BOARD MEETING DATE: December 4, 2015 AGENDA NO. 29

PROPOSAL: 2016 Air Quality Management Plan White Papers

SYNOPSIS: The draft Industrial Facility Modernization White Paper was

released for public review at the November 6, 2015 Board meeting. An opportunity for public comments is being provided today before

the white paper is finalized.

COMMITTEE: Stationary Source, October 16, 2015, Reviewed

RECOMMENDED ACTION:

Receive and file.

Barry R. Wallerstein, D.Env. Executive Officer

PF:AFM:MK

# Background

At the April 10, 2014 AQMP Advisory Group meeting, the SCAQMD staff introduced the concept of developing a series of ten white papers to provide for better integration of major planning issues regarding air quality, climate, energy, transportation, and business needs during the development of the 2016 AQMP. The Industrial Facility Modernization White Paper is the final of those documents. The remaining nine revised final white papers were "Received and Filed" with the Board at its October 2, 2015 and November 6, 2015 meetings.

#### Overview

Industrial Facility Modernization

The Industrial Facility Modernization White Paper identifies both potential hurdles that may be preventing an owner from replacing older, higher-emitting equipment and potential incentives that can better encourage a business owner to replace an older piece of equipment sooner as well as encourage ultra clean facilities to site in the Basin. These kinds of modernization and technology advancement choices are needed to meet attainment goals. Based on comments from several Board members at the October 2, 2015 Board meeting, this white paper includes a commitment to identify mechanisms to

provide greater policy certainty to businesses as they make investments to zero or near-zero emission technologies or pollution controls.

## **Working Groups and Public Participation**

The Industrial Facility Modernization working group included 28 participants who met twice in the past year. A draft final Industrial Facility Modernization document is included as an attachment to this Board letter. No major edits were made to the draft final being released today from the draft version released at the November 6, 2015 Board meeting.

The meeting dates, times, agenda, presentations and available material for the white paper is provided online at <a href="http://www.aqmd.gov/home/about/groups-committees/aqmp-advisory-group/2016-aqmp-white-papers">http://www.aqmd.gov/home/about/groups-committees/aqmp-advisory-group/2016-aqmp-white-papers</a> for public access.

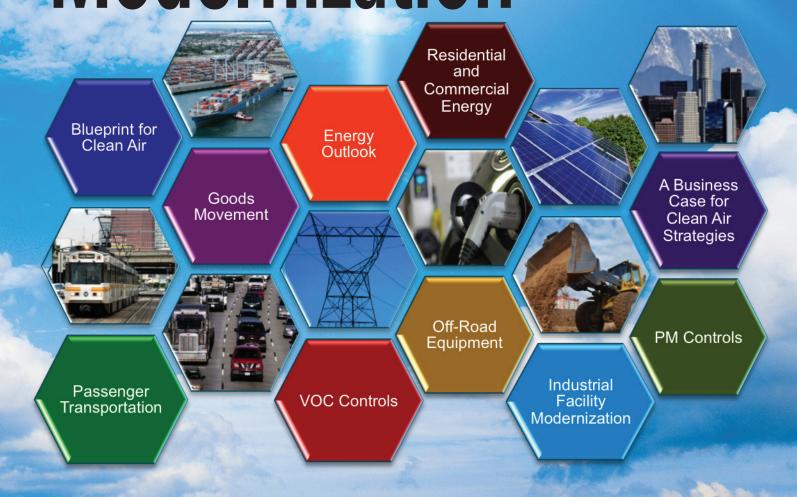
#### Attachment\*

Draft Final Industrial Facility Modernization White Paper

<sup>\*</sup>The ten White Papers are also available online at <a href="http://www.aqmd.gov/home/about/groups-committees/aqmp-advisory-group/2016-aqmp-white-papers">http://www.aqmd.gov/home/about/groups-committees/aqmp-advisory-group/2016-aqmp-white-papers</a>







