# TRANSPORTATION POOLED FUND PROGRAM QUARTERLY PROGRESS REPORT

Lead Agency (FHWA or State DOT): INSTRUCTIONS: Project Managers and/or research project inve- quarter during which the projects are active. P each task that is defined in the proposal; a pero the current status, including accomplishments a during this period.	stigators shoul lease provide a centage compl	a project schedule statu etion of each task; a coi	s of the research activities tied to ncise discussion (2 or 3 sentences) of
Transportation Pooled Fund Program Project # (i.e, SPR-2(XXX), SPR-3(XXX) or TPF-5(XXX)  TPF-S(270)		Transportation Pooled Fund Program - Report Period:  □ Quarter 1 (January 1 – March 31) □ Quarter 2 (April 1 – June 30) □ Quarter 3 (July 1 – September 30) □ Quarter 4 (October 1 – December 31)	
Project Title: Recycled Materials Resources Center- Fourth	n Generation (F	RMRC-4G)	
Name of Project Manager(s): Angela Pakes Ahlman and Tuncer B. Edil	<b>Phone Number:</b> 608-890-4966		E-Mail angela.pakes@wisc.edu
Lead Agency Project ID: TPF-5(352)	Other Project ID (i.e., contract #): AAC2312 Admin Contract		Project Start Date: January 1, 2017
Original Project End Date: February 28, 2022	Current Project End Date: February 28, 2022		Number of Extensions:
Project schedule status:  ■ On schedule □ On revised  Overall Project Statistics:	l schedule	☐ Ahead of sched	ule
Total Project Budget	Total Cost to	Date for Project	Percentage of Work
\$382,932.00		\$15,371.08	Completed to Date 4%

## **Quarterly** Project Statistics:

Total Project Expenses and Percentage This Quarter	Total Amount of Funds Expended This Quarter	Total Percentage of Time Used to Date
\$15,371.08, 4%	\$15,371.08	4%

#### **Project Description:**

The goal of RMRC-4G is to provide the resources and activities needed to break down barriers and increase utilization of recycled materials and industrial byproducts. This is being done through carefully integrated and orchestrated activities that include applied research in key areas relevant to transportation applications combined with outreach programs that provide the educational and technical resources needed to maximize the rate at which recycled materials and industrial byproducts are used in transportation applications.

#### Progress this Quarter (includes meetings, work plan status, contract status, significant progress, etc.):

Presented two seminars at Nazarbayev University of Astana, Kazakhstan on the Characterization of Recycled Materials for Sustainable Road Construction and the other about Beneficial Reuse: The Life Cycle Assessment and Life Cycle Cost Analysis of Using Recycled Materials in Road Construction.

Presentation of the WisDOT CIR Project on May 24 at the National Roads Research Alliance Pavement Conference in Minneapolis, Minnesota.

Submittal of a RMRC-4G pooled fund for inclusion in the list for the Iowa DOT FY 2018 Potential Research Projects.

Refinement of RFP proposals by Iowa DOT RMRC-4G members.

Preparation of slides on "Use of Scrap Tires for Civil and Environmental Engineering Applications" for the ADC60 Conference in Duluth July 18-21.

Preparation of slides on the "Environmental Benefits of Cold-in-Place Recycling" for the ADC 60 Conference in Duluth July 18-21.

Posters for the WisDOT CIR Project were presented at the Reid Bryson Poster Competition at UW-Madison on April 27.

Presented a poster on the WisDOT CIR Project was presented at the Nelson Institute Earth Day Conference held at UW-Madison.

Presented to WisDOT our findings and reports in relation to our CIR paper on April 24.

The poster on the WisDOT CIR Project was presented at the University of Wisconsin-Madison Undergraduate Research Symposium April 13.

Drafted TRB paper entitled Environmental Benefits of Cold-in-Place Recycling

The following people contacted the RMRC this quarter on use of various recycled materials. They are:

- Wade Svetgoff from H2O Applied Technologies for information on coal fly ash on April 4.
- Matt Wetter from the Cal. Dept. of Toxic Substances control for info on use of recycled concrete material from a contaminated site cleanup on April 25.
- Warren Benaway from Steel Tech Ltd looking for facilities to take excess pepset sand on May 2.
- Yijun Wu from Iowa State University on wanted assistance with the BE2ST program5/8/17
- Yasumasa Ogawa from Akita University on contacted us for more information on a paper 6/13/17
- Adlen Altunbaş from T.C. Beykent University wanted to incorporate an LCA program into his class 6/19/17

Held weekly internal RMRC research administration meetings

### Anticipated work next quarter:

Presenting ADC60 Conference in Duluth Minnesota on July 19.

Final Revisions and submittal of drafted TRB Paper entitled Environmental Benefits of Cold-in-Place Recycling by August 1, 2017

Implementing the first few lessons of the Eva the Engineer Project in early September

Commence work on LCA and LCCA for Sophomore Undergraduate Research Fellowship relating to Polyurethane Stabilization. Continue requesting additional funding from Uretek CRI.

Finalize and submit RFP's to RMRC-4G Executive Committee.

#### **Significant Results:**

- RMRC Student Researcher Morgan Sanger won the Reid Bryson Poster Competition by presenting the WisDOT CIR Project on 4/27/17
- Sophomore Research Fellowship awarded to Renee Olley for Polyurethane Stabilization on 4/10/17

Circumstance affecting project or budget. (Please describe any challenges encountered or anticipated that might affect the completion of the project within the time, scope and fiscal constraints set forth in the agreement, along with recommended solutions to those problems).

NA

### **Potential Implementation:**

The CIR research project has been submitted to the WisDOT for implementation in advancing the use of CIR with recycled materials in roadway reconstruction providing the triple bottom line benefits CIR process offers.