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Evaluation of Current Alternatives and Estimated Cost Curves for PFAS Removal/Destruction: Minnesota Pollution Control Agency Report Addresses Municipal Wastewater/Biosolids/Landfill Leachate/Compost Contact Water

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The Minnesota Pollution Control Agency ("MPCA") released in early June a report titled:

Evaluation of Current Alternatives and Estimated Cost Curves for PFAS Removal and Destruction from Municipal Wastewater, Biosolids, Landfill Leachate, and Compost Contact Water ("Report")

The *Report* was prepared by Barr Engineering Co. and Hazen and Sawyer for MPCA.

The stated purpose of the *Report* is to develop alternatives to remove and destroy per- and polyfluoroalkyl substances ("PFAS") from:

- Water resource recovery facility effluent
- Biosolids
- Mixed municipal solid waste
- Landfill leachate
- Compost contact water

The focus of the *Report* was the use of currently feasible technologies.

Over 50 PFAS separation and instruction technologies are stated to have been screened to determine their ability to remove and destroy select PFAS to below current analytical reporting limits. This was stated to be a non-regulatory target established by the MPCA for the study and for their demonstrated commercial status.

Thirteen technologies were stated to have been retained for detailed consideration and assembled into alternatives. This included destroying PFAS in final waste products. The alternatives were ranked for criteria related to:

- Technical feasibility
- Economic feasibility

- Byproducts management

The MPCA states that the *Report* determined that technologies and expenses needed to remove and destroy PFAS from certain wastewater streams could cost between \$14-28 billion over 20 years.

Additional results cited by MPCA include:

- PFAS can be bought for \$50-\$1,000 per pound (according to MPCA estimates) but cost between \$2.7 to \$18 million per pound to remove and destroy from municipal wastewater (depending on facility size).
- Small wastewater treatment facilities would face per-pound cost over six times greater than large facilities due to economies of scale.
- New short-chain types of PFAS are more difficult and up to 70% more expensive to remove and destroy compared to old long-chain PFAS

A link to the *Report* can be downloaded [here](#).