2016 AQMP WHITE PAPER



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### Introduction

The South Coast Air Quality Management District (SCAQMD) is preparing the 2016 Air Quality Management Plan (AQMP) to demonstrate how the region will reduce air pollution emissions to meet federal health-based standards for ground-level ozone and fine particulates (PM<sub>2.5</sub>). The 2016 AQMP will require challenging policy decisions regarding the control strategies that will bring our Basin into attainment of federal air quality standards. NOx emissions are a precursor to both ozone and PM<sub>2.5</sub> formation, and modeling analysis demonstrates that significant NOx reductions are necessary for ozone attainment, while providing substantial benefits towards achieving the PM<sub>2.5</sub> standards. Reductions in directly emitted PM<sub>2.5</sub> will also be important to ensure PM<sub>2.5</sub> attainment.

The Basin's air is much cleaner today than it was 20 years ago. Air pollution has improved despite significant long-term growth of the population, the regional economy, and vehicle miles traveled. While mobile sources are responsible for the majority of emissions in the Basin, these sources do not represent all of the emission reductions needed to demonstrate attainment of federal air quality standards. Comprehensive attainment strategies containing both mobile and stationary source measures will be needed in order to meet the standards. While stationary source emissions have been significantly controlled over the years, there are still opportunities to produce additional emission reductions. One such opportunity is through the replacement of older higher emitting combustion sources used at stationary sources with zero or near-zero emitting sources, or by encouraging the siting of new businesses in the Basin that utilize or produce these technologies. The Industrial Facility Modernization White Paper identifies and discusses efforts to incentivize existing stationary sources to replace higher-emitting, older equipment to cleaner, zero or near-zero emission equipment, as well as efforts to encourage new, cleaner facilities manufacturing and using zero or near-zero emission technologies.

# **Scope of this White Paper**

This White Paper focuses on NOx and concurrent PM emission reductions, consistent with the needs of the 2016 AQMP. Concepts to incentivize facility modernization apply to all stationary sources including new and existing stationary sources ranging from an individual piece or pieces of equipment at a facility or the entire facility. In addition, the scope of this White Paper includes mobile sources as they relate to a facility. For example, this paper considers mobile sources that are used at a stationary facility such as forklifts, and the potential use of mobile source offsets for permitting new stationary sources can contribute to emission reductions.

There are a variety of approaches to directing businesses towards the goals of facility modernization. The primary approach that this paper considers is incentives. Using an incentives-based approach will encourage businesses to make choices that will reduce emissions while minimizing impacts. An incentives-based approach is also consistent with comments that the SCAQMD staff received regarding business retention, particularly in regards to replacing older higher-emitting equipment with new lower-emitting equipment.

# **Objectives of Industrial Facility Modernization**

The overall objective of this White Paper is to identify mechanisms to incentivize businesses to choose the cleanest technologies as they replace equipment and to provide incentives to encourage businesses to move into these technologies sooner. Although replacement of older, higher emitting sources is expected to have the greatest potential for emission reductions, providing incentives and eliminating barriers for new sources to manufacture and use ultra clean technologies is also an important aspect of this white paper.

Industrial Facility Modernization can result in substantial emission reductions, especially if the cleaner equipment is at zero or near-zero emission levels. Efforts to encourage clean manufacturing facilities to site and operate in the Basin can result in emission reduction benefits as well as other co-benefits to the local economy, particularly to the surrounding community. Consistent with the scope of this White Paper, there are three objectives to Industrial Facility Modernization:

- 1. Provide incentives to replace older higher-emitting equipment with newer lower emitting equipment, which can apply to a single source or an entire facility.
- 2. Provide incentives for existing businesses to implement zero and near-zero emission technologies throughout their operations.
- 3. Encourage new businesses that use and/or manufacture near-zero and zero emission technologies to site in the Basin.

The following provides a more detailed description of each of these three objectives and some background information.

