

## **APPENDIX B**

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### **INITIAL STUDY**



**SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT**

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**Initial Study: Proposed Amended Regulation XX – Regional Clean Air Incentives Market**

**SCAQMD No. 010201JDN**

February 2001

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# **SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT**

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## **CHAPTER 1 - PROJECT DESCRIPTION**

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**Introduction**

**California Environmental Quality Act**

**Project Location**

**Project Background and Objective**

**Project Description**

## **INTRODUCTION**

The California Legislature created the South Coast Air Quality Management District (SCAQMD) in 1977<sup>1</sup> as the agency responsible for developing and enforcing air pollution control rules and regulations in the South Coast Air Basin (Basin) and portions of the Salton Sea Air Basin and Mojave Desert Air Basin. By statute, the SCAQMD is required to adopt an air quality management plan (AQMP) demonstrating compliance with all federal and state ambient air quality standards for the district<sup>2</sup>. Furthermore, the SCAQMD must adopt rules and regulations that carry out the AQMP<sup>3</sup>. The 1997 AQMP concluded that major reductions in emissions of volatile organic compounds (VOCs) and oxides of nitrogen (NOx) are necessary to attain the air quality standards for ozone and particulate matter (PM10).

SCAQMD staff is proposing an integrated group of recommendations to expedite installation of the emissions control equipment contemplated during initial Regional Clean Air Incentives Market (RECLAIM) program design while reducing impacts of California's electricity crisis on the RECLAIM market and facilitating assurance of reliable statewide electricity supply. The proposed amendments to the RECLAIM rules (Regulation XX) are intended to lower and stabilize RTC prices by increasing supply, reducing demand, and increasing RTC trading information availability and accuracy. The amendments are proposed to include the following elements: remove power plants from RECLAIM while maintaining their allocation levels with provisions for exceedances, mitigation fees, "environmental dispatch" (running cleaner units first), and expeditious installation of emission controls; and for the remaining RECLAIM sources: temporary RECLAIM air quality investment program (AQIP), compliance plan filing for large emitting sources, additional disclosure regarding RTC trades, and missing data protocol revisions.

This Initial Study, prepared pursuant to the California Environmental Quality Act (CEQA), identifies "air quality", "energy", and "hazards" as areas that may be adversely affected by the proposed project.

## **CALIFORNIA ENVIRONMENTAL QUALITY ACT**

The proposed amendments to Regulation XX are a "project" as defined by the CEQA. CEQA requires that the potential adverse environmental impacts of proposed projects be evaluated and that methods to reduce or avoid identified significant adverse environmental impacts of these projects be implemented if feasible. The purpose of the CEQA process is to inform the SCAQMD's Governing Board, public agencies, and interested parties of potential adverse environmental impacts that could result from implementing the proposed project and to identify feasible mitigation measures when an impact is significant.

The SCAQMD as Lead Agency for the project, has prepared this Initial Study (which includes an Environmental Checklist). The Environmental Checklist provides a standard evaluation tool to identify a project's adverse environmental impacts. The Initial Study is also intended to provide

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<sup>1</sup> The Lewis-Presley Air Quality Management Act, 1976 Cal. Stats., ch 324 (codified at Health & Safety Code, §§40400-40540).

<sup>2</sup> Health & Safety Code, §40460 (a).

<sup>3</sup> Health & Safety Code, §40440 (a).

information about the proposed project to other public agencies and interested parties prior to the release of the Draft Environmental Assessment (EA). Written comments on the scope of the environmental analysis will be considered (if received by the SCAQMD during the 30-day review period) when preparing the Draft EA.

## **PROJECT LOCATION**

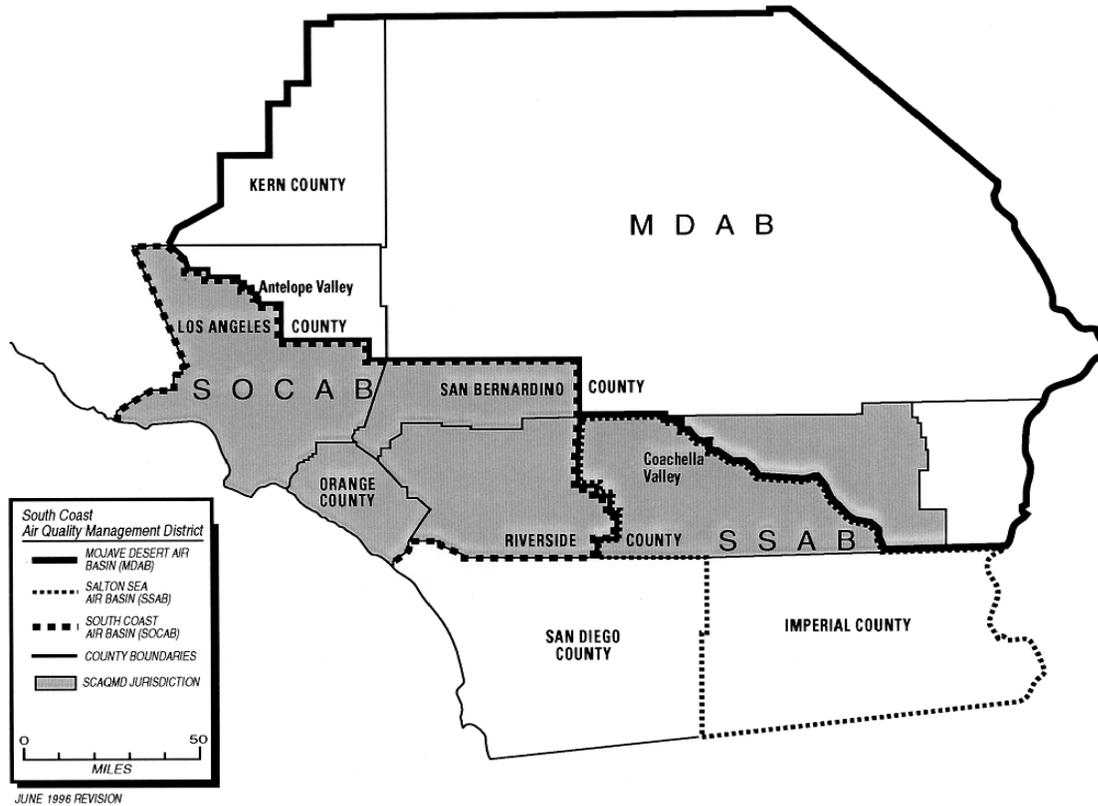
The SCAQMD has jurisdiction over an area of 10,473 square miles (referred to hereafter as the district), consisting of the four-county South Coast Air Basin (Basin) and the Riverside County portions of the Salton Sea Air Basin (SSAB) and the Mojave Desert Air Basin (MDAB). The Basin, which is a subarea of the SCAQMD's jurisdiction, is bounded by the Pacific Ocean to the west and the San Gabriel, San Bernardino, and San Jacinto Mountains to the north and east. The 6,745 square-mile Basin includes all of Orange County and the nondesert portions of Los Angeles, Riverside, and San Bernardino counties. The Riverside County portion of the SSAB and MDAB is bounded by the San Jacinto Mountains in the west and spans eastward up to the Palo Verde Valley. The federal nonattainment area (known as the Coachella Valley Planning Area) is a subregion of both Riverside County and the SSAB and is bounded by the San Jacinto Mountains to the west and the eastern boundary of the Coachella Valley to the east (Figure 1-1).

