

Plains CO₂ Reduction (PCOR) Partnership

Energy & Environmental Research Center (EERC)



Plains CO₂ Reduction (PCOR) Partnership Monthly Update October 1–31, 2018

PHASE III ACTIVITIES

Task 1 – Regional Characterization (Wesley D. Peck)

This task ended in Quarter 1 – Budget Period (BP) 5, Year 11 (March 2018).

Task 2 – Public Outreach and Education (Neil Wildgust)

Highlights

- Named Neil Wildgust task leader following the retirement of Dan Daly.
- Made additional changes to the content and layout of the draft updated Phase II Zama fact sheet. Begin the internal review process within the next few weeks.
- Continued internal discussions and work on the PCOR Partnership public Web site technical upgrade design, including the following:
 - Prepared a test site.
 - Determined a list of programming efforts remaining to bring the upgraded site live prior to December 31, 2018.
 - Began internal review of the first batch of Web pages October 31, 2018.

Task 3 – Permitting and NEPA (National Environmental Policy Act) Compliance (Charles D. Gorecki)

This task ended in Quarter 1 – BP5, Year 11 (March 2018).

Task 4 – Site Characterization and Modeling (Charles D. Gorecki)

This task ended in Quarter 1 - BP5, Year 10 (March 2017).

Task 5 – Well Drilling and Completion (John A. Hamling)

This task ended in Quarter 3 – BP4, Year 7 (June 2014).

Task 6 – Infrastructure Development (Melanie D. Jensen)

This task ended in Quarter 1 - BP5, Year 11 (March 2018).

Task 7 – CO₂ Procurement (John A. Harju)

This task ended in Quarter 4 – BP4, Year 6 (September 2013).

Task 8 – Transportation and Injection Operations (Melanie D. Jensen)

This task ended in Quarter 4 - BP4, Year 8 (September 2015).

Task 9 – Operational Monitoring and Modeling (John A. Hamling and Larry J. Pekot)

This task ended in Quarter 1 - BP5, Year 11 (March 2018).

Task 10 – Site Closure (John A. Hamling)

Highlights

 Prepared metal signs for installation at each of the ten soil gas profile stations and the 04-03 OW (observation well) geophone array. The signs are part of decommissioning (abandoning in place) and transfer of operations of the installations to Denbury Onshore (Denbury), which is a preferred alternative to removal and reclamation. The signs locate and provide construction and health, safety, and environment (HSE) information as part of the transfer agreement.

Task 11 – Postinjection Monitoring and Modeling (John A. Hamling and Larry J. Pekot)

This task ended in Quarter 1 – BP5, Year 11 (March 2018).

Task 12 – Project Assessment (Loreal V. Heebink)

This task ended in Quarter 1 - BP5, Year 11 (March 2018).

Task 13 – Project Management (Charles D. Gorecki)

Highlights

- Provided Draft Deliverable (D) 62 entitled "Plains CO₂ Reduction Partnership Phase III Final Report" to Stefan Bachu, Alberta Innovates – Technology Futures, for technical review and to Denbury for consultation.
- Presented at the 14th International Conference on Greenhouse Gas Control Technologies (GHGT-14) held October 21–25, 2018, in Melbourne, Australia.
 - Oral presentations included the following:
 - Session 2C: "Successes and Lessons Learned from 15 years of the PCOR Partnership"
 - Session 9B: "Passive Microseismic Monitoring of CO₂ EOR [Enhanced Oil Recovery] and Associated Storage Using a Downhole Array in a Noisy Subsurface Environment"
 - Session 11E: "An Improved Numerical Modeling and Simulation Study of the Aquistore CO₂ Storage Project"
 - Poster presentations included the following:

- Poster 192: "Evaluation of Measured Differences in Liquid Versus Gas Permeability and Identification of Potential Causes"
- Poster 205: "Determining the Long-Term Fate of CO₂ Storage Associated with an Enhanced Oil Recovery Project"
- Poster 263: "Viability of InSAR as a Monitoring Tool in Challenging Terrain: Bell Creek, Montana"
- Poster 373: "Nexus of Water and CCS [Carbon Capture and Storage]: Findings of the Water Working Group (WWG) of the Regional Carbon Sequestration Partnerships"
- Poster 463: "PCOR Partnership Outreach: An Evolving Regional Capability Based on RCSP [Regional Carbon Sequestration Partnership] Outreach Best Practices"
- Charlie Gorecki chaired or cochaired Sessions 4F "Injectivity," 5B "Geological Site Characterization," and 10F "Geochemical Modeling." Neil Wildgust cochaired Sessions 3F "Novel Storage Concepts" and 7F "Field Scale Modeling." Chantsalmaa Dalkhaa cochaired Session 8F "Pore Scale Modeling." Wes Peck cochaired Session 3B "Risk Assessment for Geological Storage."
- Continued addressing comments from an internal review of a value-added report on the geologic characterization and CO₂ storage potential of the state of Nebraska (continuation of a Task 1 activity). Additional modeling was completed to update CO₂ storage potential estimates.
- Began internal review of a value-added overview document based on the PCOR Partnership best practices manuals.
- Continued work on value-added documents discussing PCOR Partnership technical work. These will be submitted to appropriate subject matter journals.
- Continued to evaluate data to determine appropriate content to upload into the U.S.
 Department of Energy (DOE) National Energy Technology Laboratory (NETL) EDX.
 Continued discussions of plans to upload PCOR Partnership data to EDX and a pathway for long-term data management, including the following:
 - Continued preparation, review, and upload of Phase II data. Additional Phase II data were found and discussed with the federal project manager. At least 50% of the data files have been uploaded as of October 31, 2018.
 - Participated in a WebEx hosted by DOE to discuss pushing files to the PCOR Partnership public EDX workspace.
- Completed reporting in October:
 - September monthly update
 - Task 13: D58/D59 Quarterly Progress Report/Milestone Quarterly Report

Task 14 – RCSP WWG Coordination (Ryan J. Klapperich)

This task ended in Quarter 1 - BP5, Year 11 (March 2018).

Task 15 – Further Characterization of the Zama Acid Gas EOR, CO₂ Storage, and Monitoring Project (Charles D. Gorecki)

This task ended in Quarter 2 – BP4, Year 7 (February 2014).

Task 16 – Characterization of the Basal Cambrian System (Wesley D. Peck)

This task ended in Quarter 2 – BP4, Year 7 (March 2014).

Travel/Meetings

• October 18–29, 2018: traveled to Melbourne, Australia, to attend and present at GHGT-14.

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