# Objective 1: Provide incentives to replace older higher-emitting equipment with newer lower emitting equipment, which can apply to a single source or an entire facility

The basis of this objective is to encourage businesses to replace older higher-emitting equipment with lower emitting equipment earlier then would occur due to natural turnover by providing incentives. Under the SCAQMD's Regulation XIII – New Source Review, new equipment must be permitted with Best Available Control Technology, which is the cleanest demonstrated level for a specific equipment category, for a specific fuel or energy type. In general, SCAQMD's regulatory program allows equipment to reach its useful life and it is the decision of the business owner when the equipment will be replaced. The purpose of this objective is to realize emission reductions sooner, than would otherwise occur without incentives. Encouraging zero and near-zero emission technologies is always a goal, however, it is not the purpose of this objective and is the primary purpose of Objective 2. In addressing this objective, this White Paper will identify potential hurdles that may be preventing an owner from replacing older, higher emitting equipment and incentives that can better encourage a business owner to replace an older piece of equipment sooner. Replacing equipment sooner would provide NOx and PM emission reductions at a faster pace, and in some cases can provide reductions beyond those required under New Source Review.

# Objective 2: Providing incentives for existing businesses to implement zero and near-zero emission technologies throughout their operations

The concept of this objective is to promote the use of zero- and near-zero emission stationary and mobile source technologies at stationary source facilities. For stationary sources, there may be opportunities for using zero or near-zero technologies. For mobile sources, there are a variety of zero and near-zero mobile source technologies, such as electric forklifts and yard hostlers that can be used instead of traditional diesel equipment. In addressing this objective, this White Paper will identify potential applications of zero and near-zero technologies and mechanisms to incentivize the use of these technologies at stationary source facilities. Replacing equipment with zero or near-zero emission stationary and mobile source equipment can reduce NOx and PM emissions. In addition, an advantage to implementing zero emission technologies is the higher degree of certainty that no further reductions or equipment replacement would be required by future regulations. Over the years, the SCAQMD staff has received comments from regulated businesses regarding the lack of certainty regarding future regulatory efforts, which is inherently difficult to predict given changes in air pollution standards and advancement in pollution control technologies. Businesses that implement zero-emission technologies will have a high level of certainty that no additional emission reductions would be required. In most cases, these emission reductions will occur earlier than might otherwise be required and will go beyond emission reductions required under New Source Review for stationary sources and existing regulatory programs for mobile sources.

# Objective 3: Encourage new businesses that use and/or manufacture zero and near-zero emission technologies to site in the Basin

The purpose of this objective is to identify mechanisms to encourage new businesses that are using or producing zero and near-zero emission technologies to site in the Basin. In addressing this objective, this White Paper identifies incentives to attract new businesses that are employing the cleanest operations and/or producing those ultra clean technologies that will be needed to meet attainment goals. Although this objective focuses on new businesses that are using or manufacturing zero and near-zero emission technologies, it is possible that incentives can be provided to other existing businesses that are expanding in these areas. Incentives can include assistance during California Environmental Quality Act (CEQA) review, or lower permitting, permit renewal and emission fees, etc. This objective has the potential for long-term benefits to encourage ultra clean facilities to site in the Basin and incentivizing technologies that are needed to meet attainment goals.

### **Hurdles and Past Efforts**

Implementing ultra clean technologies at stationary sources has its hurdles, some more challenging than others to overcome. It is important to understand these potential hurdles since some incentives to encourage implementing clean technologies can be designed to minimize them. The following provides a summary of key hurdles and barriers as they relate to meeting the objectives of this White Paper.

#### Cost

Cost is likely one of the key considerations when replacing existing equipment and/or adding pollution controls. The decision of when to replace existing equipment can vary; some operators may replace equipment when it is no longer operable, while other operators may replace equipment well before it reaches that point to avoid breakdowns or to lower operating or maintenance expense. Regardless, equipment replacement and/or pollution controls represent a financial decision where the operator must account for the capital cost to purchase new equipment, installation, operating and maintenance costs.

