

# Other PHC Projects

2020 Plant Uptake of Petroleum Hydrocarbons and Salt (NaCl) and Derivation of Soil-to-Plant Uptake Factors

2018-2020 Remediation of Hydrocarbon Contaminated Soil and Groundwater using Heat-Activated Nano Stimulators

2013 Assessment of the Environmental Significance of Vapour Emissions During Ex Situ Remediation Activities Compared to Landfill Disposal, 2013 Summary Report

- 2013 MEMS\_Sampling Letter \_Vapour Emissions from Ex Situ Remediation
- 2013 MEMS\_Vapour Emissions Spreadsheet Tool
- 2014 MEMS\_Vapours Presentation
- 2014 MEMS\_Sampling Letter \_Vapour Emissions from Ex Situ Remediation

2013 A Rapid Bioassay for Predicting Toxicity of PHC-Contaminated Soil, Phase 3

- 2013 ALS\_Rapid Bioassay for PHC Contaminated Soil Presentation
- 2013 ALS\_ A Rapid bioassay for predicting toxicity of PHC contaminated soil\_Phase 3 Report
- 2014 HydroQual\_Bioassay Presentation

2012 Vapour Emissions During Ex Situ Remediation Activities: Model Calibration, Evaluation of Biofilters, and Screening Tool Development

- 2012 Meridian\_Vapour Emissions During Exsitu Remediation Activities
- 2012 Meridian\_Vapour Emissions Spreadsheet Tool

2012 Assessment of the Environmental Significance of Vapour Emissions During Ex Situ Remediation Activities Compared to Landfill Disposal, 2012 Update

- Meridian\_Vapour Emissions
- 2011 Meridian\_Vapour Emissions
- 2012 Meridian\_Vapour During Exsitu Remedial Activities compared to Landfill Disposal

2012 Alternative Process for Developing a Tier 2 SSR0, Phase 1

- 2013 Zajdlik and Stantec\_Tier 2 SSR0s Presentation
- 2013 Stantec\_Alternative Process for Developing Tier 2 SSR0s
- 2013 Stantec\_SSR0\_Report 09-9193-50
- 2011 WorleyParsons\_Tier 2 for F2 and F3 Presentations

2011 A Rapid Bioassay for Predicting Toxicity of PHC-Contaminated Soil, Phase 2

- 2011 ALS\_PHC Rapid Bioassay-913751 Report
- 2011 HydroQual\_Bioassay Presentation

2011 Simplified Microtox Bioassay Procedure for Drilling Waste Testing

- 2011 ALS\_PHC BioassayFinal for Drilling Waste\_09-9158-50 Report

2009-2011 Crop Response to Excessive Root Zone Contamination with Petroleum Hydrocarbons Under Simulated Drought

2010 A Rapid Bioassay for Predicting Toxicity of PHC Contaminated Soil, Phase 1

- 2009 ALS\_PHC Rapid Bioassay\_09-9159-50 Report

2010 Petroleum Hydrocarbon Tier 2 Guideline Calculation Software

- Hydrocarbon Calculator

2008 Earthworm Chronic Testing Phase 2, Identifying Effective Soil Conditioners and Amendment Levels in Clay and Sand Reference Soil for Use in Toxicity Testing

- 2008 Stantec\_Soil Conditioners and Overview of A New Bioavailability Project
- 2008 Stantec\_SOIL CONDITIONERS AND AMENDMENT LEVELS IN CLAY AND SAND for TOXICITY TESTING\_Phase 2

2007 Applications of Ecotoxicity Methods and Bioassay Testing for Site Specific Risk Assessments

- 2007 Stantec\_Ecotoxicity and Bioassay for SiteSpecific Risk Assessments Presentation

2006 Validation of Toxicology Test Methods for Assessing Petroleum Hydrocarbon and Brine Spills in Boreal Forest and Taiga Eco-Zone Soils

- 2007 SRC\_PHC and Brine Spills in Boreal Forest Soils
- 2007 SRC\_PHC and Brine Spills in Boreal Forest Soils Report
- 2008 Env Canada\_PHC contaminated boreal forest soil Presentation
- 2010 Env Canada\_Boreal Forest Soil Toxicity Test Methods Presentation
- 2013 Env Canada\_PHC contaminated boreal forest soil Presentation

2002 Test Methods for Assessing Toxicity in Contaminated Soil Presentation

- 2002 Stantec\_EARTHWORM Tests PH 2 Report
- Stantec\_Soil Test Methods for Assessing Toxicity in Contaminated Soil Presentation
- 2003 Stantec and UMA\_Soil Toxicity Presentation
- 2004 Env Canada\_Biological Test Methods for Assessing Contaminants in Soil Presentation

2002 In Situ Flushing Process for the Treatment of Mixed-Contaminated Soil

- 2004 SAIC\_Remediation using insitu flushing Presentation

2002 Electro-Thermal Remediation of Hydrocarbon Contaminated Soils and Groundwater

2002 Treatment of PAHs in Soil using a Two-Phase Partitioning Bioreactor

2001 Monitored Natural Attenuation for Upstream Oil and Gas

- 2000 Komex\_Uptake of Sulfolane by Cattails Report
- 2001 Komex\_MNA Presentation
- 2001 UoA\_Natural Attenuation
- 2002\_Remediation by MNA\_ERAC
- 2002 Komex\_MNA Letter Update
- 2002 Komex\_Diffusion Samplers in MNA Letter Update
- 2002 Armstrong\_Assessment MNA Report
- 2003 ERAC\_Remediation of PHC Site by MNA
- 2004 Komex\_Sulfate Reduction\_MNA
- 2004 Komex\_MNA Presentation
- 2005 Komex\_MNA Presentation

2001 Land treatment of bioremediated hydrocarbon contaminated soils

- 2002 ARC\_Phytoremediation to Enhance Hydrocarbon Remediation in Landfarms

2001 Chemical Washing Oil Contaminated Soil

- 2001 Chemical Washing\_Proposal

2001 Developing a method for large scale field measurement of soil gas emission

2000 Hydrophobic Soils: Site Characterization and Tests of Hypotheses Concerning their Formation

- 1998 Imperial\_Hydrophobicity Project
- 2000 Imperial\_Soil Hydrophobicity
- 2002 Imperial\_Soil Hydrophobicity\_Part 2

2000 Acute Screening and Definitive, Chronic Testing with Motor Gasoline

- 2000 Stantec\_Acute Screening and Definitive, Chronic Toxicity Tests with Motor Gasoline\_Presentation

2000 Degradation of Petroleum Hydrocarbons at the Soil/Root Interface in Contaminated Soils

2000 Modification of Plant Roots to Accelerate Microbial Degredation of Hydrocarbons