California Environmental Protection Agency

Air Resources Board

Staff Report

PROPOSED REGULATION FOR EQUIPMENT AND PROCESS PRECERTIFICATION

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State of California
California Environmental Protection Agency
AIR RESOURCES BOARD

STAFF REPORT:
INITIAL STATEMENT OF REASONS
FOR PROPOSED RULEMAKING

PUBLIC HEARING TO CONSIDER A
PROPOSED REGULATION FOR
EQUIPMENT AND PROCESS PRECERTIFICATION

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SUMMARY AND RECOMMENDATIONS

A. INTRODUCTION

The Air Resources Board (ARB or Board) staff is proposing a regulation and "Criteria for Equipment and Process Precertification" (Criteria) to be considered for adoption by the Board. The initial chapter of this report summarizes the purpose of the proposed regulation, identifies who will be affected by the proposal, describes how precertifications will be issued, discusses the environmental and economic impacts from the proposal, and provides recommendations to the Board. This summary is presented in question-and-answer format using commonly asked questions about ARB staff efforts to develop this criteria and regulation.

The equipment precertification program is one part of an effort by California Environmental Protection Agency (Cal/EPA) to establish certification programs at the various boards and department of the agency to assist businesses in receiving environmental permits more quickly. This report will also briefly discuss environmental technology certification efforts underway at the Department of Toxic Substances Control and at the Office of Environmental Technology (OET) located in the Compliance Division of the ARB.

In Chapter II, a more detailed presentation of the technical basis for the proposed regulation and Criteria is presented. In addition, background information is included on why ARB is proposing to precertify equipment and processes, on what precertification is, and finally how the precertifications will be issued. In the third chapter, the potential environmental and economic impacts from the proposal are discussed.

B. EXECUTIVE SUMMARY

1. What is Precertification?

Equipment and process precertification, as defined under Health and Safety Code (H&SC) section 39620, is a preliminary engineering evaluation of specific equipment or processes and a recommendation for permit conditions. In other words, equipment and process precertification is a formal confirmation that ARB staff believes that the claims made by an applicant are true and accurate when the equipment or process is operated under specified conditions. In addition, precertification is an assurance from both state and local regulators that the equipment and processes can operate in compliance with non-site specific air quality requirements.

The purpose of equipment precertification is to provide a single, in-depth, independent review of air pollution equipment and processes at the manufacturer's level to facilitate local regulatory agency and end-user acceptance. Equipment will be precertified if the product meets performance and regulatory requirements as established by the ARB and the precertification applicant. In addition, the program will establish a system to assist businesses in understanding

and meeting the requirements of various air pollution control districts and air quality management districts (districts) through equipment evaluation and regulatory review in coordination with the districts. It should also promote the use of and foster growth of innovative environmental technologies in California.

a. What is the difference between precertification and certification?

There is very little difference between the terms "precertification" and "certification." The primary difference is that certification programs often give the certificate holder an approval to sell, market, or operate the product that has been certified. For example, H&SC section 41954.(f) specifies that only certified gasoline vapor control systems can be sold, offered for sale or installed in California. In the case of precertification, H&SC section 39620 does not provide any one the approval to sell, market, or operate the equipment. Districts will still require purchasers of precertified equipment to obtain an approval or a "permit" to construct or operate. However, local districts are planning to issue permits to precertified equipment in an expedited time-frame. It may be possible in the future to expand precertification into a full certification program for small or area sources of air pollution, such as portable equipment and water-heaters, to allow manufacturers to verify performance compared to statewide minimum standards prior to sale to or operation by the public.

b. What is the difference between performance and regulatory precertification?

The Equipment Precertification Program consists of both a performance precertification and a regulatory precertification. The performance precertification is the independent verification of the performance of equipment and processes with regards to a manufacturer's claims for the equipment. All participants in the equipment precertification program must go through the independent verification process. The regulatory precertification is a regulatory review of the performance precertification to determine compliance with or equivalence to applicable federal, State, and local air pollution rules and regulations. A regulatory precertification may be requested to accompany the performance precertification.

c. How will compliance with all air pollution regulations be determined?

Districts will be requested to determine compliance with applicable local air pollution regulations prior to the issuance of a regulatory precertification. ARB staff will determine if the equipment will comply with state and federal regulatory requirements. Local districts will also be requested to review and recommend suggested operating conditions for the precertified equipment. It should be noted that the regulatory precertification does not replace the need for a district to make site specific compliance determinations with regard to federal, State, and local requirements. However, it is hoped that the need for these determinations will be minimized.

