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DATE: February 17, 2022

TO: SJVUAPCD Governing Board 

FROM: Samir Sheikh, Executive Director/APCO
Project Coordinator: Morgan Lambert

RE: **ITEM NUMBER 11: UPDATE ON DISTRICT
EMISSION REDUCTION CREDIT SYSTEM AND
CONSIDER ACTIONS TO ADDRESS FEDERAL
OFFSETTING REQUIREMENTS**

RECOMMENDATIONS:

1. Receive update on District efforts to enhance the Emission Reduction Credit program as necessary to maintain an effective permitting system that allows for protection of public health and economic growth.
2. Authorize the Executive Director/APCO to withdraw the NOx portion of the 2020-21 Annual Offset Equivalency Report, and, consistent with Section 7.4.1.3 of Rule 2201, enact the remedy to require all ATCs for new major NOx sources or NOx federal major modifications issued after the report withdrawal to comply with the offset requirements of 40 CFR 51.165, and part D of Title I of the CAA.
3. Direct District staff to begin the rule development process required by Section 7.4.1.2 of Rule 2201 to amend Rule 2201 to ensure the applicability and offset requirements comply with the federal new source review requirements.
4. Direct District staff to continue working with stakeholders, EPA, and CARB through the Public Advisory Workgroup in pursuit of solutions to enhance the District Emission Reduction Credit (ERC) program to ensure an adequate supply of credits are available to meet offsetting obligations.

BACKGROUND:

To achieve the District's mission of improving air quality and public health for all Valley residents, the District has developed and implemented numerous air quality plans to reduce emissions from stationary sources through the adoption of nearly 650 of the most stringent rules in the nation and strong voluntary incentive programs that have invested more than \$4 billion of combined funds in clean-air projects. Over the past several decades, these air quality improvement efforts have reduced ozone and PM2.5-forming NOx emissions from stationary and mobile sources by over 75%, including a greater than 90% reduction from stationary sources under the District's jurisdiction, resulting in significant air quality progress towards meeting the health-based federal ozone and PM2.5 standards.

In addition to the District rules aimed at directly reducing emissions from stationary sources, the District also has a set of rules establishing a permitting program designed under state law to ensure on a regional basis there is no net increase in emissions of nonattainment pollutants or their precursors for new or modified sources.

DISCUSSION:

Under the District Rule 2201 - *New and Modified Source Review (NSR)*, new facilities and modifications to existing facilities that result in increases in permitted emissions above specified levels are required to provide ERCs as mitigation, or "offsets", as a part of the requirements to obtain an "Authority to Construct" permit. Both federal and state law mandate New and Modified Stationary Source Review permitting programs that contain offsetting and ERC banking provisions. Offsets are intended by both federal and state law to be one part of a comprehensive NSR permitting program that has been specifically designed by Congress and the state legislature to allow for industrial growth while tightly regulating any emissions increases. Additionally, any emission increases due to growth are accounted for in State Implementation Plans that demonstrate how the District's overall air quality control program will require sufficient emissions reductions to attain national ambient air quality standards.

It is important to clarify that, despite a common misconception, ERCs cannot be used in lieu of meeting other air pollution control requirements, such as through market-based systems that other agencies may have in place. Instead, ERCs are required in addition to, and only after, establishing that the new emissions are controlled with the best available control technology (BACT) and will not cause a significant health risk to surrounding communities. The San Joaquin Valley's NSR permitting program, including the accompanying ERC program, ensures that new emissions are controlled with the best technologies, prevents the permitting of any operation that will cause a significant health impact, demonstrates on a project-by-project basis and in each attainment plan that attainment is not endangered, and has historically been found by the state and

federal governments to comply with state and federal laws governing NSR/ERC programs.

ERCs are granted to permitted sources for voluntary emissions reductions when facilities control emissions to levels beyond current or future regulatory requirements, and are only granted after a thorough review by the District has confirmed compliance with a number of criteria defined by District Rules 2201 and 2301, which rules are vetted and approved by both CARB and federal EPA. In addition, every ERC banking project and associated evaluation are provided to CARB, EPA, and the public for their review and comment prior to the ERCs being issued. ERCs approved by the District are then available for use to offset a subsequent permitted emissions increase by surrendering the ERC. ERCs can be used at the same location of the emissions decrease, or at another location, generally after the sale of the ERC to a third party.

