

SAN JOAQUIN VALLEY UNIFIED AIR POLLUTION CONTROL DISTRICT

FINAL DRAFT STAFF REPORT

Rule 2301 (Emission Reduction Credit Banking)

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I. SUMMARY

A. Reasons for Rule Development and Implementation

1. Background

In August 2008 the District's Governing Board adopted the Climate Change Action Plan (CCAP). The CCAP recognized the importance of climate change issues for District residents and businesses and identified opportunities for the District to take an active role in anticipating and addressing the challenges concerning climate change in the San Joaquin Valley.

The CCAP was developed and adopted as the District's proactive response to activities at the State level concerning climate change, including the passage and implementation of "California Global Warming Solutions Act of 2006" (AB32), designed to significantly reduce existing and future GHG emissions in California; and requiring the analysis of environmental impacts of new GHG emissions related to discretionary project approvals under the California Environmental Quality Act (CEQA). Regulations implementing AB32 are currently being developed by CARB. Additionally, analysis of a project's GHG emissions environmental impacts required by CEQA has been particularly difficult to implement as no state or local agency has provided definitive guidance on how to address GHG emissions impacts under CEQA.

The District's Governing Board, in adopting the CCAP, took a proactive approach to assist Valley businesses and residents address these requirements. The CCAP directed the Air Pollution Control Officer to develop guidance in several different areas, as his investigations found appropriate. The areas to investigate were: methods to guide the District and to assist land use agencies in addressing greenhouse gas (GHG) emissions as part of the California Environmental Quality Act (CEQA) process; development of a GHG emission reduction banking registry; enhancement of the existing emissions inventory process to include greenhouse gas emissions; and methods to administer voluntary greenhouse gas emission reduction agreements.

This staff report focuses solely on the development of a GHG emission reduction banking registry via amendments to Rule 2301 – Emission Reduction Credit Banking. A District-administered mechanism to allow facilities to bank GHG emissions reductions will be beneficial to Valley residents and businesses for the following reasons:

- Banked GHG emission reductions can be retired to provide mitigation for CEQA
- Provide a mechanism for the trading of banked GHG emission reductions
- Promote the early reductions of GHGs and their associated criteria and toxic pollutants in the District
- Provide a measure of certainty for banked GHG emission reductions lacking in some other GHG registries due to the District’s extensive experience in banking criteria pollutant emissions
- Provide a mechanism for persons to purchase and retire banked GHG emission reductions for societal benefit
- Banked protocol-based GHG emission reductions could possibly be used for compliance with the upcoming AB32 cap and trade program, pending CARB rulemaking on the cap and trade program

2. Process used in developing draft rule amendments

To investigate the various issues concerning the development of a mechanism to bank GHG emission reductions, the District formed a diverse technical workgroup consisting of District staff, land use agency representatives, industry representatives, agricultural representatives, environmental group representatives, and other interested parties. The District asked these stakeholders to participate in this process to gather ideas and issues from as many and as varied perspectives as possible, and to allow the District to develop a program that had benefits for Valley residents and businesses. This workgroup met several times in public meetings during late 2008 and early 2009, and engaged in a robust and frank discussion of pros and cons of establishing a carbon exchange. See summary of the stakeholder contributions during this process in Appendix A.

The workgroup investigated several areas of interest regarding a GHG emission reduction banking program, including:

- The differences between the upcoming AB32 cap and trade program and a GHG emission reduction banking program. The upcoming AB32 GHG cap and trade program is a method to reduce actual GHG emissions by operating under a declining GHG cap, whereas GHG emission reduction banking is a method to preserve GHG emission reductions that are in excess of any GHG emission reduction requirement, including a cap and trade program.
- Potential uses of banked GHG emission reductions. Banked GHG emission reductions could possibly be used to provide mitigation in the CEQA process, as a means to comply with a GHG cap and trade program, or other purposes.

- A review of other GHG emission reduction registration programs currently in existence was undertaken, including the Chicago Climate Exchange, New York Climate Exchange, Northeast Climate Exchange, Climate Action Reserve, and SCAQMD's SoCal Climate Solutions Exchange.
- Required elements of a District-administered GHG emission reduction banking program were discussed, including the establishment of criteria for GHG emission reduction banking, the use of CARB protocols, and the concept of additionality to quantify some GHG emission reductions. It was identified that some of the processes the District currently has in place for criteria pollutant emission reduction banking could be applied to GHG emission reduction banking.
- The advantages and disadvantages of development of a GHG emission reduction banking program. See a summary of these advantages and disadvantages in Attachment A. Please note that these discussions and conclusions are those of the workgroup, and are not necessarily shared by District staff.
- Alternatives to the development of a District administered GHG emission reduction banking program were discussed, including the District's possible role in the Climate Action Reserve as a GHG emission reduction project verifier and/or providing technical assistance to project proponents quantify and mitigate their projects GHG emissions as part of the CEQA process.

A more detailed discussion of the above topics and workgroup members' various perspectives and conclusions are documented in the Report to the APCO Regarding the Development of the San Joaquin Valley Carbon Exchange, dated March 16, 2009.

While there was no consensus among all of the technical workgroup members, District staff's analysis of the information gathered during this public process led to their recommendation to the APCO to develop a mechanism to allow the banking of GHG emission reductions.

District staff believes that by developing a program that allows the issuance of banked GHG emission reductions for those projects that are not addressed by a CARB approved protocol, and those projects that are addressed by such protocols (as discussed below), the concerns of the technical workgroup will be satisfactorily addressed and the advantages of such a program can be realized to the benefit of Valley businesses and residents.

B. Discussion of draft rule amendments

The draft amendments to Rule 2301 – Emission Reduction Credit Banking incorporate a method to bank voluntary GHG emission reductions. While the CCAP indicated that such a system would be called the San Joaquin Valley Carbon Exchange, staff

proposes that these provisions be incorporated into Rule 2301. A separate rule allowing the banking of GHG emission reductions is not required.

