



NATIONAL POLICY FOR THE RIGHT-OF-WAY AUTHORIZATIONS NECESSARY FOR SITE CHARACTERIZATION, CAPTURE, TRANSPORTATION, INJECTION, AND PERMANENT GEOLOGIC SEQUESTRATION OF CARBON DIOXIDE IN CONNECTION WITH CARBON SEQUESTRATION PROJECTS

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Instruction Memorandum

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BUREAU OF LAND MANAGEMENT

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To: All Field Office Officials

From: Assistant Director, Energy, Minerals, and Realty Management

Subject: National Policy for the Right-of-Way Authorizations Necessary for Site Characterization, Capture, Transportation, Injection, and Permanent Geologic Sequestration of Carbon Dioxide in Connection with Carbon Sequestration Projects

Program Area: Lands and Realty Management

Purpose: This Instruction Memorandum (IM) conveys policy and direction for authorizing rights-of-way (ROWs) to use public lands for site characterization, transportation, injection, capture, and geologic sequestration of carbon dioxide (CO₂) at appropriately classified injection well locations in connection with CO₂ sequestration projects. This includes authorizing the use of pore space managed by the Bureau of Land Management (BLM) when surface facilities, including injection wells, are on private or state-owned lands or lands managed by another Federal agency. When authorizing any carbon sequestration projects on public lands, the BLM should issue ROWs under Title V of the Federal Land Policy and Management Act of 1976 (FLPMA), as amended, 43 USC 1761 et seq. These ROWs should appropriately address construction, operation, maintenance, and termination of surface facilities required to inject CO₂ for permanent geologic sequestration. The BLM should similarly issue Title V ROWs when authorizing the occupation of federal pore space during and after injection operations. This IM is part of a comprehensive strategy to combat climate change and reduce CO₂ levels in the atmosphere and applies only to BLM-administered lands.^[1]

Administrative or Mission Related: Mission Related

Policy/Action: Title V of FLPMA and its implementing regulations, 43 CFR Part 2800, authorize the BLM to issue ROWs to geologically sequester CO₂ in federal pore space, including for necessary physical infrastructure and for the use and occupancy of the pore space itself. In cases of split estate where the federal government owns only the surface or the mineral estate the question of pore-space ownership may arise. In those situations, pore-space ownership should be determined early in the process. Typically, pore space is owned by the surface owner, although it may be separately conveyed. In determining pore-space ownership, title documents should be reviewed. Questions about pore-space ownership should be resolved in coordination with the Solicitor's Office. If the BLM determines that a competitive interest exists for use of a specific area for CO₂ sequestration, the BLM may use the competitive process outlined at 43 CFR 2804.23 when making an authorization decision.

The BLM should complete appropriate exploration and site characterization studies, including any mineral potential reports, and review any applicant-prepared characterization studies to determine surface and pore space ownership, geologic boundary limits, and formation impermeability before authorizing CO₂ sequestration. This initial work ensures that no physical connections exist between different formations identified for CO₂ sequestration. If needed, the BLM may issue short-term, non-renewable FLPMA Title V ROW authorizations for site testing and characterization studies related to a proposed CO₂ sequestration project.

When authorizing ROWs for CO₂ geological sequestration projects, the BLM must require the ROW holder to comply with applicable laws, including obtaining all necessary permits under the underground injection control (UIC) program to comply with the Safe Drinking Water Act of 1974 (SDWA). The UIC program is managed and permits for underground injection are issued by the Environmental Protection Agency (EPA) or a state agency with primacy for the UIC program.

Any ROW grants for long-term geologic sequestration and storage of CO₂ into subsurface formations should be issued for a minimum 30-year renewable term unless the applicant requests a shorter term. Typical authorizations under Title V of FLPMA for these purposes include those for use of pore space, pipelines, storage tanks, pumps, climate control buildings, compressor sites, power generation, electric transmission, injection wells and other associated facilities required for sequestration of CO₂. Before authorizing ROWs for these purposes, the BLM should ensure that there is an adequate monitoring program addressing the long-term stewardship of the surface and pore space injection areas to determine if any of the injectant CO₂ is escaping from the pore space.

Except in exceptional circumstances requiring approval by the State Director, all ROW authorizations for site characterization, carbon capture, injection, access, transportation, and sequestration should contain stipulations that require the ROW holders to avoid interference with any operations authorized under the Mineral Leasing Act of 1920 (MLA), as amended, require compliance with other applicable federal and state laws, and prevent damage to all other potentially recoverable mineral resources and other surface and subsurface authorized uses. The BLM will consider other uses, including uses under the MLA, when granting ROW authorizations in connection with CO₂ sequestration projects and, when warranted, will impose appropriate mitigation obligations.

Similarly, the BLM will authorize other uses of the public lands only if these uses will not interfere with previously authorized CO₂ sequestration projects, including the ROW holder's compliance with all of its permits and applicable law.

Wells previously authorized under the MLA for the extraction of leasable minerals may be considered for redrilling or recompletion to facilitate access to the pore space or formations for CO₂ sequestration, authorized under Title V of FLPMA and its implementing regulations in accordance with this policy. Mature oil and gas fields injecting CO₂ for enhanced oil recovery will not be considered as permanent sequestration for the purposes of this policy.

Proposed sequestration projects must be in conformance with the appropriate land and realty allocations within applicable Resource Management Plans (RMP). Public lands open for ROWs may not require an RMP amendment, although the terms and conditions of each RMP should be reviewed for conformance.