The SCAQMD has implemented several funding programs to help facilitate specific technologies and compliance with SCAQMD rules. One such effort involved the establishment of the Rule 1470 Risk Reduction Fund in May 2012. This fund was adopted by the AQMD Governing Board to set aside \$2.5 million to offset the cost of purchasing diesel particulate filters for new diesel emergency standby engines as required under Rule 1470 - Requirements for Stationary Diesel-Fueled Internal Combustion and Other Compression Ignition Engines. Another grant program, the Dry Cleaner Financial Incentive Grant Program, was designed to assist local dry cleaners in switching to non-perchloroethylene dry cleaning systems to comply with Rule 1421 - Control of Perchloroethylene Emissions from Dry Cleaning Systems. Up to \$20,000 was available for CO2 machines and \$10,000 for water-based systems. For a limited time, \$5,000 was available for hydrocarbon machines. Since 2008, the program has provided approximately \$265,000 to local dry cleaners to upgrade their systems. In addition, there are several existing incentive programs which help promote higher efficiency and lower emitting technologies such as: the Lawn Mower and Leaf Blower Exchange; the SOON Program; the Carl Moyer Memorial Air Quality Standards Attainment Program; MSERC Credit Programs; and the Voucher Incentive Program.

#### **New Source Review**

New equipment requiring an SCAQMD permit to operate must meet the requirements of Regulation XIII – New Source Review (NSR) and Regulation XX – RECLAIM (if at a RECLAIM facility). The SCAQMD's Regulation XIII and Regulation XX, require applicants to use Best Available Control Technology (BACT) and provide emission offsets for new sources, relocated sources, and for modifications to existing sources that may result in an emission increase of any nonattainment air contaminant. SCAQMD's NSR program also implements the federal and state statutory requirements for NSR and ensures that construction and operation of new, relocated, and modified stationary sources does not interfere with progress towards attainment of the National and State Ambient Air Quality Standards.

#### Offset Issues

For smaller emitting sources, their offset requirements are covered programmatically by the SCAQMD. NOx and SOx for RECLAIM sources are offset through RECLAIM Trading Credits, or RTCs. One of the main issues that has been raised in regards to Industrial Facility Modernization involves NSR and the discounting of ERCs when they are created, the current availability and price of ERCs, and the concern that there will be a lack of ERCs generated in the future. The shortage and cost of ERCs continues to be an issue raised by stakeholders as an obstacle to siting new facilities in the district. For an extreme ozone non-attainment region such as the South Coast Air Basin, the stationary source reduction opportunities to generate ERCs is diminishing due to continued SIP reduction commitments. Currently available ERCs in the open market derive primarily from banked facility shutdown credits. Furthermore, costs for ERCs from privately held firms have increased.

In 2009, the SCAQMD staff hosted a series of New Source Review (NSR) Working Group Meetings to discuss the availability and price of offsets needed for permitting new and modified stationary sources under the SCAQMD's NSR program. The purpose of the NSR Working Group Meetings was for the SCAQMD staff to work with businesses, environmental groups, community representatives, and other government agencies to develop near- and long-term solutions to address the availability of NSR offsets, as well as other NSR implementation issues. Permitting and NSR in particular were recognized as a potential barrier to equipment modernization and encouraging new cleaner facilities to locate in the Basin. The SCAQMD staff formed a Working Group of interested partners to work with SCAQMD staff and other stakeholders to develop solutions to these problems and other NSR issues.

The guiding principles behind the NSR Working Group efforts were to:

- Maintain BACT requirement for all new and modified sources;
- Produce real, quantifiable, enforceable, surplus, and permanent offsets;
- Promote facility modernization;
- Encourage innovative clean technologies; and
- Administrative efficiency

# **Permitting**

There are currently over 68,000 permitted pieces of equipment or processes in the Basin. On average, the SCAQMD receives 6,000 permit applications annually. Applications include those for new equipment, existing equipment operating without a permit, modifications, relocations, change of conditions and change of operator. Some permit applicants have expressed concern regarding the length of time it takes to process permits. As a result, the SCAQMD established a Permit Streamlining Task Force to streamline permit processing in the 1990's. In 2012/2013 the SCAQMD staff further investigated concepts for permit system modernizing.

