



**San Joaquin Valley
Air Pollution Control District**

**REPORT TO THE APCO
REGARDING DEVELOPMENT
OF THE
SAN JOAQUIN VALLEY
CARBON EXCHANGE**

March 4, 2009

TABLE OF CONTENTS

CHAPTER 1 INTRODUCTION	1
CHAPTER 2 LEGAL AUTHORITY.....	2
CHAPTER 3 GHG CAP AND TRADE VS. SAN JOAQUIN VALLEY CARBON EXCHANGE PROGRAM	2
CHAPTER 4 POTENTIAL USES OF GREENHOUSE GAS EMISSION REDUCTION CREDITS	5
CHAPTER 5 GHG EMISSION REDUCTION REGISTRIES ADMINISTERED BY OTHER ENTITIES.....	5
CHAPTER 6 CHARACTERISTICS OF THE SAN JOAQUIN VALLEY CARBON EXCHANGE	7
CHAPTER 7 ADVANTAGES AND DISADVANTAGES OF THE SAN JOAQUIN VALLEY CARBON EXCHANGE.....	11
CHAPTER 8 ALTERNATIVES TO THE SAN JOAQUIN VALLEY CARBON EXCHANGE	14
CHAPTER 9 CONCLUSION	15
ATTACHMENT A Technical Workgroup Members	
ATTACHMENT B Referenced Sections of the California Health & Safety Code	

CHAPTER 1 INTRODUCTION

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 where the District could take an active role in addressing the challenges concerning climate change in the San Joaquin Valley.

In November 2008 the District held a scoping meeting on the implementation of the CCAP. Please see the associated staff report (available at http://www.valleyair.org/Programs/CCAP/CCAP_idx.htm) for background information on the climate change problem and legislative actions being taken at the local, state, and Federal level to address climate change.

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 ways to assist land use agencies in addressing GHG emissions as part of the California Environmental Quality Act (CEQA) process, develop a greenhouse gas emission reduction registry, enhance the existing emissions inventory process to include greenhouse gas emissions, and administer voluntary greenhouse gas emission reduction agreements. These items would then be brought before the Governing Board for their consideration.

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. See participant list in Attachment A.

This document focuses on various issues concerning the development and use of a District-administered greenhouse gas emission reduction registry called the SJVCE, and presents the various issues and perspectives raised by the workgroup members

The goals of the SJVCE would be to provide a mechanism to preserve high quality greenhouse gas (GHG) emission reductions and encourage such reductions that have no or minimal collateral criteria or toxic pollutant emission increases, or in fact that create co-beneficial reductions in such emissions.

This document includes brief background information on climate change and governmental activities in California to reduce GHG emissions. The differences between a cap and trade program (part of AB32) and GHG emission reduction registration will be explored. Other existing and proposed GHG registries will be discussed. The benefits, uses, and restrictions of the SJVCE will be discussed. Finally, the document presents conclusions reached by a workgroup concerning the development of the SJVCE.

CHAPTER 2 LEGAL AUTHORITY

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 proposed SJVCE program would be a voluntary program to allow facilities to preserve greenhouse emission reductions and to allow for the trading and retirement of such emission reductions. The proposed SJVCE program would be similar to existing Rule 2301 – Emission Reduction Credit Banking. Rule 2301 is a voluntary program in that it does not require facilities to bank their emission reductions.

Additionally, 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 proposed SJVCE program would provide a mechanism for facilities to register GHG emission reductions, so that other facilities can purchase and retire GHG emission reductions in order to mitigate their GHG emissions increases due to a project, and therefore would be quite useful as a component of a CEQA-implementation program.

One commenter contended that the District does not have the legal authority from the Legislature to administer the SJVCE. The commenter also noted that District can not operate at its "whim", and is subject to restrictions by the Legislature.

However, the majority of the workgroup members did not challenge the District's authority to develop a voluntary SJVCE for the purposes discussed above.

