



Memorandum MAR 14 2025

To: Sarah J. Ryker

Acting Director, U.S. Geological Survey

From: Kathleen Sedney

Assistant Inspector General for Audits, Inspections, and Evaluations

Subject: Final Audit Report – Improvements for Oversight of Cooperative Agreement To Construct the U.S.

Geological Survey Energy and Minerals Research Facility

Report No. 2023-WR-042

This memorandum transmits our audit report on the U.S. Geological Survey's oversight related to its efforts to construct an energy and minerals research facility by awarding a cooperative agreement to the Colorado School of Mines.

We will track open recommendations for resolution and implementation. We will notify Congress about our findings, and we will report semiannually, as required by law, on actions you have taken to implement the recommendations and on recommendations that have not been implemented. We will also post a public version of this report on our website.

If you have any questions about this report, please contact me at aie_reports@doioig.gov.

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Results in Brief

Objectives

The objectives of our audit were to determine (1) whether the U.S. Geological Survey (USGS) administered a cooperative agreement awarded to the Colorado School of Mines to design and construct an energy and minerals research facility in accordance with laws, regulations, policies, and agreement terms and conditions and (2) whether expenditures were allowable and supported.

Findings

We found that USGS generally administered Cooperative Agreement No. G22AC00250 in accordance with laws, regulations, policies, and the cooperative agreement terms and conditions. Additionally, we reviewed cooperative agreement expenditures totaling \$13.1 million through December 2023 and found no unallowed or unsupported costs.

However, we found that USGS has not developed a monitoring plan for the cooperative agreement. We also found that while the cooperative agreement states that "USGS will be substantially involved throughout all phases of the project," USGS did not document the activities that would constitute substantial involvement.

Impact

USGS has obligated \$240 million for the cooperative agreement, which is the largest award USGS has made since 2018. We conducted this audit relatively early in the period of performance to assess oversight efforts to date and identify areas for improvement before USGS expends the majority of the obligated funds. It is imperative that USGS implement oversight procedures given the significant dollar value of the cooperative agreement. Without protections provided by the Federal Acquisition Regulation, the Government is at high risk. Additionally, there are inherent risks associated with construction (e.g., crew injuries; unanticipated cost increase for materials; and environmental impacts of weather, floods, and earthquakes). Procedures will help USGS ensure continuity of operations and avoid misunderstandings, ensure building requirements are integrated, and the new facility supports USGS' programmatic mission. A monitoring plan will also help management and key staff fulfill their responsibilities to bureau objectives and respond to risks in the internal control system.

Recommendations

We make five recommendations that if implemented will help USGS improve oversight of this cooperative agreement.

Introduction

Objectives

The objectives of our audit were to determine (1) whether the U.S. Geological Survey (USGS) administered a cooperative agreement awarded to the Colorado School of Mines to design and construct an energy and minerals research facility in accordance with laws, regulations, policies, and agreement terms and conditions and (2) whether expenditures were allowable and supported.

USGS awarded Cooperative Agreement No. G22AC00250 in 2022; the agreement will continue through 2027. We conducted this audit relatively early in the period of performance to assess oversight efforts to date and identify areas for improvement before USGS expends significant funding.

See Appendix 1 for our audit scope and methodology.

Background

Created in 1879, USGS is a primary source of science-based information on ecosystems, land use, energy and mineral resources, natural hazards, water use and availability, and updated maps and images of the Earth's features. As such, USGS provides expertise to support decision-making on environmental, resource, and public safety issues. Energy and mineral resources comprise one of USGS' five mission areas and according to its website, mission area staff conduct research and assessments that focus on the location, quantity, and quality of energy and mineral resources, including the economic and environmental effects of resource extraction and use.

According to the USGS Rocky Mountain Region Director, USGS has been working to secure an energy and mineral research facility to support its energy and minerals resources mission area since 2016. In November 2018, USGS awarded a cooperative agreement to the Colorado School of Mines to establish a mechanism for cooperative scientific research, educational development, and technological collaboration. The agreement stated that USGS would occupy space at the school's existing facilities as well as in a new facility the school would construct. According to USGS officials, the school planned to fund, design, and construct the facility and USGS planned to lease space in the new building. The school included USGS in its design meetings to solicit input about its needs for research space. The school hired an architect to plan and design the facility and, according to the USGS Rocky Mountain Region Director, intended to begin construction in late Spring 2020. However, due to the COVID-19 pandemic, the school was unable to continue the project in 2020 and never began construction.

In November 2021, through the Infrastructure Investment and Jobs Act (IIJA),³ Congress directed USGS to award a cooperative agreement to an academic partner for the design and construction of an energy and minerals research facility and provided \$167 million for this purpose. Specifically, the legislation (IIJA § 40204) states that the USGS Director "shall fund, through a cooperative agreement with an academic partner, the design, construction, and tenant build-out of a facility to support energy and minerals research and appurtenant associated structures." According to 2 C.F.R. Part 200, both grants and cooperative agreements may be used for Federal financial assistance and "to enter into a relationship the principal purpose of which is to transfer anything of value to carry out a public purpose authorized by a law of the United States." However, a

¹ USGS, Who We Are, https://www.usgs.gov/about/about-us/who-we-are.

² According to its website, USGS' five mission areas are: core science systems, ecosystems, energy and mineral resources, natural hazards, and water resources. https://www.usgs.gov/science/mission-areas.

³ Pub. L. No. 117-58, enacted on November 15, 2021.

