

**Department of Resources Recycling and Recovery**  
**SCOPE OF WORK (also STATEMENT OF WORK or SOW)**  
***Tire Outreach and Market Analysis***

## **INTRODUCTION/OBJECTIVES**

The Tire Outreach and Market Analysis (TOMA) contract is designed primarily to: 1) provide an annual in-depth analysis of the waste tire market in California; 2) conduct technical outreach and education targeted at stakeholders that are in a position to procure Tire-Derived Products (TDPs) and/or have the authority to specify them in future projects; 3) identify end-of-life best management practices and markets for TDPs that need to be replaced; and 4) share information with stakeholders, including via the CalRecycle Tire Conferences. The goal of this effort is to increase demand for TDPs, foster the application of new technologies, and expand the use of waste tire-derived material into a variety of applications, including higher value-added products.

Additionally, by utilizing the market analysis and working in collaboration with the stakeholders targeted for outreach and education, and other applicable entities, the Contractor will identify gaps in TDP data and specifications that pose a barrier to TDP market expansion. The Contractor will then conduct research and testing to address those gaps and present the results to stakeholders.

The high level of expertise required from various disciplines necessitates that the Contractor assemble a team of highly experienced and respected consultants to effectively provide the necessary assistance. Members of the Contractor's team must be highly knowledgeable regarding the waste tire and TDP industries including California-specific and national TDP markets.

## **WORK TO BE PERFORMED**

The Contractor is responsible for developing technical resources, research projects, and focused technical outreach and education assistance activities that will help to strengthen the TDP industry in California and help support CalRecycle's tire market development programs. These activities will aim to benefit one or more industry sectors as opposed to providing assistance to individual businesses. The following is a general overview of the work that the Contractor shall perform.

Task 1. Conduct annual TDP Materials Market Analysis and Report, Stakeholder Communications, and Recommendations Regarding Tire Market Development.

Task 2. Provide focused Technical Outreach and Education to Promote TDPs to Government and Private Entities.

Task 3. Identify end-of-life best management practices and markets for synthetic turf, infill, playground fill and other TDPs.

Task 4. Develop, coordinate and participate in California Tire Conferences.

Task 5: Conduct research and testing to address identified gaps in TDP product data and specifications that pose a barrier to TDP market expansion.

Task 6: Administration and Reporting.

### **III. TASKS IDENTIFIED**

#### **Task 1: Conduct Annual TDP Materials Market Analysis and Report, Stakeholder Communications, and Recommendations Regarding Tire Market Development**

A. Conduct three annual TDP markets surveys and analyses, coordinating with a designated CalRecycle staff “trainee” as requested by the CalRecycle Contract Manager. The contractor will:

- i) administer an annual market survey using protocols from prior year TOMA and TBAP contracts that will be provided to the Contractor by the CalRecycle Contract Manager (Contract Manager). The survey must gather information, including but not limited to, capacity, throughput, types and amounts of input (by specification) and outputs (by product type), types of customers, actual and perceived market drivers, barriers, and opportunities for market expansion.
- ii) analyze and summarize the market trends for targeted TDPs. This will include periodic updates regarding opportunities and market development mechanisms to address barriers;
- iii) provide information on the current supply/demand balance and capacity, including recent and expected expansions or contractions in general processing and ground rubber production capacity, TDP production capacity, export market impacts and overall market demand, waste tire diversion rate; and
- iv) identify regional infrastructure and infrastructure needs. Also address what the actual operating capacity is versus the permitted capacity to determine why some companies are not operating at permitted capacity (e.g., such as whether some companies’ equipment is becoming old and their ability to operate at permitted capacity may not be occurring for that reason), and what is needed to reach levels of increased recycling;

B. Prepare an annual report for CalRecycle that includes all of the market analysis research and findings.

C. Present annually at a public meeting a summary of the findings from the market analysis conducted that year.

D. Update the market survey and analysis guidance document based upon lessons learned in conducting the market surveys and analyses. The guidance document was

initially prepared under the prior TOMA and TBAP contracts and presents protocols and templates to enable CalRecycle staff to maintain the market surveys and analyses in future years.

- F. Utilize the market analysis, other necessary research, and the ongoing feedback and communication from stakeholders to make recommendations regarding additional market development activities to address TDP performance, health and environmental impacts, regional supply and demand barriers, and suggest a strategy for improving TDP product markets.