See Attachment B for referenced sections of the California Health and Safety Code.

CHAPTER 3 GHG CAP AND TRADE SYSTEM VS. SAN JOAQUIN VALLEY CARBON EXCHANGE PROGRAM

The following is a discussion of the proposed of the GHG cap and trade program as part of the AP32 scoping plan. This description is intended to highlight the differences between a GHG cap and trade program and GHG emission reduction registration. A GHG cap and trade program is a method to reduce actual GHG emissions by operating under a declining GHG cap, whereas GHG emission reduction registration is a method to preserve GHG emission reductions that are in excess of any GHG emission reduction requirement, including a cap and trade program.

GHG cap and trade program

In the AB32 scoping plan., an overall limit on greenhouse gas emissions from most of the California economy – the” capped sectors” – will be established by the cap-and-trade program.

Based on the requirements of AB 32, regulations to implement the cap-and-trade program need to be developed by January 1, 2011, with the program beginning in 2012.

The California cap-and-trade program will link with other Western Climate Initiative (WCI) partner cap-and-trade programs to create a regional market system for GHG allowances.

The proposed cap-and-trade measure phases in the following sectors.

Starting in the first compliance period (2012):

- Electricity generation, including imports not covered by a WCI Partner Jurisdiction
- Large industrial facilities that emit over 25,000 metric tons CO₂E per year (equivalent to one ~ 35 MMBtu/hr boiler).

Starting in the second compliance period (2015):

- Upstream treatment of industrial fuel combustion at facilities with emissions at or below 25,000 metric tons CO₂E, and all commercial and residential fuel combustion regulated where the fuel enters into commerce
- Transportation fuel combustion regulated where the fuel enters into commerce.

The cap and trade program would consist of a periodic distribution of GHG allowances by CARB. The quantity of GHG allowances distributed would decline over time. Facilities that have actual emissions less than their GHG allowance can trade (sell) their excess allowances to those entities that may have actual emissions greater than their GHG allowances.

In addition to using allowances to comply with the cap and trade program, the cap and trade program may allow a limited amount of registered GHG emission reductions that are in excess of any regulatory requirement to be used to meet the GHG cap. Such GHG emission reductions must be quantified using CARB approved protocols.

These GHG emission reductions may be allowed to come from areas inside and outside of California. The final details on the use of registered GHG emission reductions for compliance with AB32 will be specified in the AB32 cap and trade program rulemaking process.

SJVCE Program

The SJVCE program would allow facilities to register actual GHG emission reductions that are additional, i.e. in excess of any regulatory requirement. Such regulatory requirements include any requirements of AB32 or any other requirement that results in a reduction of GHG emissions (even if the requirement did not target GHGs). In other words, if a facility is required to make modifications due to any regulatory requirement, the resulting GHG emission reductions would not qualify for registration.

On the other hand, if a facility reduces GHG emissions from an operation that is not subject to an AB32 requirement or any other regulatory requirement, that emission reduction would qualify for emission reduction registration. Details of such an emission reduction registry are discussed further below.

The SJVCE will not be used as a mechanism for the District to regulate GHGs as part of its permitting program; GHGs are not subject to review as part of the District's non-attainment New Source Review rule. As such, facilities are not required to "offset" their GHG emissions as a condition of obtaining an Authority to Construct. The proposed SJVCE would not be a mechanism to "require" that GHGs be mitigated as a condition of District approval of a project.

Rather, facilities may desire to preserve GHG emission reductions through registration with the SJVCE and subsequently sell or retire them for a variety of purposes, including:

- To provide GHG mitigation as part of a CEQA process. The lead agency for the particular project will determine if retiring registered GHG emission reductions is adequate mitigation for purposes of CEQA.
- To reduce a the carbon footprint for an individual or organization
- To possibly be used to meet the requirements of a state, regional, or national GHG cap and trade program to the extent that the retirement of such registered GHG emission reductions is allowed in the design and development of such a program.