Sequestration projects will typically require an approved Plan of Development (POD) submitted along with the application (SF-299) form in accordance with 43 CFR 2804.25. Before approving a POD, the BLM should verify that it outlines all applicable phases of the project, from initial construction to termination and rehabilitation of the public lands involved. In addition, the BLM should verify that the POD appropriately identifies and describes how the project proponent will use temporary access and short-term use areas. Consistent with 43 CFR 2804.12(f), the Authorized Officer should request the applicant provide any permits associated with the project issued by Agencies other than the BLM at the time of application or upon receipt, if after the application is filed with the BLM. At the latest all other permits will be provided to the BLM prior to the notice to proceed for any construction.

Rental: Fair Market Value (FMV) for ROWs authorizing site characterization studies or the presence of surface facilities and infrastructure associated with a proposed CO₂ sequestration project will be based on appraised values or approved schedules, such as the linear ROW or the small site schedules, as appropriate, for the ROW surface acreage within the proposed project area as an annualized rental. In addition, the BLM will determine an appropriate charge in consultation with the Appraisal and Valuation Services Office (AVSO) for injecting actual amounts of CO₂ for sequestration into Federal pore space and use and occupancy of the pore space, as appropriate, on a per unit basis.

As required by 43 CFR 2806.10(a), the holder of a ROW grant "must pay in advance a rent the BLM establishes based on sound business management principles and, as far as practical and feasible, using comparable commercial practices." As outlined above, an appraisal, market study, or appropriate schedule will be used to determine the actual rental rate and any appropriate fees.

The BLM may, in accordance with 43 CFR 2806.16, collect an estimated rent when the final actual rent has not yet been determined. Upon completion of the necessary valuation product, the BLM will determine the appropriate rent. If the final rent determination is different than the estimated rent, the BLM will adjust the rent accordingly. If the estimated rent exceeds the actual rent as determined by consultation with AVSO, the over payment will be credited to the next year's rent.

Valuation: The AVSO, in coordination with the BLM, will complete the appropriate appraisals or other valuations to determine the rent that will apply for ROWs in connection with CO₂ sequestration projects.

Cost Recovery: Projects for CO₂ geologic sequestration should be processed as a major category for cost reimbursement with the collection of all reasonable costs associated with the project. Applications should not be considered complete until the applicant has paid the appropriate processing fees and a cost recovery agreement for the cost reimbursement has been executed. 43 CFR 2804.19-20.

Environmental Review: A 2010 Report of the Interagency Task Force on Carbon Capture and Storage ^[2] noted that Federal agencies would likely need to develop National Environmental Policy Act (NEPA) analysis, including consideration of appropriate mitigation, for CO₂ sequestration projects that require federal approval. Consistent with the recommendations of that Report, the BLM may prepare appropriate programmatic environmental documentation to evaluate standard practices to facilitate an expedited environmental review of CO₂ sequestration projects. Projects for the sequestration of CO₂ may be eligible for treatment as a covered project under the Fixing America's Surface Transportation (FAST-41) Act, 42 USC 4370m.

Bonding: All ROWs must be properly bonded as required under appropriate regulations unless the holder is exempt from bonding requirements, or the Authorized Officer has appropriately waived bonding requirements. Any required bonding will be in place prior to the execution of the grant by the Authorized Officer.

Timeframe: This policy is in effect immediately.

Budget Impact: Implementation of this Policy will have no impact on the budget due to cost recovery requirements under the regulations.

Background: Carbon Capture, Utilization and Storage (CCUS) refers to a set of technologies that capture CO₂ from emission point sources including oil and gas production, new and existing coal- and gas-fired power plants, and industrial processes, as well as from direct atmospheric capture for utilization or sequestration of the captured CO₂. This program is part of a greater goal to reduce CO₂ and other greenhouse gas emissions through capture and sequestration into deep rock geologic formations in an active effort to combat climate change and meet the President's domestic climate goal of net-zero emissions economy-wide by 2050.

The technologies for CCUS already exist, and continue to advance, with a reported 26 commercial-scale projects in operation globally. These projects are, by their nature, complex and include transportation, underground injection, and sequestration of CO₂. Projects may be subject to a range of Federal, state, and local permitting requirements, depending on their specific characteristics.

This IM updates expired IM 2012-035, Interim Guidance on Exploration and Site Characterization for Potential Carbon Dioxide Geologic Sequestration.

Manual/ Handbook Sections Affected: None

Coordination: The BLM Division of Lands, Realty and Cadastral Survey (HQ-350), Division of Solid Minerals (HQ-320), and the Division of Fluid Minerals (HQ-310) have coordinated preparation of this IM with relevant BLM State Offices. The Department of the Interior Solicitor's Office and the Appraisal and Valuation Services Office have reviewed and provided input to this policy prior to its finalization.

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Division of Regulatory Affairs

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^[1] This IM is not intended to, and does not, create any right or benefit, substantive or procedural, enforceable at law or equity by a party against the United States, its departments, agencies, instrumentalities or entities, its officers or employees, or any other person.

^[2] Representatives of the Department of State, Department of the Treasury, Department of Justice, Department of the Interior, Department of Agriculture, Department of Commerce, Department of Labor, Department of Transportation, Department of Energy, Office of Management and Budget, Environmental Protection Agency, Federal Energy Regulatory Commission, Office of Science and Technology Policy, and Council on Environmental Quality participated in the Interagency Task Force that prepared the 2010 Report.

FISCAL YEAR

2022