## **PROJECT BACKGROUND AND OBJECTIVE**

The following is derived from the report entitled White Paper on Stabilization of NO<sub>x</sub> RTC Prices (SCAQMD, 2001). This report is available at SCAQMD Headquarters, by calling the SCAQMD Public Information Center at (909) 396-2039, or by accessing the SCAQMD's website at <http://www.aqmd.gov>.

On October 15, 1993, the SCAQMD Governing Board adopted the RECLAIM program (Regulation XX). This program was developed and adopted in consultation with representatives of a wide variety of interest groups including local, state, and federal agencies, regulated industry, environmental groups, academic institutions, market experts, and the public.

RECLAIM was adopted with the intention of gaining a greater certainty in meeting public health standards while providing industries with the flexibility to seek the most cost-effective solution to reduce their emissions. The RECLAIM program replaced some of the command-and-control rules and control measures specified in the 1991 AQMP. RECLAIM is designed to achieve by year 2003 the same level of emissions reduction as would have been achieved in aggregate by implementing the replaced rules and control measures.



**Figure 1-1**  
**South Coast Air Quality Management District**

Under RECLAIM, SCAQMD established annual NO<sub>x</sub> and/or sulfur oxides (SO<sub>x</sub>) allocations for RECLAIM facilities for each compliance year from 1994 to 2010 and beyond based on historical reported actual emissions and the types of emission sources the facilities operated. The allocation is generally reduced for each year from 1994 to 2003, then remains stable. The NO<sub>x</sub> and SO<sub>x</sub> allocations are expressed as RECLAIM Trading Credits (RTC) where one pound of allocation for a specific compliance year is equal to one unit of RTC with expiration date at the end of the compliance year. RECLAIM requires facility owners to ensure that each year their facility-wide NO<sub>x</sub> and/or SO<sub>x</sub> emissions do not exceed the amount of RTCs available in their allocation account. Under this program, SCAQMD gives RECLAIM facilities the responsibility to decide which method of compliance is appropriate for meeting their facility-wide NO<sub>x</sub> and/or SO<sub>x</sub> emissions "budget." When the SCAQMD Governing Board adopted the RECLAIM program, they anticipated that the program would encourage RECLAIM facilities to embark upon innovative ideas in the areas of process change, adding new control equipment and replacing or refurbishing equipment with state-of-the-art technology to reduce emissions. Alternatively, RECLAIM facilities may purchase credits from other RECLAIM facilities that reduce emissions below their allocations.

RECLAIM generally applies to facilities emitting four tons or more per year of NO<sub>x</sub> and/or SO<sub>x</sub> in the year 1990 or any other subsequent year<sup>4</sup>. Currently, there are approximately 365 facilities under the RECLAIM program.

Emission goals for year 1994 through 1999 have been met. Even though the region experienced economic growth, emissions have decreased and have not exceeded allocations. During the first five years of RECLAIM implementation (1994-1998), excess RTCs were available in the market through facility shutdown, relocation outside the SCAQMD jurisdiction, improved housekeeping, and improved process efficiency. These RTCs were available at a much lower cost than the installation cost of control equipment. However, the rate of actual reduction in emissions has not kept up with the rate of reduction in allocations. The imbalance of the two rates of reduction caused emissions to approach the level of allocation, especially for NO<sub>x</sub> emissions, in 1999.

Since the adoption of RECLAIM, an active trading market has developed for both NO<sub>x</sub> and SO<sub>x</sub> RTCs. During the early years of the RECLAIM program, RTCs could be obtained at a very low price. Therefore, many RECLAIM operators relied on purchasing credits rather than making investments in air pollution control equipment. The average price per ton of SO<sub>x</sub> RTCs from 1996 to 2000 remained relatively stable, ranging from \$1,500 to \$3,000. However, the price of NO<sub>x</sub> RTCs increased dramatically in 2000. Beginning in June 2000, RECLAIM program participants experienced a sharp and sudden increase in NO<sub>x</sub> RTC prices for both 1999 and 2000 compliance years sold during the second half of that year. The average price of 1999 NO<sub>x</sub> RTCs traded in 2000 was \$15,377 per ton, which was almost ten times higher than the average price of \$1,827 per ton of NO<sub>x</sub> RTCs traded in 1999 for the same compliance year. More significantly, the average price for NO<sub>x</sub> RTCs for compliance year 2000, traded during the first ten months in 2000, increased sharply to over \$45,000 per ton compared to the average price of \$4,284 per ton traded in 1999.

As part of the RECLAIM rules, backstop provisions were included into the program design under Rule 2015 – Backstop Provisions. Rule 2015 (b)(6) requires the Executive Officer to submit an evaluation and review of the compliance and enforcement aspects of the RECLAIM program to the California Air Resources Board (CARB) and the U.S. Environmental Protection Agency (EPA). This evaluation must be submitted within six months of the determination that the average RTC price has exceeded \$15,000 per ton. Additionally, Rule 2015 (d) requires the Executive Officer, upon discovery, to propose that the Governing Board amend the program as appropriate to address any specific problems.

One factor that appears to contribute significantly to the price increase is the high demand for NO<sub>x</sub> RTCs from the utility sector during the year 2000. During this period the utility sector purchased 60 percent of NO<sub>x</sub> RTCs which expired in June 2000 and 67 percent of NO<sub>x</sub> RTCs expiring in December 2000. Such high demand from the utility sector quickly depleted the supply of available NO<sub>x</sub> RTCs in the market, resulting in the sharp increase in the NO<sub>x</sub> RTC prices.

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<sup>4</sup> Certain types of sources are excluded from the RECALIM program. Rule 2001 – Applicability, specifies criteria for inclusion in RECLAIM.

The substantial increased demand for RTCs by the utility sector is directly related to the statewide electricity crisis. The electricity crisis arose due to a number of factors, including an increase in demand that has outpaced available supply. That situation led to an extreme wholesale price fluctuation of natural gas and electricity which, coupled with the partial deregulation of the electric utilities market, has caused an economic hardship on some electricity providers in California<sup>5</sup>. The higher costs of natural gas and wholesale electricity cannot be passed on to consumers as state law limits the price that the utilities can charge their customers. As a result of the finances of the electric utilities, some out-of-state electricity producers have been reluctant to sell power to California utilities for fear of not being paid. In addition, the Northwest's supply of hydroelectric power to California has been limited. Consequently, numerous Stage 3 power alerts<sup>6</sup> have been issued and, in some instances, electric utilities have imposed "rolling blackouts" in northern California. The issue is being urgently addressed at the state and federal level.

A consequence of these events is that local power producers have generated additional electricity to make up for the shortfall of imported supplies. The need to generate additional electricity to meet the state's power requirements has caused or will cause some facilities in the utility sector to exceed their RECLAIM allocations. Thus, demand for RTCs, and their price, has rapidly and substantially increased.

