

**DR. G. H. HUANG**  
**UNIVERSITY OF REGINA**  
**Faculty of Engineering**  
**Regina, Saskatchewan**  
**CANADA S4S 0A2**

**CONFIDENTIAL REPORT**  
**to the Petroleum Technology**  
**Research Centre**

**Scoping Study**  
**of Environmental Issues in**  
**the Petroleum Industry**

by  
G. Renouf  
Saskatchewan Research Council

L. Liu  
G. Huang  
University of Regina

**SRC Publication No. P-110-493-C-00**

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**SUMMARY**

Notes  
1. Song 无问题  
2. 问题多  
3. 问题多  
call Guy  
easy

This study was undertaken to determine if research projects in the areas of site remediation and oily waste treatment would have the support of the petroleum industry. A literature search and website search allowed us to review the state of the art in environmental research. A telephone survey of contacts from various branches of the petroleum industry in western Canada was also conducted. Thirty-seven individuals reported on which environmental issues were most significant. They also relayed their views on whether research was needed in the areas of site remediation and oily waste management.

A number of site remediation projects have been undertaken to deal with contaminated sites due to the leakages and spills of petroleum products in the past few decades in western Canada. Site remediation has become a routine operation in the case of fresh spills. However, operators still have difficulty with certain contamination cases, most notably those caused many years in the past. The application of technologies developed in the United States have not always been successful in western Canada's colder climate. Site remediation research will attract industry funding as long as the work addresses the specific problems identified by industry. These are as follows:

- hydrocarbon contamination in high-clay soils
- aged hydrocarbon contamination below surface
- flare pit or ecology pit clean-up
- heavy oil contamination in high-salt soils

Industry contacts also reported a need for more research into remediating salt-contaminated soils.

Oily waste management was, in general, not a fruitful topic of research, according to environmental managers. Operations managers, however, appeared to be interested in studies of oily waste volume reduction.

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