

Petroleum Technology Alliance Canada

Oil and Gas Industry Collaboration through the Remediation Reclamation Research Committee

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Chief Operating Officer

PTAC

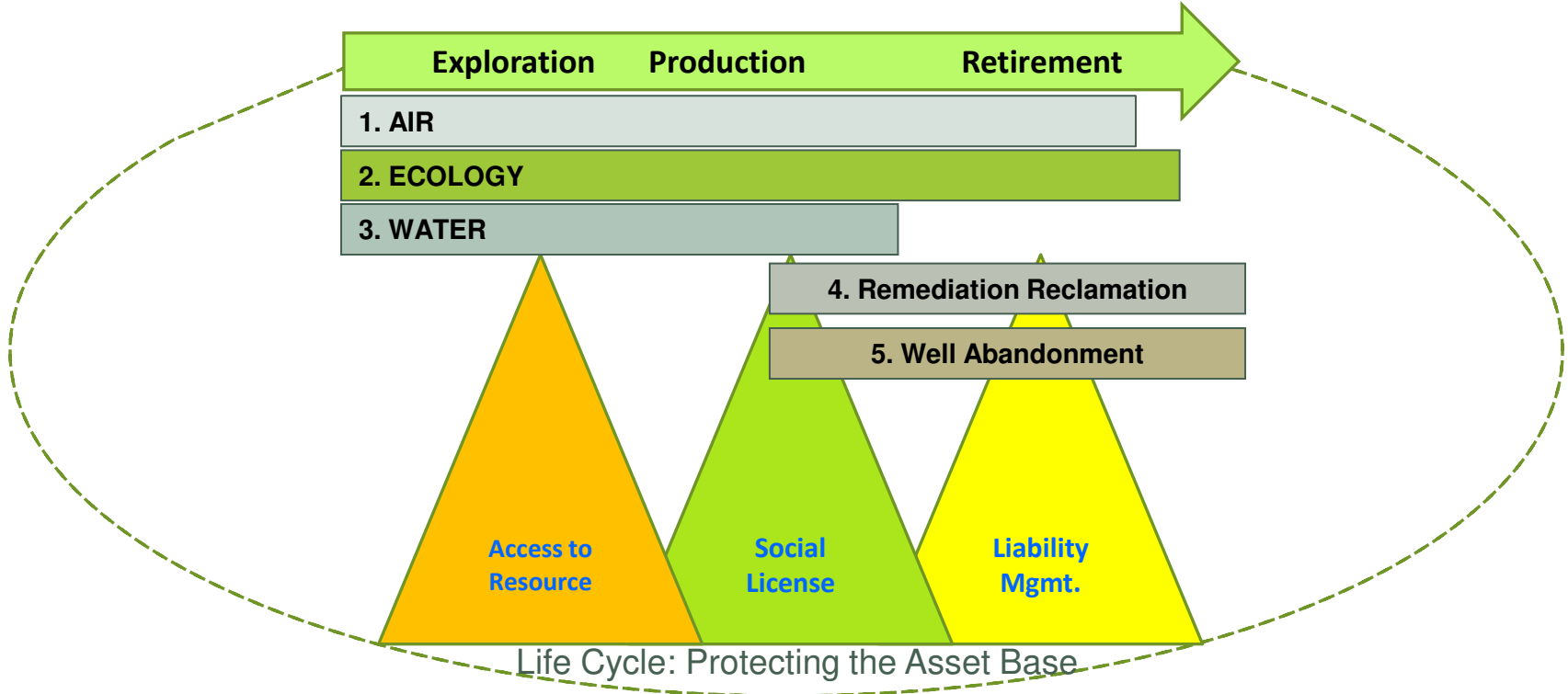
Driven. Innovative. Valuable.

- The Remediation Reclamation Research Committee (RRRC) is a technical arm of the AUPRF Program which conducts practical science-based studies to develop credible and relevant information to address knowledge gaps.
- The Alberta Upstream Petroleum Research Fund was launched to create innovation and collaborative R&D to minimize the environmental impacts of conventional oil and gas activities, economically.
- AUPRF is a collaboration funded by the Oil and Gas Sector working with government and regulators to create practical solutions.



AUPRF: Partnership for Performance Improvement

Collaboration Between Industry, Government & Regulators to Improve Environmental Performance



*Committee priorities, projects, and budgets are established by CAPP, and EPAC technical experts from member companies.