The proposed SJVCE program is intended solely to provide a mechanism to voluntarily register GHG emission reductions and will not impose any restrictions on the uses of registered GHG emission reductions.

CHAPTER 4 POTENTIAL USES OF GREENHOUSE GAS EMISSION REDUCTION CREDITS

Registered greenhouse gas emission reductions can potentially be used for a variety of purposes. The proposed SJVCE program is intended solely to provide a mechanism to voluntarily register GHG emission reductions and will not impose any restrictions on the uses of registered GHG emission reductions.

One potential use of registered GHG emission reductions is to allow facilities to retire such emission reductions as all or part of the GHG mitigation required as part of a CEQA process. The lead agency for the particular project will determine if retiring registered GHG emission reductions is adequate mitigation for purposes of CEQA.

When the District is the lead agency for CEQA, the District would assess the validity of the registered GHG emission reductions proposed to be used for mitigation. Retirement of GHG emission reductions registered in the SJVCE program would be valid for GHG mitigation. Typically, retirement of GHG emission reductions registered with the Climate Action Reserve or the Chicago Climate Exchange would likely be considered adequate mitigation for CEQA purposes. However, please be advised that the District's evaluation of any GHG mitigation required under CEQA will be made when the District evaluates the individual project, and some carbon exchange programs are currently under fire for lax oversight, resulting in suspect emissions reductions. Use of SJVCE credits would eliminate that issue.

Registered GHG emission reductions could also be retired by a person or group to reduce that person's or group's carbon footprint.

Retirement of registered SJVCE GHG emission reductions could be used in a state, regional, or national GHG cap and trade program to the extent that the retirement of such registered GHG emission reductions is allowed in the design and development of such a program.

CHAPTER 5 GHG EMISSION REDUCTION REGISTRIES ADMINISTERED BY OTHER ENTITIES

There are currently several voluntary GHG emission reduction registries in existence in the U.S. as discussed below.

Chicago Climate Exchange (CCX) members make a commitment, i.e. a voluntary cap and trade program, to reduce greenhouse gases. The members are given GHG "allocations" with a declining balance. Members can sell excess allocations or purchase needed allocations as part of this cap-and-trade program.

The CCX also allows the registration and trading of GHG emission reduction projects (separate from the cap and trade program). These emission reductions are also traded on the CCX.

The CCX has developed standardized rules, i.e. protocols, that allow GHG registration for the following types of projects:

- Agricultural methane
- coal mine methane
- landfill methane
- agricultural soil carbon
- rangeland soil carbon management
- forestry
- renewable energy
- ozone depleting substance destruction

Such emission reductions can be generated world-wide. Due to the global nature of the emission reductions verification of these emission reduction can be difficult.

The New York Climate Exchange and the Northeast Climate Exchange are newly formed entities that will provide for the trading of GHG allowances as part of the Regional Greenhouse Gas Initiative (RGGI) starting in 2009. RGGI is an agreement by ten Northeastern and Mid-Atlantic States to agree to cap emissions from fossil-fuel fired electric generation plants larger than 25 MW at current levels for 2009. A cap-and-trade program is in place with a 10 percent decrease in greenhouse gas emissions by 2018.

The RGGI also has provisions, similar to those in California's AB32, that allow for emission reductions outside of the capped sector to be used to meet mandatory emission caps. RGGI has established "prescriptive standards", i.e. protocols, that allow for the registration of specific types of emission reduction projects, including:

- Landfill methane capture and destruction
- Reduction in emissions of sulfur hexafluoride (SF6) in the electric power sector
- Sequestration of carbon due to forestation;
- Reduction or avoidance of CO2 emissions from natural gas, oil, or propane end-use combustion due to end-use energy efficiency in the building sector
- Avoided methane emissions from agricultural manure management operations

The Climate Action Reserve (CAR), a separate program of the California Climate Action Registry, allows members to register GHG emission reductions that occur in the U.S. The CAR is solely a GHG emission reduction registry; there is no cap and trade component. The Climate Action Reserve is not party to GHG emission reduction transactions. CAR has developed emission reduction project protocols

that allow for the registration of specific types of emission reduction projects, including:

- forestry sector project protocol
- urban forestry project protocol
- manure management project protocol.