## **Task 2: Provide Focused Technical Outreach and Education to Promote TDPs to Government and Private Entities**

In consultation with the Contract Manager conduct the following:

A. Identify federal, state, and local agencies, such as public works departments; public and private colleges, universities, and schools/districts; major corporations, retailers and other private entities that are in a position to procure TDPs and/or have the authority to specify them in future projects. For example: entities might include Caltrans, DGS, Department of Parks and Recreation, the California State University system, architects, fast food restaurants with playgrounds, and builders. In determining what entities to target, quantify procurement opportunities to help tailor outreach to maximize outreach opportunities. Create and implement a detailed plan for targeted technical education and outreach to the entities identified in this task. Note: This does not include a focus on Tire-Derived Aggregate/Rubberized Asphalt Concrete, which is being promoted through other projects.

B. Compile detailed cost and performance data on targeted TDPs and identify new TDPs with a high potential for successful market entry and existing products newly incorporating waste tire feedstock(s).

C. Update and keep current the TDP Catalog and expand education, outreach, and marketing efforts to promote the use of it.

D. Develop case studies annually (total number of case studies each year to be determined in consultation with Contract Manager) that are no more than two pages in length and are in a common format suitable for publishing on the CalRecycle web site and as handouts. In selecting which case studies to develop, priority should be given to existing TDPs for which there is a high potential for new or expanded sales opportunities. Case studies should:

(i) detail successful real-world application of TDPs by actual users, including high quality digital color photographs;

(ii) identify the uses and benefits of TDPs including suitable applications for the given type of TDP and comparisons to competing products that are not made from waste tires;

(iii) highlight key cost and performance data, including lifecycle costs and benefits.

E. Compile other education, marketing and technical specification materials from TDP companies, and as applicable TDP users, and prepare materials such as brochures, fact sheets, Power Point presentations, both electronically and web-based, to assist in targeted education, outreach and marketing TDPs to the targeted entities. Where applicable, and in consultation with the Contract Manager, incorporate relevant research information (e.g., health effects, lifecycle cost analyses, etc.) into marketing materials.

F. Conduct focused TDP education and assistance to those entities targeted per Task 2A above, and include targeted outreach and education such as roundtables, meetings, training sessions, workshops, webinars, and utilize other methods, such as written communications to identify and secure sponsors as needed for mealtime learning sessions.

(i) prior to meeting with an audience, identify TDPs procurement opportunities based upon audience entity's procurement policies, needs, objectives and requirements.

(ii) target entities with greatest TDPs procurement motivation and ability such as companies with green purchasing requirements, etc.

(iii) Conduct follow up to all initial targeted technical outreach and education efforts and provide focused follow-up TDP education and assistance, as needed.

G. Monitor and provide qualitative as well as quantitative measurement of the results of the technical education, outreach, and marketing and the resulting sales of TDPs. Track and report any identifiable TDPs procurement actions of targeted audiences.

H. Coordinate closely with the Contract Manager to ensure that CalRecycle staff has the latest information, data, and resources for promotion, outreach, education, and training activities.

### **Task 3: Identify end-of-life (EOL) best management practices and markets for synthetic turf, infill, playground fill and other TDPs**

In coordination with and approval from the Contract Manager, the contractor will utilize existing information including findings documented in the 2016 "Recycling and Reuse of Crumb Rubber Infill Used in Synthetic Turf Athletic Fields" report to CalRecycle to:

A. Identify end-of-life best management practices (BMPs) for synthetic turf, infill, playground fill, and other TDPs.

- (i) Upon completion effectively disseminate BMPs to the Industry and to entities with TDPs in need of removal and replacement.
- (ii) Provide information to TDP installers regarding EOL considerations.

B. Identify companies offering TDP removal, reuse and/or recycling services and associated cost of options available and provide this information to stakeholders via workshops, print and electronic tools.

C. Collaborate with the Industry and third party experts to find cost-effective uses and identify new markets, beyond reusing turf field infill, for EOL crumb rubber. Share findings as appropriate.

D. Research if infill in athletic fields can be without contaminants and be designed to be more end-of-life friendly, e.g., reduce migration of infill to keep the material on the field thus increasing the amount of time before it needs to be replaced.

#### **Task 4: Develop, coordinate, and participate in the California Tire Conferences**

In coordination with the Contract Manager, assist with any specialized needs in development and implementation of two state tire conferences including:

- A. Solicit stakeholder input on topics to be addressed,
- B. Develop educational activity plans/priorities,
- C. Organize conference sessions,
- D. Identify and secure potential presenters, attend and participate/present at the conferences.