## **SCAQMD Permit Streamlining Task Force**

A new Permit Streamlining Initiative to further improve permitting efficiency was developed. In April 1998, the Permit Streamlining Task Force (PSTF) subcommittee, including Governing Board members, industry representatives, local government representatives, environmental groups, and SCAQMD staff, was launched to brainstorm new ways to expedite permitting and improve customer service. Thirty-seven recommendations were made which incorporated various mechanisms to improve the permitting process. These recommendations were grouped into the following 4 Categories:

- Reduce steps required to issue permits;
- Improve communications internally and externally;
- Optimize permit structure and systems; and
- Enhance management and organizational effectiveness

These recommendations were or are continuing to be implemented. However, additional mechanisms are being developed that introduce new streamlining approaches to the permitting process. These include:

- Establish standardized permits for specific equipment types (e.g., lithographic printing, Rule 1166 soil remediation equipment);
- Expand registration and certification programs;
- Online filing of applications;
- Online payment of fees; and
- Reduction of permit processing bottlenecks through the incorporation of a de-centralized process

In addition to the primary work of the Permit Streamlining Taskforce, the SCAQMD evaluated the development of a modified or new permitting program in 2012/2013 to meet the region's evolving air quality and economic needs, including incentivizing the use of new, lower emitting technologies, manufacturing of such clean technologies within the region, addressing availability issues associated with emission offsets for new or modified sources, and reducing administrative burdens while providing equivalent or better protection of public health.

Three concepts were proposed which included:

- Incentivize the permitting of advance clean equipment by reducing recordkeeping, monitoring, and permit fees and requiring registration in lieu of permits;
- Establish an advance technology offset reserve that would be funded by a limited pool of emission offset credits from AQMD internal bank; and
- Include an emission reduction credit calculation method which incentivizes process changes that reduce emissions

## **Regulatory Certainty**

The issue of regulatory certainty has also been raised as a potential impediment to installing state-of-the-art pollution controls. Operators have commented that they want some assurance that if they are investing in pollution controls, that they can define, plan for, and amortize their costs without future regulatory requirements leading to additional costs. In addition, other business representatives have expressed concern regarding additional regulations that can result in stranded assets, meaning that a future regulatory requirement could result in removal and/or replacement of existing pollution controls that have not met their useful life.

The SCAQMD staff is sensitive to the cost of pollution controls and amendments to rules that may require new or different pollution control strategies. The SCAQMD staff fully considers previous requirements and the useful life and cost of previously required equipment when amending rules, and strives to develop rules that avoid stranded assets. One example is Rule 1421 for dry cleaning, which allowed operators to phase out old equipment based on the expected useful life of the equipment.

At the October 2, 2015 Governing Board meeting, several Board Members emphasized the importance of business certainty, particularly for those businesses that make early investments in state-of-the-art pollution controls. The SCAQMD will be developing policies to address this issue to provide better certainty to businesses as they make investments in zero or near-zero emission technologies or pollution controls. This will assist with Facility Modernization.

# **California Environmental Quality Act**

Some business representatives have commented that the California Environmental Quality Act (CEQA) is a hurdle to implementing new projects because of the length of time to prepare and approve a CEQA document, and other issues that can slow the approval process that are not related to an environmental issue. Under the California Environmental Quality Act (CEQA), discretionary projects with potentially significant adverse environmental impacts are required to prepare an environmental document. This applies to all permitting projects where the Executive Officer has discretionary approval of the permits. For other discretionary projects, such as land use projects, the SCAQMD can be a commenting agency and/or a responsible agency in situations where there are permitted sources involved. Environmental documents include those where there are either no significant environmental impacts or potentially significant environmental impacts are mitigated such as a Negative Declaration or Mitigated Negative Declaration. Environmental documents for projects where impacts are potentially significant can require an Environmental Impact Report or Environmental Assessment. Although most permitting projects do not require preparation of a CEQA document by the SCAQMD, there are some projects where a CEQA environmental document is needed and the SCAQMD is the lead agency responsible for approval. For land use projects, a CEQA document is almost always required and depending on the complexity of the land use project and the degree of controversy, the CEQA process can be lengthy.