The goals of the draft amendments to Rule 2301 are to provide a mechanism to preserve voluntary high quality greenhouse gas (GHG) emission reductions. The draft rule will allow the use of banked GHG emission reductions for any purpose and will not impose any restrictions on their use. However, the potential use of banked GHG emission in CARB's proposed cap and trade program will be subject to the requirements of such a program.

The draft amendments to Rule 2301 will allow for GHG emission reductions that fall into two different categories to be banked with the District, as discussed below.

Non-protocol GHG Emission Reductions

In quantifying this type of GHG emission reduction the District would use the criteria in Rule 2301, i.e. that the emission reductions be real, enforceable, permanent, surplus, and quantifiable. The District has a tremendous amount of experience in using these criteria and validated techniques to quantify criteria pollutant emissions reductions, and would simply be expanding this rule to extend the same type of time-tested analyses to quantifying and validating GHG emissions reductions. Emission reductions would not be required to be additional, i.e. GHG emission reductions that occur as a collateral benefit of another requirement may qualify for banking, provided they are surplus of existing GHG reduction regulations.

ERCs quantified without CARB approved protocols would likely be retired as one possible method to provide mitigation for a project's GHG emissions as part of the CEQA process, if approved by the lead agency. Please note that the lead agency for a particular project has the discretion to determine what mitigation measures are appropriate and feasible. When the District is the lead agency, it would allow the retirement of banked GHG emission reductions that were quantified without CARB approved protocols as a method to mitigate a project's GHG emissions. In its role as a responsible or commenting agency in the CEQA process, the District would support this type of GHG mitigation.

By providing a method for facilities to generate banked GHG emission reductions from a wide variety of emission reduction projects and allowing the transfer and retirement of such ERCs, the District will provide a mechanism to assist facilities to adequately address their project's GHG emissions in the CEQA process.

It is expected that many different types of GHG emission reduction projects would qualify for banking using this approach.

Protocol-based GHG Emission Reduction Credits

In addition to the types of projects described above, the District would be able to bank GHG emission reductions that rely on a California Air resources Board (CARB) approved GHG emission reduction project protocol.

To be interchangeable with other emission reduction registries, e.g. Climate Action Reserve or the Chicago Climate Exchange, GHG emission reductions would have to be quantified pursuant to a CARB approved emission reduction project protocol.

CARB approved GHG emission reduction project protocols include detailed procedures on how to quantify GHG emission reductions for specific project types and specific criteria to ensure that the emission reductions are additional. For an emission reduction to be additional it must not be due to (either directly or indirectly) a routine replacement of equipment or due (either directly or indirectly) to any regulatory requirement, including any requirement of AB32 or any local, State, or Federal rule requirement.

The requirement that emission reductions be additional is generally more stringent than the Rule 2301 requirement that emission reductions be surplus, i.e. in excess of any current or proposed regulatory requirement that targets that specific pollutant. The requirement that GHG emission reductions be additional means that the actions that generate the emission reduction go beyond any type of requirement that would have the effect (even if not the target of the requirement) of reducing GHG emissions and is due primarily with the intent of generating GHG emission reductions.

To date, there are three CARB approved GHG emission reduction project protocols – forestry preservation, urban forestry, and manure management.

These protocols typically require that emission reduction occur after a specified date and that the banked GHG emission reductions have a specified life, i.e. 100 years for forestry preservation and urban forestry, and 10 years for manure management.

In general, the development and CARB approval process for GHG emission reduction project protocols is a very involved and time consuming process. Additional protocols are currently being developed by the Climate Action Reserve and the South Coast Air Quality Management District that may be submitted for CARB approval in the future.

If Valley businesses or other local entities determine that there is a need for a new CARB approved GHG emission reduction project protocol (to allow such emission reductions to possibly use for compliance in the AB32 cap and trade program compliance), under this rule the District would develop such a protocol and submit it to CARB for their approval. Due to the District's extensive with criteria pollutant emission reduction banking and it's proactive approach to providing Valley businesses and residents with assistance in meeting California's climate change issues, we believe that the District could develop such protocols that would address Valley business and residents concerns in a timely and efficient manner.

GHG emission reductions that are additional and quantified using CARB approved GHG emission reduction project protocols are intended to be interchangeable with GHG emission reductions in other registries, and, potentially, to be used to some degree to comply with the AB32 cap and trade program. Details on the use of banked GHG emission reductions for AB32 compliance will be addressed in the AB32 cap and trade rulemaking process.

Finally, we should note that reductions banked under the non-protocol requirements of the rule would be eligible for re-examination and potential rebanking after a protocol is developed for that type of reduction, to the extent allowed by the approved protocol.

C. Implementation of Draft Rule Amendments

Applications to bank GHG emission reductions will take the same form as applications that are currently used for the more traditional criteria pollutant emission reductions. Such applications will be subject to the existing fee structure in Rule 3060 (Emission Reduction Credit Banking Fee). This rule requires that for Emission Reduction Credits (ERCs) to be issued for a project, that a filing fee and an analysis fee be paid for the issuance of an ERC. Currently, these fees are as follows: a filing fee of \$759, and an analysis fee of \$90/hour (the \$759 is a deposit towards the hourly processing fees, and is also the minimum fee for analyzing an ERC banking application). Subsequent transactions for a particular ERC are only subject to a lesser filing fee of \$71 per certificate.

The District currently has a computerized system in place to issue, transfer, and track the use of ERCs for affected pollutants. Such ERCs are issued in an amount (lbs) per calendar quarter. All valid ERCs are included in an ERC registry that is available on the District's website.