The Western Climate Initiative (WCI) is a collaboration of seven Western U.S. states (including California) and four Canadian provinces created to identify, evaluate, and implement collective and cooperative ways to reduce greenhouse gases in the region, focusing on a market-based cap-and-trade system.

The partner states and provinces will commit to lowering GHG emissions from the largest GHG sources down to 15% below 2005 levels by 2020 through the use of a cap and trade program. Each state and province will be allocated a certain amount of GHG allowances. The states and provinces then distribute those allowances in a manner similar to that proposed to be used in AB32. Allowances can be traded across states and provinces.

Similar to AB32, in addition to using allowances to comply with the cap and trade program, the WCI will allow a limited amount of registered GHG emission reductions to meet the GHG cap. The WCI offset program is still in its infancy, but it is expected to have the same requirements and restrictions on the use of offsets as a means to comply with the emissions cap as specified in AB32.

The South Coast Air Quality Management District (SCAQMD) adopted a new GHG emission reduction registry called the “SoCal Climate Solutions Exchange”. The GHG registry allows the registration of voluntary GHG emission reductions that occur within the SCAQMD. The SCAQMD will only use defined protocols (approved by SCAQMD and CARB) to quantify the emission reductions. Potential uses of registered GHG emission reductions include providing GHG mitigation for CEQA, retirement to reduce an entities carbon footprint, and possibly for compliance with AB32.

CHAPTER 6 CHARACTERISTICS OF THE SAN JOAQUIN VALLEY CARBON EXCHANGE

Criteria for GHG emission reduction registration in the SJVCE:

To qualify for registration in any SJVCE GHG emission reductions would have to be real, enforceable, quantifiable, and additional (i.e. would not happen in the absence of the GHG emission reduction project and are in addition to any emission reduction requirement, including emission reductions that target GHG emission reductions and other requirements in which GHG emission reductions are a collateral benefit).

The program should not allow the registration of GHG emission reductions that are required by AB 32. The proposed AB32 scoping plan includes a cap and trade program for electricity generation and industrial facilities with GHG emissions greater than 25,000 metric tons per year starting in 2012 and for fuel requirements for facilities with GHG emissions less than 25,000 metric tons per year starting in 2015, and various early action measures to reduce GHG emissions from a variety of industrial and commercial sources. However, the SJVCE may allow for the registration of temporary of emission reductions that will be eventually required by AB32 requirements. In such a case, when the AB32 emission reduction requirement is in force, the emission reduction would no longer be valid.

The program should not allow the registration of GHG emission reductions that occur as a collateral benefit making a required criteria pollutant emission reduction. For example, if a facility replaces an IC engine with an electric motor as a means to comply with a District rule that targeted NOx emissions, any resulting GHG emission reduction would not qualify for registration.

To increase integrity of the SJVCE and to allow the registered emission reductions to be readily interchangeable with those of other entities, especially the Climate Action Reserve, the District may need to obtain accreditation under ISO 14065 (Greenhouse gases - Requirements for greenhouse gas validation and verification bodies for use in accreditation or other forms of recognition). This accreditation process is a lengthy and costly process.

The quantification methods for GHG emission reductions would follow pre-approved emission reduction project protocols, i.e. methods to quantify GHG emission reductions. These protocols would have to be approved by the District and CARB. Using CARB approved protocols would ensure the validity of the registered emissions reductions.

CARB has developed and adopted three emission reduction project protocols to date:

- forestry sector project protocol
- urban forestry project protocol
- manure management project protocol.

Unlike some GHG emission reduction registration programs described above, registered GHG emission reductions in California would have to be in excess of that which is required by AB32.

