

Attachment G
Research Proposal Template
Roads & Highways Monitoring Committee
Subgroup of the Stormwater Working Group

1. RESEARCH PROPOSAL TITLE

Testing of PCBs in motor oil and fuels (i.e., recycled content)

2. RESEARCH PROBLEM DESCRIPTION

We have some preliminary evidence that PCBs are in motor oil that is imported from other countries and locally (i.e., recycled oil and other "waste" is being incorporated into products sold here) and anecdotal evidence about similar contamination in fuels. A fairly simple study would involve lab testing of a range of products we purchase off the shelf. We can compare PCBs and other priority pollutant levels in different brands of Oil/fuels

3. RESEARCH OBJECTIVE

Determine if there are indeed pollutants in motor oil and fuel that are due to contamination (recycled materials). If so, we can then address this (might take legislation or might already be banned, but need to enforce)

Effectiveness Source Identification Status & Trends

4. LITERATURE SEARCH AND RESEARCH IN PROGRESS SUMMARY

Recent cases:

Midas Muffler mishandles PCBs in used motor oil <http://www.americanrecycler.com/0609/midas.shtml>

Portland's Oil Re-Refining Company must incinerate 150,000 gallons of PCB-contaminated oil

http://www.oregonlive.com/environment/index.ssf/2013/04/portlands_oil_re-refining_comp.html

http://www.spokanewastewater.org/Docs/Stormwater/PCB_Annual_Report_2012.pdf

Table 1. Oil and Transmission Fluid Sample PCB Concentrations

Sample Total PCB, micrograms per kilogram (ppb)

(EPA Method 1668)

Pennzoil SAE5W-30	37.8	
Quaker State SAE5W-30	14	
Valvoline Mercon V	49.5	
Red Line D4 Automatic Transmission Fluid		8.8
Valvoline Full Synthetic 5W-30	116	

5. Geographic Scope and Urgency of Research

How broadly will the results of this research apply?

Nationally Pacific Northwest WA Only Eastern WA Western WA Puget Sound Basin

How quickly will you need the results of this research?

ASAP Within 6 months Within 1 year Within 2 years Within 5 years Ongoing

6. Conceptual Research Approach

We would hire a contractor or a research institution to do the actual study.

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7. ESTIMATED COST AND TIMING (Optional)

Identify: 1) The funds required; 2) How long the project will take; and 3) Whether the project depends on another action before it can proceed.

8. CONTACT INFORMATION

Provide specific contact information for the person(s) involved in developing the research proposal.

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