

QUARTERLY PROGRESS REPORT

November 1, 2020 to January 31, 2021

PROJECT TITLE: Environmental Impacts of Reclaimed Asphalt Pavement (RAP)

PRINCIPAL INVESTIGATOR: John A. Bowden

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CO-PRINCIPAL INVESTIGATOR: Timothy Townsend

**AFFILIATION: Professor, University of Florida
Department of Environmental Engineering Sciences**

COMPLETION DATE: February 3rd, 2021 PHONE NUMBER: 941-716-4431

PROJECT WEB SITE: <https://faculty.eng.ufl.edu/timothy-townsend/research/florida-solid-waste-issues/understanding-the-environmental-impacts-of-reclaimed-asphalt-pavement/>

Work accomplished during this reporting period:

The research team developed a matrix of polycyclic aromatic hydrocarbons (PAHs) of interest, extending beyond the EPA priority 16. Laboratory standards for these PAHs were ordered from the National Institute of Standards and Technology. Work to develop standard calibration curves for these compounds on the Gas Chromatograph/Mass Spectrometer (GC/MS) has begun. Materials necessary for project kickoff have been obtained, including a custom fabricated 50 cm ID, stainless-steel, column designed to run EPA method 1314 on RAP samples.

In addition to material preparation needs, a workflow has been developed for sample leaching and subsequent analysis. Sampling locations have been identified and operators have been contacted to establish a general sampling timeline. Lastly, a Technical Assistance Group (TAG) has been developed to provide critical feedback from experts within the field, assuring that relevant questions/concerns are comprehensively addressed.

Work planned for the next reporting period:

The developed workflow for sample leaching and analysis will be tested and improved, as necessary. Laboratory materials will be tested with standards and developed calibration data for quality control in the leaching methodology. Sampling will begin. A TAG kickoff meeting will be planned regarding this project.

Metrics:

Name	Rank	Department	Professor	Institution
Ashley Lin	Master's Student	Environmental Engineering	Dr. Townsend	University of Florida

TAG Meeting: No TAG meetings were held during this period