2. Why are we proposing to precertify equipment and processes?

California businesses have identified equipment precertification as a high priority for simplifying and streamlining the air pollution permitting process and for promoting uniformity

between districts. Governor Wilson signed Assembly Bill (AB) 2781 in 1992, which required several districts to implement precertification programs as part of permit streamlining activities. In its 1994 Strategic Plan, the California Environmental Technology Partnership (CETP), a public/private partnership, identified environmental certification programs as the highest priority for Cal/EPA.

In 1994, Governor Wilson signed AB 3215 (Pringle) which amended H&SC section 39620 to expand the ARB's role in assisting districts in improving the efficiencies of the permitting program to include the development of a statewide precertification program for simple, commonly used equipment permitted by districts. The Board was to develop criteria and guidelines for an equipment precertification program in coordination with the districts. The program will assist districts in simplifying the permitting process by providing equipment-specific information when applicants purchase precertified equipment and agree to operate it within a given set of operating conditions. The equipment precertification program will benefit equipment manufacturers by eliminating the need for duplicative verification of performance currently required when applying for permits from multiple districts throughout the state. The program should expedite the issuance of district permits for purchasers of precertified equipment.

a. Why are we developing separate guidelines for the program?

Guidelines to accompany the regulation and Criteria have been developed to provide applicants for precertification with a clear understanding of the information needed and the administrative steps to follow to precertify equipment or processes. The proposed Guidelines contain example request forms, applications forms, and formats for scope of the precertification and test protocols / reports. Additional Guidelines may be developed for districts, other agencies, and purchasers of precertified equipment in order to clarify how precertification affects them. The Guidelines are not considered to be part of the regulation and therefore are not legal requirements. These documents are intended to assist interested parties in accessing the precertification process.

3. Who will be affected by the proposed regulation and criteria?

The proposed regulation and criteria for equipment and process precertification is designed to benefit equipment manufacturers, distributors, and local businesses. The primary regulatory agencies expected to directly participate in this effort are the ARB and local districts. To some extent, other regulatory agencies may be affected including other local, state, and federal agencies. However, the proposed regulation and criteria is a voluntary program which does not mandate the participation of any business or agency.

a. How does the proposal affect manufacturers and businesses?

The proposed precertification program should benefit equipment manufacturers by eliminating duplicative testing to verify the performance of the equipment. The program should

also reduce the amount of time needed to conduct an engineering evaluation for each district. The program also provides equipment manufacturers with an opportunity to prove that the ARB has evaluated and verified performance claims for their equipment and/or processes.

Businesses which purchase precertified equipment will be able to benefit from an expedited permit process which will enable businesses to install and operate the equipment earlier than they would if the equipment had not undergone engineering evaluation performed during precertification. Additionally, businesses will know before purchase of equipment what types of conditions will be placed on their air permit. In some districts initial permit fees or authority to construct fees may be lowered due to the decreased district evaluation time for each permit. Finally, in certain cases the initial start-up source test may be waived.

b. How does the proposal affect district programs?

Statewide precertification is designed to expedite local district's permitting programs. However, it will not affect any existing authority of a district regarding the issuance of permits or compliance with applicable requirements. The equipment precertification program will assist districts in simplifying the permitting process by providing equipment-specific information when applicants purchase precertified equipment and agree to operate it within a given set of operating conditions.

c. How will federal and other state agencies activities impact the proposal?

Currently, there are no equivalent programs at the federal level to precertify or certify simple, commonly used air pollution related equipment and processes. The United States Environmental Protection Agency (U.S. EPA) has established various performance standards for emissions, efficiency, work practice, or other specific criteria applicable to general categories of equipment and processes which may be included within an applicant's scope of the precertification. The U.S. EPA is also evaluating the formation of a technical center for verification testing of environmental technologies.

Several Cal/EPA agencies are developing or considering environmental technology certification programs. The Department of Toxic Substance Control has established a certification program for hazardous waste environmental technologies as authorized by H&SC section 25200 (AB2060). The Administration and the Legislature also created the Office of Environmental Technology (OET) via the 1995 Budget Act. The OET (located within the ARB) will coordinate with the various Cal/EPA certification programs to integrate common administrative elements while maintaining program specific elements, including the technical evaluations, required for certification separately within the boards and departments.

Other states are currently evaluating the development of environmental technology certification programs which may include air pollution equipment. Cal/EPA has signed a Memorandum of Understanding (MOU) with the environmental protection agencies within the states of Illinois, Massachusetts, and New Jersey. This MOU commits each state to consider the technical data and engineering evaluations performed in accordance with approved procedures

and test protocols when conducted under the supervision of an MOU state. Efforts are underway to develop mutually acceptable quality assurance and quality control requirements for this process.