# **Mechanisms to Incentivize Industrial Facility Modernization**

Through the years, a variety of incentives to encourage Industrial Facility Modernization have been implemented, such as exempting electric equipment from permitting, implementing measures to streamline permit processing for cleaner equipment, use of short-term mobile source credits, mitigation fee programs, the Air Quality Investment Program (AQIP), and emissions averaging provisions in rules. The incentive programs, which include incremental funding or subsidies, are designed to promote voluntary introduction of new technologies on an accelerated schedule. These programs may also provide manufacturers with incentives to accelerate the development and deployment of cleaner technologies.

Based on input from some Working Group members, the SCAQMD staff has compiled a list of potential incentives to encourage businesses to use zero- or near zero technologies or enhancements to the SCAQMD's existing programs to reduce or eliminate hurdles to implement state of the art technologies. The list below represents an "initial list" of potential concepts to encourage Industrial Facility Modernization. The purpose of this list is to initiate the discussion regarding the types of programs and incentives that can be further explored as part of the 2016 AQMP. It is expected that as the SCAQMD staff and stakeholders further explore incentives for Industrial Facility Modernization, additional concepts may be identified while others may be removed. By providing this initial list of incentives, the SCAQMD staff is not endorsing any specific incentive. However, the SCAQMD staff is committed to further investigating the concepts. This White Paper will discuss the following categories of incentive mechanisms:

- Incentive Funding: The concept of incentive funding involves the creation of economic incentives to
  reduce the cost and encourage businesses to replace their existing high emitting equipment with
  equipment that is zero- or near-zero emissions. It includes mechanisms such as rebates, grants, and loans
- Permitting and Fee Incentives and Enhancements: Permitting and fee incentives and
  enhancements would include the expansion of the existing equipment certification program and preapproved permit program to include additional equipment categories. Incentives involving reduced
  permitting fees for advanced technologies which significantly reduce emissions as well as other permitting
  enhancements identified as part of the 2012/2013 priority projects are also discussed in this incentive
  approach.
- **NSR Incentives and Enhancements:** The mechanism of credit offsets and NSR incentives includes expanding the number of exemptions under Rule 1304 Exemptions and expanding the use of the priority reserve under Rule 1309.1 Priority Reserve. In addition, this mechanism includes the adoption of a Clean Air Investment Fund and the concept of short-term leasing of offset credits.
- **CEQA Incentives:** CEQA incentives will focus on mechanisms the SCAQMD staff can affect in the CEQA process, such as expedited review. There are other incentives that are possible, however, they may require legislative changes.

- **Branding Incentives:** The concept of branding incentives is to publicly recognize businesses that are going beyond regulatory requirements and/or are implementing/producing zero or near-zero emission technologies. Branding incentives can range from recognition awards to specific labeling or certification.
- Recordkeeping and Reporting Incentives: The concept of incentives for recordkeeping and reporting
  is to reduce certain recordkeeping and reporting requirements, where applicable, for specific zero and nearzero emission technologies.

## **Incentive Funding**

Mechanisms that provide funding or loans to stationary sources can incentivize Industrial Facility Modernization. Incentives may include grants for new purchases of equipment as well as loan programs in areas where capital costs are high but long-term cost savings from increased efficiency are achieved. The SCAQMD staff recognizes that while the private sector plays the central role in funding mechanisms to modernize facilities, supportive policy and good governance are essential for such programs to succeed. The following are initial concepts for funding and grant programs:

- Develop a stationary source grant program, similar to the Carl Moyer program for mobile sources, that
  would provide financial incentives through an application process to cost-effectively reduce stationary
  source NOx emissions with additional considerations for producing co-benefits for air toxic and GHG
  reductions.
- Utilize public funding or public-private partnerships to "tip the balance" towards a business case for investments when equipment upgrades do not offer sufficient returns for private investment.
- Seek additional grants and cost-sharing opportunities from various government agencies, such as the California Air Resources Board (CARB), the California Energy Commission (CEC), the National Renewable Energy Laboratory, the U.S. EPA, the U.S. Departments of Energy (DOE) and the Department of Transportation (DOT) to support technology advancement efforts as well as infrastructure needed for facility modernization. Historically, such cooperative project funding revenues have been received from CARB, CEC, DOE and DOT. In 2014, state and federal revenue totaling nearly \$20 million was awarded to the SCAQMD.<sup>1</sup> While most of these monies were used to fund mobile source-related projects, these funding sources will be investigated as a mechanism to incentivize the replacement of older higher emitting stationary source equipment with newer cleaner equipment, or the siting of new, cleaner facilities in the Basin.
- While the Clean Fuels Program which, under H&SC §§40448.5 and 40512 and Vehicle Code Section 9250.11, establishing mechanisms to collect revenues from mobile and stationary sources to support the program's objectives, these authorities have not traditionally been used to significantly fund the deployment of stationary source low-emitting technologies<sup>2</sup> Thus, there may be potential

