1 BACKGROUND

Under the Cap-and-Trade Program, covered entities may use compliance offset credits to satisfy up to eight percent of their compliance obligation. This limit applies to each individual covered or opt-in covered entity for each compliance period. Compliance offsets are tradable credits that represent verified greenhouse gas (GHG) emissions reductions or removal enhancements from sources not subject to a compliance obligation in the Cap-and-Trade Program and resulting from one of the following: (1) a project undertaken using an Air Resources Board (ARB or Board) approved Compliance Offset Protocol pursuant to Subarticle 13 of the Cap-and-Trade Regulation; (2) an offset credit issued by a linked jurisdiction pursuant to Subarticle 12 of the Cap-and-Trade Regulation; or (3) a sector-based offset credit issued by an approved sector-based crediting program pursuant to Subarticle 14 of the Cap-and-Trade Regulation. In almost all cases, these GHG sources are outside of the industrial, energy, and transportation sectors. This document describes ARB’s process for the review and approval of new ARB Compliance Offset Protocols. As an important market feature, offset credits can provide covered entities a source of low-cost emissions reductions for compliance flexibility. The inclusion of offset credits will also support the development of innovative projects and technologies from sources outside capped sectors that can play a key role in reducing emissions both inside and outside California.

As required by Division 25.5 of the Health and Safety Code (Assembly Bill 32 or AB 32), any reduction of GHG emissions used for compliance purposes must be real, permanent, quantifiable, verifiable, enforceable, and additional (Health and Safety Code §38562(d)(1) and (2)). Any offsets issued by ARB must be quantified according to Board-approved Compliance Offset Protocols. The Cap-and-Trade Regulation (Regulation) includes provisions for collecting and submitting the appropriate monitoring documentation to support the verification and enforcement of reductions realized through the generation and retirement of Compliance offset credits. The regulatory provisions and the requirements of the Compliance Offset Protocols will ensure that the reductions are quantified accurately, represent real GHG emissions reduction, and are not double-counted within the system. Compliance Offset Protocols are considered regulatory documents and are made publicly available so that anyone interested in

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1 “Compliance obligation” is defined as “the quantity of verified reported emissions or assigned emissions for which an entity must submit compliance instruments to ARB.” Title 17, California Code of Regulations, section 95802(a).
developing an offset project can do so if their project meets Board-approved standards. Information on existing and proposed protocols can be found here:

http://www.arb.ca.gov/cc/capandtrade/offsets/offsets.htm

It is important to note that compliance offset credits are only one way to incentivize voluntary GHG reductions outside of the Cap-and-Trade Program. Projects that could reduce GHG reductions could be incentivized through the use of grants, the generation of voluntary offsets, and potentially as regulatory offsets for compliance with the California Environmental Quality Act.

2 COMPLIANCE OFFSET PROTOCOL REQUIREMENTS

2.1 How will ARB determine which protocols to take through the approval process?

Periodically, ARB staff will review offset protocols that are available for use in the voluntary offset programs. These voluntary protocols will be assessed against the protocol criteria listed below. This process will be coordinated with our Western Climate Initiative (WCI) partners. Staff will also consider proposed protocols submitted by stakeholders that include elements to ensure any resulting offsets would meet the AB 32 offset and ARB protocol requirements presented in section 2.2. The specific process and steps prior to Board consideration are provided in section 3 below.

In addition to the ability to generate offsets that meet the AB 32 criteria, there are several other factors that are considered when deciding which project types will be considered for potential development of a Compliance Offset Protocol. These factors include, but are not limited to, the following:

- Potential for projects in California;
- Potential offset supply;
- Cost-effectiveness; and
- Co-benefits.

ARB staff is also working with our WCI partner jurisdictions to identify which offset project types to evaluate next as part of the regional trading program, which may also include a review of existing protocols from voluntary offset programs. Staff will determine if a proposed protocol for a project type can be applied in California and/or at the regional level, and if it has the potential to meet the criteria listed above. There may be instances where a protocol is not applicable in every jurisdiction of a linked program. In all cases, all linked jurisdictions will have to agree on offset project protocols to

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ensure nothing will impact the fungibility of offsets across a regional Cap-and-Trade Program.