Considering the above, the objectives of the proposed amendments are to:

- 1) facilitate state and federal efforts to assure a reliable statewide electricity supply by providing greater flexibility to power plants in meeting the requirements of Regulation XX while maintaining regulations protective of public health; and
- 2) lower and stabilize RTC prices by increasing supply, reducing demand, and increasing RTC trading information availability and accuracy.

As additional background information, it should be noted that beginning in 1993, the SCAQMD adopted a series of mobile source credit rules under Regulation XVI – Mobile Source Offset Programs, and area source credit rules under Regulation XXV – Intercredit Trading<sup>7</sup>. These voluntary programs set forth protocols for generating mobile source emission credits (MSERCs) and area source credits (ASCs). These credits have historically been used as an alternative method of compliance with the SCAQMD's ridesharing rule, Rule 2202 – On-Road Motor Vehicle Mitigation Options. Some of the MSERCs and ASCs have also been used to comply with stationary source rules, including Regulation XX. Since the Regulation XVI rules and Rule 2506 have not been federally approved, however, stationary sources that use credits generated pursuant to these rules as an alternative to directly complying with source specific rule

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<sup>5</sup> Three local utilities generate their own power and have not been affected by the recent natural gas/electricity price fluctuations (Los Angeles Department of Water and Power (LADWP), the Public Service Department for the cities of Burbank and Glendale, and the Water and Power Department for the City of Pasadena).

<sup>6</sup> A Stage 3 alert is called when electricity reserves fall below 1.5 percent of demand.

<sup>7</sup> The major SCAQMD mobile source programs include Rules 1610 – Old Vehicle Scrapping, 1612 – Credits for Clean On-Road Vehicles, and 1620 – Credits for Clean Off-Road Mobile Equipment. The major area source credit program is Rule 2506 - Area Source Credits for NO<sub>x</sub> and SO<sub>x</sub>.

requirements may be subject to federal enforcement actions. This has discouraged the demand for these credits by stationary sources, thereby depressing their generation.

Consequently, irrespective of the present problems leading to the proposed amendments to Regulation XX, staff has been seeking federal approval and incorporation into the State Implementation Plan (SIP) of existing mobile and area source credit generation rules. Federal approval would provide certainty for the users of the credits generated pursuant to these rules which could lead to an increase in the generation of such credits and, thus, an increase in the supply of RTCs. To further increase the supply of RTCs, staff has also been developing protocols that would allow generation of credits from additional mobile and area sources. Separate rule development and CEQA review will be undertaken for these proposals.

## **PROJECT DESCRIPTION**

Over the last several months, SCAQMD staff has been involved in fact finding discussions with a wide variety of individuals interested in the RECLAIM program. These discussions, along with Advisory Committee meetings, included representatives of facilities in varying compliance status with RECLAIM, RTC brokers, EPA, CARB, California Energy Commission (CEC), and environmental groups. After careful consideration of the suggestions and concerns discussed, staff is proposing an integrated group of recommendations to modify the RECLAIM program. These recommendations are expected to encourage expedited installation of the emissions control equipment contemplated during initial RECLAIM program design, reduce the impacts of California's electricity crisis on the RECLAIM market, and facilitate state and federal efforts to assure a reliable statewide electricity supply. SCAQMD staff intends to propose a set of measures that are simple, directed to the exact problems at hand, and treat fairly the vast majority of facilities that remain in compliance with program requirements.

The proposed amendments to the RECLAIM rules are intended to provide greater flexibility to power producers and lower and stabilize RTC prices by increasing supply, reducing demand, and increasing RTC trading information availability and accuracy. The rule amendments are proposed to include the following elements:

### **Bifurcate Power Plants from RECLAIM**

Under this element, electrical generation facilities would be isolated from the remainder of the RECLAIM universe for at least the 2001 through 2003 compliance years. These facilities may or may not be able to rejoin the full RECLAIM universe based upon whether their reentry will result in any negative impact on the remainder of the RECLAIM universe or California's energy security needs. The number of RTCs available for these facilities' use would be frozen at their original allocation plus any purchases made through a specified date. Any emissions in excess of these available RTCs are proposed to be offset by the payment of a mitigation fee to be set at a level that will allow NOx emission reductions from mobile, stationary or area sources to be obtained to mitigate any air pollution effects. The suggested level is \$7.50 per pound (\$15,000 per ton). Evaluation of whether these excess emissions over RTC holdings should also be debited from the facility's next compliance year allocation and/or "environmental dispatch" of units (running of cleaner units first) will also be considered. It is also proposed to require all such facilities to file a compliance plan for incorporation into their permit. This compliance plan

must present an expedited schedule for control equipment installation and/or repowering to clean generation equipment to produce the maximum feasible emissions reduction. Current Abatement Orders and Settlement Agreements would in general constitute compliance with the compliance plan submittal requirement if they are at least as stringent.

Implementation of this recommendation will increase the supply of RTCs available for the remainder of the RECLAIM universe by reducing utility sector demand. It is also designed to provide more flexibility to electricity generators while limiting their influence on NO<sub>x</sub> RTC prices.

### **Temporary RECLAIM Air Quality Investment Program (AQIP)**

Some facilities in the RECLAIM market are totally dependent on credit purchases by program design (e.g., so called "structural buyers" and new power plants). As a result of the sharp increase in RTC prices, there may need to be an additional means of compliance for these facilities if the prices do not come down. To meet this need, staff is considering a temporary pilot effort for an AQIP for the 2001-2003 compliance years. Criteria for limiting participation would be determined during rule development.

Under the AQIP, facilities will pay into a fund for every ton of emissions in excess of the amount covered by usable RTCs. The fee will initially be set at a fixed level per pound (a level above the marginal costs of controls). SCAQMD will use the funds paid into the AQIP to obtain NO<sub>x</sub> emission reductions from stationary, area and mobile sources.

The SCAQMD Governing Board may also consider prefunding the AQIP with a loan to obtain actual emission reductions during Compliance Year 2001. Funds will be replenished by payments for emissions exceeding usable RTCs. SCAQMD staff currently believes that cost-effective reductions will be available at less than \$15,000 per ton (\$7.50 per pound), since staff estimated in the October 2000 RECLAIM report that there are additional NO<sub>x</sub> reductions available within the RECLAIM universe at under such cost. It is proposed that the Governing Board evaluate the appropriate funding amount each year during review of the annual RECLAIM Compliance Report.

By establishing the AQIP program, SCAQMD would be assuming some of the responsibility for achieving necessary NO<sub>x</sub> emission reductions that would otherwise be the responsibility of RECLAIM facilities. For this reason, SCAQMD proposes the AQIP initially as a three-year pilot program, subject to full reevaluation by the Governing Board on an annual basis. In addition, the pilot program would be limited in number of tons per year available to be made up through AQIP. SCAQMD staff proposes that the initial limit be determined during rule development. Should demand for the AQIP program exceed that limit a method would need to be established for allocating access to the AQIP, and any exceedances not covered by the AQIP would constitute rule violations.

Implementing the temporary AQIP proposal would ensure that emission reductions are available for a limited number of RECLAIM participants that have special needs.