4. How did the public participate in the development of the program?

In developing the equipment precertification program, a survey of local districts was conducted in March 1995, soon after the effective date of the legislation, to identify types of equipment which would benefit from statewide precertification. ARB staff also conducted a survey of the business community in April 1995 to identify benefits and concerns with statewide precertification. A series of four public meetings and workshops were held including: a) initial consultation meeting on December 13, 1994 to discuss our concepts for the program; b) two workshops on the draft Guidelines held on July 17, 1995 in Sacramento and July 20, 1995 in Diamond Bar; and c) a regulatory workshop held on February 15, 1996 in Sacramento to discuss the draft regulation, Criteria and revised guidelines. Copies of the draft guidelines was released for public review and comment in July 1995. Copies of the regulation, criteria, and revised guidelines were released for public review in January 1996.

Concurrently, a limited pilot program was initiated in October 1995 to evaluate the draft guidelines developed for the equipment precertification program. During the initial phase of the pilot program, ARB staff solicited requests for precertification from different manufacturers of small natural gas-fired boilers and dry cleaning machines in order to evaluate the guidelines and to determine the resources necessary to conduct precertifications. Staff has continued to expand the pilot program into other categories of equipment as we have revised the criteria for the program.

5. How will precertification standards and specifications be established?

The applicant will propose standards and specifications in the application package as part of the scope of the precertification. The purpose of the scope of the precertification is to identify what claims the applicant is trying to demonstrate and how the applicant will prove or verify the claims. Standards are the requirements for equipment within a general category while specifications are parameters specific to the applicant's equipment. ARB staff will review the proposed standards and specifications for the equipment, the type and quantity of each pollutant emitted or controlled by the equipment or process, and compare the proposed precertification standards with applicable federal, State, and district requirements.

a. How will manufacturers demonstrate that the equipment will achieve the standards and specifications?

The applicant will prove or verify performance claims through verification testing of the equipment or process. Verification testing is source, bench, or laboratory tests which are conducted as part of the precertification process. For new testing, the applicant will initially provide an overview in the scope of the precertification of the proposed test methods, the data quality objectives to be met, and the calculations to be used. In addition, the applicants will

submit test protocols that provide details on how the testing will be conducted. Finally, the applicant will prepare test reports which provide the results of the testing.

6. What alternatives and impacts were evaluated?

Several alternatives, environmental impacts, and economic impacts were evaluated during the development of the criteria for the program.

a. What alternatives were considered?

Several alternatives were considered during the development of the criteria for the program. The program could be implemented without a regulation or Board adopted criteria. Guidelines could be developed for a voluntary marketing program. There were concerns, however, about liability to the ARB and potential disputes which could arise during precertification. Furthermore, ARB staff could not implement a fee based program as mandated in the statute without a regulation which specifies how fees would be determined. The continued development of district precertification programs was also considered as an alternative. However, this would continue to result in greater variation in permitting requirements for similar equipment in use throughout the state, and would not result in significant statewide permit streamlining benefits. Self-precertification was considered as an alternative, however, ARB staff cannot ensure that equipment or processes can achieve performance standards under self-precertification programs. Also, the wide variation between types of equipment and standards would make it extremely difficult to develop a consistent and credible program. In addition, the level of acceptance by local districts might be reduced, concerns about liability for precertifications, and potential conflict of interest issues between manufacturer and testing company would need to be addressed.

b. What are the expected environmental impacts from the proposed regulation?

The proposed precertification regulation and criteria will not have any significant adverse environmental impacts. The program does not affect existing standards or establish requirements for the control of emissions which could impact local ambient air quality, global warming, ozone depletion, airborne toxics, water quality, hazardous wastes, or solid waste disposal.

c. What are the economic impacts of the proposed regulation including impacts on employment, business creation and expansion, and competitiveness?

The proposed precertification regulation and criteria should not have any significant adverse economic impacts. Since precertification is optional for manufacturers, individual businesses would presumably participate only if it were financially advantageous. The major cost to businesses participating in the program is the cost of testing. Since the proposed Criteria affect all manufacturers and marketers in the same way regardless of their location, California manufacturers will not be at a competitive disadvantage. California businesses which purchase precertified equipment may have reduced initial permit fees.

7. What are ARB staff's future plans for equipment precertification?

Upon adoption of the proposed Criteria and regulation, we expect to expand the program to include additional district or ARB identified priority or targeted categories of equipment and processes. ARB staff anticipates expanding the program to include at least two additional equipment categories per year during first three years of implementation. ARB program staff will work with districts, other Cal/EPA boards and departments, and the OET to identify manufacturers in equipment classifications which will assist in maximizing permit streamlining benefits, result in cost effective emission reductions, and promote the use of innovative environmental technologies in California. In addition, we intend to assist other Cal/EPA boards and departments, and the OET in the certification of environmental technologies which have multiple environmental media impacts, such as wastewater evaporators used at dry cleaning facilities.