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<sup>&</sup>lt;sup>1</sup> SCAQMD, Technology Advancement Office Clean Fuels Program 2014 Annual Report and 2015 Plan Update, March, 2015

<sup>&</sup>lt;sup>2</sup> Ibid

- opportunities for this type of funding source to be used for "Industrial Facility Modernization." While this would be consistent with H&SC §40448.5 to the extent the funds are used to develop and implement advanced clean fuels (including electrification), this incentive approach may have other legal or legislative issues that need to be further analyzed.
- While monies collected from penalties have been historically used to help fund the District's operating
  costs, provide community benefits, and support health effects research, it may be possible that a
  portion of these funds could be specifically earmarked to assist facilities who opt to replace older higher
  emitting equipment with newer cleaner equipment, such as is already done for the District's
  Supplemental Environmental Projects (SEPs).

## **Permitting Incentives and Enhancements**

The following identifies enhancements to the existing permitting program and permitting incentives that can be used to incentivize Industrial Facility Modernization. Enhancements to the existing permitting program are based on past efforts or recommendations from the Permit Streamlining Task Force and the 2012/2013 permit modernization effort. Incentives for reducing permitting costs can be direct such as reduced fees for use or manufacture of zero and near-zero technologies, or indirect such as streamlining the permit process, where applicable, for operators by reducing the time to prepare permits for zero and near-zero technologies.

- Expand standardized permits for specific equipment or processes. As part of the permit streamlining effort, standardized permits were developed for lithographic printing and non-halogenated soil remediation equipment and emergency generators. This incentive would seek to expand standardized permits to additional source categories.
- Expand registration and certification permit programs to near-zero technologies. Zero emission technologies are exempt from permit under Rule 219. SCAQMD staff can look at expanding the registration and certification programs for near-zero emission technologies to reduce the administrative burden of implementing these technologies.
- Expedited permit processing time and/or reduced annual renewal fees for:
  - Older, high emitting sources that are replaced with zero or near-zero technologies;
  - New zero or near-zero emission operations or manufacturing; and
  - New facilities that implement zero or near-zero emission fleets within their business.
- Develop a presumptive BACT list of pre-approved equipment or controls for specific source categories, where applicable, which could provide sources prior certainty that they could expeditiously receive a permit for most equipment types faster than the traditional review period. This list would need to be updated on a regular basis to accommodate technological advancements which become designated as BACT.
- Develop a tiered or sliding scale system of fees such that the lower emission sources could have correspondingly lower permit processing fees, on the premise that inherently cleaner sources require

less effort to issue permits. This mechanism could also be applied to sources replacing older high-polluting equipment/processes with near-zero-emitting equipment, or installing new equipment using advanced technologies at near-zero emission levels.

#### **New Source Review Incentives and Enhancements**

There are areas within NSR where enhancements or incentives can be provided to encourage new and modified sources to implement zero and near-zero emission technologies as well as encourage zero and near-zero emission credit generation projects. The following provides an initial list of incentives and possible New Source Review program enhancements to address credit generation and use for new and modified sources. This list represents initial concepts for the SCAQMD staff to further investigate.