## **Compliance Plan Filing**

Staff proposes requiring the largest emitting RECLAIM facilities to file a compliance plan demonstrating the steps they will take to come into compliance with their Compliance Year 2001, 2002, and 2003 NO<sub>x</sub> RTC holdings at the time of compliance plan submittal. These plans are proposed to be filed in two phases with facilities emitting 25 tons or more of NO<sub>x</sub> in Compliance Year 1999 first, followed by those reporting 10 to 25 tons in Phase 2. Criteria for compliance plan approval will be specified during rule development.

Implementation of this proposal will address the lag time between control equipment installation and the realization of the attendant emission reductions to better forecast market supply and demand. It will also assure all major RECLAIM companies devote immediate attention to their emission reduction planning effort and commit to an enforceable plan ensuring the required emission reductions occur. It encourages commitment to install the required air pollution control technologies without layering new command and control requirements on top of the market-based program.

## **RTC Trade Registration Improvements**

The proposed amendments would specify additional RTC Trade Registration reporting requirements<sup>8</sup>, including at least: 1) broker disclosure of actual RTC seller, 2) enforceable certification of trading transaction date, and 3) timely filing of trade registrations with SCAQMD within 14 calendar days of transaction date. Implementation of this recommendation will increase information availability and accuracy of trade data available to the public through the SCAQMD.

## **Missing Data Protocol Revision**

SCAQMD staff proposes to develop a specific missing data protocol for missing and late electronic reports. In some limited circumstances, a company that can demonstrate that their transmission of actual emissions data was not timely would not be required to use missing data procedures<sup>9</sup>. Implementation of this recommendation would reduce the impact of missing data procedures on the availability of RTCs.

In summary, bifurcation of the program as proposed by staff is a response to the need to provide greater flexibility to power plants while removing power plant RTC demand from dominating the RECLAIM market and causing RTC prices to substantially increase. Yet, if existing power plants do not have some remaining constraint on their emissions, there could be a large increase in generation and associated power plant emissions within SCAQMD's jurisdiction. The proposal would attempt to maintain appropriate limits on power plant emissions while removing their influence from the RECLAIM market. Further, the proposal would attempt to maintain incentives for power generation to be as clean as possible, while making the environment whole

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<sup>8</sup> Rule 2007 – Trading Requirements, defines the RECLAIM trading unit and establishes trading requirements for RECLAIM.

<sup>9</sup> Missing data procedures, specified in Rule 2012, are used to determine substitute data whenever a valid hour of NO<sub>x</sub> emission data has not been obtained or recorded

for any exceedances. It is expected that equivalent or close to equivalent emission reductions will occur in each year as would have occurred under RECLAIM. Thus, the proposal would attempt to maintain expeditious progress toward air quality goals while allowing necessary electricity generation to occur.

To help meet the goals of the project, staff will create a RECLAIM Rule Development Working Group with broad-based participation and solicit outside peer review of amendments to the RECLAIM market structure prior to presentation to the Governing Board for adoption.



## **CHAPTER 2 - ENVIRONMENTAL CHECKLIST**

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**Introduction**

**General Information**

**Potentially Significant Impact Areas**

**Determination**

**Environmental Checklist and Discussion**



## INTRODUCTION

The environmental checklist provides a standard evaluation tool to identify a project's adverse environmental impacts. This checklist identifies and evaluates potential adverse environmental impacts that may be created by the proposed amendments to the RECLAIM program.

## GENERAL INFORMATION

Name of Proponent: South Coast Air Quality Management District  
Address of Proponent: 21865 E. Copley Drive  
Diamond Bar, CA 91765  
Lead Agency: South Coast Air Quality Management District  
CEQA Contact Person: Jonathan D. Nadler (909) 396-3071  
Rule Contact Person: Jill Whynot (909) 396-3104  
Name of Project: Proposed Amended Regulation XX - RECLAIM

## POTENTIALLY SIGNIFICANT IMPACT AREAS

The following environmental impact areas have been assessed to determine their potential to be affected by the proposed project. Any checked items represent areas that may be adversely affected by the proposed project. An explanation relative to the determination of impacts can be found following the checklist for each area.

- |                                                 |                                                                     |                                                        |
|-------------------------------------------------|---------------------------------------------------------------------|--------------------------------------------------------|
| <input type="checkbox"/> Aesthetics             | <input type="checkbox"/> Geology and Soils                          | <input type="checkbox"/> Population and Housing        |
| <input type="checkbox"/> Agricultural Resources | <input checked="" type="checkbox"/> Hazards and Hazardous Materials | <input type="checkbox"/> Public Services               |
| <input checked="" type="checkbox"/> Air Quality | <input type="checkbox"/> Hydrology and Water Quality                | <input type="checkbox"/> Recreation                    |
| <input type="checkbox"/> Biological Resources   | <input type="checkbox"/> Land Use and Planning                      | <input type="checkbox"/> Solid/Hazardous Waste         |
| <input type="checkbox"/> Cultural Resources     | <input type="checkbox"/> Mineral Resources                          | <input type="checkbox"/> Transportation./Traffic       |
| <input checked="" type="checkbox"/> Energy      | <input type="checkbox"/> Noise                                      | <input checked="" type="checkbox"/> Mandatory Findings |

**DETERMINATION**

On the basis of this initial evaluation:

- I find the proposed project, in accordance with those findings made pursuant to CEQA Guideline §15252, could NOT have a significant effect on the environment, and that an ENVIRONMENTAL ASSESSMENT with no significant impacts will be prepared.
- I find that although the proposed project could have a significant effect on the environment, there will NOT be significant effects in this case because the mitigation measures described on an attached sheet have been added to the project. An ENVIRONMENTAL ASSESSMENT with no significant impacts will be prepared.
- I find that the project MAY have a significant effect(s) on the environment, and an ENVIRONMENTAL ASSESSMENT will be prepared.

**Date:** January 31, 2001

**Signature:** \_\_\_\_\_

Alene Taber  
Manager  
Planning, Rules, and Area Sources

**ENVIRONMENTAL CHECKLIST AND DISCUSSION**

The proposed project is intended to lower and stabilize RTC prices by increasing their supply, reducing demand, and increasing trading information availability and accuracy. The projects that may be undertaken to increase the RTC supply and reduce demand include process changes and control equipment at stationary sources such as low-NOx burners, selective catalytic reduction, SCONOX, and other burner and flue gas configurations that improve the efficiency of the combustion process. Any ASCs or MSERCs that may be created (and converted to RTCs) through the proposed mitigation fee or AQIP will most likely be generated by the replacement or repowering of existing diesel and gasoline engines with lower-emitting engines using electric power or alternative fuels such as compressed natural gas (CNG), liquefied natural gas (LNG), or liquefied petroleum gas (LPG).

It must be noted that the projects assumed to occur as a means of increasing the RTC supply and reducing the demand could occur under the existing RECLAIM program. The proposed amendments would merely further induce such projects to occur.