^{4 2} C.F.R. § 200.1, "Definitions."

cooperative agreement differs from a grant in that a cooperative agreement "provides for substantial involvement of the Federal awarding agency in carrying out the activity contemplated by the Federal award."⁵

Colorado School of Mines Cooperative Agreement

In May 2022, USGS awarded Cooperative Agreement No. G22AC00250 to the Colorado School of Mines to design and construct a federally owned energy and minerals research facility on the school's campus in Golden, Colorado (see Figure 1 for an image of the project site).



Figure 1: USGS Energy and Minerals Research Facility Project Site, August 2024

Source: Contractor's onsite camera at Colorado School of Mines, courtesy of USGS.

The facility will, among other things, house the USGS Geology, Geophysics, and Geochemistry and Central Energy Resources Science Centers, which support USGS' energy and minerals mission by providing research and operational capabilities in critical minerals, energy resource evaluation, and other energy and mineral program priorities. These centers currently reside in older buildings at the Denver Federal Center in Lakewood, Colorado. In August 2023, USGS and the school signed two lease agreements, under which USGS will lease land on the school's campus for the facility and the school will lease space in the federally owned facility.

The cooperative agreement states that USGS will "use the roles, responsibilities, and governance processes identified in the U.S. Department of Interior (DOI) Construction Capital Planning and Investment Control Process (CPIC)" and that USGS will be substantially involved in all phases of the project. The cooperative agreement is for all approved costs up to and not exceeding \$240 million—which is the largest cooperative agreement USGS has awarded since at least 20187—and using a cooperative agreement for construction is new to USGS. Although IIJA included \$167 million for the project, USGS indicated in the cooperative agreement that it would provide the additional funding to complete the project. USGS awarded the initial cooperative agreement for \$6.1 million and has since executed six modifications. As of December 1, 2024,

⁵ Ibid.

⁶ The CPIC identifies examples of elements for each phase of a construction project. These phases include requirements determination, planning, design, construction, and operations and maintenance.

⁷ Since 2018, the next largest cooperative agreement USGS awarded was \$11.0 million and the largest contract USGS awarded was \$86.5 million.

USGS has obligated \$240 million, and expended a total of \$42.6 million. While USGS initially scheduled the facility for completion in September 2025, changes made during the design phase in response to budget constraints delayed the target completion date until November 2026. Subsequently, USGS told us that weather has caused an additional delay, and the new target completion date is December 2026.

Project Oversight

Two different branches within USGS perform oversight responsibilities for the agreement. First, the Denver Acquisition and Grants Branch, housed within the USGS Office of Acquisition and Grants, provides administrative oversight, which includes ensuring that recipients prepare all required documentation prior to award, maintaining the award file, and ensuring the recipient is submitting complete reports in a timely manner. Second, the Facilities Project Management and Support Branch, housed within the USGS Office of Administration and Policy (OAP), provides technical oversight, which includes monitoring construction work; conducting site visits; reviewing proposed budgets and change proposals; and attending meetings with the school, the architectural and engineering firm, and the general contractor.

In addition, the Colorado School of Mines oversees the contracts it has awarded for the facility design and construction. The school awarded a contract to an architectural and engineering firm for facility design and a contract to a general contractor to participate in the design and manage the construction of the building project. The general contractor will award any necessary subcontracts. The project restarted in June 2022—after the IIJA passed and building ownership pivoted to USGS—and in 2023, the school awarded the contract to the construction management firm that it had selected in 2019. See Figure 2 for an artistic rendering of the facility.



Figure 2: Artist Rendering of the Energy Minerals Research Facility

Source: USGS website.

Build America, Buy America Act

The IIJA⁹ includes Title IX—the Build America, Buy America Act (BABAA)—which requires that funds made available for a Federal financial assistance program for infrastructure may not be obligated for a project unless all the iron, steel, manufactured products, and construction materials used in the project are produced in the United States. BABAA also requires each awarding agency to ensure that recipients comply with BABAA, which means the recipients must use materials produced in the United States or obtain approved waivers. The Office of Management and Budget (OMB) issued BABAA implementation guidance¹⁰ in April 2022, and DOI

⁸ The Denver Acquisition and Grants Branch Chief signed the financial assistance award to the Colorado School of Mines.

⁹ Enacted in 2021 and in effect at the time of our review.

¹⁰ OMB Memorandum M-22-11, *Initial Implementation Guidance on Application of Buy America Preference in Federal Financial Assistance Programs for Infrastructure*, issued April 18, 2022, provides implementation guidance to Federal agencies on the application of: (1) a "Buy America" preference to Federal financial assistance programs for infrastructure and (2) a transparent process to waive such a preference, when necessary.

approved a short-term general applicability waiver in July 2022 that expired in January 2023. According to DOI Office of Grants Management (PGM) guidance, this general applicability waiver of the BABAA procurement requirements was approved to provide DOI financial assistance recipients sufficient time to apply the preferences without having to disrupt current projects and to allow projects to continue to be executed swiftly without jeopardizing performance goals.