ARB staff will continue to meet with stakeholders and consider additional proposed offset project types that meet the AB 32 offset and ARB protocol requirements as we coordinate with WCI partner jurisdictions.

2.2 What criteria will ARB use to evaluate new protocols?

ARB must ensure that all GHG emissions reductions issued as offset credits under a Compliance Offset Protocol meet the AB 32 offset criteria as defined in the Regulation. ARB’s decision not to develop a Compliance Offset Protocol does not preclude that project type from being incentivized through grants, development of voluntary offsets, or potentially as mitigation for compliance with the California Environmental Quality Act.

The Regulation also specifies the criteria for Compliance Offset Protocols in section 95972. These requirements will be broadly applied to each offset project type for which ARB is developing a protocol. There may be additional considerations that staff, in collaboration with stakeholders, may look at for specific offset project types.

New protocols can only be considered for project types that meet the following requirements:

- The resulting GHG emission reductions are from sources that are not covered by the cap and that are not subject to a compliance obligation. This is because there is no net reduction (i.e. no “offset”) as a result of emissions being shifted from one source under the cap to another source under the cap. As a matter of policy, we do not issue offset credits for reductions from sources that would be covered by the cap but are located outside the State. For example, energy-related projects, such as the installation of solar panels, would not be eligible for offsets as the actual emission reductions are associated with power generation and all electricity generation is already covered under the Cap-and-Trade Program. Similarly, transportation fuels are covered in the program starting in 2015, so ARB will not adopt a Compliance Offset Protocol for cleaner vehicle fleets.

- The GHG emissions reduction must be a direct reduction within a confined project boundary. Recycling activities would not be eligible for offset credit as the recycling activities do not have a direct GHG reduction at the recycling facility, but may have an emissions impact upstream when new materials are extracted or manufactured in lieu of the recycling. Currently, to avoid double counting
issues in the Cap-and-Trade Program, ARB does not plan to adopt protocols that include a lifecycle analysis.

• The GHG emissions reduction must be permanent. For avoided GHG emissions, there must be no opportunity for a reversal of the avoided emissions. An example of this type of permanence is methane flaring in livestock digester projects, which permanently destroys methane. For GHG sequestration, the project must be able to ensure the GHG will not be released into the atmosphere for at least one hundred years. Both the U.S. Forest and Urban Forestry Projects Compliance Offset Protocols require a commitment to keep any credited carbon stocks sequestered for at least 100 years.

• The GHG emissions reduction must be conservatively quantified to ensure that only real reductions are credited. This requires a sound foundation and understanding of the underlying quantification for all sources, sinks, and reservoirs within a project boundary so that the net change from implementing the project represents a real reduction for issuing credit.

• The GHG emissions reduction must be verifiable and enforceable. This requires a Compliance Offset Protocol to have clear monitoring and measurement requirements that can be audited by a verifier and enforced by ARB.

• The GHG emissions reduction must be additional, or beyond any reduction required through regulation or action that would have otherwise occurred in a conservative\(^3\) business-as-usual scenario.\(^4\) In order for ARB to ensure offset credits are additional, ARB would not adopt a protocol for a project type that includes technology or GHG abatement practices that are already widely used. See section 4 for more information.

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\(^3\) “Conservative,” in the context of offsets, means “utilizing project baseline assumptions, emission factors, and methodologies that are more likely than not to understate net GHG reductions or GHG removal enhancements for an offset project to address uncertainties affecting the calculation or measurement of GHG reductions or GHG removal enhancements.” Title 17, California Code of Regulations, section 95802(a).

\(^4\) “Business-as-usual scenario” means “the set of conditions reasonably expected to occur within the offset project boundary in the absence of the financial incentives provided by offset credits, taking into account all current laws and regulations, as well as current economic and technological trends.” Title 17, California Code of Regulations, section 95802(a).
3 PROCESS FOR ADOPTION OF COMPLIANCE OFFSET PROTOCOLS

3.1 What are the rulemaking requirements for approving Compliance Offset Protocols?

Compliance Offset Protocols are considered regulatory documents and are subject to the Administrative Procedure Act (APA). As with any regulation that is considered by the Board, each Compliance Offset Protocol must be developed through a full stakeholder process. As part of this APA process and consistent with ARB’s certified regulatory program, staff will also develop an environmental analysis that is included in the staff report prepared for any Compliance Offset Protocol to be considered by the Board. This process satisfies the requirements of the California Environmental Quality Act (CEQA). The primary steps and details of the APA process and how it applies to protocol review and adoption are as follows:

- **Offset Protocol Announcements and Timing:** Staff will announce decisions to develop new offset protocols in a public setting, open to all stakeholders. Information related to new offset protocols will be shared in a transparent and public process so as not to give any one entity a potential market information advantage over another entity.