Additionality of GHG emission reductions

As discussed above, one of the criteria for registering a GHG emission reduction is that the emission reduction must be additional. In general, 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.

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 requires that the actions that generate the emission reduction go beyond any type of requirement that would have the effect of reducing GHG emissions.

To ensure that emission reductions registered in the SJVCE would be recognized by other entities, emissions reductions will be required to be additional.

Furthermore, requiring that GHG emission reductions be additional ensures that they may potentially be used in state, regional, or national GHG cap and trade programs as these GHG reductions will have occurred outside of any regulatory mandate.

For example, California's proposed AB32 cap and trade program may allow the use of registered GHG emission reductions to meet a GHG emissions cap provided the emission reductions are additional, i.e. are not occurring otherwise. Requiring such GHG emission reductions be additional ensures that their use towards meeting a GHG cap represents a real reduction in GHG emissions that would not otherwise occur. As such, additional GHG emission reductions would be valid towards meeting a GHG cap.

As stated above, to ensure the integrity of SJVCE program and to allow for the potential use of registered GHG emissions in a state, regional, or national GHG cap and trade program, registered emission reductions must be additional.

If the SJVCE program did not require that GHG emission reductions be additional, more emission reductions would qualify for registration, but the integrity of the SJVCE program would suffer. Such emission reductions would likely not be allowed for use in any cap and trade program, and may not be interchangeable with other GHG emission reduction registries.

Typical GHG emission reduction projects

Under currently approved protocols, GHG emission reductions that may be registered include forestry preservation projects, urban forestry projects, and agricultural manure management projects.

While the current list of approved protocols is rather short, new protocols could be developed to address any number of GHG emission reduction projects. However, to qualify for registration, any GHG emission reduction project would have to be in excess of any regulatory requirement.

GHG emission reduction projects that may qualify for registration under future protocols may include, but are not limited to:

- reducing CO2 emissions from combustion equipment due to equipment efficiency upgrades
- installing landfill gas collection and control to reduce methane emissions
- reducing flaring of process gasses from industrial facilities
- switching fuels from a high GHG fuel to a lower GHG fuel

Some GHG emission reduction projects could result in an increase in criteria or toxic air pollutants, e.g. agricultural manure management by methane collection and incineration. However, any project to reduce GHGs that result in new emissions of criteria or toxic pollutants would be subject to Rule 2201 – New and Modified Stationary Source Review. Rule 2201 requires that such equipment be equipped with the best available control technology to minimize pollutant emissions and provide offsets increases in criteria pollutant emissions.

Nevertheless, because of the District’s severe air pollution problems, minimization or avoidance of criteria pollutant emissions will take precedence over GHG emission reductions. As such, the District may disallow or may highly discount GHG emission reductions projects that result in increased criteria or toxic air pollutants.

Compatibility with Other GHG Registries

The SJVCE would be designed to be compatible, to the extent possible, with other established and pending GHG registries such as the following:

- Chicago Climate Exchange
- Climate Action Reserve (part of California Climate Action Registry)
- Pending Regional Greenhouse Gas Initiative (10 Northeast and Mid-Atlantic states) offset program
- Pending Western Climate Exchange registry
- SCAQMD GHG registry “SoCal Climate Solutions Exchange”

Please note that GHG banking programs outside of California generally allow the banking of a larger variety of GHG emission reductions that would be allowed in California. Due to the requirements of AB32 and the draft scoping plan, some emission reductions that can be banked in other states may not be “additional” emission reductions in California and therefore would not qualify for registration.

Structure of the SJVCE

A new District regulation would likely be developed to allow for the registration of GHG emission reductions. Such a regulation would specify the criteria that GHG emission reductions must meet to be eligible for registration, including detailed

references to requirements of AB32 to determine if such emission reductions are additional.

Such a rule would also address the generation of temporary GHG emission reductions.