**Potentially Significant      Less Than Significant      No Impact**

	Impact	Impact	
<b>I. AESTHETICS.</b> Would the project:			
a) Have a substantial adverse effect on a scenic vista?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Substantially degrade the existing visual character or quality of the site and its surroundings?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

I. a) - d): The proposed project is intended to lower and stabilize RTC prices by increasing supply, reducing demand, and increasing trading information availability and accuracy. The projects that may be undertaken to increase the RTC supply and reduce demand include process changes and control equipment at stationary sources and the replacement or repowering of existing mobile source engines with lower-emitting engines. Such projects would require installation of control equipment and construction of alternative fuel fueling stations. These activities are not expected to result in a substantial adverse effect on any scenic vistas, substantially degrade the existing visual character or quality of any site and its surroundings, or create new sources of substantial light or glare which would adversely affect day or nighttime views of an area. The projects would occur mainly in commercial and industrial areas and would be subject to local zoning requirements as enforced through building permits.

	Potentially Significant Impact	Less Than Significant Impact	No Impact
<b>II. AGRICULTURE RESOURCES.</b> Would the project:			
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Conflict with existing zoning for agricultural use,	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

or a Williamson Act contract?

- |    |                                                                                                                                                            |                          |                          |                                     |
|----|------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|--------------------------|-------------------------------------|
| c) | Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
|----|------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|--------------------------|-------------------------------------|

II. a) - c): The proposed project would not result in any new construction of buildings or other structures that would convert farmland to non-agricultural use or conflict with zoning for agricultural use or a Williamson Act contract. There are no provisions in the proposed amended regulation that would affect land use plans, policies, or regulations. Land use and other planning considerations are determined by local governments and no land use or planning requirements will be altered by the proposed project. As discussed above, projects undertaken to increase RTC supply and reduce demand would occur mainly in commercial and industrial areas and would be subject to local zoning requirements.

	<b>Potentially Significant Impact</b>	<b>Less Than Significant Impact</b>	<b>No Impact</b>	
<b>III. AIR QUALITY.</b> Would the project:				
a)	Conflict with or obstruct implementation of the applicable air quality plan?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b)	Violate any air quality standard or contribute to an existing or projected air quality violation?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c)	Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions that exceed quantitative thresholds for ozone precursors)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d)	Expose sensitive receptors to substantial pollutant concentrations?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e)	Create objectionable odors affecting a substantial number of people?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f)	Diminish an existing air quality rule or future compliance requirement resulting in a significant increase in air pollutant(s)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

III. a) - f): The Draft EA will investigate whether the proposed amendments to RECLAIM result in any of the following: 1) a delay the time in which anticipated emission reductions are achieved; 2); less emission reductions than would have otherwise occurred under the current RECLAIM program; or 3) the creation of adverse localized effects.

	Potentially Significant Impact	Less Than Significant Impact	No Impact
<b>IV. BIOLOGICAL RESOURCES.</b> Would the project:			
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Have a substantial adverse effect on federally protected wetlands as defined by §404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Conflicting with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Conflict with the provisions of an adopted Habitat Conservation plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

IV. a) - f): No direct or indirect impacts from the proposed project were identified that could adversely affect plant or animal species or the habitats on which they rely in the SCAQMD's jurisdiction. A conclusion of the 1997 AQMP EIR was that population growth in the region would have greater adverse effects on plant species and wildlife dispersal or migration corridors in the basin than SCAQMD regulatory activities, (e.g., air quality control measures or regulations). The current and expected future land use development to accommodate population growth is primarily due to economic considerations or local government planning decisions.

There are no provisions in the proposed rule that would affect land use plans, policies, or regulations. Land use and other planning considerations are determined by local governments and no land use or planning requirements will be altered by the proposed project. The proposed amendments to RECLAIM would not affect in any way habitat conservation or natural community conservation plans, agricultural resources or operations, and would not create divisions in any existing communities. It is assumed that any control equipment installation or other construction will occur at existing facilities located in industrial, institutional, or commercial areas.

	Potentially Significant Impact	Less Than Significant Impact	No Impact
<b>V. CULTURAL RESOURCES.</b> Would the project:			
a) Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Cause a substantial adverse change in the significance of an archaeological resource as defined in §15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Disturb any human remains, including those interred outside a formal cemeteries?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

V. a) - d): It is assumed that any control equipment installation or other construction will occur at existing facilities located in industrial, institutional, or commercial areas. Any construction that may be associated with the proposed project would likely be done at previously disturbed sites and, thus, has no potential to cause a substantial adverse change in the significance of a historical or archaeological resource, directly or indirectly destroy a unique paleontological resource or site

or unique geologic feature, or disturb any human remains, including those interred outside a formal cemeteries.

	Potentially Significant Impact	Less Than Significant Impact	No Impact
<b>VI. ENERGY.</b> Would the project:			
a) Conflict with adopted energy conservation plans?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Result in the need for new or substantially altered power or natural gas utility systems?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Create any significant effects on local or regional energy supplies and on requirements for additional energy?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) Create any significant effects on peak and base period demands for electricity and other forms of energy?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e) Comply with existing energy standards?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

VI. a), b), e): The proposed project is intended to lower and stabilize RTC prices by increasing supply, reducing demand, and increasing trading information availability and accuracy. Possible elements of the proposal are the use of mitigation fees and a temporary AQIP to fund projects to generate RTCs. Projects that may be funded under these programs include the replacement or repowering of existing mobile or area source engines with lower-emitting engines. Such projects may increase the use of natural gas, electricity, or other non-conventional fuels such as liquefied petroleum gas. The potential increased use of these power sources would not be expected to conflict with adopted energy conservation plans, result in the need for new or substantially altered power or natural gas utility systems, or be out of compliance with existing energy standards.

VI. c) , d): The Draft EA will evaluate whether the potential for increased use of natural gas, electricity, or other non-conventional fuels would create significant effects on local or regional energy supplies, including significant effects on peak and base period demands for energy.

	Potentially Significant Impact	Less Than Significant Impact	No Impact
<b>VII. GEOLOGY AND SOILS.</b> Would the project:			
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

• Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
• Strong seismic ground shaking?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
• Seismic-related ground failure, including liquefaction?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
• Landslides?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Result in substantial soil erosion or the loss of topsoil?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Be located on a geologic unit or soil that is unstable or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

VII. a) - e): Any soil disruption impacts are expected to be negligible because construction will likely be limited to areas where previous soil disruption has occurred and there is some form of overcovering (e.g., pavement of concrete) already in place. Therefore, the proposed project would not result in significant disruption or overcovering of soil, or changes in topography or surface relief features. The proposal would not result in the erosion of beach sand, or a change in existing siltation rates. In addition, the proposed project would not expose people or property to geological hazards such as earthquakes, landslides, mudslides, ground failure, or other natural hazards. Since the proposed project would result in construction activities in industrial, institutional, and/or commercial settings, little site preparation is anticipated that could adversely affect geophysical conditions in the jurisdiction of the SCAQMD.

	Potentially Significant Impact	Less Than Significant Impact	No Impact
<b>VIII. HAZARDS AND HAZARDOUS MATERIALS.</b> Would the project:			
a) Create a significant hazard to the public or the environment through the routine transport, use, and disposal of hazardous materials?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Emit hazardous emissions, or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code §65962.5 and, as a result, would create a significant hazard to the public or the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
i) Significantly increased fire hazard in areas with	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

flammable materials?

VIII. a) - i): The potential hazards associated with the proposed project involve the increased use of ammonia (for SCR), CNG, LNG, and LPG.

