract by the MPA to explore innovative reuse of contaminated dredge material for coastal protection. Using our proprietary DryForming™ technology, we successfully stabilized the contaminated material in custom ExoForms™ durable enough to be used for coastal protection and armoring.



 Cox Creek, Maryland

 February 2022

## PROJECT OVERVIEW

**Clients:** Maryland Port Administration

**Partners:** Holcim, Northgate Environmental Management

**Project:** Innovative Materials Reuse, Coastal Protection

**Industry:** Port Infrastructure and Dredging

## PROJECT GOALS

- Create a way to stabilize and reuse contaminated dredge material for coastal protection
- Ability to recover 500,000 cubic yards of material storage capacity each year through removal of contaminated materials.
- Incorporate and stabilize contaminated material within custom Natrx ExoForms™ durable enough to be deployed for coastal armoring

## PROJECT OUTCOMES

- Natrx tested mix designs that used up to 50% upcycled, contaminated dredge and slag material
- Contaminated dredge material was stabilized within custom Natrx ExoForms™ with strength sufficient for handling and deployment in coastal protection use
- Created the opportunity to reuse contaminated sediments and provide local coastal armoring in future maintenance projects
- Enabled future dredging practices with increased capacity and reduced maintenance requirements increasing competitive advantage for the port