Remediation Reclamation Research Committee (RRRC)

- Ensures full and effective engagement with relevant regulators, stakeholders and subject matter experts through steering committee participation.
- Provides collaborative opportunities to match technical experts with funding to explore unique challenges and find defensible solutions
- Outcomes of the projects lead to the development of smart policies, regulations and best practices.
- Completed projects across the 5 topic areas have resulted in cost savings estimated (by industry) at \$125M annually.

Regulation and Guideline Impacts

- Remediation and Reclamation committee project results supported the following regulatory and guideline revisions/updates:
 - Stratified criteria for PHC *
 - Remote Green Zone Limits (F2-F3) *
 - Development of Subsoil Salinity Tool (SST) – Chloride *
 - Total Barium to extractable Barium (Barite)
 - Alberta Tier 1 Hydrocarbon Fraction F3 guideline change
 - Alberta Tier I for Boron
 - Salt endpoints in muskeg post brine release
 - Alberta Tier I Methanol
 - Alberta Tier I Sulfolane
 - Rapid Bioassay for Predicting Toxicity of PHC

2023/24 Policy Issues/Knowledge Gaps

Highest Priority Knowledge Gaps:

1. Salinity Assessment (delineation and characterization for chlorides)
2. Research to support future updates to forested wellsite reclamation criteria (e.g. understanding sites reclaimed post 2007, species diversity parameters and thresholds, caribou habitat)
3. Risk Assessment - Understanding receptors and standardizing risk assessment approaches (scalable) for chlorides
4. Use of remote sensing to assist in reclamation assessments and certification

Details found at <https://auprf.ptac.org/soil-and-groundwater-policy-issues-and-knowledge-gaps/>



Alberta
Upstream Petroleum Research

Call for Proposals

We currently have an open call seeking proposals to address the knowledge gaps.

- Deadline to submit is October 28
- The Step 1 proposal is a short online form which can be accessed here: <https://auprf.ptac.org/call-for-funding-applications/>
- Two-page form asking for high level information about potential projects – scope, leveraged funding, value add for the sector.

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RRRC Members

- Christopher Boyd Shell
- Debbie Tainton CNRL
- Devin Scheck BC ER
- Elise Neumann AEPA
- Jason Desilets Cenovus
- Jeff Mills Orphan Well Association
- Jennifer Thompson Rev Energy Inc.
- Jonas Fenn White Cap
- Linda Eastcott Imperial Oil
- Lisa Warren Cenovus
- Lori Neufeld Imperial Oil
- Marci Jacula Rev Energy Inc.
- Nadia Cruickshank AER
- Paul Hartzheim CAPP
- Rick Rohl ARC Resources
- Sara Blacklaws AER
- Shawn Glessing Cenovus
- Sheldon Exner Crescent Point Energy
- Sonia Glubish CNRL
- Tom Knapik Plains Midstream
- Tyrel Hemsley AEPA

RRRC Project Updates today

12:05 - Evaluation of Reclamation Practices on Forested Upland and Peatland Well Sites - Dean MacKenzie, Vertex Resource Group & Chibuike Chigbo, InnoTech Alberta

12:35 - Evaluation of Soil Chloride Delineation Requirements - Daniel Pollard, Matrix Solutions

1:10 - Expanded Correlations Between Hydrometer Data, Sieve Data, and Saturation Percentage Data/Subsoil Salinity Tool Technical Manual - Greg Huber, Equilibrium Environmental

1:45 - Update on the Alberta and Saskatchewan Background Soil Quality Systems - Paul Fuellbrant, Statvis Analytics & Chibuike Chigbo, InnoTech Alberta

2:20 - Regulatory Approval of Risk Tools Shallow Groundwater Guidelines to Protect Underlying DUA - Ian Mitchell, Millenium EMS Solutions

2:55 - Remote Sensing Tools for Environmental Monitoring and Certification of Well Sites - Eduardo Loos, Vertex Resource Group

3:30 - Recovery Strategies for Industrial Development in Native Grassland – the Dry Mixed grass Natural Subregion - Brian Lambert, Northshore Environmental

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Q&A – Speaker by Speaker

To reach us for questions about projects or the AUPRF program

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- Lorie Mayes lmayes@ptac.org