The potential hazards associated with the increased use of ammonia will be analyzed in the Draft EA. The increased use of CNG, LNG, and LPG are not expected to result in significant adverse hazard impacts for the reasons discussed below.

The hazards associated with the construction of alternative fuel fueling stations are similar to the hazards associated with the installation of diesel fuel facilities. Both involve approximately equivalent risks of upsets and worker and public exposure to physical hazards and hazardous substances. These construction-related hazards, however, are relatively well defined and commonplace and considered insignificant when compared to the overall construction activities within the SCAQMD jurisdiction.

Comparing natural gas and petroleum gas with diesel fuel, the following can be stated (SCAQMD, 2000):

- ✓ Diesel fuel is toxic to the skin and lungs; natural gas and petroleum gas are not;
- ✓ Diesel fuel vapors are heavier than air (specific gravity of air =1 and diesel fuel is >4). Natural gas is lighter than air (specific gravity is 0.55) and disperses more readily than diesel in air. Though petroleum gas is heavier than air, it is lighter than diesel fuel (specific gravity is 1.52) and would also disperse more readily than diesel;
- ✓ Natural gas and petroleum gas have higher auto ignition temperatures (1,200°F and 920°F, respectively) than diesel fuel (500°F);
- ✓ Natural gas and petroleum gas are more difficult to ignite since their “lower flammability limit” are higher (5.3 percent and 2.0 percent, respectively) than diesel fuel (0.5 percent); and,
- ✓ Natural gas can be directly shipped via pipelines to the compressor station, rather than by on-road delivery trucks, and thus has less delivery accident risk than vehicle shipments. Conversely, depending on the relative size of delivery trucks, the number of trips to deliver LPG may be greater since it has a lower fuel value than diesel (1.86 gallons of LPG = 1.0 gallon of diesel).

Conventional fuels, such as diesel fuel, have been used since the introduction of the internal combustion engine, and their associated hazards are well known. Alternative clean fuels discussed in this section pose different hazards during storage, handling, transport, and use than conventional fuels. In general, the hazards posed by the conversion to alternative clean fuels are not significantly greater than those posed by diesel fuel. The hazards posed by the use of alternative clean fuels that may be slightly higher than those posed by the conventional fuels are in the following areas:

- CNG - The main additional hazard associated with the use of CNG versus diesel is the exposure to high pressures employed during storage, dispensing and operations. Due to these high pressures a large amount of gas could escape in a short amount of time and, if present under flammable conditions, could explode in the presence of an ignition source. Another potentially significant hazard is a release of natural gas during vehicle maintenance.
- LNG - The main additional hazard associated with the use of LNG versus diesel are personal injuries from contact with a cryogenic liquid and the potential for explosion stemming from release in the case of an accident (e.g. a tanker truck accident or storage tank failure). Another potentially significant hazard is a release of natural gas during vehicle maintenance.
- LPG - The main additional hazard associated with the use of LPG versus diesel is the potential in the event of a tank rupture for the gas to pool and boil off. This presents the possibility of a boiling liquid, vapor cloud explosion and fire. Another potential hazard is a release of propane gas during vehicle maintenance.

Though CNG, LNG, and LPG pose some different hazards during storage, handling, transport, and use than conventional fuels, these clean fuels are widely used and their potential hazards are well understood and accounted for in building and fire codes and standard emergency planning. Existing emergency planning is anticipated to adequately minimize the risk associated with the substitution of natural gas or petroleum gas for diesel fuel. Businesses are required to report increases in the storage or use of flammable and otherwise hazardous materials to local fire departments. Local fire departments ensure that adequate permit conditions are in place to protect against potential risk of upset.

The Uniform Fire Code and Uniform Building Code set standards intended to minimize risks from flammable or otherwise hazardous materials. Local jurisdictions are required to adopt the uniform codes or comparable regulations. Local fire agencies require permits for the use or storage of hazardous materials and permit modifications for proposed increases in their use. Permit conditions depend on the type and quantity of the hazardous materials at the facility. Permit conditions may include, but are not limited to, specifications for sprinkler systems, electrical systems, ventilation, and containment. The fire departments make annual business inspections to ensure compliance with permit conditions and other appropriate regulations.

Some of the various existing regulations and standard operating procedures for the transport, storage, and use of CNG, LNG, and LPG are presented in Table 2-1. When operators using alternative fuels comply with existing regulations and standard operating procedures, potential hazards impacts associated with the use of CNG, LNG, and LPG would be generally equivalent to those of conventional fuel. Consequently, potential hazard impacts associated with the possible increased use of these materials are not expected to be significant.

**TABLE 2-1**

Summary of Hazards and Existing Safety Regulations/Standard Operating Procedures  
Associated with Alternative Clean-Fuels

<b>Fuel Type</b>	<b>Hazard</b>	<b>Regulation/Procedure</b>
CNG	CNG bottles are typically stored outside and are required to be above ground (NFPA 52) as opposed to below ground for gasoline or diesel tanks. There is a risk of vehicles colliding with the bottles causing a gas release.	Collisions can be prevented by installation of curbing and bollards to protect the tanks from vehicle operations (LAF57.42.16).
	Potential release of gas in the maintenance shop creating explosive risk.	Installation of methane detection systems in the shop can provide early detection of leaks and alert the maintenance personnel. (If integrated with vent systems, vents are not required to operate continuously - CFC 2903.2.5). Ignition sources can be reduced/eliminated by ensuring that all electrical systems in the shop are explosion proof (smoking and open flames are prohibited under CFC 2901.7). Providing adequate ventilation can prevent the occurrence of explosive conditions (required under CFC2903.1). Procedures can be established to ensure that all vehicles requiring maintenance are defueled and depressurized before admission to the maintenance depot.
LNG	LNG is a cryogenic liquid and has the potential risk to workers of burns (frostbite) that can be suffered if workers come in contact with the liquid or with surfaces that are not insulated.	Proper safety equipment and training can moderate these hazards.
	LNG is generally stored above ground. Since it is a cryogenic liquid, in the event of a release, a fraction of the liquid immediately flashes off to gas while the majority of the remainder will pool and boil violently emitting dense vapor. If a source of ignition is present, the boiling liquid, dense vapor and gas could explode and burn threatening surrounding facilities and other storage vessels.	Tanks can be protected by containment dikes (required if neighboring tanks can be affected LAF57.42.11) and physically separated LAF57.42.10) so that they do not interact in case of a fire or explosion. Deluge systems can be installed to cool neighboring tanks in case of a fire.

