

**CalRecycle Staff Response to Stakeholder Comments re: Draft Scopes of Work and Proposed
Contractors
Used Oil Life-Cycle Assessment Project**

October 2010

CalRecycle solicited input from engaged stakeholders on the proposed Scopes of Work (SOW) and Contractors for the Used Oil Life-Cycle Assessment (LCA) Project that were presented at the August 11, 2010 Materials Management and Local Assistance public meeting. CalRecycle originally proposed the following SOWs and contractors:

- “Contract to Facilitate Stakeholder Process and Legislative Report for Used Oil Life-Cycle Assessment Project”; California State University, Sacramento; PI: Dr. Lindle Hatton, College of Business Administration
- “Used Oil Life-Cycle Assessment Study” Contract; Regents of the University of California, Santa Barbara; PI: Dr. Roland Geyer, Bren School of Environmental Science and Management
- “Independent Peer Review of Used Oil Life-Cycle Assessment Project” Contract; Regents of the University of California, Berkeley; PI: Dr. Arpad Horvath, Department of Civil and Environmental Engineering

CalRecycle received written comments from the following stakeholders:

- American Petroleum Institute
- DeMenno Kerdoon/World Oil (submitted jointly)
- NORA, An Association of Responsible Recyclers
- Oil Changer, Inc.
- Safety-Kleen
- Thermo Fluids

Stakeholder comments are grouped below by topic, followed by CalRecycle’s response.

Main Determinations/Concerns

1. Economic analysis project component

Stakeholder Comments: The single largest issue expressed by stakeholders is whether or not the project should include an economic analysis of some type and the nature of such economic analysis. Some stakeholders believe that SB 546 requires the inclusion of eco-efficiency or econometric modeling, while others interpret the inclusion of an economic analysis as beyond the statutory authority of the project, citing the department (as opposed to the LCA Practitioner) as the party responsible for evaluating certain regulatory requirements.

As a result of this overarching difference of opinion, specific comments on the substance of the LCA Practitioner SOW and proposed contractor ranged significantly. These ranged from several important, though relatively minor suggestions (e.g., more detail should be included regarding the data-gathering

phase, include sensitivity analysis language, additional opportunity for stakeholder comment before finalizing the LCA study, etc.) to suggesting that CalRecycle postpone approving the SOW until after the first stakeholder meeting. It was suggested that the latter approach would allow further development of the scope of the LCA study, thereby ensuring that the appropriate team of contractors is selected, as well as ensure that, given the scope of the project, all stakeholders are given sufficient opportunity to participate.

Some stakeholders further commented that an econometric model and publically available tool that could be used by others around the country and even internationally should be developed as a part of this project. Others suggest that the geographic scope be limited to California processes, regulatory environment, and impacts.

CalRecycle Response: CalRecycle staff agrees that an economic component for this project is necessary. CalRecycle originally intended to initiate a separate contract to satisfy the relatively short list of parameters in PRC §48651.5(b)(1)C); however, after careful consideration of the statute, CalRecycle has concluded that an economic component as a complement to the environmental LCA is required.

Pursuant to PRC§ 48651.5(b)(1) the purpose of the comprehensive LCA is to provide the Legislature with recommendations for statutory changes that may be necessary to promote increased collection and responsible management of used oil. It is CalRecycle's determination that the critical and far-reaching nature of such recommendations necessitates the inclusion of an economic analysis as part of the overall project. Further, without this component the effort would not be comprehensive and thus would fall short of the Legislature's express mandate. Written comments from the bill's author support this determination. Therefore, CalRecycle staff plans the following:

- Add an in-house economist to the CalRecycle/DTSC project team in an advisor role;
- Conduct an economic study under a separate contract with a separate contractor(s) than the LCA study;
- Wait until the first stakeholder meeting to further explore necessary components for the scope of work on the economic study, to allow for full input from stakeholders;
- Modify the existing "Used Oil Life-Cycle Assessment Study" SOW following the first stakeholder meeting to include tasks related to identifying all assumptions and conducting sensitivity analyses. Since the boundaries and detailed scope of the LCA and economic analyses are, by statutory design, intended to be developed with stakeholder input, further modifications from the stakeholder meeting will likely be included; and
- Present proposed contractors for the LCA study and the economic study as quickly as feasible following the initial stakeholder meeting.

