

Agenda Date: May 16, 2013
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Continued Item: No

Board Agenda Item

TO: Air Pollution Control District Board

FROM: Dave Van Mullem, Air Pollution Control Officer

CONTACT: Michael Goldman, Engineering Manager (961-8821)

SUBJECT: Offsets Workgroup: Potential Solutions

RECOMMENDATION:

That the Board:

- a) Receive report regarding the District Offsets Workgroup;
- b) Direct staff to further analyze two Workgroup recommended options; Community Bank and Clean Technology Fund; and
- c) Direct staff to return with final recommendations for next steps, including potential rulemaking.

DISCUSSION:

Your Board previously received updates on the progress of the District's Offsets Workgroup in October 2012, December 2012 and March 2013. The Workgroup commenced work in September 2012 and ended in March 2013. This report provides a more detailed discussion of the Workgroup, the work it performed and staff's recommendation for the next steps.

Workgroup Purpose. The District formed the Offsets Workgroup to initiate a dialog regarding the viability of our Emission Reduction Credit (ERC) program. ERCs are air quality "mitigation" for individual pollutants issued by the District in the form of certificates in units of tons. These ERC credits can be used by permitted sources that trigger the emission offset thresholds of our New Source Review regulation. It was the Workgroup's observation that the current ERC program is no longer working as intended and that this may be having detrimental effects on the regulated community. Specifically, the Workgroup's concerns centered on ERC costs and availability.

- Cost. The cost of ERCs is based on a supply versus demand market system. Today, demand is high and supply is low, so understandably, we are observing ERC costs at an all-time high of \$115,000 per ton. As a practical matter, this means it will cost over \$1.725 million dollars for any regulated entity (e.g. business, government) to mitigate a “triggered” project with ERCs. This is a large difference from 1997, when the ERC program began, and ERCs cost \$5,000 per ton. This is a 2,200% cost increase. In adopting the ERC program rules in 1997, the District had not envisioned such a drastic spike in costs. Table 1 shows the cost trends of oxides of nitrogen (NO_x) ERCs in the past 16 years.
- Availability. There are two reasons for the low supply of ERCs. First, all the easy projects have been addressed and potential ERCs were created and sold. The program worked very well for the first 5 to 10 years; so in those terms it was successful and a great benefit to air quality. Second, as supply tightened, companies that owned ERCs became unwilling to sell them. These companies do not appear to be “speculating” with the ERCs as an investment, but rather the ERCs were procured for real and/or potential future projects.

Further, due to the way the current ERC program was designed, a distinction was made between South and North County credits; essentially creating two markets. Most of the activity, ERC creation and use, has been in the North. Activity in the South has been minimal due mainly to lack of any available ERCs. Table 2 shows the current availability of ERCs on the open market, along with the District’s assessment of which credits have a “realistic” chance for sale.

District staff have also observed instances where projects were scaled back or dropped due to the lack of available ERCs. It is one of the key items we address when inquiries arrive from businesses evaluating Santa Barbara County for potential projects or from existing businesses looking to expand. For example, Southern California Edison was looking to site a small peaking power plant in the South Coast. The purpose of such a facility would be to address load issues due to peak demands or emergencies (such as earthquakes that could disrupt South County power for an indeterminate period). A review of each inquiry received exposed a lack of ERCs that would have prevented us from approving an otherwise viable project.

The Workgroup’s purpose was to generate a list of possible solutions and then screen these as potential final solutions. It was an informal process. This was key for the District, since we believed getting early input from informed stakeholders would improve our chances of better understanding the issue from those outside the agency, thus enabling us to better focus our attention when any formal review processes began.

