

December 22, 2021

Wade Crowfoot, Secretary  
California Natural Resources Agency  
715 P Street, 20th Floor  
Sacramento, CA 95814

Dear Secretary Wade Crowfoot,

In accordance with the State Leadership Accountability Act (Leadership Accountability), the Department of Conservation submits this report on the review of our internal control and monitoring systems for the biennial period ending December 31, 2021.

Should you have any questions please contact Clayton Haas, Division Director of Administration, at (916) 323-2950, Clayton.Haas@conservation.ca.gov.

## **GOVERNANCE**

### **Mission and Strategic Plan**

The Department of Conservation's (DOC) mission balances today's needs with tomorrow's challenges and fosters intelligent, sustainable, and efficient use of California energy, land, and mineral resources.

The DOC provides a safe and sustainable environment for all Californians through services and information promoting environmental health, economic vitality, informed land-use decisions and sound management of our state's natural resources. With a team of scientists and other dedicated professionals, the DOC administers a variety of programs vital to California's public safety, environment, and economy. The Department is comprised of program Divisions which include: The California Energy Management Division (CalGEM) [formerly known as the Division of Oil, Gas, and Geothermal Resources (DOGGR)], Division of Land Resources Protection (DRLP), Division of Mine Reclamation (DMR), and the California Geological Survey (CGS). The Department objectives include:

- Regulate oil, gas, and geothermal industries by overseeing drilling, operations, maintenance, and plugging of oil, natural gas, and geothermal wells, while protecting public health and the environment.
- Protect agricultural farmland and open space through various projects and financial mechanisms in accordance with the Land Conservation Act of 1965 (commonly known as the Williamson Act).
- Oversee local lead agency implementation of the Surface Mining Reclamation Act of 1975, requiring mine operators to establish reclamation plans and financial mechanisms to assure adverse environmental impacts are minimized and mined lands are reclaimed to usable conditions.
- Compile an inventory of the State's abandoned mines and conduct remediation of the sites where applicable.
- Identify, evaluate, and map the State's geology, geologic, and seismologic induced hazards such as earthquakes, landslides, tsunamis, volcanic eruption threats, and hazardous mineral

- exposure.
- Analyze critical facility sites such as reservoirs, bridges, and hospital sites for seismic safety; provide applicable policy recommendations based upon analysis.
  - Operate the world's largest Strong Motion Instrumentation network to provide seismic data to various international, state, and local entities and assist in the development of improved building codes.

## **Control Environment**

DOC Executive management has developed a baseline of set controls by defining principles to assist employees designing/implementing work plans, projects, staff management and internal and external stakeholder communications. On May 29, 2018, DOC's Director announced and implemented DOC's Operating Principles. The Operating Principles are used as a controlled standard for Department projects and programs to ensure alignment with the following:

- Demonstrate accountability to ourselves and the public through the quality and integrity of our work. Employees concerns regarding integrity and ethical conduct issues can report their concerns to either the DOC's Ethics Officer or the Equal Employment Opportunity Officer.
- Provide unbiased, sound science and engineering to the people of California. Report timely data on the Department's website relevant to the various Department divisions, available to the public and various stakeholders.
- Maintain a professional, respectful, and collaborative work environment.
- Develop a culture that attracts and retains talented staff who are committed to excellence and ethical performance. DOC's proactive recruitment plan develops a working pipeline of talented potential future applicants interested in State service. The recruitment analyst seeks a variety of skill sets and talent by attending public recruiting events as well as maintains communication and professional relationships.
- Seek continuous improvements in delivery of our products and services.
- Anticipate future needs in the actions and decisions we make today.
- Engage in outreach to achieve conservation goals.

DOC Director, David Shabazian, and the Executive management team are responsible for the overall establishment and maintenance of all internal controls/monitoring systems.

Executive Monitoring Sponsors are also responsible for facilitating and verifying DOC internal control practices are functioning as intended.

All managers and supervisors are responsible for integrating the Operating Principles throughout their Divisions plans/projects/programs. Managers and supervisors ensure DOC's products (e.g. science and engineering data) adhere to Operating Principles. Managers and supervisors enforce accountability and address performance issues not meeting the standards of the Operating Principles. Performance issues are addressed and vetted accordingly, following Department-specific and State processes and procedures.