With the general applicability waiver now expired, according to the PGM "Buy America" website, ¹¹ financial assistance recipients seeking a waiver must submit one of the three waiver requests the BABAA explicitly allows: (1) a public interest waiver in cases where the head of the Federal agency finds that applying the domestic content procurement preference would be inconsistent with the public interest; (2) a nonavailability waiver when the iron, steel, manufactured products, or construction materials are not produced in the United States in sufficient quantities or of a satisfactory quality; or (3) an unreasonable cost waiver when the inclusion of United States-made iron, steel, manufactured products, or construction materials will increase the cost of the overall project by more than 25 percent. While the ultimate waiver decision rests with the head of the Federal agency that issued the financial assistance award, the process includes input from OMB's Made in America office. ¹²

For the cooperative agreement with Colorado School of Mines, the school prepares the waiver request and submits it to the USGS acquisition team, which reviews the request for sufficient detail. The USGS acquisition team then submits the waiver request to PGM, which reviews it for compliance and then sends it to OMB for review. The energy and minerals research facility is the first USGS project for which a waiver has been requested. As noted above, final approval of the waiver rests with the head of the Federal agency that issued the financial assistance, and approved waivers are listed on the PGM "Buy America" website. ¹³ Moreover, Federal agencies awarding financial assistance for infrastructure are responsible for ensuring BABAA compliance.

¹¹ DOI Office of Grants Management, "Buy America" Domestic Sourcing Guidance and Waiver Process for DOI Financial Assistance Agreements, https://www.doi.gov/grants/BuvAmerica.

¹² The OMB Made in America Office was established as part of BABAA to ensure compliance with "made in America" laws. The office ensures Federal agencies are trained on BABAA and other domestic preference statutes, reviews BABAA waiver requests, and collects data to improve domestic supply chains.

¹³ DOI, Approved Buy America Requests, https://www.doi.gov/grants/BuyAmerica/ApprovedWaivers.

Results of Audit

We found that USGS generally administered Cooperative Agreement No. G22AC00250 in accordance with laws, regulations, policies, and the cooperative agreement terms and conditions. For example, USGS completed a pre-award risk assessment required by USGS Acquisition Operating Procedures; submitted annual reports to Congress on the status of the facility as required by the IIJA; monitored project status by reviewing annual progress reports that described the work the school has performed; and attended weekly meetings with the school, the architect and engineering firm, and the general contractor. Further, we reviewed cooperative agreement expenditures totaling \$13.1 million through December 2023 and found no unsupported or unallowed costs.

However, we found that USGS has not yet developed a monitoring plan for oversight of the cooperative agreement or documented the substantial involvement activities it would undertake.

USGS Did Not Develop Procedures for Oversight or Provide Details on Substantial Involvement

The Standards for Internal Control in the Federal Government¹⁴ (the "Green Book") state that the development of policies and procedures helps management achieve objectives and respond to risks, and the terms of the cooperative agreement state that USGS will be "substantially involved" in all phases of the project. Although USGS has stated that it plans to attend meetings, conduct expenditure reviews, conduct site visits, and ensure BABAA compliance—which are examples of oversight, substantial involvement, or both—it has not developed oversight procedures, such as a monitoring plan, or documented its activities that would constitute substantial involvement. While USGS has been involved in the planning and design of the energy and mineral research facility, without documented oversight procedures and defined substantial involvement activities, USGS cannot ensure that all parties are aware of USGS' management roles and responsibilities for the cooperative agreement.

Requirements for Cooperative Agreements

The Green Book states that control activities "are the actions management establishes through policies and procedures to achieve objectives and respond to risks in the internal control system," and that management should implement control activities through policies. The Green Book further states that "those in key roles for the unit may further define policies through day-to-day procedures," which may include the "timing of when a control activity occurs and any follow-up corrective actions to be performed by competent personnel if deficiencies are identified." Thus, policies and procedures help management and key staff fulfill their responsibilities to bureau objectives and respond to risks in the internal control system.

In its memorandum on effective stewardship of taxpayer resources and outcomes in implementing the IIJA, OMB emphasizes the importance of accountability and transparency for the execution of IIJA projects. The guidance states that agencies should ensure program goals and objectives, and document performance measures in the award agreement. Further, OMB's Performance Management Playbook states that Performance monitoring and assessment involves regularly collecting and analyzing data to monitor award recipient compliance as well as to track progress against proposed targets and goals. Performance monitoring can help identify whether the sub-project is meeting interim milestones. Performance assessments can provide insight into whether the sub-project's goals are being advanced or achieved. One best practice in performance management is an evaluation plan, also known as a monitoring plan. Monitoring plans involve

¹⁴ U.S. Government Accountability Office, Standards for Internal Control in the Federal Government, GAO-14-704G, September 2014.

¹⁵ OMB Memorandum M-22-12, Advancing Effective Stewardship of Taxpayer Resources and Outcomes in the Implementation of the Infrastructure Investment and Jobs Act, issued April 29, 2022.

¹⁶ OMB, Managing For Results: The Performance Management Playbook for Federal Awarding Agencies, issued April 2020.

regular, ongoing data collection against key performance indicators or milestones to gauge the direct and near-term effects of activities and whether desired results are occurring as expected during implementation.

Although the cooperative agreement states that USGS will follow the CPIC that identifies roles and activities for construction project phases, the process does not include procedures USGS would use to oversee the cooperative agreement and monitor the school's progress in designing and constructing the facility. However, a monitoring plan would include procedures identifying roles and responsibilities for activities that USGS undertakes to ensure that the school is complying with requirements in the cooperative agreement.

USGS follows its *Acquisition Operating Procedures for Cooperative Agreements* (AOP),¹⁷ which provides guidance on what activities could be classified as substantial involvement but does not require where or how these activities should be identified or documented. In contrast, the National Park Service (NPS) uses a cooperative agreement template that requires a list of tasks and other activities the recipient and the NPS will perform, respectively, including activities demonstrating NPS' substantial involvement.