The regulation would list the specific approved project protocols that must be used in quantifying GHG emission reductions. Such protocols would require District and CARB approval prior to use.

Persons wishing to register GHG emission reductions in the SJVCE would be required to reimburse the District for the staff time expended in registering their GHG emission reductions. Once the SJVCE is developed, collection of these fees would allow the SJVCE to be largely self funding.

CHAPTER 7 ADVANTAGES AND DISADVANTAGES OF THE SAN JOAQUIN VALLEY CARBON EXCHANGE

If developed, the SJVCE could provide benefits to businesses in the San Joaquin Valley. These benefits, as well as some drawbacks of a SJVCE are discussed in detail below.

Advantages of the development of the San Joaquin Valley Carbon Exchange

- The SJVCE would be a purely voluntary program allowing Valley businesses and entities to obtain carbon credits for voluntary projects 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 SJVCE 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 can have on environmental justice communities and all Valley residents and can aid in bringing the District into attainment with the ambient air quality standards.

Environmental justice communities are defined in the District's Environmental Justice Strategy as "... minority and low-income populations with disproportionately high and adverse human health or environmental impacts".

See the District's Environmental Justice strategy at <http://www.valleyair.org/Programs/EnvironmentalJustice/Environmental%20Justice%20Strategy.pdf>.

- Retirement of registered GHG emission reductions may be used as mitigation for GHG emissions from a project as part of the CEQA process. The retirement of locally occurring GHG emission reductions that were registered in a District administered GHG registry program may increase their credibility as mitigation in the CEQA process.
- Additionally, 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 offsets 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 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 service to applicants than larger statewide or nationwide GHG registries.
- Pending development of the AB32 cap and trade program by CARB, the retirement of registered GHG emission reductions 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 CARB rulemaking process.

Disadvantages to the development of the San Joaquin Valley Carbon Exchange

- The SJVCE, 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 projects 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 19 projects and two 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 SJVCE is 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 SJVCE 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. Development of administration of the SJVCE would detract the District from its main purpose of reducing criteria pollutant emissions.

CHAPTER 8 ALTERNATIVES TO THE SAN JOAQUIN VALLEY CARBON EXCHANGE

District could function as a project verifier in the Climate Action Reserve:

One commenter noted that in lieu of developing the SJVCE program, the District could take on a role in the existing Climate Action Reserve program as a “project verifier”.

In the Climate Action Reserve emission reduction registry project verifiers review the emission reduction project and the emission reduction calculations to determine if the emission reductions were calculated according to approved protocols and verify that the emission reduction did in fact occur. The project verifier’s opinion is then submitted to the Climate Action Reserve. The Climate Action Reserve reviews the project verifier’s opinion, and, if appropriate, registers the emission reductions with the reserve.

Project verifiers are hired by the project proponent and must establish that they do not have a conflict of interest with the project proponent. Project verification must be performed annually to ensure that the emission reductions continue to occur.

Project verifiers must undergo training provided by the Climate Action Reserve, and beginning on 6/1/09 must be accredited by either ANSI or CARB under ISO 14065 (Greenhouse gases - Requirements for greenhouse gas validation and verification bodies for use in accreditation or other forms of recognition). ANSI accreditation is very involved and costly, e.g. tens of thousands of dollars. The CARB accreditation program, once functional, is expected to be less costly.

Project verifiers must also meet program specific requirements for each protocol. Generally this requires that project verifiers demonstrate an understanding and have experience with the emission reduction technology in each protocol.

Develop a District only greenhouse emission reduction registration program:

Instead of developing the SJVCE, the District could develop a District only GHG emission reduction registration. This program could be used to register GHG emission reductions that occurred in the District for which there are no CARB approved emission reduction project protocols. Use of these registered GHG emission reductions would likely be limited to their retirement for mitigation as part of the CEQA process.

Because this system would not require the use of “approved” project protocols, such emission reductions would not be recognized by other entities.