Workgroup Selection. The District specifically set out to select Workgroup members that would represent a broad spectrum of those we regulate and the environmental community. Table 4 lists the original members of the Workgroup. Additional interested parties attended latter, but not all meetings (e.g., Marc Chytilo of the Law Office of Marc Chytilo and John Gilliland of URS Corporation) and also provided verbal and written comments. As can be seen, varied interests ranging from manufacturing, environmental, oil & gas, education, agriculture, medical,

mineral processing and national defense made up the Workgroup. The Workgroup met five times between September 2012 and March 2013. All documents and presentations were shared via our webpage: <http://www.sbcapcd.org/eng/nsr/Offsets/owg.htm>.

Workgroup Initial Meetings. The first item that the District requested the Workgroup address was whether there was a broad consensus that a problem actually existed. The District felt that that there would be no need to further address the issue if we could not achieve Workgroup members' agreement. At the second meeting, the Workgroup unanimously resolved that the ERC program was in need of a re-evaluation and that they should continue and work on identifying potential options for the District to consider. The Workgroup also approved the Mission Statement listed in Attachment 1.

Workgroup Options. Over the next five months (November 2012 thru March 2013), the Workgroup discussed many different types of solutions. District staff pointed out potential obstacles to be aware of (e.g., Senate Bill 288, which limits changes to New Source Review regulations), but otherwise let the discussion be open and free-flowing. The Workgroup whittled these ideas down to three potential options; and sub-groups were formed to more fully explore each option. District staff provided the sub-groups criteria by which they should evaluate their options to ensure a consistent level of review. These criteria are included in Attachment 2. To more fully vet the options, each was discussed by the entire Workgroup and modified to address the concerns raised. There was not 100 percent agreement by all Workgroup members, but a general consensus concurred that the following three options should be considered by the District in the next steps of the process. They are:

- **Option 1 - Policies:** A number of suggestions were presented to change the way the District implements its current process of approving ERCs by changing or implementing new policies to make it easier to get an ERC approved.
- **Option 2 - Registration Process:** This proposal would take many permitted diesel engines and boilers and exempt them from permit. In place of a permit, a registration program would be implemented. This essentially exempts this equipment from requiring emission offsets, so ERCs would not be required. This option also explored the idea of creating a Community Bank for use by essential public services.
- **Option 3 - Alternative Mitigation Rule – Clean Technology Fund:** Instead of, or in addition to the purchasing of ERCs, sources that require offsets could pay into a Clean Technology Fund as mitigation. The generated revenue would be used to fund emission reduction projects. This program would be similar to the District's Carl Moyer program, an existing and highly successful program that helps businesses to modernize their equipment and reduce emissions. This Clean Technology Fund would be set up such that it did not compete with the Carl Moyer program, but rather would fund projects that could not otherwise qualify for funding due to cost effectiveness limits imposed on the Moyer program.

Preliminary Evaluation. The District performed an evaluation of the three options noted above. Some of the recommended options are not considered feasible by District staff for reasons ranging from: direct rule conflicts; basic air quality management principles; the amount of resources needed to implement the change; and the limited impact the solution could have. Table 3 provides a summary of the three options (which are actually eight options as Option 1 has four parts and Option 2 has two parts). **Our recommendation is to pursue further analysis of both the Community Bank and Clean Technology Fund options. If further staff analysis shows these to be feasible, implementation would occur through Board approved rulemaking.** The District will evaluate potential policy changes internally as part of our normal processes.

Major Challenges. Even if agreement can be reached on a specific plan of action, any change to our New Source Review and ERC rules presents a major challenge in terms of meeting State and Federal oversight agency review and approval. Further, as some of the proposals (e.g., Option 3) are new and untried, there is no guarantee that they will be successful. The following are some challenges we may face:

- Senate Bill 288. Senate Bill 288, the "Protect California Air Act of 2003," was signed into State law on September 22, 2003, with an effective date of January 1, 2004. That law was developed in response to concerns regarding Federal changes weakening New Source Review (NSR) regulations; SB 288 places restrictions on changes that California air agencies can make to their local NSR rules. NSR rules guide the pre-construction permitting of new and modified stationary sources of air pollutants. These restrictions may make the proposed solutions difficult to implement. SB 288 does allow rule changes for areas that attain all national ambient air quality standards, such as Santa Barbara County, under the following stringent conditions:
 - The changes will not impair maintenance of those standards.
 - The changes will not impair progress toward attaining State ambient air quality standards.
 - The changes must be consistent with any environmental justice guidance approved by the California Air Resources Board.