The USGS AOP states that substantial involvement should include at least one of the following activities:

- Participate and collaborate jointly with the recipient partner.
- Review and approve one stage of work.
- Review and approve proposed modifications or subgrants prior to the award.
- Help select project staff or trainees.
- Direct or redirect the work because of interrelationships with other projects.
- Holds power to halt an activity immediately if detailed performance specifications are not met.
- Limit recipient discretion with respect to scope of work, organization structure, staffing, mode of operations, and other management processes, coupled with close monitoring or operational involvement during performance.

As stated earlier, Cooperative Agreement No. G22AC00250 requires USGS to be "substantially involved" throughout all phases of the project to ensure Federal building requirements are integrated in the design and the new space supports USGS' ability to perform science to support its programmatic mission. However, USGS has not documented what activities it will perform to maintain substantial involvement. Given the size and scope of this project, the lack of a monitoring plan that clearly documents oversight procedures puts USGS at increased risk that the project will fall behind on time and budget milestones.

The following sections describe the oversight and substantial involvement activities that USGS has been performing or plans to perform.

Design and Construction Meeting Attendance

The USGS AOP states substantial involvement can be anticipated when USGS participates and collaborates jointly with the recipient partner. However, USGS has not documented guidance on processes, roles, and responsibilities for continued participation in project meetings. As noted earlier, the Green Book states that "those in key roles for the unit may further define policies through day-to-day procedures," which may include the "timing of when a control activity occurs and any follow-up corrective actions."

¹⁷ USGS Office of Acquisition and Grants, Acquisition Operating Procedures for Cooperative Agreements, issued June 9, 2023.

The USGS project team began attending weekly design meetings¹⁸ with the Colorado School of Mines, its architectural and engineering firm, and its general contractor when they restarted the project. According to the school's project team and the USGS architect, the school hosts the meetings, and they will continue throughout the project's construction phase. However, USGS has not developed procedures identifying roles and responsibilities for its continued involvement in these meetings, including who from USGS is required to attend, how frequently, and how it would memorialize meeting discussions and follow-up activities for USGS to complete.

Project Expenditure Review

According to 2 C.F.R. § 200.300, awarding agencies must manage and administer the Federal financial assistance award in a manner that ensures that Federal funding is expended in accordance with Federal law. Therefore, Agency review of expenditures is critical to ensuring that this standard is met. However, a USGS official told us it has not developed procedures identifying processes, roles, and responsibilities for reviewing expenditures of the cooperative agreement. As of February 2024, the USGS project team had not yet reviewed any expenditures and based on the way USGS transfers funds to the school, it is unclear how USGS will be able to complete an expenditure review, especially without established procedures.

The USGS project team told us that they plan to begin reviewing expenditures during the construction phase, which began in January 2024. Specifically, USGS project team personnel stated that they intend to simultaneously review invoices that contractors submitted to the school and inform the school if something did not look appropriate. However, USGS acquisition branch personnel stated that cooperative agreement recipients draw down payments from a USGS account, ¹⁹ and they are not required to provide supporting documentation.

The Colorado School of Mines' contract with the general contractor requires the general contractor to allocate the entire contract sum to portions of the work.²⁰ When a portion of the general contractor's work is completed, the general contractor applies for payment. The school's project team said its project manager then conducts an onsite walkthrough to determine if payment is appropriate. If payment is appropriate, the school pays the contractor and subsequently draws from the USGS account set up for the cooperative agreement. In December 2023, school officials stated the project was not at a point that required onsite walkthroughs, and while the school welcomes USGS input, the school believed it had ultimate responsibility for monitoring the work performed and paying the contractor.

Additionally, as part of the pre-award process, USGS' Financial Assistance Monitoring Protocol requires USGS to complete a financial assistance risk assessment checklist to determine risk level for the project. ²¹ The checklist focuses on the entity it is entering into an agreement with rather than the risk level of the project itself. However, this assessment includes an option for other factors impacting risk rating. USGS completed its financial assistance risk assessment checklist and calculated the risk rating as low based primarily on its assessment of the Colorado School of Mines rather than the energy and minerals research facility project. USGS did not complete the checklist option of other factors "that impact, either by raising or lowering, the preliminary recipient risk rating." That is, while the Colorado School of Mines is considered low risk—given using a cooperative agreement for a construction project is new to USGS and the significant size of the cooperative agreement relative to others USGS has awarded—the actual project risk may be greater than the

¹⁸ Since June 2022, USGS participated in at least 84 percent of the weekly meetings. We requested meeting minutes from USGS, and it provided meeting minutes from the architectural and engineering firm. Although USGS, the school's project team, the architectural and engineering firm, and the construction contractor generally attended all meetings, meeting minutes did not always identify participants. Therefore, USGS participation could be greater than the 84 percent we were able to identify from the minutes alone.

¹⁹ USGS pays the school through the Automated Standard Application for Payments (ASAP), which is a completely electronic U.S. Department of Treasury system that Federal agencies use to transfer money quickly and securely to recipient organizations. Federal agencies enroll recipient organizations, authorize their payments, and manage their accounts. Recipient organizations request payments from these preauthorized accounts.

²⁰ According to the American Institute of Architects (AIA), this allocation is called a schedule of values. Under AIA guidance, the contractor is required to submit a schedule of values where the construction contract is based on a stipulated sum or Guaranteed Maximum Price, which is the type of contract the school has with the general contractor.