## **Information and Communication**

Each Division's work plan/project is available to all staff. Staff reviews and comments are invited,

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encouraging transparency within each Division. If work plan/project interfaces with other Divisions and Departments, collaborative meetings are conducted to ensure open lines of communication. These meetings are opportunities for program policies/procedures, financial decisions, and DOC's Operating Principles are reviewed and incorporated as needed. Divisions follow Division-specific policies/procedures to maintain consistent communication when gathering relevant project research from either internal or external parties. Weekly meetings conducted by management allowing divisions to continually maintain consistency with internal policies/procedures. Weekly meetings also encourage management and internal subject matter experts to communicate on various topics (e.g. performance issues and necessary course-correction).

DOC holds quarterly program management meetings where Executive management is informed of the quality control practices being conducted, whether improvements are needed, and the overall successes and challenges within each Division. This information is summarized and reported to the DOC Director. The DOC Director is also briefed on the status of programs/projects through collaborative Executive management weekly meetings. Final projects and accomplishments are communicated to all staff via their direct-line supervisor, email, internal intranet, as well as communicated to external parties via public website.

## **MONITORING**

The information included here discusses the entity-wide, continuous process to ensure internal control systems are working as intended. The role of the executive monitoring sponsor includes facilitating and verifying that the Department of Conservation monitoring practices are implemented and functioning. The responsibilities as the executive monitoring sponsor(s) have been given to:  
Jeff Newton, Chief Deputy, California Geological Survey;  
Yuvaraj Sivalingam, CalGEM, Deputy Supervisor of Policy and Administration ; and  
Cameron Campbell, Division of Mine Reclamation Supervisor.

DOC confirms the effectiveness of the internal control systems by monitoring progress of Division-wide work plan and/or projects. Each Division utilizes program-level work plans, vetted by management to determine key performance indicators tracked and reviewed on a frequent and regular basis. Periodic detailed reviews are conducted by program subject matter experts who evaluate, analyze, and provide results to Executive Management. Reported data is compared to expectations (Operating Principles) allowing necessary course-correction, when needed. The oversight encourages an adaptable workforce, reinforcing an environment of accountability.

Vulnerabilities are often identified during work plan development. When identified, risk assessments are conducted, accounting for both impact and likelihood of occurrence. Severity of risks determine monitoring mechanisms (e.g. dedicated staff oversight).

## **RISK ASSESSMENT PROCESS**

The following personnel were involved in the Department of Conservation risk assessment process: executive management, middle management, front line management, and staff.

The following methods were used to identify risks: brainstorming meetings, ongoing monitoring activities, audit/review results, other/prior risk assessments, external stakeholders, consideration of potential fraud, performance metrics, and other.

The following criteria were used to rank risks: likelihood of occurrence, potential impact to mission/goals/objectives, timing of potential event, potential impact of remediation efforts, tolerance level for the type of risk, and other.

## **RISKS AND CONTROLS**

### **Risk: Federal Safe Drinking Water Compliance**

CalGEM, USEPA, and the State Water Resources Control Board (SWRCB) jointly regulate Class II Underground Injection Control (UIC) Program to ensure the protection of water resources under the federal requirements of the Safe Drinking Water Act (SDWA). The United States Environmental Protection Agency (USEPA) developed the aquifer exemption process to protect drinking water aquifers and meet industry needs. An aquifer exemption allows fluid that might otherwise endanger a drinking water source to be placed into a specific portion of a non-potable aquifer. If a geologic structure containing water is not a current or future source of drinking water because it naturally contains petroleum or harmful levels of minerals (i.e., arsenic or boron), an exemption allowing injection into that geologic structure may be granted, but only if it can be demonstrated that fluids will not migrate outside of the exemption boundary.

Aquifer exemptions are a crucial part of returning California's UIC practices to comply with the SDWA. Failure to complete the remaining aquifer exemptions in a timely manner would make California out of compliance with the SDWA. California is behind the original schedule to complete aquifer exemptions, but is continuing to make progress.

### **Control: The Aquifer Exemption Review Process**

CalGEM has developed an Aquifer Exemption Review Process to address the aquifer exemption proposals in the queue and continues to implement the recommendations the California Office of State Audits and Evaluations (OSAE) outlined in its 2020 audit of CalGEM's UIC review protocols and procedures. The Aquifer Exemption Review Process, which benefits from the improvements put in place following the OSAE Audit, begins with CalGEM and SWRCB collecting supporting evidence and concurring that the evidence shows that the aquifer is unsuitable for human or agricultural use. That evidence is then sent to USEPA in the form of an "aquifer exemption proposal" for USEPA's determination of whether they concur with the evidence demonstrating that the aquifer should be exempted from SDWA protections because it is naturally impaired by metals or hydrocarbons.