The above criteria are what Air Resources Board (ARB) staff will be using when reviewing any proposal we develop. It will be important to get input from ARB during the early stages of any rulemaking process to ensure we can meet their review criteria.

- Clean Air Plan. Any changes to our NSR rules must be consistent with our Clean Air Plan (CAP). We are still not in attainment with the State 8-hour ozone standard. The District is currently in the final stages of completing a required 3-year update to the State Clean Air Plan. This Plan is our "roadmap" for showing progress towards attainment with the State ozone standard. One can see where there is an overlap with the requirements of SB 288 for allowing changes to our NSR rules in that the changes cannot impair progress toward attaining State ambient air quality standards. During the CAP revision process, we have added a small growth allowance (a "contingency") for ozone pre-cursor pollutants. The intent of adding the contingency is to provide the District with

needed flexibility in developing potential offset rule revisions while maintaining consistency with the approved Clean Air Plan.

Two examples come to mind where this contingency may come into use. One would be to “pre-fund” a Clean Technology Fund type rule (Option #3). The other would be to fund a Community Bank for essential public services.

For the first example, the Clean Technology Fund would be designed to be “self-sufficient” over the long term. Funds paid into the program would generate actual emissions reductions in-the-aggregate that are equal to or greater than the actual emission increases (in-the-aggregate) from the projects that are using these alternative credits. However, we would need to leverage credits obtained through the growth allowance contingency to get the Clean Technology Fund up and running. Further, as noted above, there is simply no guarantee that this new category of program will be 100 percent successful, so the Clean Air Plan contingency will be needed to satisfy consistency with Plan requirements.

The creation of a Community Bank for essential public service is the second potential use of the Clean Air Plan contingency. We would need to dedicate a specific amount of credits for essential public service use. These credits would be provided at no or low cost and therefore the contingency would not be fully replenished as it would with the Clean Technology Fund proposal. Another possible method of funding the Community Bank would be to follow the process used by Ventura County APCD and utilize all ERC rule discounts and credits supplied in excess of the 1:1 trading ratio. As with all the options presented herein, this latter option would require extensive staff review for feasibility and stakeholder involvement.

We believe the inclusion of the contingency into the Clean Air Plan is a vital aspect in ensuring that ARB and EPA can approve any potential future NSR rule changes regarding emission credits as it would show that the proposed changes are still consistent with the 2013 Clean Air Plan, which is currently under revision.

- EPA Federal NSR Enforceability. The District’s permitting program is comprised of many components that are derived from State and Federal requirements. We meld these various requirements into our permit system under Regulation VIII. This simplifies the process for those we regulate. One important aspect is the Federal permitting requirements. Federal permitting requirements include New Source Review (also referred to as Nonattainment review, but called NSR herein to simply the terminology), Prevention of Deterioration (for attainment areas), and Part 70 Major Source operating permits. We implement these Federal requirements into our rules. These rules are then submitted to EPA for their review and approval for inclusion in the State Implementation Plan (SIP). Once SIP approved, the rules become federally enforceable. For example, the Federal PSD permitting requirements are “incorporated by reference” in our Rule 810; the Title V Major Source operating permit program is included as our Regulation XIII.

Our NSR rule was last revised in 1997 and was submitted to EPA for SIP approval. EPA

has failed to act on that Regulation. In fact, EPA has failed to act on our prior NSR rule submittal in 1985. The only NSR rule that EPA has acted upon and is SIP approved goes back to 1979. While this sounds peculiar, it has not had any material effect on the Districts permit program since our State approved local NSR rules (Regulation VIII) are more stringent than the older 1979 SIP approved version. The only difference in practical terms is that EPA cannot enforce our current NSR rules.