²¹ USGS Acquisition Operating Procedures, Financial Assistance Monitoring Protocol, issued June 18, 2019. The risk assessment checklist includes two questions about the project, but most are related to the recipient organization, its financial systems, experience, and single audit results.

entity risk. Moreover, the USGS AOP defines monitoring requirements based on the risk assigned to the cooperative agreement with lower risk agreements requiring less monitoring. For example, for low-risk entities "Program offices must review and approve performance reports" whereas for high-risk entities, "Site visits allow USGS to assess recipient's capability, performance, and compliance against the applicable elements that make up each award."²²

Further, when interviewing the USGS Denver Acquisition and Grants Branch Chief and persons at DOI PGM, there were inconsistencies as to whether USGS views the cooperative agreement as a standard cooperative agreement or a fixed amount award, which affects whether and to what extent review of actual costs is allowed. Fixed amount awards include a set price and do not allow an agency to review expenses unless the agreement is terminated. After we raised the inconsistencies between the USGS Denver Acquisition Branch's and the USGS Office of Acquisition and Grants' views of the cooperative agreement, USGS ultimately explained that the energy and minerals research facility cooperative agreement was a standard award and thereby did not preclude USGS from reviewing actual costs.

While USGS is required to conduct site visits that may include compliance review of administrative regulations, such as expenditures for a cooperative agreement only if the entity is considered high risk, there is nothing preventing it from reviewing expenditures or requiring that the school submit expenditure supporting documentation for review. Given the significant dollar value and risk associated with the project, reviewing expenditures and related supporting documentation is important to comply with 2 C.F.R. § 200.300 and ensure that Federal funding is expended in accordance with Federal law. A monitoring plan would be an ideal instrument to document the frequency and extent of expenditure reviews.

Site Visits

USGS has not developed clear procedures identifying processes, roles, and responsibilities for site visits. The USGS architect attends the weekly meetings with the school, the architectural and engineering firm, and the general contractor. The architect acts as the representative for the project owner (USGS), reviewing all drawings to ensure that USGS' needs for the facility are being met. As the most technical person working on the project from USGS, the architect works with USGS researchers to ensure that the new facility's labs meet the researchers' needs. In addition, the architect told us in December 2023 that she planned to conduct site visits almost daily once construction began.

However, because there are no procedures on conducting site visits, it is not apparent how these site visits will work in conjunction with the school's review of construction progress. Without these procedures, it is also unclear if USGS will use site visits to conduct oversight, engage in substantial involvement, or both.

BABAA Compliance

The cooperative agreement states that funds provided under the IIJA be obligated for projects with materials and manufactured products made in the United States or with an approved waiver. USGS amended the cooperative agreement in September 2022 to "incorporate Buy America Domestic Procurement Preference." The amendment included more detailed guidance on the process for the school to obtain waivers, if needed. While USGS in conjunction with PGM provides guidance, according to PGM's "Buy America" guidance, it is the school's responsibility as the recipient of financial assistance to submit waivers.

With both the cooperative agreement and the school's contract for the construction of the facility containing BABAA requirements, compliance has been a topic of discussion as early as January 2023 between USGS and the Colorado School of Mines' project officials, the architectural and engineering firm, and the construction contractor. During a site visit in December 2023, the school's project team told us that there is a "long list" of construction materials and manufactured products for which the contractor wants to obtain BABAA waivers. At that time, the school provided us a list of 40 items from a subcontractor, of which 14 would need BABAA waivers, including an exhaust fan, heat exchanger, heat recovery system, and unit heater. In June 2024, the

²² USGS Acquisition Operating Procedure, Financial Assistance Monitoring Protocol, Monitoring Activities by Risk Level.

school provided a list of 265 items required to comply with BABAA. Of these, 41 complied with BABAA, 26 did not comply with BABAA, and BABAA compliance was not yet determined for 198.

The school did not submit a waiver request until September 2023 when it requested a public interest waiver for the project. USGS did not submit the waiver request to DOI because it was on the wrong form. In October 2023, the school's contractors wanted to obtain a public interest waiver. However, PGM provided guidance to USGS to have the school focus on conducting market research in preparation for submitting nonavailability waiver requests going forward. Because the school needed time to work with the National Institute of Standards and Technology to obtain market research, the school submitted its first nonavailability waiver request for heating, ventilation and air conditioning controls and coils to USGS on May 24, 2024. USGS submitted the waiver to DOI on June 18, 2024, and DOI forwarded the waiver to OMB's Made in America Office on July 23, 2024. As of August 2024, this waiver request had not been approved.

In August 2024, we met with the USGS project team, the Rocky Mountain Region Director, and cognizant USGS acquisition officials to discuss the BABAA waiver process. USGS is discussing the BABAA waiver process with the school and has provided guidance and assistance on the process. USGS officials stated that this is the first time that either USGS or the school have requested a waiver and expect future waiver requests to be more efficient given the lessons learned from this experience. However, USGS officials have not documented the process or developed procedures to be used in subsequent waiver requests.

USGS project officials stated that complying with BABAA could take time, thus presenting risks to both project schedule and cost. However, USGS has not developed a plan to address the risk to the project if the school is not compliant with BABAA or to address how USGS will hold the school accountable for complying with BABAA. As of August 2024, the school still needs to determine whether 206 items are compliant and, if not, identify alternatives or request waivers for these items along with the 29 items that are not compliant. The process to obtain the waivers or identify alternatives should waivers not be granted could delay project completion or increase costs.

In October 2024, USGS sent an email to the Colorado School of Mines stating that after consideration, "it has been determined that BABAA is not applicable to the EMRF project.".

Lack of Procedures Due to Use of a Cooperative Agreement for Construction

USGS did not develop internal control procedures specific to its oversight, monitoring, or substantial involvement of the energy and minerals research facility cooperative agreement because USGS was required to use a cooperative agreement to construct the facility, and cooperative agreements are not generally used for construction projects. The Facilities Project Management and Support Branch Chief told us that the project team had not taken any financial assistance monitoring and oversight training but had completed project management training.