- **Informal Development Activities:** During this step, staff will hold public workshops or technical meetings to discuss the development of a potential offset protocol, focusing on areas such as, but not limited to, project specific mitigation methods, defining a project boundary, quantification of baseline conditions, and quantification of actual GHG reductions or removal enhancements. Staff will look at offset supply potential that could be generated under each potential Compliance Offset Protocol, prioritizing those with supply in California and then broadly across the United States. When considering offset supply, staff will be interested not only in the potential supply from a single project and the potential supply if only small projects can occur, but also in whether the mitigation methods or technology(ies) are easily transferrable for a larger volume of reductions. This process would, where appropriate, also include the development of draft protocol text following stakeholder input.

Depending on the complexity of the project type, ARB may hold a series of workshops or technical workgroup meetings. Dates of the workshops or

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5 Government Code, § 11340 et seq. Although Health and Safety Code section 38571 exempts quantification methodologies from the Administrative Procedure Act (APA), Compliance Offset Protocols and the corresponding adoption through the Cap-and-Trade Regulation would include regulatory components that are subject to APA requirements.
meetings will be posted on the ARB website and posted to the relevant email listservs. When possible, such meetings are webcast for broad public participation.

All workshop presentations will be posted on the ARB website and a protocol-specific development webpage will be posted that contains information about the development of that specific protocol. During the first public workshop, a protocol staff lead for ARB will be identified along with his or her contact information.

- **Issuing the Notice:** This step initiates the APA rulemaking action. When, after completing the preliminary activities described above, ARB determines that it would like to proceed with a formal rulemaking on a proposed Compliance Offset Protocol, ARB will issue a notice of proposed rulemaking, which is included in the California Regulatory Notice Register. This notice will include the Board hearing date when staff will present the proposed Compliance Offset Protocol for Board consideration. This notice is posted at least 45-days prior to the Board hearing.

- **Availability of the Proposed Text and the Initial Statement of Reasons:** At least 45-days prior to the Board hearing, ARB will make available the proposed Compliance Offset Protocol text and a staff report that includes an explanation of why certain decisions were made in the development of the proposed Compliance Offset Protocol, any relevant analyses to support the proposed Compliance Offset Protocol, and an analysis of potential environmental impacts. ARB will post the proposed text and the staff report on its rulemaking website with the 45-day notice. ARB practice is to notify the public of the availability of these documents through the relevant email listservs.

- **45-Day Comment Period:** ARB will provide at least 45 days for the public to review the proposed Compliance Offset Protocol text and staff report and provide written comments to ARB.

- **Public Hearing:** Staff will present the proposed Compliance Offset Protocol to the Board for its consideration. This process usually includes a staff presentation at a regularly scheduled Board hearing. The dates and agendas for each hearing are posted on the rulemaking website. Stakeholders can provide written and oral testimony to the Board before the Board takes any action on the proposed Compliance Offset Protocol text. The Board may choose to adopt the proposed Compliance Offset Protocol text as written or to direct staff to make changes and release amended material for a formal comment period of at least 15-days. ARB will consider all formal comments on its proposed Compliance Offset Protocol as required by the APA and Board policy.
• **Summary and Response to Comments:** ARB must summarize and respond to all formal comments submitted during the 45-day comment period, at the Board hearing, and during any subsequent 15-day comment periods on the proposed Compliance Offset Protocol in a document referred to as the Final Statement of Reasons. In this document, ARB will indicate where it made a change in response to a comment, or why a change is not appropriate. When applicable, the written responses to comments addressing the environmental analysis will be considered by the Board prior to making any findings required by the CEQA before a proposed protocol is adopted. This process ensures that ARB has understood and considered all relevant material presented to it before adopting a proposed protocol.