This existing system, with appropriate modifications, will be used to issue, transfer, retire, and track the use of GHG ERCs issued as CO₂ equivalents. The computerized system will be revised to reflect that GHG ERCs are issued on annual amounts (not quarterly) and in units of metric tons (1,000 kg) per year.

In addition, such GHG ERCs will be clearly conditioned to reflect the CARB-approved protocol upon which they are based. Likewise, ERCs that are not based on a protocol will be clearly indicated. These separate categories of ERCs will be tracked and reported separately on the District website, so that buyers and sellers of such credits will have a clear indication of the availability of various types. In addition, the District will track, and will display on the District Website, purchase prices of all transactions.

D. District Authority

On August 21, 2008 the San Joaquin Valley Air Pollution Control District's Governing Board adopted the Climate Change Action Plan (CCAP). One of the items that the CCAP authorized was the development of a mechanism, through a public process, to allow facilities to preserve greenhouse gas emission reductions that occurred in the District.

These draft amendments to Rule 2301 are implementing this mandate of the District's Governing Board. In general, the SJVAPCD's legal authority to adopt rules is based in the California Health and Safety Code Sections 39002, 40000, and 40001.

Unlike most District rules, the draft amendments to Rule 2301 do not create any new requirements for regulated sources – they are voluntary in nature. The draft amendments are designed to assist Valley residents and businesses who choose, or are required by some third party or regulatory requirement, to mitigate GHG emissions. The draft amendments would allow facilities to preserve GHG emission reductions and allow for the trading and retirement of such emission reductions. The draft amendments do not require that facilities bank GHG emission reductions, nor do they require that such reductions be used in any way, such as to mitigate emissions increases.

Separately, California CEQA guidance allows for lead agencies to develop programs to address the cumulative impacts of projects, provided such a program itself is subject to a CEQA review. The draft amendments to Rule 2301 could be part of a program developed by a lead agency to address the cumulative impacts of projects GHG emissions under CEQA, and in fact the District is proposing these changes as an important part of the District's efforts to address such situations.

Potential uses of banked GHG emission reductions are to allow facilities to preserve GHG emission reductions, retain or sell the banked emission reductions, and retire such GHG emission reductions as mitigation in the California Environmental Quality Act (CEQA) process.

The draft amendments to Rule 2301 would provide such a mechanism for facilities and therefore would be useful as a component of a CEQA-implementation program.

II. CURRENT AND PROPOSED REGULATIONS

A. Existing Rule 2301

Rule 2301 (Emission Reduction Credit Banking) was adopted September 19, 1991 and was last amended on December 17, 1992. The purpose of the rule is to:

- Provide a regulatory mechanism for sources to store ERCs for later use as offsets where allowed by District, state, and federal rules and regulations, and
- Provide a regulatory mechanism for sources to transfer ERCs to other sources for use as offsets as allowed by Rule 2201 (New and Modified Stationary Source Review Rule), or state and federal rules and regulations, and
- Define eligibility standards, quantitative procedures and administrative practices to ensure that ERCs are real, permanent, quantifiable, surplus, and enforceable.

The current rule applies to all transactions involving the storage, transfer, or use of ERCs of affected pollutants. Other provisions contained in the rule include eligibility

requirements, ERC Certificate application procedures, registration of ERC Certificates, and administrative requirements.

The current rule allows the banking of emission reductions of pollutants and their precursors for which air quality standard exist. As there is not an ambient air quality standard for GHGs, the current rule does not allow the banking of GHG emission reductions.

B. Summary of Draft Amendments to Rule 2301

Section 1.0 Purpose

Subsection 1.1 will be amended to indicate that this subsection applies to affected pollutants only. Affected pollutants, as defined in Rule 2201, do not include greenhouse gasses.

New subsection 1.2 will be added to indicate that the purpose of Rule 2301 has been expanded to allow the banking and transfer of greenhouse gas emission reductions and to define the standards for banking greenhouse gas emission reductions.

Section 2.0 Applicability

The applicability of Rule 2301 will be expanded to apply to greenhouse gas emission reductions as well as affected pollutant emission reductions. Subsection 2.1 will be amended to indicate that the rule also applicable to the storage, and transfer of banked greenhouse gas emission reductions.

Section 3.0 Definitions

Several new and revised definitions will be included to define terms used in the registration of greenhouse gas emission reductions, as discussed below.

A new definition of affected pollutant will be added. This definition will refer to the definition of affected pollutant in Rule 2201, except that greenhouse gasses will be explicitly excluded. While greenhouse gasses are not currently considered to be affected pollutants, a recent greenhouse gas endangerment finding by EPA may result in greenhouse gasses being considered to be affected pollutants in the near future. As such, greenhouse gasses will be excluded from the definition of affected pollutant solely for the purposes of Rule 2301.

A new definition of carbon dioxide equivalent (CO₂E) will be added to the rule. The term carbon dioxide equivalent will be use to normalize the global warming potential of defined greenhouse gasses to the global warming potential of carbon dioxide.

The definition of Emission Reduction Credits (ERCs) will be revised to include both affected pollutant and greenhouse gas emission reductions. It will be revised to specify that such emission reductions can also be used for tradeoffs or offsets, CEQA

mitigation, or other purposes. The use of banked GHG emission reductions will not be limited by the rule.

A new definition of greenhouse gas will be added. This definition includes six greenhouse gasses: carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), hydrofluorocarbons (HFCs), and perfluorocarbons (PFCs), and sulfur hexafluoride (SF₆).

Section 4.0 Eligibility of Emission Reductions

Subsections 4.1, 4.2, and 4.4 will be revised to indicate that these existing subsections apply to affected pollutant emission reductions.

New subsection 4.5 will be added to specify the eligibility requirements for greenhouse gas emission reductions.

Subsection 4.5.1 will require that the GHG emission reductions, except as allowed by a specific CARB approved GHG emission reduction project protocol, actually occurred after January 1, 2005.

