



**PTAC**

**PETROLEUM  
TECHNOLOGY  
ALLIANCE  
CANADA**

**REQUEST FOR PROPOSAL (RFP)**

**Design and Cost Estimate for Central Terminal System for  
Collection of High Purity CO<sub>2</sub> Emissions in Fort Saskatchewan and  
Sturgeon, Alberta Area with CO<sub>2</sub> Pipeline to Pembina and Swan  
Hills for Use in Enhanced Oil Recovery**

**November 21, 2006**

## CO2 RFP Overview

- } This RFP is a result of considerations by the PTAC CO2 EHR (Enhanced Hydrocarbon Recovery) Steering Committee.**
- } The question of economic feasibility has been identified (through industry working groups and workshops) as a barrier to implementation of CO2 EHR.**
- } The steering committee believes that sufficient high purity CO2 is currently being vented in the Fort Saskatchewan area to support the initiation and ongoing operation of commercial enhanced recovery of conventional oil in the Pembina and Swan Hills fields. It is anticipated that additional high purity CO2 will become available as future upgraders using the gasification and other processes come on stream.**

## CO2 RFP Overview

- } **(+/- 40%) capital and operating cost estimate (was +/-25% in RFP).**
- } **Sale price of CO2 and CO2 emissions credits or purification/separation of CO2 from flue gas or similar low CO2 concentration streams will not be considered in this study.**
- } **Potential Sources:**
  - **Agrium (Red Water)**
    - Agrium (Fort Saskatchewan)**
    - Sherritt (Fort Saskatchewan)**
    - Shell**
    - Dow Chemical**
    - Dow (Ethane Purifier)**
  - **North West Upgrading (future)**
  - **Northern Lights(future)**
  - **Fort Hills(future)**

## Scope of Work

- } Collect CO<sub>2</sub> (at the available pressure) via pipeline at the property boundary of the high purity CO<sub>2</sub> emissions sites (6 current sources plus up to 3 future sources) in Fort Saskatchewan and Sturgeon area (design basis up to 5,000 t/d CO<sub>2</sub> total).**
- } Pipeline the CO<sub>2</sub> to a central terminal site to be established for dehydration and compression followed by pipeline transport to the oil fields.**
- } The product of the study will be an estimate of the capital and operating cost for the collection, terminal and pipeline to Pembina and Swan Hills, including the incremental cost to “plug-in” any or all of the three additional CO<sub>2</sub> sources to the system as such arise in the future.**

## Potential Funders, Performers & Next Steps

- } **14 potential funders**
- } **4 potential performers**
- } **Confirm participation (provision of information) of CO2 emitters in project**
- } **Expand potential sources by including medium purity (40%) CO2 sources**
- } **Request revised proposals from 4 potential performers**
- } **Funders select successful performer**
- } **Raise necessary funding**
- } **Launch project**

## Final Step and Questions

- } The results of the project will likely be publicly available, and will be used to define more clearly the question of whether the pursuit of CO2 capture and storage for EHR is viable and economically feasible.**
- } It is hoped this will lead to a commercial project.**
- } Questions**

## Contact PTAC

} We are located at –

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} For further information – <http://www.ptac.org/co2/co2r.html>

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