Regarding the comment that an econometric model and tool should be developed that could be used by others, CalRecycle anticipates that the studies conducted in support of this project will necessitate the collection of information from within and outside of California (e.g., on material flows, management methods, and economics). However, funding for this study is directly tied to fees collected pursuant to the California Oil Recycling Enhancement Act (Act), and recommendations contained in the final report to the Legislature will appropriately focus on the Act. CalRecycle thus plans to conduct these studies with a California-specific focus that will take into consideration California's unique regulatory and operational framework. This will entail development of a complementary economic analysis for

purposes of this study. CalRecycle intends to ensure that the scope and all underlying data, analytical algorithms, and methods are vetted by stakeholders in the context of the project's transparent process. However, CalRecycle does not plan to develop this into an econometric modeling tool that will be published and maintained by CalRecycle for use by other states and countries. CalRecycle's perspective is that other interested parties may be able to take this study's economic analysis methodology and apply it to situations outside of the California context.

2. International Organization for Standardization (ISO) Peer Review Contract

Stakeholder Comments: Some stakeholders stated that the existing LCA Practitioner SOW language could require the LCA Practitioner to use stakeholder recommendations that may conflict with International Organization for Standardization (ISO) standards. Others stated the need to clearly separate the LCA scope and boundary development phase, which they state, should have broad stakeholder involvement and support, from the assessment phase, in order to avoid potential conflict regarding preconceived solutions/conclusions among the different stakeholders.

CalRecycle Response: CalRecycle is actively considering contractors for this contract. CalRecycle staff recommends slight modifications to the draft SOW at this point. These include, but are not limited to, clarifying that this is an independent review of the LCA related to ISO standards, to ensure that proper protocol is followed, and not a traditional peer review of the merits of any particular outcome alone; and slightly reducing the contractor's involvement in stakeholder activities in order to place additional distance between the ISO reviewers and the process of developing the scope of the LCA study.

3. Proposed contractors for the LCA Practitioner and LCA Peer Review contracts

Stakeholder Comments: Concerns were raised regarding the specific contractors proposed for the LCA Practitioner and Peer Review contracts. Some stakeholders believe that Dr. Arpad Horvath, due to his previous work on this topic co-authoring a 2004 study with Mr. Boughton, and an interpretation that Dr. Horvath does not meet the criteria for "independent third party consultant", should not be considered as a contractor for the LCA Peer Review contract. Similar concerns were raised with regard to Dr. Roland Geyer and his consideration for LCA Practitioner.

CalRecycle Response: CalRecycle recognizes Dr. Horvath's experience and expertise in LCA and ISO review and is confident in his abilities to perform the tasks associated with the Peer Review contract. However, since Dr. Horvath has withdrawn from this project, CalRecycle must consider alternate contractors for the LCA Peer Review SOW.

4. Details for Life-Cycle Assessment Practitioner contract

Stakeholder Comments: CalRecycle received several comments requesting additional technical detail with regard to the LCA Practitioner SOW. For example, suggestions included adding tasks and/or additional detail to existing tasks regarding an economic component (see #1 above); allowing for additional primary data gathering and generation; sensitivity testing and uncertainty analysis; as well as consideration of closed-loop recycling.

CalRecycle Response: As described in #1, above, CalRecycle will gather additional stakeholder feedback on the scope of the LCA study, including an accompanying economic analysis, at the first stakeholder meeting. Therefore, the stakeholder comments mentioned above and many others will be addressed in the next draft of the LCA Practitioner SOW.