**TABLE 2-1 (cont.)**

Summary of Hazards and Existing Safety Regulations/Standard Operating Procedures Associated with Alternative Clean-Fuels

Fuel Type	Hazard	Regulation/Procedure
LNG cont.	Potential release of gas in the maintenance shop creating explosive risk.	Installation of flammable gas detection systems in the shop can provide early detection of leaks and alert the maintenance personnel. (Required for LNG under CFC2903.3). Ignition sources can be reduced/eliminated by ensuring that all electrical systems in the shop are explosion proof (smoking and open flames are prohibited under CFC 2901.7). Providing adequate ventilation can prevent the occurrence of explosive conditions (required under CFC2903.1). Vehicle fuel shut-off valves shall be closed prior to repairing any portion of the vehicle fuel system (CFC2903.4.1). Vehicles fueled by LNG, which may have sustained damage to the fuel system, shall be inspected for integrity with a gas detector before being brought into the garage (CFC2903.4.2). Procedures can be established to ensure that all vehicles requiring maintenance are defueled and depressurized before admission to the maintenance depot.
LPG	There is a danger of releasing gas in a maintenance shop with its related explosive hazards (a flammable concentration within an enclosed space in the presence of an ignition source can explode).	Installation of combustible gas detection systems in the shop can provide early detection of leaks and alert the maintenance personnel. Ignition sources can be reduced/eliminated by ensuring that all electrical systems in the shop are explosion proof. Providing adequate ventilation can prevent the occurrence of explosive conditions. Procedures can be established to ensure that all vehicles requiring maintenance are defueled and depressurized before admission to the maintenance depot. NFPA 58, 8-6 requires that the cylinder shut-off valve be closed when vehicles or engines are under repair except when the engine is operated. Also, the vehicle cannot be parked near sources of heat, open flames, or similar sources of ignition or near inadequately ventilated pits.

CFC = California Fire Code; LAFC = City of Los Angeles Fire Code (it is expected that cities in Orange, Riverside, and San Bernardino Counties have in place similar regulations); NFPA = National Fire Protection Association

**Potentially Significant Impact**     
 **Less Than Significant Impact**     
 **No Impact**

**IX. HYDROLOGY AND WATER QUALITY.**

Would the project:

- a) Violate any water quality standards or waste discharge requirements?

b)	Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g. the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c)	Substantially alter the existing drainage pattern of the site or area, including through alteration of the course of a stream or river, in a manner that would result in substantial erosion or siltation on- or off-site?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d)	Substantially alter the existing drainage pattern of the site or area, including through alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner that would result in flooding on- or off-site?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e)	Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f)	Otherwise substantially degrade water quality?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g)	Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
h)	Place within a 100-year flood hazard area structures which would impede or redirect flood flows?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
i)	Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
j)	Inundation by seiche, tsunami, or mudflow?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
k)	Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

- |    |                                                                                                                                                                                                                                 |                          |                          |                                     |
|----|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|--------------------------|-------------------------------------|
| l) | Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?                             | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| m) | Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?                                      | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| n) | Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?                                                                             | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| o) | Require in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

IX. a) - o): The proposed project is intended to lower and stabilize RTC prices by increasing supply, reducing demand, and increasing trading information availability and accuracy. The projects that may be undertaken to increase RTC supply and reduce demand include process changes and installation control equipment at stationary sources and the replacement or repowering of existing mobile source engines with lower-emitting engines.

The construction associated with projects that may be undertaken to increase RTC supply and reduce demand may use water as a dust suppressant if grading is required. Most control equipment installation at stationary sources, however, would not be expected to require grading. Other than possible grading for installation of an ammonia tank for SCR, most of the modifications would occur to existing equipment (i.e., burners and flue gas ductwork). Grading would more likely be required for the installation of alternative fuel fueling stations. The amount of water that may be used for this purpose has been previously analyzed and is minimal. In the Final Environmental Assessment for the Proposed Fleet Vehicle Rules and Related Amendments (SCAQMD No.000307DWS, June 2000), it was estimated that water use associated with dust suppression during the demolition and removal of underground diesel fuel storage tanks would be 222 gallons of water per day per site. This nominal amount of water use is not considered significant.

Additionally, water used for dust suppression does not have to be of potable quality, but can be reclaimed water. Reclaimed water is currently available in many areas of the SCAQMD's jurisdiction. Furthermore, it is likely that many of the fleets that may convert to alternative clean fuels to generate MSERCs would retain some conventional fueled vehicles in the fleet such that associated conventional fuel storage tanks would be left in use.

Process changes and the use of additional control equipment at stationary sources and the replacement or repowering of existing area or mobile source engines with alternative clean fuel engines or electric power would not be expected to result in significant adverse water resource impacts. No additional water demand or wastewater generation results from the operation of SCR systems or low-NOx burners at stationary sources. Likewise, the additional use of CNG, LNG, LPG, or electricity would not result in significant water demand or wastewater impacts. Because CNG is a gas that is stored in aboveground high-pressure cylinders, the potential for impacts to water quality is minimal. Likewise, even though LNG and LPG are transported and stored as liquids, they are gases under ambient conditions and will volatilize (i.e., form a gas) upon release. Thus, any pooling on the ground from an accidental release would be for a short period of time and would be unlikely to migrate to freshwater or groundwater bodies.

In conclusion, the proposed project has no provision that would require the construction of additional water resource facilities, the need for new or expanded water entitlements, or an alteration of drainage patterns. The project would not substantially deplete groundwater supplies or interfere substantially with groundwater recharge. The proposed rule would not create or contribute runoff water that would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff, violate any water quality standards or waste discharge requirements, or otherwise substantially degrade water quality.

	Potentially Significant Impact	Less Than Significant Impact	No Impact
<b>X. LAND USE AND PLANNING.</b> Would the project:			
a) Physically divide an established community?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Conflict with any applicable habitat conservation or natural community conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

X. a) - c): There are no provisions of the proposed project that would affect land use plans, policies, or regulations. Land use and other planning considerations are determined by local governments and no land use or planning requirements will be altered by the projects that may be undertaken to increased the supply and reduce the demand for RTCs. The proposed project would not affect in any way habitat conservation or natural community conservation plans, agricultural resources or operations, and would not create divisions in any existing communities.

It is assumed that any projects undertaken as a result of the proposed modifications to the RECLAIM program will occur at existing facilities located in industrial, institutional, or commercial areas.

	<b>Potentially Significant Impact</b>	<b>Less Than Significant Impact</b>	<b>No Impact</b>
<b>XI. MINERAL RESOURCES.</b> Would the project:			
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

XI. a), b): There are no provisions of the proposed project that would result in the loss of availability of a known mineral resource of value to the region and the residents of the state, or of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan

	<b>Potentially Significant Impact</b>	<b>Less Than Significant Impact</b>	<b>No Impact</b>
<b>XII. NOISE.</b> Would the project result in:			
a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) A substantial temporary or periodic increase in	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

ambient noise levels in the project vicinity above levels existing without the project?

- |    |                                                                                                                                                                                                                                                                  |                          |                          |                                     |
|----|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|--------------------------|-------------------------------------|
| e) | For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| f) | For a project within the vicinity of a private airship, would the project expose people residing or working in the project area to excessive noise levels?                                                                                                       | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

XII. a) - f): The potential noise impacts from construction activities that may be associated with the proposed project are not considered significant because the duration of the noise would only be for a short period of time and construction equipment operation would be required to comply with local city or county noise ordinances. Likewise, any changes to operational noise would occur in industrial or commercial areas where noise levels are already relatively high. All noise producing equipment must comply with local noise ordinances and applicable OSHA or Cal/OSHA workplace noise reduction requirements.