#### **Task 5: Conduct research and testing to address identified gaps in TDP product data and specifications that pose a barrier to TDP market expansion**

In consultation with Contract Manager, Contractor will conduct research and testing to address the gaps in TDP product data and specifications including:

- A. Assessing the feasibility of using crumb rubber in molded, extruded, and other products.
- B. Collaborate with potential users of large quantities of TDPs to identify what information and data they need in order to overcome roadblocks to purchasing TDPs. Identify gaps in research and product testing that are necessary to fill in order to significantly expand markets for TDP. This effort should build upon the performance standards identified in the prior Tire Derived Product Business Assistance Program: Industry-Wide Support Activities contract.

- C. Conduct research and product testing to provide product data, specifications, and performance results for applicable TDPs or categories of TDPs in order to expand markets for TDPs.
- D. Compile information and data for CalRecycle and any other entities relevant to the research and/or testing. This may include making presentations, developing reports, writing data sheets, etc. This task, along with others identified in this scope of work, may involve information and data from businesses that must remain confidential.
- E. Assessing and advising on market opportunities for waste tires and residual fluff.
- F. Conduct or collaboratively work on special projects seeking to overcome barriers to TDPs market expansion

### **Task 6: Administration and Reporting**

#### **A. Develop Work Plans:**

(i) work with the Contract Manager and any other applicable CalRecycle staff to prepare a work plan detailing all tasks and deliverables (including reports; presentations and/or dissemination of information to stakeholders; materials to be posted or revised on the existing web and newsletter or list serve functions, or communicated by other means).

(ii) the work plan will include a timeline for all tasks and deliverables. CalRecycle will not pay Contractor's Administration time for compilation of billing/invoicing or delivery of invoices.

(iii) the work plan will identify any entities with which the Contractor will coordinate to accomplish the identified tasks, such as Recycling Market Development Zone Administrators, industry organizations, (e.g., Rubber Manufacturers Association, American Institute of Architects, Rubber Recycling Network), local jurisdiction recycling coordinators, etc.

(iv) no other contract work shall be conducted until the work plan is approved by the Contract Manager.

(v) should changes to the work plan be necessary, the Contractor will submit any such changes to the Contract Manager for approval before conducting other work.

#### **B. Reporting**

(i) the Contractor will communicate with the Contract Manager on an ongoing basis and provide written reports, on a monthly basis at a minimum, to the Contract Manager covering activities that are in progress, completed, and upcoming; any issues that have arisen; a budget status; a status of meeting the timelines established in the work plan, etc.

(ii) if significant issues arise, the Contractor shall not wait for a scheduled report and will report them to the Contract Manager immediately.

(iii) all documents and/or reports drafted for publication by or for CalRecycle in accordance with this contract shall adhere to CalRecycle's Contractor Publications Guide at [www.calrecycle.ca.gov/Contracts/PubGuide](http://www.calrecycle.ca.gov/Contracts/PubGuide) and must be reviewed by a technical editor of the Contractor's choosing to ensure that the reports comply with CalRecycle's publication guidelines, after which they shall be submitted to and reviewed by the Contract Manager in consultation with the CalRecycle editor.

*(The Contractor is encouraged to consult with CalRecycle's project management team and editorial staff early in the development process to ensure deliverable requirements are clearly understood and to minimize the need for revisions.)*

(iv) the Contractor will submit to CalRecycle by August 31, 2019, a final report on the contract and the work performed, including an evaluation of its effectiveness (with qualitative and quantitative results). The Contractor shall submit a draft final report to the Contract Manager six weeks prior to the due date for the final report. The draft will be reviewed by CalRecycle staff who will provide comments or questions that the Contractor will address or incorporated into the subsequent draft of the report. Any requested changes must be completed by the Contractor and resubmitted to the Contract Manager for final approval. Only when all revisions are made and approved by the Contract Manager will the report be deemed final.

(v) the Contractor will not receive final payment until the final report has been approved by the CalRecycle Contract Manager.

#### IV. CONTRACT/TASK TIME FRAME

The contract is estimated to begin September 3, 2016 and end September 3, 2019. The timeframe below reflects the task/time frame of the contract from date of award:

<b>Task</b>	<b>Deliverable(s)</b>	<b>Estimated Timeframe</b>
Task 1: Annual TDP Materials Market Analysis and Report, Stakeholder Communications, and Recommendations Regarding Tire Market Development	Draft and web-ready reports, presentation materials, mechanism for communications with stakeholders, tire market development recommendations	Spring 2017, Spring 2018, Spring 2019
Task 2: Focused Technical Outreach and Education to Promote TDPs to Government and Private Entities	Targeted outreach and education plan; education, outreach tracking results and impacts of outreach, technical specification materials; update TDP catalog case studies	Ongoing through August 2019
Task 3: Identify end-of-life (EOL) best management practices and markets for synthetic turf, infill, playground fill and other TDPs	Identify end-of-life best management practices (BMPs); Identify companies offering removal/reuse/recycling for TDPs; Share findings as appropriate	Ongoing through August 2019
Task 4: California Tire Conferences	Assist as requested, organize and conduct presentations	First quarter of 2017 and third quarter of 2018
Task 5: Research and testing to address identified gaps in TDP product data and specifications that pose a barrier to TDP market expansion	Conduct research, testing and report, conduct presentations as requested/appropriate. Conduct or collaboratively work on special projects seeking to overcome barriers to TDPs market expansion	Ongoing through August 2019
Task 6: Administration and Reporting	Write, revise and provide updated work plans as needed.	Provide progress reports quarterly; Final report for all activities due August 2019

The following provisions will be included in the Terms and Conditions or Special Terms and Conditions of the Contract:

## **V. COPYRIGHT PROVISION**

The Contractor shall assign to CalRecycle any and all rights, title and interests to any copyrightable material or trademarkable material created or developed in whole or in any part as a result of this Agreement, including the right to register for copyright or trademark of such materials. The Contractor shall require that its subcontractors agree that all such materials shall be the property of the CalRecycle. Such title will include exclusive copyrights and trademarks in the name of the CalRecycle.

## **VI. CALIFORNIA WASTE TIRES**

Unless otherwise provided for in this Scope of Work, in the event the contractor and/or subcontractor(s) purchases waste tires or waste-tire derived products for the performance of this Scope of Work, only California waste tires and California waste tire-derived products shall be used. As a condition of payment under the agreement, the contractor shall be required to provide documentation substantiating the source of the tire materials used during the performance of this Scope of Work to the contract manager.

## **VII. WASTE REDUCTION AND RECYCLED-CONTENT PRODUCT PROCUREMENT**

In the performance of this Agreement, Contractor shall use recycled content, used or reusable products, and practice other waste reduction measures where feasible and appropriate.

Recycled Content Products: All products purchased and charged/billed to the CalRecycle to fulfill the requirements of this contract shall be Recycled Content Products (RCPs), or used (reused, remanufactured, refurbished) products. All RCPs purchased or charged/billed to the CalRecycle to fulfill the requirements of the contract shall have both the total recycled-content (TRC) and the postconsumer content (PC) clearly identified on the products. Specific requirements for the aforementioned purchases and identification are discussed in the Terms and Conditions of the Contractual Agreement under Recycled-Content Product Purchasing and Certification. The Contractor should, at a minimum, ensure that the following issues are addressed, as applicable to the services provided:

### **A. WRITTEN DOCUMENT PROVISION**

All documents and/or reports drafted for publication by or for CalRecycle in accordance with this contract shall adhere to CalRecycle's *Guidelines for Preparing CalRecycle Reports (available upon request)* and shall be reviewed by the CalRecycle's Contract Manager in consultation with one of CalRecycle's editors.

In addition, these documents and/or reports shall be printed double-sided on one hundred percent (100%) recycled-content paper. Specific pages containing full-color photographs or other ink-intensive graphics may be printed on photographic paper. The paper should identify the postconsumer recycled content of the paper (i.e., "printed on 100% postconsumer paper"). When applicable, the contractor shall provide the contract manager with an electronic copy of the document and/or report for the Board's uses. To the greatest extent possible, soy ink instead of petroleum-based inks should be used to print all documents

## **B. CONFERENCING PROVISION**

The contractor shall take any and all steps necessary to make sure that the event is a model for future recycling, waste prevention, diversion, buy recycled, and waste management events.

**Paper Products:** All paper products used to fulfill the requirements of this contract (nametags, badges, letters, envelopes, brochures, etc.) must contain at least 30% post-consumer recycled content fiber.

**Re-usable Cups, Plates & Utensils:** To the greatest extent possible, use re-usable/washable utensils, dishes, tableware, etc., rather than single-use disposable products.

**Leftover Food/Beverages:** All leftover food and/or beverages associated with the event will be donated to an established food donation outlet. Arrangements for the donation must be made prior to the date of the event. CalRecycle staff will assist the contractor in identifying these donation outlets, if needed.

**Recycling/Composting:** Arrangements must be made with the venue, sponsor, or by contract, to provide adequate collection bins for recyclables, organics (food waste) or biodegradable materials, and trash (non-recyclables). The bins should contain at least 30% post-consumer plastic. In addition, the contractor shall work with the venue and/or sponsors to maximize diversion of the discarded materials.

**Soy-based Printing Ink:** To the greatest extent possible, soy ink instead of petroleum-based inks should be used to print all documents needed for the event.