So, how is this considered a “challenge” in our Emission Reduction Credit/Offsets issue? The answer boils down to EPA’s level of stringency and *inflexibility* when being asked to approve alternative means of generating emissions credits for NSR rule requirements. Our Rule 804 and Rule 806 currently follows EPA’s strict requirements for reviewing, approving and using ERCs for projects under NSR. Getting EPA’s approval of innovative solutions such as Option #3 (Clean Technology Fund) will likely be very difficult. District staff are investigating whether it may be prudent to approach our Federal NSR permitting responsibilities in a different manner. Specifically, we would look into implementing the Federal NSR requirement in exactly the same manner as we are doing for the Federal PSD permit program. Namely, we would create a new Rule that would “incorporate by reference” the Federal NSR requirements. We would no longer rely on our State only approved local Regulation VIII NSR rules to implement this Federal requirement. This would allow us to move forward with potential NSR rules revisions without the need to obtain EPA approval. Any project that triggered the EPA NSR permit thresholds would then have to comply with both the State/local and Federal requirements. The reality of the situation is that we rarely receive permit applications that exceed the Federal NSR thresholds (the last one was in 1987), so the material effect is negligible.

- State No Net Monitoring Offset Program Requirement. California Health & Safety Code requires air Districts to implement Best Available Control Technology (BACT) and emission offset programs according to their nonattainment status. The poorer the air quality, the more stringent (i.e., the lower the threshold) the requirements become. For Santa Barbara County in the mid-1990s our air quality was classified as Moderate nonattainment for ozone (*Ref: §40918(a)(1) of the CaH&SC*). This meant we were required to adopt a BACT program with a 25 pound per day threshold and an emissions offset program with a 25 tons per year threshold, both based on the “potential to emit” calculation methodology. During the rulemaking process for our Regulation VIII in the late 1990’s we adopted the BACT threshold as noted above, but (per stakeholder and Community Advisory Committee input) we adopted an alternative emissions offsets program based on a threshold of 55 pounds per day or 10 tons per year using the Net Emissions Increase calculation methodology. By adopting this alternative emissions offsets program, we were required to show that this program was equivalent to the 25 tons per year CaH&SC requirement. This was termed as being a “No Net Monitoring Offsets Program”. Therefore, any changes we make to our NSR rules should also show similar equivalency. District staff are also investigating whether this requirement still applies as our air quality no longer meets the CaH&SC definition of Moderate. We will need to work with ARB staff to further explore this question.

Next Steps. The recommended next steps are for District staff to start a detailed analysis of both the Community Bank and Clean Technology Fund options. If these options (one or both of them) appear feasible, we would report back to the Board with the intent of recommending the initiation of a formal rulemaking process, which includes public workshops, Community Advisory Committee review and bringing the proposed rule(s) to your Board. The District will also evaluate potential policy changes (Option 1) internally as part of our normal processes.

Table 1 – NOx ERC Cost Trends (\$/ton)