OMB and USGS OAP also acknowledge the need for control activities such as clear oversight and monitoring procedures. Specifically, OMB requires that agencies maintain a risk register to provide thoughtful analysis of the risks that impede an agency's ability to achieve its strategic objectives and that arise from agency activities and operations and to identify appropriate options for addressing significant risks. ²³ In response to the OMB requirement, USGS creates an annual risk register. In the fiscal year 2023 risk register, ²⁴ OAP proposed that USGS improve existing procedures and oversight for financial assistance post-award monitoring, stating that USGS should "monitor post-award activities in accordance with departmental guidelines to ensure financial assistance funds are used effectively, efficiently, and for their intended purpose. Clear procedures should be

²³ OMB Memorandum M-16-17, *OMB Circular No. A-123, Management's Responsibility for Enterprise Risk Management and Internal Control*, issued July 15, 2016. USGS identified risks based on financial statement and internal control audit testing that identified deficiencies.

²⁴ USGS FY 2023 Risk Register, "Proposed New or Enhanced Risk Treatment(s)."

established to outline the steps and responsibilities for monitoring post-award grants and the specific requirements for performance progress reports and federal financial reports."²⁵

It is imperative that USGS implement oversight procedures and document processes such as for obtaining BABAA waivers given the significant dollar value of the cooperative agreement and the inherent risk associated with construction. Also, unlike a contract, a cooperative agreement does not include Federal Acquisition Regulation protections, which means the risk to the Government is higher. Contract disputes can be taken to the Civilian Board of Contract Appeals, but there are no similar venues to take disputes related to cooperative agreements.

While USGS and Colorado School of Mines officials stated they have a good working relationship, it is critical that USGS develop, implement, and communicate procedures for its oversight and substantial involvement to ensure continuity of operations and avoid future misunderstandings in the event of turnover in the USGS or school project teams or management. Without documented procedures identifying roles and responsibilities for cooperative agreement oversight, USGS and the school could run into misunderstandings that could impact the project's schedule. In addition, without documented procedures, USGS cannot ensure building requirements are integrated, the new facility supports USGS' programmatic mission, and management and key staff fulfill their responsibilities to bureau objectives and respond to risks in the internal control system.

In March 2024, we communicated to USGS our concerns regarding its lack of procedures specific to the energy and minerals research facility. USGS responded that it had already begun to formally document its own role going forward.

²⁵ OAP officials told us that they distribute the risk register to the Chiefs of USGS' Offices of Accounting and Financial Management, Acquisitions and Grants, Policy and Analysis, Policy and Special Projects, and Management and Services. However, OAP officials could not confirm whether the mitigation efforts are communicated to field staff responsible for each business process.

²⁶ Construction risks include safety (crew injuries), financial (interrupted cash flow, cost increase for materials, etc.), legal (regulations, code violations, etc.), project (resource management, schedule slips, etc.), and environmental (weather, floods, earthquakes, etc.). USGS staff cited schedule and budget risks as well.

²⁷ While 2 C.F.R. Part 200 affords some protections under cooperative agreements such as temporarily withholding payments, disallowing costs for some or all activities, and suspending or terminating the agreement, it does not provide the traditional legal forums available should disputes or claims arise.

Conclusion and Recommendations

Conclusion

We found that USGS did not develop specific procedures for oversight or document its substantial involvement activities for the cooperative agreement awarded to Colorado School of Mines for designing and constructing the energy and minerals research facility. By developing and implementing a monitoring plan and documenting its substantial involvement, USGS can improve oversight and ensure its continued substantial involvement. The deficiencies we found occurred because USGS was required to use a cooperative agreement for a construction project; USGS does not have experience with a cooperative agreement for construction, and cooperative agreements are not typical for construction projects.

In addition, as of August 2024, the school had not received any BABAA waivers even though there are 235 items that may need BABAA waivers. While it was not clear whether all these items would need BABAA waivers, if waivers are not granted, the school and its general contractor will need to identify alternative items or sourcing, which could delay project completion.

We conducted the audit early in the cooperative agreement's period of performance to help USGS improve oversight of the cooperative agreement and mitigate risks associated with constructing the facility using a cooperative agreement; we make five recommendations to that effect.

Recommendations Summary

We provided a draft of this report to USGS for review. USGS concurred with four recommendations and did not concur with one recommendation. However, upon review of its response, we consider all recommendations resolved. Below we summarize USGS' response to our recommendations, as well as our comments on its response. See Appendix 2 for the full text of USGS' response; Appendix 3 lists the status of each recommendation.

We recommend that USGS:

- 1. Develop a monitoring plan that documents all oversight activities that will be performed, including roles and responsibilities of project officials.
 - **USGS Response:** USGS concurred with our recommendation. USGS stated that it is "in the process of developing and implementing a monitoring plan to document all EMRF construction oversight activities" and that the plan will be completed on or before March 1, 2025.
 - **OIG Response:** We consider this recommendation resolved based on USGS' response. We will consider this recommendation implemented once we receive the monitoring plan and confirm that it includes sufficient oversight activities and roles and responsibilities of project officials.
- 2. Document USGS' substantial involvement in the energy and mineral research facility project, including explicitly detailing what activities USGS considers substantial involvement and identifying roles and responsibilities of that involvement.
 - **USGS Response:** USGS concurred with our recommendation. USGS stated that within two weeks of revising *Acquisition Operating Procedures for Cooperative Agreements* in response to Recommendation 4, it will apply those guidelines to document substantial involvement in the EMRF project.
 - **OIG Response:** We consider this recommendation resolved based on USGS' response. We will consider this recommendation implemented when we received evidence that USGS has