January 1, 2005 was chosen because this date is immediately after the 2002 – 2004 baseline period used in the AB32 scoping plan to determine baseline emissions that were used to project year 2020 business as usual emissions. This is the level of emissions that would occur in the absence of any of the control measures called for in AB32. The difference between 2020 projected emissions and 1990 emissions is the quantity of greenhouse gas reductions called for in the AB32 scoping plan.

By allowing greenhouse gas emission reductions occurring after January 1, 2005 to be banked ensures that the emissions were not included in the baseline period used in the AB32 scoping plan.

Subsection 4.5.2 will require that the GHG emission reduction have occurred within the District. The CCAP mandated that the District develop a program to bank GHG emission reductions that occurred within the District. GHG emission reductions that occurred outside of the District are beyond the authority of the District, i.e. the District could not readily determine that the emission reductions occurred. As GHG emission reductions will be made enforceable via a District permit or contract, the District does not have the authority to impose requirements on equipment or operations outside of its boundaries.

Subsection 4.5.3 requires that GHG emission reductions, except for GHG emission reductions quantified pursuant to a CARB approved protocol, be real, surplus, permanent, quantifiable, and enforceable. These are the same five criteria required to the banking of affected pollutant emission reductions.

Subsection 4.5.4 specifies how GHG emission reductions are calculated, i.e. as the difference between the project's average annual GHG emissions before the project

(based on any 24 month period within the past 60 months) and the potential GHG emissions.

Subsection 4.5.5 requires that when the GHG emission reduction is created by a non-permittable operation, the source must enter into a legally binding contract with the District that ensures the emission reduction will continue to occur, as specified in the rule.

Section 5.0 ERC Certificate Application Procedures

Subsection 5.3 will be revised to indicate that for a particular emission reduction, a single ERC application can be submitted to bank emission reductions of affected pollutants and greenhouse gasses.

Subsection 5.5 will be revised to indicate that ERC applications for greenhouse gas emissions reductions that occurred after January 1, 2005 and before the rule amendment date are due by six months after the rule amendment date.

New subsection 5.6 will be added to specify that entities that were issued GHG ERCs that did not rely on a CARB approved emission reduction project protocol may apply to have the ERC re-issued using a CARB approved emission reduction project protocol when such protocols become available. Such applications will be subject to the requirements of the protocol and will be subject to filing and evaluation fees pursuant to Rule 3060.

Section 6.0 Registration of ERC Certificates

New subsections 6.14 and 6.15 will be added.

Subsection 6.14 requires that greenhouse gas emission reductions be banked as metric tons (1,000 kg) of CO₂E per year. These units are consistent with those used by other GHG emission reduction registries.

Subsection 6.15 requires that GHG emission reductions that were quantified using CARB approved protocols include a notation that specifies the protocol being used. This notation will allow persons to readily determine that the ERC was quantified using a CARB approved protocol.

Section 7.0 Withdrawal, Transfer, and Use of ERCs

New subsection 7.5 indicates that banked GHG emission reductions can be used for any purpose. Possible uses include, but are not limited to, retirement for CEQA mitigation; retirement for the benefit of the environment or to reduce or eliminate a carbon footprint by an individual, household, facility, corporation, community, city, or other group. Please note that the use of banked greenhouse gas emission reductions for compliance with any State or Federal greenhouse gas regulation will be subject to the requirements of such regulations.

III. RULE DEVELOPMENT PROCESS

District staff conducted a scoping meeting in November, 2008, in which implementation of the Climate Change Action Plan (CCAP) was discussed.

A technical workgroup consisting of District staff, land use agency representatives, industry representatives, agricultural representatives, environmental group representatives, and other interested parties was formed to study the feasibility and need for the San Joaquin Valley Carbon Exchange (SJVCE). This group met three times in late 2008 and early 2009.

As part of the rule development process, District staff conducted public workshops to present and discuss proposed amendments to Rule 2301. The series of workshops took place during the second quarter of 2009. The comments received from the public, affected sources, interested parties, California Air Resources Board (ARB), and EPA, during the public workshop process have been incorporated into the draft rule as appropriate.

The proposed rule amendments and final draft staff report with appendices will be published no later than September 10, 2009, with the public hearing to consider the adoption of proposed rule amendments to Rule 2301 by the District Governing Board scheduled to take place in November 2009.

IV. COST EFFECTIVENESS AND SOCIOECONOMIC IMPACT ANALYSIS

Pursuant to State law, the District is required to analyze the cost effectiveness of any proposed rule amendment that implement Best Available Retrofit Control Technology (BARCT). The draft amendments do not add BARCT requirements and therefore are not subject to the cost effectiveness analysis mandate.

Additionally, state law requires the District to analyze the socioeconomic impacts of any proposed rule amendment that significantly affects air quality or strengthens an emission limitation. The draft amendments will have neither effect, and is therefore not subject to the socioeconomic analysis mandate.

V. RULE CONSISTENCY ANALYSIS

Pursuant to CH&SC Section 40727.2 (g) a rule consistency analysis of the draft rule is not required. The draft rule does not strengthen emission limits or impose more stringent monitoring, reporting, or recordkeeping requirements.

VI. ENVIRONMENTAL EFFECTS

Pursuant to CEQA Guidelines §15063(a), District staff prepared an Initial Study for the proposed project. The District finds that there is no substantial evidence, in light of the whole record before the District, that the project could have a significant effect on the environment. The District finds that the project is exempt per the general rule that CEQA applies only to projects which have the potential for causing a significant effect on the environment (CEQA Guidelines §15061(b)(3)). Upon approval of the proposed rule by the District's Governing Board, District staff will file a Notice of Exemption with each County Clerk within the boundaries of the District, CEQA Guidelines §15075(d).