To date, CalGEM has processed 21 of 30 aquifer exemption proposals. Of the remaining nine, two have been submitted to the USEPA for review and a third will be submitted to the USEPA by September 30, 2022. The other six will require additional technical review and time to complete any necessary remediation before consideration can be made for submittal to USEPA for approval.

## **Risk: Knowledge Transfer**

Within the Division of Mine Reclamation (DMR), the Environmental Program Manager I (EPM) overseeing the Abandoned Mine Lands Program (AML) recently announced retirement. The AML team (created in 1997) identifies and addresses the safety and environmental contamination hazards from legacy abandoned mines. In overseeing the program, the EPM carries with them decades of institutional knowledge on the program. This knowledge includes contacts with dozens of local, State, and Federal agencies where cooperative agreements have led to many past contracts and grants to help make thousands of hazardous shafts and audits (horizontal and vertical) on public lands safer for California residents and recreationists. Without the EPM's knowledge there are near-term risks that include continuity and ongoing task agreements with Federal and State agencies to ensure timelines and deliverables are met.

Furthermore, potential long-term impacts would include ongoing discussion with the US Department of Interior on resource allocation of possible grants associated with the recent passage of the Infrastructure Investment and Jobs Act (IIJA) related to Section 40704 (Abandoned Hardrock Mine Reclamation).

### **Control: Knowledge Transfer and Strategic Planning**

Currently, ongoing knowledge transfer meetings with the EPM have been initiated as well as communication with external stakeholders from various local, State, and Federal agencies to continue bridging the knowledge transfer.

Also, established procedures will be examined with the DOC Performance Review Team to identify processes and controls that can be documented and shared. Additionally, a request will be made to the EPM to document pending action items in conjunction with a teamwork plan for continued continuity.

Lastly, near-term efforts to establish and create a current Division Strategic Plan targeting team projects, will be drafted, shared, and posted to the external DMR webpage and shared with the State Mining and Geology Board.

The above control will reduce the risks to ensure any near-term impacts on team performance will be identified and followed up. Long-term impacts will be addressed through recruitment efforts to backfill the EPM position as well as building upon any potential grant funding associated with the IIJA passage and currently established program funding through gold and silver fees. This will further ensure the AML Program continues to support the role of protecting citizens of California.

## **Risk: Strong Motion Instrumentation Infrastructure**

The California Geological Survey's (CGS) Strong Motion Instrumentation Program has over 1,600 stations across California used to monitor seismic ground shaking and the impacts of shaking of critical infrastructures such as buildings, dams, and bridges. Approximately, 1,100 of these instruments are antiquated and obsolete in their technology. This presents an increased risk to life safety and infrastructure, thus delaying return to service and costing communities millions of dollars if not brought back to service quickly. In its current state of antiquated sensors and communications, the seismic system is inadequate and does not meet current and future needs of State agencies (such as

the California's Office of Emergency Services (CalOES), California Department of Transportation (CalTrans), and Department of Water Resources (DWR)) and the seismic engineering community for information essential to saving lives, property, infrastructure, and having an effective emergency response.

### **Control: Project Plan Development**

A developed project plan to address the strong motion instrumentation infrastructure is the first control to be put into place. The plan will map out the upgrade of 1,100 stations over the next five years. The project plan initiative is scheduled to be completed by August of 2022.

Other controls include:

- CGS management to meet with key stakeholders (CalOES, CalTrans, and DWR) to prioritize instrument upgrades based on the highest risk (life safety and damage potential to California's communities). This control is expected to be completed by June of 2022.
- Established funding sources are being considered through Budget Change Proposals to cover infrastructure upgrades of 1,100 stations. Funding will also include instruments and labor considerations for installment.

### **CONCLUSION**

The Department of Conservation strives to reduce the risks inherent in our work and accepts the responsibility to continuously improve by addressing newly recognized risks and revising risk mitigation strategies as appropriate. I certify our internal control and monitoring systems are adequate to identify and address current and potential risks facing the organization.

**David Shabazian, Director**

CC: California Legislature [Senate (2), Assembly (1)]  
California State Auditor  
California State Library  
California State Controller  
Director of California Department of Finance  
Secretary of California Government Operations Agency