

POST-INJECTION SITE CARE AND SITE CLOSURE PLAN SUMMARY

40 CFR 146.93(b)

Sutter CCUS, LLC

1.0 Facility Information

Facility name: Sutter Energy Center
CCS 1 Well
CCS 2 Well
CCS 3 Well

Facility contact: Barbara McBride, Director of Strategic Origination Development
Oak Road, Walnut Creek, CA 94596
(925) 570-0849
bmcbride@calpine.com

Well location: Robbins, Sutter County, CA



The Post-Injection Site Care (PISC) and Site Closure plan describes the activities that SUTTER CCUS, LLC will perform to meet the requirements of 40 CFR 146.93. SUTTER CCUS, LLC will monitor ground water quality and track the position of the carbon dioxide plume and pressure front for the duration of the PISC period years. SUTTER CCUS, LLC may not cease post-injection monitoring until a demonstration of non-endangerment of USDWs has been approved by the UIC Program Director pursuant to 40 CFR 146.93(b)(3). Following approval for site closure, SUTTER CCUS, LLC will plug all monitoring wells, restore the site to its original condition, and submit a site closure report and associated documentation.

2.0 Overall Strategy and Approach for Post-Injection Site Care and Closure

The reservoir simulation indicates that, after injection ceases, the pressure front begins to dissipate, and the CO₂ plume remains within the injection zone and continues to expand. After the injection ceases, the project will plug and abandon the injector wells according to the plugging procedure proposed in the Plugging Plan document. Additional monitoring wells will be drilled as proposed in the phased approach of the monitoring plan provided in the Testing and Monitoring Plan document.

Planned groundwater quality monitoring and plume and pressure front tracking during the post injection phase will meet the requirements of 40 CFR 146.93(b)(1). The results of all post injection phase testing and monitoring will be submitted annually, within 60 days of the anniversary of the date that injection ceases. The post-injection monitoring program will focus on the tracking of the projected CO₂ plume migration.

During the PISC period, the monitoring reports will be prepared annually and submitted to the EPA Region 9 UIC Branch Office. These reports will summarize methods and results of ground water quality monitoring, CO₂ storage zone pressure tracking, and indirect geophysical monitoring for CO₂ plume tracking.

The PISC Plan will be reviewed every 5 years during the PISC period. Results of the plan review will be included in the PISC monitoring reports. The operational and monitoring results will be reviewed for adequacy in relation to the objectives of the PISC. The monitoring locations, methods, and schedule will be analyzed in relation to the size of the CO₂ storage zone, pressure front, and protection of USDWs. In case of changes to the PISC plan, a modified plan will be submitted to the EPA Region 6 UIC Branch Office at least 30 days before the planned initiation of the changes.

Prior to approval of the end of the post-injection phase, Sutter CCUS will submit a demonstration of non-endangerment of USDWs to the UIC Program Director, per 40 CFR 146.93(b)(2) and (3). Sutter CCUS will conduct site closure activities to meet the requirements of 40 CFR 146.93(e). Sutter CCUS will submit a final Site Closure Plan and notify the permitting agency at least 120 days prior of its intent to close the site. Once the permitting agency has approved closure of the site, Sutter CCUS will plug the monitoring wells and submit a site closure report to EPA. The activities, as described below, represent the planned activities based on information provided to EPA. The actual site closure plan may employ different methods and procedures. A final Site Closure Plan will be submitted to the UIC Program Director for approval.

Upon conclusion of the PISC period, all monitoring wells will be plugged and capped below grade in accordance with the approved Plugging and Abandonment Plans. Before the wells are plugged, the internal and external integrity of the wells will be confirmed. The results of this logging and testing will be reviewed and approved by the appropriate regulatory agencies prior to plugging the wells. After the completion of the plugging activities, a plugging report will be submitted to the UIC Program Director describing the methods used and tests performed on the well during plugging. This report will be submitted to the UIC Program Director within 60 days of completing the plugging activities.

At the end of the PISC phase, Sutter CCUS will ensure the site is reclaimed and returned to predevelopment condition to meet the requirements of 40 CFR 146.93(e).