VII. REFERENCES

San Joaquin Valley Air Pollution Control District – Climate Change Action Plan -
Adopted August 21, 2008

(http://www.valleyair.org/Board_meetings/GB/agenda_minutes/Agenda/2008/August/Item%208/Agenda%20Item_8.pdf)

Climate Change Action Plan Staff Report - November 2008

(http://www.valleyair.org/Programs/CCAP/CAPP%20Staff%20Report%202008Nov12_re_titled.pdf)

Report to the APCO Regarding the Development of the San Joaquin Valley Carbon
Exchange March 16, 2009

(<http://www.valleyair.org/Programs/CCAP/SJVCE%20program%20final%20report%20to%20APCO%203-16-09.pdf>)

California Global Warming Solutions Act of 2006 (AB32)

(http://www.leginfo.ca.gov/pub/05-06/bill/asm/ab_0001-0050/ab_32_bill_20060927_chaptered.pdf)

AB32 Scoping Plan (<http://www.arb.ca.gov/cc/scopingplan/scopingplan.htm>)

ATTACHMENT A

Advantages and disadvantages of developing a mechanism to register GHG Emission Reductions identified by the technical workgroup

Please note that the following thoughts and conclusions do not necessarily reflect the views of District staff – they represent the varied perspectives of members of public agencies, environmental groups, business groups, and many other interested parties.

Advantages of the development of a District administered GHG emission reduction registration program

- The program would be purely voluntary.
- It would allow Valley businesses and other entities to obtain credit for voluntary projects that generate GHG emission reductions, and that generate early reductions in GHG emissions in advance of regulatory requirements.
- By providing a mechanism to register GHG emission reductions with the District, the program can promote early local reductions of GHGs (and collateral criteria and toxic air pollutant emissions) in the San Joaquin Valley. The associated emission reductions of criteria and toxic air pollutant emissions can help mitigate the impacts air pollution has on all Valley residents and can aid in bringing the District into attainment with the ambient air quality standards.
- Retirement of registered GHG emission reductions may be used as mitigation for a projects GHG emissions as part of the CEQA process. The retirement of locally occurring GHG emission reductions that were registered with the District may increase their credibility as mitigation in the CEQA process.
- Registered GHG emission reductions may be retired by an individual or an organization as a means to reduce that entities “carbon footprint”.
- With some GHG registries there is uncertainty involved with many of the emission reduction projects. It is sometimes difficult to judge whether the emission reductions registered in these other programs are indeed real.
- The District’s extensive experience (over 20 years) in banking criteria pollutant emission reductions can readily be extended to registering GHG emission reductions. This experience can provide a high level of certainty that the GHG emission reductions are valid. Additionally, the proximity of District staff to such emission reduction projects will allow easy verification of the emission reductions.
- The District as the “local” air regulatory agency can provide better and more responsive service to applicants than larger statewide or nationwide GHG emission reduction registries.

- Pending development of the California Assembly Bill 32 – California Global Warming Solutions Act of 2006 (AB32) cap and trade program by CARB, the retirement of registered GHG emission reductions that are additional and quantified using a CARB approved GHG emission reduction project protocols may be able to be used to a limited degree to comply with the AB32 cap and trade program. Details on the use of registered GHG emission reductions for AB32 compliance will be addressed in the cap and trade rulemaking process.

Disadvantages of the development of a District administered GHG emission reduction registration program

- The proposed program, like other emissions trading programs, would facilitate the retirement of registered GHG emission reductions as mitigation for a project. Some believe that allowing the retirement of previously registered emission reductions does not truly mitigate a project's emission increase because the emission reductions to be retired occurred prior to and independent of the project's emission increase. Instead of using retirement of registered GHG emission to provide mitigation, contemporaneous GHG emission reductions should be required.
- Other existing GHG registries are currently in place that allow facilities in the San Joaquin Valley to register GHG emission reductions. As such, there may not be a need for a District administered GHG emission reduction registry.
- While some of the existing GHG registries may allow the banking of questionable GHG emission reductions, the Climate Action Reserve appears to have the greatest number of safeguards in place to ensure that GHG emission reductions must be real, additional, etc in order to qualify for registration. Emission reductions registered in the Climate Action Reserve must be quantified using CARB approved protocols. The use of such protocols would generally ensure that the emission reductions are real.
- The Climate Action Reserve has been in existence since 2006. To date the Climate Action Reserve has received applications for 32 projects and six have been issued. This relatively low amount of activity may be indicative of the low demand for a GHG registry in general. There may not be sufficient demand for a District administered GHG emission reduction registry.
- Administration of a GHG emission reduction registry may tax District resources, especially given all of the current mandates of the District, especially Title V permitting and agricultural permitting for small sources due to the upcoming change to the major source threshold, permitting activities related to compliance with new rules, etc.
- Administering the SJVCE program could be a distraction from the District's core mission of regulating criteria air pollutants, and as a result local air quality could suffer.

- The development of project protocols and receiving CARB approval is an involved and time consuming process that could tax District resources. However, if the proposed rule amendments are developed, there may be ways to minimize the impact on District resources regarding the development of new project protocols. These include the pooling of resources with other APCDs/AQMDs, coordination through CAPCOA, and to only develop new project protocols if there is a sufficient demand indicated from project proponents.
- The cost of developing the draft rule amendments would indirectly be born by the current permit holders as these activities would be funded by the current District budget. While it is understood that individual applicants would reimburse the District for time expended in registering a particular GHG emission reduction, other administrative costs, including the rule development process itself, would be born by the District, and by association, regulated entities. These costs would unfairly be passed onto stationary sources.

ATTACHMENT B

SUMMARY OF COMMENTS AND RESPONSES FROM THE WORKSHOP HELD ON June 30, 2009

EPA comments:

None received.