• **Submission of a Rulemaking Action to the Office of Administrative Law (OAL) for Review:** Following final ARB approval, the rulemaking record is submitted to OAL for review. ARB also posts a Notice of Decision with the Secretary of Natural Resources in accordance with its CEQA certified program. OAL has 30 working days to review the rulemaking record to determine whether it demonstrates that ARB satisfied the requirements of the APA. Upon OAL approval, the Board-adopted Compliance Offset Protocol is filed with Secretary of State and becomes effective within a quarterly time schedule provided in the APA.

The Administrative Procedures Act mandates that ARB complete a rulemaking within one calendar year from the date the 45-day notice is published in the California Notice Register. If ARB does not submit the final protocol and regulatory amendments to the Office of Administrative Law by that date, ARB must initiate a new rulemaking. This includes a new 45-day comment period and Board hearing.

4 **ADDITIONALITY**

AB 32 and the Cap-and-Trade Regulation require any reductions used for compliance to be beyond what would otherwise be required by law, regulation, or legally binding mandate, and that exceed what would otherwise occur in a conservative business-as-usual scenario. For each proposed Compliance Offset Protocol, staff will establish whether GHG reductions or removal enhancements that result from the implementation of offset projects under the protocol are already being required by a local, state, or federal regulation. If a specific GHG mitigation method is already required by regulation, any reductions from that mitigation method would not meet the requirements for additionality. In this case the proposed Compliance Offset Protocol could not include
that specific GHG mitigation method and compliance offsets would not be issued for that reduction activity.

To assess if a specific GHG mitigation method may have “otherwise occurred,” staff will establish if that method is common practice in the geographic area in which the proposed Compliance Offset Protocol is applicable. Where possible, this review would include staff’s best estimate of the percent of the technology or mitigation in use for that sector. This can be done through outreach to the sector that would generate potential offsets, discussions with trade organizations, data research, and reviews of technology trends. Staff will take into consideration cost barriers that may prohibit technology or GHG mitigation methods from occurring in the absence of revenues from the generation of offset credits. For each proposed Compliance Offset Protocol, staff will share their findings during a stakeholder process and solicit feedback to determine whether a specific technology or GHG mitigation method is beyond common practice, and if the resulting reductions would meet the requirements for additionality.

5 HOW DOES ENVIRONMENTAL CREDIT STACKING WORK UNDER THE CALIFORNIA COMPLIANCE OFFSET PROGRAM?

Environmental credit stacking refers to a situation where a single activity provides more than one marketable environmental credit. For example, forest projects can result in carbon sequestration and improved watershed quality benefits. ARB believes that environmental co-benefits are a desired result of its Compliance Offset Protocols. The additional incentives such as other environmental credits would not by themselves disqualify a project type from being considered for the development of a Compliance Offset Protocol. ARB’s assessment of additionality will be based on how prevalent a mitigation practice or technology is within a sector, regardless of whether or not the activity could generate other marketable environmental credits.

6 WILL ARB PERIODICALLY REVIEW COMPLIANCE OFFSET PROTOCOLS?

Yes, ARB will continue to monitor the adoption of new or modified regulations that could affect additionality, as well as new developments in scientific data and quantification related to adopted Compliance Offset Protocols that would warrant a change to an existing Compliance Offset Protocol. Staff will propose amendments to Compliance Offset Protocols as necessary through a stakeholder process prior to Board consideration. Staff will weigh the decision to update a protocol against the market desire for certainty to support an active and robust compliance offset program. Any amendments to an existing Compliance Offset Protocol would involve the same APA process as developing a new Compliance Offset Protocol.
Once ARB updates an existing Compliance Offset Protocol, the previous version would no longer be used by new projects from the date that OAL approves the new version. Any existing projects under the previous version of the protocol would be required to use the new version of the protocol once the existing crediting period has ended.