California Air Resources Board Review of District ERC Program

At their January 2019 meeting, CARB directed their staff to review the District's ERC and offset equivalency program in response to a request from environmental advocacy groups. CARB staff worked cooperatively with District staff to review the ERC system, including the annual federal equivalency demonstration, in the context of the District's stationary source permitting program.

Following nearly a year and a half of detailed review, CARB released its final report entitled "Review of San Joaquin Valley Air Pollution Control District Emission Reduction Credit System" on June 5, 2020. In response, the District committed to taking the following specific steps to enhance the program as necessary to maintain an effective permitting system that allows for protection of public health and strong economic growth:

- Conduct a public workshop each year, beginning with the 2019-2020 equivalency demonstration, to present the results of the annual equivalency demonstration prior to taking the report to the District's Governing Board.
- Enhance the annual demonstration report to make the report more understandable beginning with the 2019-2020 equivalency demonstration, including more fully characterizing adjustments made to year-to-year carry-overs to ensure the public can better understand all adjustments effective in a tracking year.
- Convene a public advisory working group consisting of affected stakeholders, including regulated Valley businesses, Valley residents, and federal, state, and local public agencies, to assist in developing solutions related to the District's offset equivalency system, as needed to maintain an effective permitting system that allows for protection of public health and strong economic growth.
- Adjust calculated emission reductions from all affected Agricultural Internal Combustion Engine Conversion Incentive Program (AG-ICE) projects to reflect the appropriate load-factor, and incorporate these adjustments into the 2020

equivalency demonstration. The District will include a discussion of the analysis and adjustments in the 2019-2020 report.

- Analyze the orphan shutdown projects identified by CARB, and make adjustments, as appropriate, for inclusion in the 2019-2020 equivalency demonstration. The District will include a discussion of the analysis and adjustments in the 2019-2020 report.
- Update the District's policies that pertain to the quantification of emissions reductions from orphan shutdowns, and ensure procedures and associated staff training maintain consistency with District NSR criteria for creditability of emissions reductions.
- Develop a new equivalency tracking database, including associated documentation.

Public Engagement

To ensure that any enhancements to the District's ERC program and offset equivalency system benefit fully from the input and suggestions of Valley stakeholders and subject matter experts, the District Governing Board created a public advisory working group to assist in developing solutions related to the District's offset equivalency system. The District believes that this public engagement tool will also be effective in navigating the complex subject matter of ERCs and federal offset equivalency, and enable stakeholder input that will be valuable in developing enhancements to the program. Since its formation in September 2020, the District has held eleven meetings with the ERC Public Advisory Workgroup (PAW) in which topics such as the District's offset equivalency demonstration, implications associated with the offset equivalency demonstration, role of ERCs in State Implementation Plans, and strategies for the generation of new creditable reductions have been discussed. The ERC PAW includes members of Valley community based organizations, regulated Valley businesses, CARB, and EPA. With the input of the ERC PAW members and other Valley stakeholders, the District has made significant progress in fulfilling the specific commitments made to address the findings contained in the CARB review.

District Offset Equivalency Program

As allowed by the federal Clean Air Act, the District's ERC program has historically differed from a direct implementation of the federal offsetting/ERC requirements. EPA approved the District's approach in 2001 as the District's local NSR program was at least as stringent as the federal program. As included in the District's EPA-approved NSR Rule, to demonstrate equivalency with the federal NSR offsetting requirements the District is required to prepare and submit an annual offset equivalency report to EPA and CARB that evaluates whether both of the following conditions are met:

- Offset Quantity (Test 1) - the quantity of offsets required by the District from new and modified stationary sources equals or exceeds the quantity of offsets otherwise required under federal regulations; and
- Surplus Value (Test 2) - the amount of reductions, after discounting at the time of use, required by the District from new and modified stationary sources, plus any additional surplus creditable emission reductions, equals or exceeds the amount of offsets otherwise required under federal regulations.

Under the District's NSR rule, if the system ever fails to demonstrate equivalency with federal requirements, immediate and specified remedies are required to be enacted for each of the above tests.