ARB Comments:

- COMMENT:** Section 1.2.1: (a) In order to generate additional reductions for use in a cap-and-trade program, offsets used for compliance purposes (instead of an allowance) must come from an activity that will not generate a compliance obligation in the cap-and-trade program. Under this concept, capped sources would not be eligible to generate compliance offsets. Therefore, voluntary GHG emission reductions from such activities registered by the District would automatically be ineligible. Once a cap-and-trade program is in place, reductions made by capped sources would be neither surplus nor additional, and so should not be considered voluntary reductions. (b) Thus far, ARB has approved three protocols for voluntary purposes only. Any use of these protocols to generate compliance offset credits would need to be adopted as part the California cap-and-trade rulemaking. (c) It is also important to note that in addition to using approved protocols for generating compliance offsets, reductions credited under CARB's cap-and-trade program will need to meet very rigorous requirements for verification which will also be established during the cap-and-trade rulemaking process.

RESPONSE: The draft amendments provide a mechanism to bank two different types of GHG emission reductions – those quantified using a CARB approved protocol, and those not quantified using a CARB approved protocol. The draft rule does not make any statements that either type of such reductions can be used as compliance offsets in CARB's upcoming cap and trade program. We understand that the use of any GHG emission reductions for compliance with the CARB cap and trade program will be subject to the requirements of such a program. We understand that GHG emission reductions not quantified using a CARB approved protocol and approved for use in the cap and trade program will likely not be allowed as compliance offsets in the cap and trade program. However, such non-protocol emission reductions have other uses, including but not limited to, their retirement as a mitigation in the CEQA process.

- COMMENT:** Section 1.2.2: California is in the process of designing its cap-and-trade program. Whether or not GHG credits under the District's program would be recognized in a California cap-and-trade program for use as compliance offsets

would need to be determined through the State rulemaking process. Any reductions made by sources covered by the cap-and-trade program reduce the compliance obligation for those sources in the program and should not be available for other uses.

RESPONSE: The draft amendments require that GHG emission reductions be surplus. As a result, for sources covered by a cap and trade program, GHG emission reductions that are claimed by a facility in meeting their GHG emission cap would not be eligible for GHG banking. As such, GHG emission reductions that are banked pursuant to the draft amendments will be surplus of the upcoming CARB cap and trade program. Also, see response 1.

3. **COMMENT:** Section 1.2.3: We are in the process of defining these same standards, requirements and criteria for compliance offsets within the California cap-and-trade program. Depending on ARB's definitions, District approved credits may not be eligible for use in the California cap-and-trade program. Also, as described in page 4 of the Draft Staff Report, "*Emission reductions would not be required to be additional, i.e., GHG emission reductions that occur as a collateral benefit of another requirement may qualify for registration, provided they are surplus of existing regulations.*" Therefore, those credits would not meet the test of additionally for offsets that would be required under AB32 program for compliance-based offsets.

RESPONSE: See response 1.

4. **COMMENT:** Section 3.8: The definition and proposed usage of ERCs, as defined by the District, appears overly broad to be applicable for use as a GHG compliance offset in a California cap-and-trade program.

RESPONSE: See response 1.

5. **COMMENT:** Section 4.5.4: The determination of historical emissions runs a risk of resulting in data manipulation that could magnify average historical emissions by an affected source. In this case, the emission reduction credits generated could be inflated and not representative of actual emissions. ARB is still the process of determining how additionally and baselines should be calculated for compliance offsets in a cap-and-trade program. Nevertheless, staff believes that ARB's methodology for calculating baseline and additionally is likely to be more restrictive than the District's proposed rule language.

RESPONSE: The calculation procedure in section 4.5.4 states that the emission reduction is the difference between the historic actual emission before the project and the potential to emit after the project. We do not see how this calculation methodology could lead to "inflated" actual emission reductions. In fact, this calculation methodology is similar to that used for affected pollutant emission reductions that has been in place since 1992. We have not seen any evidence

that using this type of calculation methodology results in the inflation of banked affected pollutant emission reductions and therefore do not expect such problems with GHG emission reductions. On the other hand, our analyses will result in issuing credit for reductions that have occurred, and have been demonstrated to have occurred,

6. **COMMENT:** Section 4.5.6: (a) A non-permitted source in the District's jurisdiction could still be a capped source or contained within a capped sector subject to ARB's cap-and-trade regulation. In this case, the non-permitted source in the District's jurisdiction would be ineligible for generating compliance offsets. (b) Emissions calculation methods (including emission factors) should be defined before the issuance of any ERCs (if not provided in ARB's approved protocols). (c) The term "reasonable expected life" for applicable projects, along with the duration of the reduction period for eligible sources should be more carefully defined to ensure the enforceability of this provision. (d) For emissions that are land use dependent, such as agricultural waste burning, a deed restriction that prohibits zoning changes should be included to ensure the permanency of emissions reductions. (e) The District should consider enforcement provisions to address circumstances when GHG credit projects are not producing committed emissions reductions.

RESPONSE: Pursuant to Section 8.5, when the District makes its preliminary decision on GHG emission reduction banking application, the preliminary decision is published in a newspaper of local and general circulation, and also forwarded to EPA, CARB, and the applicant. With this process we are documenting the basis of our preliminary decision, including all emission factors and calculations used.

The criteria in Section 4.5.6 that the emission reduction must continue for the reasonable expected life of the equipment requires that as long as the equipment that is generating the emission reduction is operable and enforceable by a legally binding contract with the District that the GHG emission reduction is eligible for an ERC. If the equipment that is generating the emission reduction is no longer operable, the facility would be in breach of the contract with the District. As such, the District could take enforcement action and determine that the emission reductions are no longer valid.

Additionally, such a contract would likely imposes restriction on the use of land or equipment that was used to generate a GHG emission reduction.

Also, see response 1.

7. **COMMENT:** Section 7.5: At this point, there is no assurance that District registered GHG emission reductions will be recognized under an ARB cap-and-trade program; therefore, language in this provision should clarify that credits generated under this rule would not to be available for complying with a California cap-and-trade program, unless otherwise provided for in the California regulation.