In quantifying GHG emission reductions in such a program the District may use the criteria in Rule 2301, i.e. that the emission reductions be real, enforceable, permanent, surplus, and quantifiable. Such a system may not allow the “registration” of temporary GHG emission reductions, as such emission reductions would not be permanent. Furthermore, emission reductions could be required to be surplus, rather than “additional” as described above.

Such a program would be more flexible than other GHG emission reduction registries in that it would not rely on District and CARB approved emission reduction project protocols.

Provide assistance to project proponents to quantify GHG emissions due to a project:

The District could provide a service to project proponents by assisting in quantifying GHG emission reductions (typically those that were required as mitigation for CEQA).

The District currently functions in this capacity, when the lead agency with regard to criteria pollutants in that it determines if the emission reductions that are claimed for mitigation are accurate. District staff can extend this function to address GHG emissions as well.

When the District is a responsible agency, it determines if the proposed mitigation for criteria pollutants is calculated correctly. District staff could extend this function to address GHG emissions as well if requested by the lead agency.

CHAPTER 9 CONCLUSION

Many workgroup members felt that it would be inappropriate or inadvisable for the District to develop the SJVCE for a number of reasons.

- Some felt that administering such a program and developing emission reduction project protocols would be very labor intensive and costly. Such activities would tax the District’s resources and distract it from its main goal of facilitating attainment of the ambient air quality standards.

- It was thought that the SJVCE would be redundant with the other GHG registries, especially the California-based Climate Action Reserve (CAR). Because facilities currently have the ability to register GHG emission reductions with other entities, there does not appear to be a need for the SJVCE.

While some GHG registries allow the registration of questionable GHG emission reductions, the CAR has the reputation for being a highly reputable GHG registry. GHG emission reductions that occur in the Valley can be registered with the CAR.

- Others questioned the legal authority of the District to administer such a program stating that the Legislature tasked the District with regulating criteria pollutant emissions, not GHG emissions.
- Some believed that the District should develop a District only GHG emission reduction registration program in which project proponents could register emission reductions not recognized by other entities, largely because no project protocols exist. Use of such emission reductions would likely be limited to retirement for mitigation as part of the CEQA process. This program could rely largely on existing Rule 2301.
- District staff believes that both the SJVCE and a District only GHG emission reduction program could be developed. The SJVCE would provide a mechanism to register GHG emission reductions that would be compatible with other GHG emission reduction registries. The District only program would be for use for those emission reductions for which there are not CARB approved protocols. Use of such emission reductions would be limited to providing mitigation of GHG emissions for purposes of CEQA for projects within the District.

Other workgroup members expressed the belief that the District should develop a SJVCE:

- SJVCE should be developed as the District could provide a local service for those entities wishing to register or purchase GHG emission reductions. It was suggested a District administered SJVCE would be more flexible and responsive to the needs of industry.
- The District should continue the public process in developing the SJVCE and use that process to gather additional public input as to whether the benefits of such a program would outweigh the expense and time that it would take to implement.

One workgroup member suggested that, in lieu of developing the SJVCE, the District could provide a service to project proponents by assisting them in quantifying projects GHG emissions and assisting in identifying GHG mitigation:

- The District could serve as a clearinghouse for methods that project proponents could use to mitigate their GHG emissions.
- The District's current document "Guidelines for Assessing and Mitigating Air Quality Impacts" (GAMAQI) is in the process of being revised to, among other things, provide guidance on assessing and mitigating a projects GHG emissions. When finalized, the revised GAMAQI can be used by project proponents to assist them in quantifying and mitigating their project's GHG emissions. District staff is available to provide assistance when needed.
- The District is currently able assist project proponents in mitigating their GHG emissions via voluntary emission reduction agreements, in which the District will use developer resources to fund grant programs that result in GHG emissions reductions. While these agreements have historically targeted the reduction in criteria pollutant emissions, such agreements can also address GHG emissions.