The findings of CARB's review pointed to the need to revisit the District's offset equivalency system and the assumptions used in the District's equivalency demonstrations. Consistent with the District's offset equivalency agreement with the federal EPA and with the provisions of the District's NSR rule, the District historically utilized the surplus value of emission reductions across various categories to demonstrate equivalency with federal offsetting requirements on an annual basis. Two particular categories that have been utilized were agricultural engine electrification projects associated with the AG-ICE incentive program and unbanked facility shutdowns ("orphan shutdowns"). CARB raised valid questions regarding the assumptions, quantification methodologies, and creditability of the emission reductions associated with these projects when viewed in an NSR context. In response to the review, the District committed to revisiting the emission reductions used in the equivalency demonstration from these two categories.

After further review of these projects and given the significant questions surrounding the assumptions, quantification methodologies, and creditability of the emission reductions from these two categories, the Governing Board removed the emissions reductions associated with the orphan shutdown and AG-ICE projects from the system in September 2020. After this proactive action, the system was no longer able to demonstrate equivalency with the surplus value test for NO_x and VOC.

In completing the 2019-20 Annual Offset Equivalency Report, the District conducted an extensive review of the projects and entries in the system, and made significant adjustments to the carry-over balances as part of the 2019-2020 demonstration. In addition, the District also incorporated the effects of the Governing Board's September 2020 removal of orphan shutdown and agricultural engine electrification projects. The 2019-20 Annual Offset Equivalency Report demonstrated that VOC was no longer offset quantity (Test 1) or surplus value (Test 2) equivalent, and NO_x was no longer surplus value (Test 2) equivalent. The appropriate remedies contained within Rule 2201 were enacted.

The 2020-21 Annual Offset Equivalency Report was completed and submitted to EPA and CARB on November 19, 2021, and received and filed by the Governing Board on December 16, 2021. As detailed in the report, there was a current year offset quantity shortfall; however, there was a sufficient NOx carry-over balance to maintain offset quantity (Test 1) equivalency. While the report was submitted to meet the strict timelines mandated in Rule 2201, further analysis of the 2020-21 annual shortfall in the quantity of NOx offsets required highlights the possibility that the current Test 2 remedy in District Rule 2201 will not be sufficient to ensure the District will be able to remain equivalent with federal offsetting requirements. It is imperative that the District operates an offsetting program that ensures that federal offsetting requirements can be met on an ongoing basis. Consistent with the District's efforts to evaluate the offsetting program and ensure that all state and federal requirements are met, staff recommend that the Board take action to require that all new major sources or federal modifications triggering offsets for NOx be required to provide ERCs for the full federal offset quantity and that those credits be surplus at time of ATC issuance effective February 17, 2022. This would make NOx offsetting requirements consistent with current VOC offsetting requirements. To effect this change, staff recommends that the Board direct the Executive Director/APCO to withdraw the NOx portion of the 2020-21 Annual Offset Equivalency Report. Consistent with Section 7.4.1.3 of Rule 2201, this action would enact a remedy to require all ATCs for new major sources or federal major modifications issued after the report withdrawal to comply with the offset requirements of 40 CFR 51.165, and part D of Title I of the CAA.

This recommended action is consistent with your Board's direction for a proactive response to the review, and would allow the public rule development process and ERC PAW to help inform the development of rule amendments that ensure federal offsetting requirements will be met on an ongoing basis and that mechanisms are in place to ensure project proponents have the ability to generate or procure the credits necessary to meet offsetting obligations. Consistent with the commitment for stakeholder engagement, this recommended action was discussed at the February 3, 2022, ERC PAW meeting.

NEXT STEPS:

Upon approval of today's recommendations by your Board, the District will provide information to interested parties consistent with the District's ongoing outreach efforts on this matter. The District is actively engaging with project proponents to help navigate the potentially significant impacts of federal offsetting requirements. Additionally, the District is working with stakeholders, EPA, and CARB through the Public Advisory Workgroup in pursuit of solutions to enhance the District ERC and offset equivalency programs to ensure an adequate supply of credits are available to meet offsetting obligations. Additionally, in accordance with Section 7.4.1.2 of Rule 2201, the District must begin a rule development process to amend Rule 2201 to ensure the applicability and offset requirements comply with the federal new source review requirements.

Due to the complexity and importance of the issues, it is likely that the process will occur over an extended period. District staff will provide progress reports to the Governing Board at the regularly scheduled public meetings.