RESPONSE: District staff concur. Section 7.5 has been revised to add the following “Use of banked greenhouse gas emission reductions for compliance with any State or Federal greenhouse gas regulation will be subject to the requirements of such regulations.”

Industry Comments:

California Cotton Ginners and Growers Associations (CCGGA)
Center for Biological Diversity (CBD)
Dairy Cares (DC)
Earthjustice, (EJ)
Kern Oil (KERN)
Silgan Containers Mfg. Corp. (SC)
Western Agricultural Processors Association (WAPA)

8. **COMMENT:** We request that the District provide further clarification of its use of the terms “surplus” and “additional” in connection with eligibility for emission reductions credits from criteria pollutant emissions and GHG emissions. (DC)

RESPONSE: The term surplus, as used in Rule 2301 means that the emission reduction of a particular pollutant is in excess of any emission reduction of that pollutant that is currently required, or is identified as being required in the future for a particular type of equipment. For example, NOx emission reductions from a boiler that reduce emissions to the level required by a current or upcoming District Rule would not be surplus.

The term “additional” is not an eligibility criteria in the draft amendments. Therefore, except as required in specific CARB approved protocols, GHG emission reductions banked pursuant to amended Rule 2301 will not be required to be additional.

Notwithstanding the above, generally speaking, for an emission reduction to be additional, it has to have occurred primarily due to the financial incentive due to generating the GHG emission reduction. Emission reductions due to any regulatory requirement (even as a collateral benefit) or due to normal business activity are typically not additional.

9. **COMMENT:** We suggest the District clarify that new projects, which satisfy California Air Resources Board (CARB) protocols for quantifying GHG reductions, or for which the District has determined that reductions are “real, additional, quantifiable and enforceable,” would be eligible to bank GHG reduction credits. (DC)

RESPONSE: For emission reductions that are not quantified using a CARB approved protocol, the emission reductions will eligible for banking if the emission reductions meet all of the eligibility criteria in the draft rule, including the

requirements that the emission reductions occurred after January 1, 2005 and the emission reductions are real, surplus, quantifiable, permanent and enforceable. For such emission reductions, credit is only available if the emission reduction occurred after January 1, 2005. New equipment that generates GHG emissions that is installed after January 1, 2005 that includes an inherent GHG reduction technology will not be eligible for banking as there is actually an emission increase and not an emission reduction.

For emission reductions that are quantified using a CARB approved protocol, emission reductions will qualify for banking provided that they meet all criteria in the protocol. Please note that at least one CARB approved emission reduction protocol (manure management) allows the banking of GHG emission reductions from new operations that employ a GHG emission reduction technology. Provided that such projects meet a CARB approved protocol, they would be eligible for GHG banking pursuant to the draft rule amendments.

10. **COMMENT:** We suggest that the District clarify that compliance with a CARB-approved GHG reduction quantification protocol means that the emission reductions are eligible for banking regardless of whether they meet the District's criteria for "real, surplus, quantifiable and enforceable." (DC)

RESPONSE: GHG emission reductions quantified using a CARB approved protocol must only meet the requirements of that protocol. Such emission reductions are not subject to the other eligibility requirements in Section 4.5.

11. **COMMENT:** In reference to Definition 3.3, we suggest the definition of "Bankable Emission Reductions" be revised to allow inclusion of GHGs. The current language appears to limit the definition to "pollutants and their precursors for which ambient air quality standards exist and which meet the provisions of this rule." Because no ambient air quality standards exist for GHGs, the current language appears to preclude them from the definition. (DC)

RESPONSE: District staff concur. Section 3.3 has been revised as follows:

Bankable Emission Reductions: emission reductions of affected pollutants and their precursors for which ambient air quality standards exist and greenhouse gasses which meet the provisions of this rule. Such reductions may be deposited in the District's ERC Bank. Once banked and certified, the emission reductions become ERCs.

12. **COMMENT:** We recommend that the District change the requirements that an emission reduction source be determined real and permanent *globally* when determining eligibility for CEQA projects. The non-protocol emission reduction credits in the proposed amendments will be primarily used to satisfy CEQA and not a global trading system or other regulation. The purpose is to trade emission reductions from California businesses to allow other California businesses to

expand or be created within California. Since we are dealing with a California only regulation, these emission sources should be considered real and permanent within California for purposes of providing CEQA offsets.

A new source that is coming into California will be subject to the CEQA requirements without first determining whether that source, by locating in California or the San Joaquin Valley, will have a global increase on GHG emissions. Therefore, the offsets used to satisfy CEQA should use the same standard. (CCGGA), (WAPA)

RESPONSE: Unlike affected pollutants, the effect of GHGs extends beyond the Valley air basin. To ensure that banked emission reductions are highly credible, the District must conclude that the emissions that are to be banked are real and permanent, i.e. the GHG emissions do not occur elsewhere as a result of the GHG emission reduction that occurred in the Valley. The District's analysis to determine if a particular GHG emission reduction is real and permanent will occur on a case by case basis. We agree that a global analysis would sometimes be difficult and unnecessary, and we have therefore eliminated the use of the word "global". However, to allow the District to determine if a GHG emission reduction meets the eligibility criteria, the applicant should provide documentation that demonstrates with reasonable certainty that the emission reduction is real and permanent.