ATTACHMENT A

Technical Workgroup Members

Name	Affiliation
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Mark Montelongo	SJVAPCD
Greg Meisinger	Aera Energy LLC.
Jim Mosher	Aera Energy, LLC
Rob Neenan	California League of Food Processors
Gordon Nipp	Kern- Kaweah Chapter of Sierra Club
Elena Nuno	Michael Brandman Associates
Lorelei Oviatt	Kern County
Jason Paukovits	LSA Associates, Inc
Patrick Pfeiffer	Cantor CO2e
Mike Polyniak	N/A
Eddie Quintero	City of Taft
Brian Schuster	ICF Jones & Stokes
Sarah Sharpe	Fresno Metro Ministry
David C. Smith	Director of Regulatory Affairs of DMD Assoc. Inc. (Land Dvpt)
Lee Smith	Attorney
Paul Sousa	Western United Dairymen
Franklin Spees	City of Fresno
Laura Fultz Stout	Coalition for Clean Air
Robert "Bill" Tracy	Buttonwillow Land & Cattle Co.
Dennis C. Tristao	J.G. Boswell Company
Tom Umenhofer	Western States Petroleum Association
Lisa Van de Water	SJVAPCD
Nicole Vermilion	The Planning Center
Zenis Walley	LPGC

ATTACHMENT B

REFERENCED SECTIONS OF THE CALIFORNIA HEALTH & SAFETY CODE

39002. Local and regional authorities have the primary responsibility for control of air pollution from all sources other than vehicular sources. The control of vehicular sources, except as otherwise provided in this division, shall be the responsibility of the State Air Resources Board. Except as otherwise provided in this division, including, but not limited to, Sections 41809, 41810, and 41904, local and regional authorities may establish stricter standards than those set by law or by the state board for nonvehicular sources. However, the state board shall, after holding public hearings as required in this division, undertake control activities in any area wherein it determines that the local or regional authority has failed to meet the responsibilities given to it by this division or by any other provision of law.

40000. The Legislature finds and declares that local and regional authorities have the primary responsibility for control of air pollution from all sources, other than emissions from motor vehicles.

The control of emissions from motor vehicles, except as otherwise provided in this division, shall be the responsibility of the state board.

40001. (a) Subject to the powers and duties of the state board, the districts shall adopt and enforce rules and regulations to achieve and maintain the state and federal ambient air quality standards in all areas affected by emission sources under their jurisdiction, and shall enforce all applicable provisions of state and federal law.

(b) The district rules and regulations may, and at the request of the state board shall, provide for the prevention and abatement of air pollution episodes which, at intervals, cause discomfort or health risks to, or damage to the property of, a significant number of persons or class of persons.

(c) Prior to adopting any rule or regulation to reduce criteria pollutants, a district shall determine that there is a problem that

the proposed rule or regulation will alleviate and that the rule or regulation will promote the attainment or maintenance of state or federal ambient air quality standards.

(d) (1) The district rules and regulations shall include a process to approve alternative methods of complying with emission control requirements that provide equivalent emission reductions, emissions monitoring, or recordkeeping.

(2) A district shall allow the implementation of alternative methods of emission reduction, emissions monitoring, or recordkeeping if a facility demonstrates to the satisfaction of the district that those alternative methods will provide equivalent performance. Any alternative method of emission reduction, emissions monitoring, or recordkeeping proposed by the facility shall not violate other provisions of law.

(3) If a district rule specifies an emission limit for a facility or system, the district shall not set operational or effectiveness requirements for any specific emission control equipment operating on a facility or system under that limit. Any alternative method of emission reduction, emissions monitoring, or recordkeeping proposed by the facility shall include the necessary operational and effectiveness measurement elements that can be included as permit conditions by the district to ensure compliance with, and enforcement of, the equivalent performance requirements of paragraphs (1) and (2). Nothing in this subdivision limits the district's authority to inspect a facility's equipment or records to ensure operational compliance. This paragraph shall apply to existing rules and facilities operating under those rules.