

St. Louis County Addressing PFAS now and into the future

What is PFAS?

Per- and polyfluoroalkyl substances (PFAS) are a large family of man-made chemicals that are forever present in the environment due to frequent use since the 1930s. At certain levels they are toxic, causing adverse health effects in humans, fish, and wildlife.

Now

Regional Landfill Leachate Treatment System Replacement &

Into the Future Integrated Solid Waste Management Campus

Spray

Irrigation

Clean Water

St. Louis County's project is aligned with the State's goals to **protect ecosystem health**, **remediate PFAS contaminated sites**, and **manage PFAS in waste** by constructing an advanced leachate treatment facility in Canyon that will provide a solution for the entire Northeast region. This new facility could be utilized as a repository for leachate generated by landfills within the region. It also will be designed to consolidate old landfills and dumps into a lined facility to contain PFAS containing waste.

Project Details - HF960

Integrated Solid Waste Management Campus = Western Lake Superior includes: Sanitary District Service Area $\boldsymbol{\mathcal{Y}}$ Landfill = US Highway MSW Closed Landfill/Old Dump MSW Waste = County Boundary Municipal WWTF Pressed Biosolids **>> Leachate Treatment and Management** Treatment Ponds Engineered Wetland Ultrafiltration Technology St. Louis County Regional Landfil Spray Irrigation Site \rightarrow Waste Processing Facility Recyclables Non-permitted Landfill Materials Grand Ranids >> Landfill Gas/Solar/Geothermal Energy ed Integrated Was ement Facility **Capture and Utilization** Office and Maintenance Building Treatment Ponds and Engineered Wetlands Solid Waste Processing Facility Hybrid Engineered Wetland Treatment Process Landfill Compactors **Organics Transfer to WLSSD** State Request: \$20M Advanced Oxidation Media Filter Engineered Wetland Activated Ion Carbon Exchange Landfill Leachate

Dirty Water

S O

M

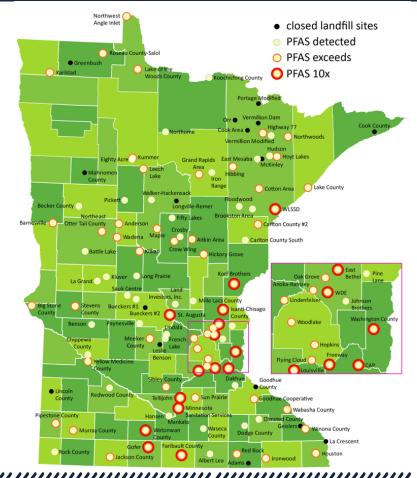
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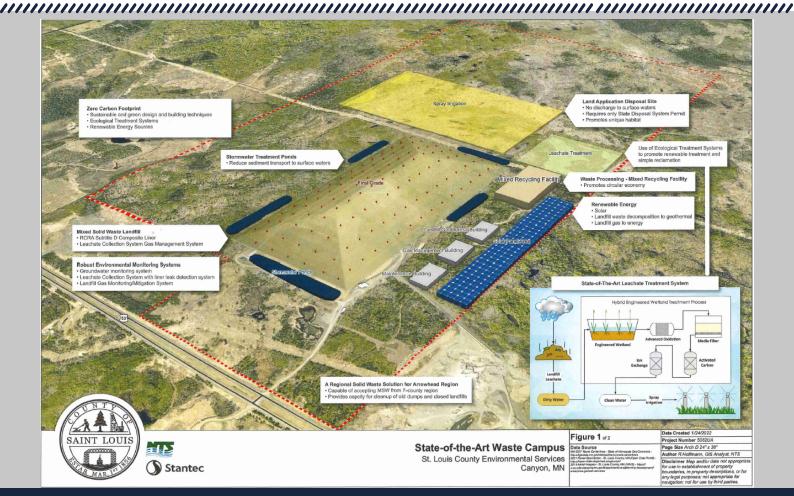
St. Louis County

Project Rationale:

Integrated Solid Waste Management Campus

- **Manages** PFAS to meet current and future Minnesota Department of Health drinking water standards
- **Meets** current and anticipated Minnesota Pollution Control Agency PFAS management requirements
- Serves as a long term solid waste management tool in the 10 year Regional Solid Waste Management Plan
- Accepts leachate from active landfills and waste/leachate from closed landfills and dumps in the region
- **Prevents** leachate contaminants from entering critical surface and groundwater resources
- Allows for modifications/expansion to address future regulatory requirements
- **Provides** a system to sustain the region's recycling goals and commitments
- **Protects** ecosystem health, reduces per- and polyfluoroalkyl substances (PFAS) exposure to humans from fish and game consumption





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