- adequately revised *Acquisition Operating Procedures for Cooperative Agreements* and documented substantial involvement activities for the energy and mineral research facility project.
- 3. Communicate oversight procedures identified in the monitoring plan and details of substantial involvement developed in response to Recommendations 1 and 2 to the Colorado School of Mines.
 - **USGS Response:** USGS concurred with our recommendation. USGS responded that within one week of completing the monitoring plan in response to Recommendation 1 and documenting substantial involvement in response to Recommendation 2, it will communicate this information to the Colorado School of Mines.
 - **OIG Response:** We consider this recommendation resolved based on USGS' response. We will consider this recommendation implemented when we receive documentation demonstrating that USGS has adequately communicated the monitoring plan and details of USGS substantial involvement in the EMRF project to the Colorado School of Mines.
- 4. Update the *Acquisition Operating Procedures for Cooperative Agreements* to include guidance on how and where substantial involvement activities should be documented.
 - **USGS Response:** USGS concurred with our recommendation. USGS stated that it will review its *Acquisition Operating Procedures for Cooperative Agreements* and modify the procedures accordingly to ensure it includes effective guidance on how and where substantial involvement should be documented. All revisions will be completed on or before March 1, 2025.
 - **OIG Response:** We consider this recommendation resolved based on USGS' response. We will consider this recommendation implemented when we receive documentation demonstrating that the revised *Acquisition Operating Procedures for Cooperative Agreements* includes adequate guidance on how and where substantial involvement activities should be documented.
- 5. Consult the Office of Management and Budget's Made in America Office on the determination that the Build America, Buy America Act is not applicable to the energy and mineral research facility construction.

USGS Response: USGS did not concur with our recommendation. As stated below:

"USGS reached its determination that Build America, Buy America Act (BABAA) does not apply to the EMRF project in coordination with and supported by the DOI Solicitor's Office, which included appropriate consideration of the current OMB regulations at 2 CFR Part 184 and the latest OMB guidance at M-24-02. The Solicitor's Office provided a legal opinion to this effect on October 25, 2024. With delegated responsibility for ensuring its awards comply with BABAA and for authorizing waivers, the USGS maintains its conclusion that BABAA does not apply to the EMRF project, and therefore the bureau is not seeking to issue a waiver. The USGS has no questions or concerns regarding waivers or application of BABAA on which to consult with OMB's Made in America Office."

OIG Response: Based on USGS's response, we consider this recommendation implemented. We considered the Solicitor's Opinion that the EMRF project is not infrastructure as defined under the law and guidance. Under Section 70912 (5) of the IIJA, agencies have discretion in determining which projects are infrastructure and whether those projects qualify for a listed waiver or exemption under BABAA. We therefore defer to DOI's interpretation of Section 70912 (5)(K), "buildings and real property," and the definitions and guidance provided in 2 C.F.R. Part 184. Additionally, PGM consulted with OMB's Made in America Office and received similar guidance that the DOI had discretion to determine whether a project is infrastructure.

Appendix 1: Scope and Methodology

Scope

We audited the U.S. Geological Survey's (USGS') efforts to design and construct an energy and minerals research facility through a cooperative agreement with the Colorado School of Mines. Specifically, our objectives were to determine (1) whether USGS administered a cooperative agreement awarded to the Colorado School of Mines to design and construct an energy and minerals research facility in accordance with laws, regulations, policies, and agreement terms and conditions and (2) whether expenditures were allowable and supported.

The scope included Cooperative Agreement No. G22AC00250 dated May 20, 2022, and the planning for the facility prior to awarding the cooperative agreement. We also included all relevant criteria, related documentation, and expenditures. We did not review whether a cooperative agreement was the proper vehicle to use to construct the facility because the Infrastructure Investment and Jobs Act directed USGS to award a cooperative agreement to an academic partner for this purpose. We conducted the audit prior to the construction phase to help USGS improve oversight of the cooperative agreement and mitigate risks associated with constructing the facility using a cooperative agreement.

Methodology

We conducted this performance audit in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

We assessed whether internal control was significant to the audit objectives. We determined that USGS' control activities and the following related principles were significant to the audit objectives:

- Management should identify, analyze, and respond to risks related to achieving the identified objectives.
- Management should design control activities to achieve objectives and respond to risks.
- Management should externally communicate the necessary quality information to achieve the entity's objectives.
- Management should establish and operate monitoring activities to monitor the internal control system and evaluate the results.

We tested the operation and reliability of internal controls over activities related to our audit objectives. Our tests and procedures included:

- Gathering background information on Cooperative Agreement No. G22AC00250 and the work and mission of USGS.
- Reviewing relevant laws, regulations, and policies related to managing and overseeing cooperative agreements; Federal construction regulations; and U.S. Department of Interior (DOI) Build America, Buy America Act processes.
- Interviewing officials at DOI's Office of Grants Management, USGS, and the Colorado School of Mines.
- Reviewing documentation to determine USGS' oversight over the cooperative agreement.

- Reviewing documentation to determine USGS' substantial involvement in the cooperative agreement.
- Reviewing meeting minutes between USGS and the Colorado School of Mines from June 2022 through November 2023.
- Reviewing documentation related to Americans with Disabilities Act compliance for the construction of the energy and minerals management research facility.
- Reviewing the Colorado School of Mines' \$13.1 million in expenditures.
- Conducting site visits to USGS' offices in Lakewood, Colorado, and the Colorado School of Mines in Golden, Colorado.