7 HOW CAN I PARTICIPATE IN THE COMPLIANCE OFFSET PROTOCOL DEVELOPMENT PROCESS?

ARB encourages interested parties, including subject matter experts and general members of the public to attend Compliance Offset Protocol development workshops and provide informal and formal written feedback on proposed content during the Compliance Offset Protocol development process. Stakeholders can also request meetings with ARB staff to discuss protocol-related issues. Stakeholders are encouraged to sign up for the Cap-and-Trade listserv to make sure they are notified of any workshops or public information related to Compliance Offset Protocol development:


8 SUBMITTING IDEAS FOR COMPLIANCE OFFSET PROTOCOLS?

8.1 Can a voluntary offset program recommend a protocol for review?

Yes. Voluntary offset programs such as the American Carbon Registry, Climate Action Reserve, Verified Carbon Standard, and others may submit protocols to ARB for review. However, regardless of how the voluntary protocols are developed, ARB staff must determine whether the voluntary protocol should be developed for use in the Cap-and-Trade Program and if so, to conduct its own rulemaking process under the Administrative Procedure Act. As outlined above, under this process ARB would review, modify, and present a proposed Compliance Offset Protocol for Board consideration. This process ensures that any voluntary protocol modified for consideration by the Board demonstrates the resulting reductions meet the offset criteria in AB 32 as defined in the Cap-and-Trade Regulation and the criteria listed earlier in this document.

Protocols developed by the voluntary programs are not Compliance Offset Protocols as they are not developed through a rulemaking process, may not meet the AB 32 and Cap-and-Trade Regulation criteria, and were not approved by the Board.

8.2 Why has ARB not developed Compliance Offset Protocols for all of the existing voluntary offset protocols?

There are many existing voluntary offset protocols for use in the voluntary offset market. However, ARB must ensure any Compliance Offset Protocol it develops will result in
offset credits that meet the AB 32 offset criteria and the general protocol criteria in section 2.2. ARB will periodically review the available voluntary offset protocols and the potential to develop them into Compliance Offset Protocols.

8.3 Why can’t we limit offset protocols just to California projects?

An important role for compliance offsets in the Cap-and-Trade Program is to provide cost containment for covered entities in the program. A covered entity can meet up to eight percent of its compliance obligation by using offsets in each compliance period. It is important to note that if all entities under the cap were to maximize the use of offsets up to the eight percent limit, there would still need to be on-site GHG emissions reductions at covered entities to meet the overall cap limits through 2020. Since the Cap-and-Trade Program already covers most sectors of California’s economy under the cap, limiting offsets to just projects in California would significantly reduce the offset supply potential available to covered entities. This would increase their cost for compliance under the Cap-and-Trade Program. As stated in section 2.1, ARB will try to identify potential Compliance Offset Protocols that may be applicable in California, as well as across the United States.

8.4 What if I have a good idea for an offset protocol?

ARB encourages stakeholders to engage with staff regarding the development of new Compliance Offset Protocols and potential new project types that may fit the criteria for compliance offsets. Section 2.2 of this document contains the requirements for Compliance Offset Protocols. These requirements can help stakeholders discern if their ideas could potentially be considered for the Compliance Offset Program.

8.5 Will ARB only approve protocols based on a standardized approach?

Yes, approved Compliance Offset Protocols serve as a cornerstone of the Compliance Offset Program to ensure that reductions are appropriately quantified, monitored, reported, and documented. Those protocols taken to the Board for adoption will consist of standardized methods that quantify reductions based on specific criteria and pre-established calculation methods. This approach streamlines the calculation of project baselines and determination of the additionality of projects by using standard eligibility criteria that ensure projects are additional. By establishing the standardized criteria in the Compliance Offset Protocol, there is less subjectivity by verifiers or offset project developers as to whether a project may be additional and this supports consistent quantification rigor in the offset program.
8.6 Will ARB approve protocols developed under a project-based approach?

No, ARB is not planning to accept project-based protocols because each individual project protocol must be approved by the Board and such a process would be lengthy and administratively burdensome.

Additional Information

More information on the Cap-and-Trade Program, compliance offsets, and current rulemaking activities can be found here:

http://www.arb.ca.gov/cc/capandtrade/capandtrade.htm

Staff contacts for the Cap-and-Trade Program can be found here:

http://www.arb.ca.gov/cc/capandtrade/contacts/capandtrade_contacts.htm