	<b>Potentially Significant Impact</b>	<b>Less Than Significant Impact</b>	<b>No Impact</b>	
<b>XIII. POPULATION AND HOUSING.</b> Would the project:				
a)	Induce substantial growth in an area either directly (for example, by proposing new homes and businesses) or indirectly (e.g. through extension of roads or other infrastructure)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b)	Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c)	Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

XIII. a) - c): Human population in the SCAQMD's jurisdiction is anticipated to grow regardless of implementing the proposed project. The proposal would not result in the creation of any

industry that would induce or inhibit population growth or distribution. Because the proposed project has no effect on population growth or distribution, the proposed rule would not directly or indirectly induce the construction of single- or multiple-family housing units. Accordingly, no significant adverse impacts on human population or housing are expected.

	<b>Potentially Significant Impact</b>	<b>Less Than Significant Impact</b>	<b>No Impact</b>
<b>XIV. PUBLIC SERVICES.</b> Would the proposal result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered government facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the following public services:			
a) Fire protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Police protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Schools?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Parks?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Other public facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

XIV. a) - e): As shown by the responses to the other checklist topics, the proposed project does not have the potential to directly or indirectly result in significant adverse effects to public services. The only services that may be affected is fire protection due to a possible increase in the use of ammonia (for SCR) and alternative clean fuels. Ammonia, CNG, LNG, and LPG are widely used and their potential hazards are well understood and accounted for in building and fire codes and standard emergency planning. An increase in their use for air pollution control relative to existing uses are not expected to have a significant effect on fire protection services. The proposal would not result in the need for new or physically altered government facilities in order to maintain acceptable service ratios, response times or other performance objectives.

	<b>Potentially Significant Impact</b>	<b>Less Than Significant Impact</b>	<b>No Impact</b>
<b>XV. RECREATION.</b>			
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

physical deterioration of the facility would occur or be accelerated.?

- |                                                                                                                                                                                        |                          |                          |                                     |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|--------------------------|-------------------------------------|
| b) Does the project include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|--------------------------|-------------------------------------|

XV. a) - c): As discussed under “Land Use” above, there are no provisions to the proposed project that would affect land use plans, policies, or regulations. Land use and other planning considerations are determined by local governments; no land use or planning requirements will be altered by the proposal. The proposed project would not increase the use of existing neighborhood and regional parks or other recreational facilities or include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment.

<b>Potentially Significant Impact</b>	<b>Less Than Significant Impact</b>	<b>No Impact</b>
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**XVI. SOLID/HAZARDOUS WASTE.** Would the project:

- |                                                                                                                        |                          |                          |                                     |
|------------------------------------------------------------------------------------------------------------------------|--------------------------|--------------------------|-------------------------------------|
| a) Be served by a landfill with sufficient permitted capacity to accommodate the project’s solid waste disposal needs? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| b) Comply with federal, state, and local statutes and regulations related to solid and hazardous waste?                | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

XVI. a), b) : The proposed project does not contain any provisions that require generation of hazardous or solid waste. The only potential projects that may generate solid waste are MSERC generation projects that may be undertaken through the proposed mitigation fee or AQIP.

Substitution of current conventional fuel operations with alternative clean-fuels would correspondingly reduce the need for conventional fuel capacity at existing fueling stations. This may require the modification of some existing conventional fuel dispensing facilities. Solid or hazardous wastes generated from construction-related activities would consist primarily of materials from the demolition of existing conventional -fuel storage and dispensing facilities and construction associated with new refueling facilities.

The demolition/construction debris and backfilling for one refueling station is estimated to consist of approximately 22 20-ton haul truck loads per station (SCAQMD, 2000). This waste would be disposed of at a Class II (industrial) or Class III (municipal) landfill. This assumes that the removed underground storage tanks (USTs) would most likely be recycled. As discussed

above, it is likely that conventional vehicles would remain in some of the participating fleets and associated conventional fuel storage tanks would be left in use.

There are 48 Class II/Class III landfills within the SCAQMD’s jurisdiction. The estimated total capacity of these landfills is approximately 111,198 tons per day (SCAQMD, 2000). Therefore, as shown in Table 2-2, the amount of waste disposed of from the construction of one refueling station is about 0.4 percent of the total daily disposal capacity. It is not likely that more than one refueling station would be modified on any given day.

**TABLE 2-2**

Estimated Amount of Nonhazardous Waste Landfilled during Construction-Related Activities

Total Disposal (tons/station)	440
Capacity of Landfills (tons/day)	111,198
% of Daily Capacity	0.39%
Significant (Yes/No)	No

Note: Assumes all waste is disposed of on the same day.

Aside from construction-related activities, the proposed project is not expected to generate solid or hazardous wastes. Depending on the rule under which MSERCs are generated, generators are typically required to demonstrate that the original vehicles are destroyed or otherwise relocated outside of the district. It is anticipated that most if not all MSERC generators would sell or otherwise transfer whole vehicles outside the district as opposed to destroying the vehicles. In the unlikely event that vehicles are destroyed, it is common practice to recycle approximately 98 percent by volume of heavy-duty vehicles or equipment that are dismantled (SCAQMD, 1995). The remaining two percent of non-recyclable items include hoses, seats and miscellaneous plastic parts that may be disposed of in a landfill.

Based on the above, the proposed rule is not expected to significantly increase the volume of solid or hazardous wastes, require additional waste disposal capacity, or generate waste that does not meet applicable local, state, or federal regulations.



**Potentially Significant Impact**      **Less Than Significant Impact**      **No Impact**

**XVII. TRANSPORTATION/TRAFFIC.** Would the project:

- a) Cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections)?

- |                                                                                                                                                                      |                          |                          |                                     |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|--------------------------|-------------------------------------|
| b) Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?      | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| d) Substantially increase hazards due to a design feature (e.g. sharp curves or dangerous intersections) or incompatible uses (e.g. farm equipment)?                 | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| e) Result in inadequate emergency access?                                                                                                                            | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| f) Result in inadequate parking capacity?                                                                                                                            | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| g) Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g. bus turnouts, bicycle racks)?                                      | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

XVII. a) - g): There are no provisions in the proposed amendments that would increase worker commute trips, raw material or finished product transport trips, adversely affect parking, or conflict with adopted policies associated with alternative transportation.

	<b>Potentially Significant Impact</b>	<b>Less Than Significant Impact</b>	<b>No Impact</b>
<b>XVIII. MANDATORY FINDINGS OF SIGNIFICANCE.</b>			
a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)

- c) Does the project have environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly?

XVIII. a) –c): As discussed above, the proposed project will be analyzed to determine whether it results in significant adverse air quality, energy, and/or hazards impacts.



## **REFERENCES**

SCAQMD, 1993. Regulation XX – Regional Clean Air Incentives Market, October 1993 (and subsequent amendments)

SCAQMD, 1995. Final Environmental Assessment: Proposed Rule 1612 - Credits for Clean On-Road Vehicles and Proposed Rule 1620 - Credits for Clean Off-Road Mobile Equipment, SCAQMD NO. 950803CB, August 1995

SCAQMD, 2000. Final Program Environmental Assessment: Proposed Fleet Vehicle Rules and Related Amendments, SCAQMD No. 000307DWS, June 2000

SCAQMD, 2001. White Paper on Stabilization of NO<sub>x</sub> RTC Prices, January, 2001