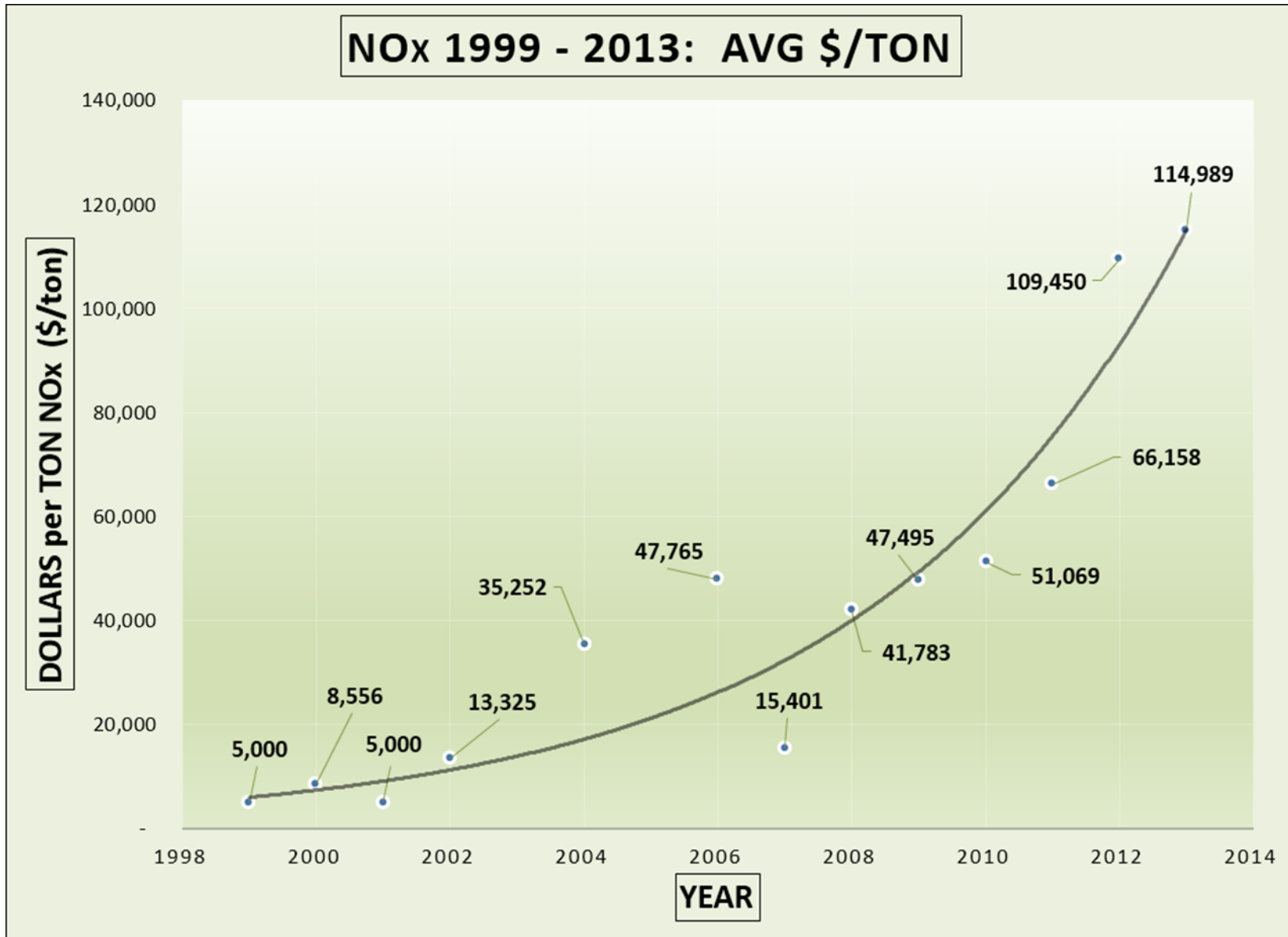


Table 2 – Current Availability of ERCs (tons/year)

ACTIVE ERCS as of MAY 2013			
Company Name	NOx	ROC	PM
Aera Energy	19.7	0.3	
E&B Resource Management	2.7	13.8	
ERG Operating Company	13.2	25.1	
Grefco			41.8
Pacific Coast Energy Company	36.8	1.3	
Plains Exploration & Production	5.9	52.2	0.0
Point Arguello Companies	25.9		
Space Exploration Technologies	1.1	2.1	0.0
The Okonite Company	0.6		
United Launch Alliance	5.8	2.7	0.9
United States Air Force	106.0	10.8	32.8
Wm. Bolthouse Farms			0.9
Grand Total	217.7	108.2	76.4
APCD ESTIMATE OF ACTIVE ERCS AVAILABLE FOR SALE as of MAY 2013			
Company Name	NOx	ROC	PM
Aera Energy	0.0	0.0	
E&B Resource Management	2.7	13.8	
ERG Operating Company	0.0	0.0	
Grefco			41.8
Pacific Coast Energy Company	0.0	0.0	
Plains Exploration & Production	0.0	0.0	0.0
Point Arguello Companies	0.0		
Space Exploration Technologies	0.0	0.0	0.0
The Okonite Company	0.6		
United Launch Alliance	0.0	0.0	0.0
United States Air Force	0.0	0.0	0.0
Wm. Bolthouse Farms			0.9
Grand Total	3.3	13.8	42.7

