UTC Project Information	
Project Title	MPC-597 – Bacteria Removal from Stormwater Runoff Using Steel Byproduct Filters
University	South Dakota State University
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Total Project Cost	$156,454
Agency ID or Contract Number	69A3551747108
Start and End Dates	April 11, 2019 to July 31, 2022
Brief Description of Research Project	Stormwater runoff generated from highways, urban areas, and agricultural settings may contain various pollutants that can deteriorate water quality of receiving water bodies and threaten public health. Escherichia Coli (E. coli) is used as an indicator of bacteriological quality of water. Many surface waters are impaired by E. coli transported from stormwater runoff. It is important to develop effective technologies to remove E. coli from stormwater to improve the surface water quality and protect public health. Media filtration is an emerging stormwater treatment technology that has shown great potential to remove multiple contaminants from non-point source

	pollution. Recycled steel byproducts are a new group of industrial byproducts that can be used as filtration media for stormwater runoff treatment. The objectives of this project are to evaluate factors that can affect E. coli removal by steel byproduct filters through laboratory column experiments, and to determine the long-term performance of a field scale steel byproduct filter for E. coli removal from stormwater. The results of this project can lead to the development of a low-cost and locally available technology for E. coli removal in stormwater runoff.
Describe Implementation of Research Outcomes (or why not implemented) Place Any Photos Here	
Impacts/Benefits of Implementation (actual, not anticipated)	
Web Links • Reports • Project Website	