- Promote sustainable growth in the Basin by incentivizing the introduction of new manufacturing facilities
  that emit within a specified annual emission range (e.g., 4 to 10 tpd), or reduce reliance on imported fuels
  via local renewable fuel production facilities through the use of annual discounted emission offset leasing
  fees. The annual discounted leasing fees scenario is an approach that would provide opportunities for
  facilities to lease non-tradable credit offsets on a temporary basis (e.g., for the first 5 years). If unused,
  credit offsets could then be returned to the SCAQMD with any applicable emission offset discounts, if
  needed.
- Use a similar approach for new manufacturing facilities that produce zero or near-zero emission technologies by exempting them from offsets and offset fees as long as there is a net emission benefit due to the application of such technologies.
- Evaluate additional strategies for increasing credit generation opportunities such as providing incentives to generate mobile source credits through zero and near-zero mobile source projects.
- Establish a pre-funded clean air investment fund administered by the SCAQMD or by other appropriate
  publicly-accountable entities where facilities would pay a benchmark fee to use the offset credits. Monies
  from the clean air investment fund would be used to invest in emerging zero and near-zero emission
  technologies.
- Initial concepts for possible enhancements to NSR regarding generation and use of ERCs under NSR that can better incentivize Industrial Facility Modernization:
  - Calculate future ERCs and convert existing ERCs to annual instead of daily credits (e.g., calculate offsets for power generation peaker plants the same as base load power plants).
  - Give facilities the opportunity to lease ERCs for short-term use.
  - Expand Rule 1304 Exemptions for near-zero emission technologies.
  - Investigate modifications to the discounting of newly generated ERCs, to better incentivize replacing older equipment with zero- or near-zero emission technologies by possibly reducing the amount of discount.

#### **CEQA Incentives**

A potential incentive to assist businesses that will use zero or near-zero emission technologies or equipment, similar to the 2012 AQMP Control Measure INC-02 - Expedited Permitting and CEQA Preparation - Facilitating the Manufacturing of Zero and Near-Zero Technologies, is to provide assistance to facilities requiring a CEQA document where the SCAQMD is a lead agency. The SCAQMD may act as a lead agency for permit projects filed with the SCAQMD that have not previously undergone a CEQA analysis. This does not include CEQA documents for projects reviewed by the SCAQMD as a commenting or responsible agency. Such assistance could be accomplished by prioritizing SCAQMD staff involvement and oversight on a fast-track schedule; thus reducing the time for completion of the CEQA process.

## **Branding Incentives**

The concept of a branding incentive is to recognize businesses that are going above and beyond regulatory requirements and/or are implementing/providing zero- or near-zero emission technologies. Branding incentives can be implemented in a variety of different forms and can be for an individual piece of equipment or product line, an entire business, and for new projects. The mechanism to implement this type of program can be through labeling, certification and awards that the facility can display in their lobby or their business advertising and possibly recognition on the SCAQMD's website or at the SCAQMD Clean Air Awards, to name a few.

## **Recordkeeping and Reporting Incentives**

Some Working Group members suggested reduced recordkeeping and reporting requirements as an incentive to encourage businesses to implement the cleanest technologies. This recommendation is also consistent with one of the 2012/2013 permit modernization proposed concepts to incentivize the permitting of advanced clean equipment via reduced recordkeeping and monitoring.

# **Industrial Facility Modernization in the 2016 AQMP**

In the 2012 AQMP, the SCAQMD staff proposed two measures that would seek to provide incentives for zero or near-zero emission technologies. The first measure, INC-01 Economic Incentive Programs to Adopt Zero and Near-Zero Technologies, sought to provide incentives for new and existing facilities to install and operate clean, more-efficient combustion equipment beyond what is currently required, with a focus on zero and near-zero emission options for boilers, water heaters, commercial space heating, and other source categories through economic incentive programs, subject to the availability of public funding. The second measure INC-02 - Expedited Permitting and CEQA Preparation - Facilitating the Manufacturing of Zero and Near-Zero Technologies, included the concept of expedited permitting processing and assisting in the development of applicable CEQA documentation if a company that manufactures zero or near-zero emission technology.

In developing the 2016 AQMP, the SCAQMD staff believes that INC-01 and INC-02 should be revisited to incorporate additional concepts to incentivize Industrial Facility Modernization. In addition, a process to begin developing these measures needs to be established where the SCAQMD staff initiates a series of task force meetings to address the various policy issues in order to move forward with additional incentives for Industrial Facility Modernization.