ACTIVE ERCS by Zone as of May 2013			
Zone	NOx	ROC	PM
North	189.4	106.2	76.4
South	28.4	2.0	0.1
TOTAL	217.7	108.2	76.4

Table 3 – Summary of District Review of Workgroup Options

WORKGROUP OPTIONS

Option 1 – Policies and Procedures

Option 2 – Registration Program

Option 3 – Mitigation Fee Rule

ID	Proposal	District Summary Review
1.1a	Revise policy to allow for the “maximum” emissions in the 5 year period prior to application completeness by using highest 3 year rolling average in last 5 years.	Not feasible. Runs counter to existing rule which requires actual average data, not maximum. District could not support changes from actual emission reduction definition as this is a basic tenet of air quality regulations. Does not address the larger issue of availability and cost of ERCs.
1.1.b	Revise policy to allow for the use of the highest daily averages or peak daily data out of a 5- year period.	Not feasible. Runs counter to existing rule which requires actual average data, not maximum. District could not support changes from actual emission reduction definition as this is a basic tenet of air quality regulations. Does not address the larger issue of availability and cost of ERCs.
1.2	Revise policy to allow for the transfer of ERCs that have been applied to existing equipment that is taken out of service.	Not feasible as it runs counter to existing rule “time of use criteria”. Current policy allows for creation of ERCs from the “newer” equipment that is being shut down. Does not address the larger issue of availability and cost of ERCs.
1.3	Revise policy to require the District to automatically initiate the 5 year ERC renewal process so that ERCs are not automatically lost. Or extend the life of the ERCs indefinitely and use the NSR process to determine whether the ERCs are still valid based on existing rules.	Would require a rule change and would have minimal impact. Does not address the larger issue of availability and cost of ERCs.
1.4	Revise P&P 6100.073 to allow for replacement of existing equipment with lower emitting equipment within the timeframe of the useful life of the original equipment. This would eliminate the need to permit this new equipment and thus require offsets.	Not feasible. Runs counter to specific EPA guidance. However, it may be feasible to create a new policy addressing this issue without changing the policy in question.
2.1	Create a Registration Program for all emergency standby diesel generators and small boilers. This would de-permit these emission units and not subject them to NSR and offset requirements.	This option primarily impacts two existing large sources, would be very time consuming to implement and would create a significant disruption in the current permitting program. Does not address the larger issue of availability and cost of ERCs.

ID	Proposal	District Summary Review
2.2	<p>Create a new Santa Barbara County Community ERC Bank. Transfer any existing ERCs used to offset diesel generators and small boilers into this bank to pre-fund it. Allow the District to create and sell ERCs from this Community Bank.</p>	<p>The creation of a Community Bank for Essential Public Service would be challenging, but is something that deserves further analyses. The main challenge would be in finding ways to pre-fund it.</p>
3	<p>Adopt new rule in which the applicant submits a mitigation fee to the District to purchase the emission reduction credits (ERC) instead of purchasing the ERCs on the open market or implementing an emission reduction program to create the required ERCs. This would be an alternative to the existing ERC process outlined in Rule 804 and 806. The fee revenue would be used for District-sponsored emission reduction projects.</p>	<p>This proposal provides an alternative means of meeting the offsets obligations under Rule 802/803. This would essentially establish a “Carl Moyer-like” program at the District where fees mitigation fees paid to the District would be used to reduce emissions in the County where there currently is no means to do so. It does meet the primary objective of the Workgroup in that it applies across the board to all regulated sources, both new and existing. This is the only Option that achieves this primary goal.</p>