13. **COMMENT:** The proposed rule contemplates allowing the banking of credits that are merely "surplus" in lieu of "additional." Under the "surplus" rule, greenhouse gas reduction benefits that are incidental to a regulation or other required action could be banked. Thus, entities could bank greenhouse gas reductions that are a corollary benefit of compliance with regulations aimed at reducing criteria pollutants. By allowing participants to take credit for the corollary benefits of actions they were otherwise required to do, claimed reductions are illusory, undercut genuinely additional greenhouse gas mitigation, and cannot validly be used for CEQA purposes. Rather than function to mitigate the cumulative impacts on climate change of new projects, the proposed rule allows entities to subsidize the costs of complying with criteria pollutant and other regulations by banking any associated greenhouse gas reductions. (CBD), (EJ)

RESPONSE: The draft rule amendments allow the banking of emission reductions that, among other criteria, are surplus. Such GHG emission reductions must be in excess of any GHG emission reduction that is currently required, or is identified as being required in the future for a particular type of equipment. Such emission reductions are not "illusory", they did in fact occur and are in excess of any required emission reduction.

While the concept of additionality of GHG emission reductions may be appropriate for GHG emission reductions to be used as compliance offsets in a cap and trade program, such a requirement is not necessary or appropriate for GHG reductions that will likely not be used in such a program.

Similar to affected pollutant emission reduction banking, the District believes that GHG emission reductions that are in excess of any current or upcoming GHG emission reduction requirement are eligible for banking. Such emission reductions, even if incidental to other actions by a facility, did nonetheless actually occur and will be eligible for banking, provided all of the criteria in Rule 2301 are satisfied.

Finally, while we believe that such banked GHG emission reductions should be valid as mitigation in the CEQA process, it is up to each lead agency to determine the appropriateness of any GHG mitigation.

14. **COMMENT:** When asked at the June 30, 2009 public workshop whether new sources will also be able to take advantage of the GHG bank, staff remarkably answered “yes” and explained that the GHG reductions to be banked could be calculated as the difference between the potential GHG emissions after the project is complete and the historic annual average GHGs of similar projects using any consecutive 24 month period during the previous 60 months. So essentially, the District is saying that new projects can generate emission reduction credits by *adding* emissions to the environment. (CBD), (EJ)

RESPONSE: This is not correct, except as allowed by CARB-approved protocols. See response 9.

15. **COMMENT:** For the majority of the processes, production volumes were removed from the market. The few pieces of equipment which, were relocated to other facilities were mostly refitted to create zero emissions installations or fully offset by internal reductions. Closed facility, energy use and resulting GHG from light, heat, and vehicle miles will be permanently reduced from the closed sites as these are not being replaced or additive to another location.

Please look at this and consider the criteria you would need to qualify shutdown banking of GHG. (SC)

RESPONSE: If the applicant can demonstrate with reasonable certainty (and the District concurs) that the emission reduction due to equipment or facility shutdown is in fact real and permanent, such an emission reduction may be eligible for banking. Such determinations will be made on a case by case basis.

16. **COMMENT:** If ERCs for a combustion source were banked after January 1, 2005, could those ERC projects be re-evaluated for potential GHG reductions without the filing of a new ERC application, and would those projects be exempt from Rule 2301, Section 5.5.2 requiring the ERC application to be submitted within 180-days after the emission reduction occurs? (KERN)

RESPONSE: Applications for GHG emission reductions that occurred after January 1, 2005 will require the submittal of a new ERC application and filing fee.

As specified in Section 5.5.2, for emission reductions that occurred prior to the rule amendment date (and after January 1, 2005) such ERC application must be filed within 6 months of the rule amendment date (and not within 180 days of when the emission reduction occurred).

17. **COMMENT:** How would the District consider the banking of “fugitive” GHG reductions, for fugitive components exempt from permit pursuant to Rule 2020, Section 6.12? (KERN)

RESPONSE: For GHG emission reductions from equipment that is prohibited from being issued a permit, pursuant to Section 4.5.6 the facility would have to enter into a legal binding contract that will make the emission reductions enforceable. Such emission reductions would have to meet the eligibility requirements in Section 4.5, including the requirement that the emission reduction is surplus. However, if not prohibited from issuing a permit, the District would use permitting to enforce the reductions.

In evaluating such an application the District would need to determine if there are any current or upcoming rules or regulations, including those being developed by CARB as a result of the AB32 scoping plan, that will require reduction in fugitive GHG emissions at refineries. If there are any such current or upcoming regulations, such GHG emission reductions would not be surplus and would therefore not be eligible for banking.

18. **COMMENT:** At the June 30, 2009 workshop staff indicated that GHG credits could be bought outside of the SJV to mitigate a project within the SJV. Since the purchase of offsets can occur outside of the SJV to mitigate projects inside the SJV, Kern recommends the proposed rule be amended to allow the banking of GHG credits from sources outside the SJV including international projects as long as the credits conform to District recognized protocols (e.g., Western Climate Initiative, Kyoto Protocol, etc.). Allowing the banking and purchasing of international credits is consistent with the premise that climate change is a “global” issue with global impacts. (KERN)

RESPONSE: In developing the draft rule amendments, the District determined that GHG emission reductions that occurred outside of the District are beyond the authority of the District, i.e. the District could not readily determine that the emission reductions occurred. As GHG emission reductions will be made enforceable via a District permit or contract, the District does not have the authority to impose requirements on equipment or operations outside of its boundaries.

Please note that there are other entities in existence that are available to facilitate the banking of GHG emission reductions in areas outside of the District.

19. COMMENT: The proposed rule should have some language that indemnifies a source from any future challenges of the validity or permanency of GHG emission reduction credits used to mitigate a project. (KERN)

RESPONSE: Prior to making a decision to issue GHG ERCs, the District must document the basis for its decision. If the District can not find that the GHG emission reductions satisfy all of the requirements of Rule 2301, we can not issue GHG ERCs. However, if we determine that such an emission reduction satisfies all of the requirements of the rule, the District will issue such ERCs.

If the lead agency is challenged on the validity of GHG ERCs used for mitigation, the District will assist the lead agency with any technical questions concerning the ERCs. However, the District will not indemnify the CEQA lead agency or the facility for possible future challenges on the uses of such ERCs.