We also reviewed the contract that the school awarded for construction and construction management and compared it to Federal Acquisition Regulation (FAR) Part 36, "Construction and Architect-Engineer Contracts," which identifies relevant policies and procedures for Federal agencies, to determine if Part 36 requirements are included. While the contract was not subject to FAR Part 36 as it was awarded by the school, we determined that the contract nonetheless contained clauses similar to FAR requirements that may mitigate risk.

We identified deficiencies in internal control which we discuss in the results of our report and made recommendations to address.

We relied on computer-generated data provided by the Colorado School of Mines, which included expenditure data. We verified 100 percent of the expenditure data to source documents but did not review Colorado School of Mines systems. We also relied on DOI's financial system for identifying expenditures for the cooperative agreement.

Appendix 2: Response to Draft Report

The U.S. Geological Survey's response to our draft report follows on page 17.



United States Department of the Interior U.S. Geological Survey

Office of the Director Reston, Virginia 20192

Memorandum

To: Mark Lee Greenblatt, Inspector General

U.S. Department of the Interior

From: Sarah J. Ryker, Acting Director

U.S. Geological Survey

Digitally signed by SARAH
RYKER
Date: 2025.02.07 13:35:58 -05'00'

Subject: Response to Draft Report – Improvements for Oversight of Cooperative Agreement

to Construct the U.S. Geological Survey Energy and Minerals Research Facility

(Report No. 2023-WR-042) (Issued December 16, 2024)

The U.S. Geological Survey (USGS) appreciates the opportunity to respond to the Potential Findings and Recommendations issued by the Office of Inspector General following an audit of the bureau's management of the cooperative agreement that funds the construction of the Energy and Minerals Research Facility (EMRF) on the campus of the Colorado School of Mines (Mines). We concur with four of the five recommendations.

Recommendation 1: Develop a monitoring plan that documents all oversight activities that will be performed, including roles and responsibilities of project officials.

USGS Response: Concur. The USGS is in the process of developing and implementing a monitoring plan to document all EMRF construction oversight activities. The plan will be complete on or before March 1, 2025.

The responsible official is Brian Wachter, Chief, USGS Office of Management Services.

Recommendation 2: Document USGS' substantial involvement in the Energy and Mineral Research Facility project, including explicitly detailing what activities USGS considers substantial involvement and identifying roles and responsibilities of that involvement.

USGS Response: Concur. Within two weeks of the completion of a revised Acquisition Operating Procedures for Cooperative Agreements (Recommendation 4), the USGS will apply those guidelines to document substantial involvement in the EMRF project.

The responsible official is Peter Griffiths, Regional Director, USGS Rocky Mountain Region.

Recommendation 3: Communicate oversight procedures identified in the monitoring plan and details of substantial involvement developed in response to Recommendations 1 and 2 to the Colorado School of Mines.

USGS Response: Concur. Within one week of completing the monitoring plan (Recommendation 1) and the documentation of substantial involvement (Recommendation 2), the USGS will communicate this information to Mines.

The responsible official is Brian Wachter, Chief, USGS Office of Management Services

Recommendation 4: Update the *Acquisition Operating Procedures for Cooperative Agreements* to include guidance on how and where substantial involvement activities should be documented.

USGS Response: Concur. The USGS will review its *Acquisition Operating Procedures for Cooperative Agreements* and modify the text accordingly to ensure it includes effective guidance on how and where substantial involvement should be documented. All revisions will be completed on or before March 1, 2025.

The responsible official is Scott Morton, Chief, Office of Acquisitions and Grants.

Recommendation 5: Consult with OMB's Made in America Office on the determination that BABAA is not applicable to the Energy and Mineral Research Facility construction.

USGS Response: Do not concur. The USGS reached its determination that Build America, Buy America Act (BABAA) does not apply to the EMRF project in coordination with and supported by the DOI Solicitor's Office, which included appropriate consideration of the current OMB regulations at 2 CFR Part 184 and the latest OMB guidance at M-24-02. The Solicitor's Office provided a legal opinion to this effect on October 25, 2024. With delegated responsibility for ensuring its awards comply with BABAA and for authorizing waivers, the USGS maintains its conclusion that BABAA does not apply to the EMRF project, and therefore the bureau is not seeking to issue a waiver. The USGS has no questions or concerns regarding waivers or application of BABAA on which to consult with OMB's Made in America Office.

Appendix 3: Status of Recommendations

Recommendation Status Action Required

2023-WR-042-01

We recommend that the U.S. Geological Survey (USGS) develop a monitoring plan that documents all oversight activities that will be performed, including roles and responsibilities of project officials.

2023-WR-042-02

We recommend that USGS document USGS' substantial involvement in the energy and mineral research facility project, including explicitly detailing what activities USGS considers substantial involvement and identifying roles and responsibilities of that involvement.

2023-WR-042-03

We recommend that USGS communicate oversight procedures identified in the monitoring plan and details of substantial involvement developed in response to Recommendations 1 and 2 to the Colorado School of Mines

2023-WR-042-04

We recommend that USGS update the *Acquisition Operating Procedures for Cooperative Agreements* to include guidance on how and where substantial involvement activities should be documented.

2023-WR-042-05

We recommend that USGS consult with the Office of Management and Budget's Made in America Office on the determination that the Build America, Buy America Act is not applicable to the energy and mineral research facility construction. Resolved

We will track implementation.

Implemented

No action is required.



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