

MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY

INTEROFFICE COMMUNICATION

TO: C. Heidi Grether, Director

THROUGH: Amy Epkey, Environment Deputy Director
Barb Schaibly, Administration Deputy Director

FROM: Jack Schinderle, Division Director
Waste Management and Radiological Protection Division

DATE: May, 2017

SUBJECT: Approval of Scrap Tire Market Development Grant
Recommendations for Fiscal Year 2017 (FY17)

The Waste Management and Radiological Protection Division (WMRPD), Sustainable Materials Management Unit (SMMU) has completed the review of the applications received for the FY17 Scrap Tire Market Development Grant Program Funding under Part 169, Scrap Tires, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended, and is requesting your approval to fund the recommended projects.

Twenty one grant applications were received requesting \$4,657,897.00 in funding. This is above the amount of remaining funding available in the WMRPD grant appropriation. Four applications were administratively incomplete and therefore ineligible for funding. After considering the benefits of each of the remaining 17 projects, we are recommending the funding of 14 projects which will utilize the remaining \$2,902,200.00 grant appropriation from the Scrap Tire Regulatory Fund for FY17.

Grant evaluation was based on the three top priorities of the Market Development Program, with the highest priority and points awarded for equipment purchases, the next highest priority and points awarded for research and development, and the lowest priority and points awarded for paving projects. Each application was individually scored and the projects ranked in order by score. In addition, funding recommendations were made for each project. See the attached spreadsheet for the individual scores and recommended funding amounts.

Continued development of scrap tire commodity markets other than Tire Derived Fuel (TDF) is essential to the continuing success of the Scrap Tire Regulatory Program. It is anticipated that TDF use will continue to decline. This decline appears to be primarily due to reduced alternative energy costs, the costs of operation of small coal fired or co-generation plants, and federal clean air regulations. This year's grant applicants did not request any funds for TDF. The recommended projects will help to drive development of other market segments.

The recommended projects are:

Midland County Road Commission: Project using Tire Derived Aggregate (TDA) as a lightweight fill and subbase drainage course beneath the gravel portion of the Eastman Road rehabilitation project to prevent future deterioration of this county road. Re-paving of this road will also include CRMA. Project plans to use material from over 100,000 scrap tires, at a cost under \$10 per tire used. Amount requested and recommended is \$431,947.

Michigan Technological University: The main goal of this project is to research a practical approach for tire rubber modified asphalt emulsion used with a chip seal for effective pavement preservation. This project will be performed in a lab setting with a field demonstration conducted on a road in Muskegon County, MI. The grant amount requested was \$498,502. Amount recommended is \$431,000. The university has received several Scrap Tire Market Development grants in the past several years, and the \$67,502 reduction will help the Department fund another paving project utilizing Crumb Rubber Modified Asphalt (CRMA).

Michigan State University (MSU): The purpose of this project is to evaluate one of the recently invented crumb rubber modified asphalt technologies called "Polymer Coated Rubber (PCR)" for possible use in polymer modified asphalt mixtures at comparable costs to similar products. This project will be performed in a lab setting with a field test conducted on Lake Lansing Road in Ingham County. Grant amount requested was \$500,000. Amount recommended for approval is \$431,000. The university has received several Scrap Tire Market Development grants in the past several years, and the \$69,000 reduction will help the Department fund another paving project utilizing Rubber Modified Asphalt (RMA).

City of Harbor Beach: Project paving of two moderate traffic city streets with CRMA at under \$100 per tire used. Amount requested and recommended is \$220,011.

City of Caro: Project paving of seven low traffic volume city streets with CRMA at under \$100 per tire used. Amount requested and recommended is \$207,000.

City of Flushing: Project paving of six low traffic volume city streets with CRMA at under \$100 per tire. Amount requested and recommended is \$187,500.

Saginaw County Road Commission-Hospital Road: Project paving of a moderate traffic county road with CRMA at under \$50 per tire used. Amount requested and recommended is \$180,000.

St. Clair County Road Commission-Smith's Creek Road: Project paving of a county commercial roadway with CRMA at under \$100 per tire used. Amount requested and recommended is \$179,170.

Imlay Township: Project paving of a lower traffic volume local street with CRMA at under \$100 per tire used. Amount requested and recommended is \$174,000.

City of Imlay City: Project paving of two moderate traffic volume streets with CRMA at just over \$100 per tire used. Amount requested and recommended is \$155,000.

City of Davison: Project paving of a moderate traffic volume street with CRMA at under \$100 per tire used. Amount requested and recommended is \$105,000.

Village of Ortonville: Project paving of two, low traffic volume local streets with CRMA at under \$100 per tire used. Amount requested and recommended is \$103,000.

Porous Pave Inc.: Grant request for a new custom built production/mixing trailer which will allow them to meet their growing demand for their Porous Pave product and reduce cost to compete with conventional products. This trailer will significantly boost their ability to take on larger projects and possibly double the amount of scrap tire material they can recycle each year. Amount requested and recommended is \$62,779.

St. Clair County Road Commission-Bridge Overlays: The proposed project will consist of the design, construction, and performance evaluation of an experimental concrete bridge overlay constructed with scrap tire crumb rubber and recycled glass aggregate on three St. Clair County bridges. Amount requested and recommended is \$33,176.

The three administratively complete applications that are not being recommended for funding are as follows:

- Cobalt Holdings LLC (\$343,306) – Not enough progress made on FY16 Market Development grant.
- Saginaw County Road Commission-Moorish Road (\$115,000) – The grant committee is recommending that only one grant be awarded per entity unless multiple applications are significantly different and promote markets for scrap tires in significantly different ways.
- City of Marysville (\$180,250) – The lowest scoring of the administratively complete applications. The City stated that the paving project would continue with or without funding to utilize scrap tire crumb rubber in the asphalt mix.

If you have any questions, please contact Mr. Jeff Spencer, Unit Supervisor, Sustainable Management Materials Unit, Solid Waste Section, WMRPD, at 517-284-6879; spencerj3@michigan.gov; or you may contact me at 517-284-6852.

APPROVED:

Barb Schaibly, Administration Deputy Director

Date

Amy Epkey, Environment Deputy Director

Date

C. Heidi Grether, Director

Date

Attachment

cc: Kathy Tetzlaff, DWMAD
Christina Campbell, DWMAD
Rhonda Oyer, WMRPD
Jeff Spencer, WMRPD
Aaron Hiday, WMRPD