

UTC Project Information	
Project Title	MPC-690 – Pilot Scale Evaluation of Escherichia Coli Removal from Stormwater Runoff Using Steel Byproduct Filtration
University	South Dakota State University
Principal Investigator	Guanghai Hua Christopher Schmit
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Funding Source(s) and Amounts Provided (by each agency or organization)	<p>USDOT, Office of the Assistant Secretary for Research and Technology \$120,000</p> <p>East Dakota Water Development District \$50,000</p> <p>South Dakota State University \$70,000</p>
Total Project Cost	\$240,000
Agency ID or Contract Number	69A3551747108
Start and End Dates	May 24, 2022 to July 31, 2023
Brief Description of Research Project	<p>Fecal indicator bacteria such as E. coli have been recognized as major contaminants that prevent the potable and non-potable reuse of stormwater runoff from different sources. Conventional stormwater best management practices are generally not effective in removing E. coli. Recycled steel byproducts are a new filtration material that can be used for stormwater runoff treatment. Laboratory experiments have shown that media filtration using steel products can effectively remove E. coli from stormwater runoff. The objective of this project is to install a large pilot scale steel byproduct filter at a stormwater site at the City of Sioux Falls, SD and determine the performance of this filter for E. coli removal. The results of this project can promote the full scale application of this new technology for stormwater treatment.</p>

Describe Implementation of Research Outcomes (or why not implemented) Place Any Photos Here	
Impacts/Benefits of Implementation (actual, not anticipated)	
Web Links <ul style="list-style-type: none">• Reports• Project Website	