Table 4 – Original Members of the Offset Workgroup

**Santa Barbara County APCD
Offsets Workgroup Members**

10/16/2012

NAME	COMPANY	REPRESENTING
Amy Estrella	Lockheed Martin – SB Focalplane	Manufacturing
Bob Poole	Santa Maria Energy	Oil and gas
Brent Reiswig	Bonipak/Betteravia Farms	Agriculture
David Landecker	Environmental Defense Center	Environmental Community
Glenn Oliver	Plains Exploration & Production Company	Oil and Gas
Katie Wilson	ExxonMobil Production Company	Oil and Gas
Kevin Wright	WSPA	Consultant
Lee Moldaver ¹	Audubon Society	Environmental Community
Marianne Strange	MF Strange & Associates	Consultant
Paul Topinko	Cottage Health Care Systems	Healthcare
Sherri Wentz	Raytheon	Manufacturing
Shams Hasan	E&B Resources	Oil and Gas
Sara Wallon	Imerys Minerals California	Mining/Minerals Processing
Stacey Calloway	University of California	Education
Tony Guy	Zodiac Aerospace	Manufacturing
Tony Lucas	United States Air Force	Military/Space Operations

¹ Member of APCD Community Advisory Council

ATTACHMENT 1 – OFFSET WORKGROUP MISSION STATEMENT

Offsets Workgroup Mission Statement

To seek revisions to the District's emission offsets program to address the lack of available mitigation that is required under the New Source Review regulation. Historically, the emissions offsets program was very successful in improving our air quality. Today, however, the default methods of mitigation for the program - Emission Reduction Credits (ERCs) - are very difficult to obtain, due to the high cost and/or lack of availability. This has resulted in both an economic hardship on the regulated community and a substantive impact on their operations. The Offsets Workgroup will investigate and recommend solutions to address these concerns in such a manner that would support responsible economic growth throughout Santa Barbara County without detriment to the environment and the Mission of the District.

ATTACHMENT 2 – WORKGROUP OPTION REVIEW CRITERIA

January 16, 2013

Santa Barbara County APCD
Offsets Workgroup
Offset Improvement Options - Evaluation Criteria and Format Standards

Section 1: Title and Brief Description of the Offset Improvement Option

Section 2: Detailed description of the Offset Improvement Option

Section 3: Analysis of the Offset Improvement Option

- What are the advantages of the option (*be detailed*)
- What are the disadvantages of the option (*be detailed*)
- Address how the option meets the established [Workgroup Purpose](#) and the District's Mission Statement
- Address who would be affected by the option and how they would be affected (including potential financial impacts). Address whether the proposal will apply to wide or narrow sector of the community needing ERCs
- Address the process of implementing the option. If rulemaking is required, describe what rules are impacted and what changes would be required
- Address whether the option will increase/decrease emissions and estimate the amount
- Address how the option would impact District resources (both time and financial) and whether any of these impacts can be borne by other entities
- Discuss how SB-288 will impact this option
- Address the consistency of the option with existing District policies and applicable regulations in place at the District and other pertinent agencies
- Discuss how the option would be consistent with the Clean Air Plan
- Address any precedent(s) that would be set by the option
- Discuss how the option impacts Greenhouse Gases
- Address whether the option has any environmental justice impacts
- Discuss any similar programs implemented by other air districts, including the current status and success/failure of each.

Section 4: Summary

Section 5: Authors Names and Affiliations

Appendices: List any referenced Attachments (*separating each by a cover sheet*)

Appendix A-1: Name

Appendix A-2: Name

etc.