ARB staff will work closely with districts and participate in environmental exhibitions and presentations to inform equipment manufacturers and permit applicants of the options available through the purchase and use of precertified equipment. We also intend to continue to make information regarding precertified equipment available to districts, U.S. EPA, business community, and general public. Precertified equipment information will be included on the California Air Resources Board Information System (CARBIS) electronic bulletin board system (accessible by modem at (916) 322-2826 and through the internet with a worldwide web home page at "http://www.arb.ca.gov").

C. STAFF RECOMMENDATION

We recommend the Board approve the proposed regulation and Criteria for Equipment and Process Precertification presented in this report. The proposed regulation and Criteria are necessary to carry out the Board's responsibilities under Division 26 of the Health and Safety Code.

II.

DISCUSSION OF STAFF PROPOSAL

A. BACKGROUND

1. Background on California Air Pollution Permit Programs

The Federal Clean Air Act provides conditional authority for states to directly regulate both stationary and mobile sources of air pollution. The authority to directly regulate stationary sources is further delegated to the local and regional air pollution control and air quality management districts (districts). The districts, as authorized by section 42300 of the California Health and Safety Code (H&SC), have developed permit programs for stationary sources. H&SC section 42301 et seq. in part requires that: (1) permits be written to assure that the equipment not interfere with the attainment or maintenance of any air quality standards; (2) permits not be issued until the Air Pollution Control Officer is satisfied that compliance with the applicable rules and regulations will be met; (3) annual permit reviews be conducted to determine if permit conditions are sufficient to meet regulatory compliance; and (4) a means be provided to transfer ownership or reissue a permit.

The districts adopt rules and regulations to define the procedures and criteria used in permitting stationary sources. The permits ensure that the construction and operation of new and modified stationary sources which emit air contaminants will comply with all applicable standards, rules, and regulations.

2. Background on Permit Streamlining

District permit systems were initially established for large sources of air pollution. In the more populated areas of the state, permit systems evolved to include smaller sources of air pollution, as these sources became subject to control measures and regulations. The work load at districts increased, which in some cases slowed the issuance of permits to construct and operate. In addition, each of the 34 districts is an autonomous agency and the regulatory requirements and permitting procedures varied throughout the state. As a result, the legislature established permit streamlining measures in the H&SC. These permit streamlining measures have been developed and implemented, primarily in the most populated districts, to expedite the permit processing. Most permit streamlining measures have been designed to: 1) improve the completeness of the applications received; 2) expedite the district's review once applications are complete; and 3) improve communication with applicants.

The Air Pollution Permit Streamlining Act (H&SC section 42320-42323) requires districts with a population of greater than 250,000 to implement a program for the expedited review of permits. This includes a series of specific required measures including: 1) a precertification program for mass-produced and operated equipment; 2) a consolidated permitting process for sources that are required to have more than one permit, 3) an expedited review schedule based on the amount and species of pollutant emitted, 4) a training and

certification program for private sector personnel to provide a pool of professionals who qualify for precertification, 5) a standardized permit application, 6) a consolidation of the authority to construct and the permit to operate when possible, and 7) an appeals process for a source if the APCO neglects to notify the permit applicant of the approval or disapproval of an application within the time allocated.

The ARB and the California Air Pollution Control Officers' Association (CAPCOA) worked together to release the Permit Streamlining Guidance Document in December 1993. This document describes the ongoing and planned programs designed to expedite the permit process. One of the recommendations addressed in this document was to develop a state-wide precertification program to encourage more uniformity between districts.

3. Background on Equipment Precertification

One of the measures specified in the Air Pollution Permit Streamlining Act requires the districts to establish a precertification program for mass-produced equipment operated by many sources throughout the local area. The State of California has a long and active role in establishing air pollution related certification programs. Currently, the ARB has programs which certify vapor recovery systems, alternative fuel retrofit systems, motor vehicle emission control systems, and sandblasting abrasives. Most of the ARB certifications have been related to mobile sources and fuels for mobile sources.

In 1992, the South Coast Air Quality Management District (SCAQMD) implemented an equipment certification program to streamline the permit process for stationary sources. The SCAQMD established its certification program for standard, off-the-shelf equipment. This program is voluntary for equipment manufacturers, dealers, and distributors. The applicant's equipment is reviewed to determine if the equipment meets current District rules and regulations. Once the evaluation is completed and the equipment meets certification parameters, the manufacturer is issued a Certified Equipment Permit and the equipment is included in a list of certified equipment. A purchaser of the equipment is issued a Registration Permit and benefits by having the permit fees reduced and receiving the permit within a short period of time. As of February, 1996, the SCAQMD has included nine categories of equipment on their list of certified equipment. The number of models in each category varies from 6 models in the boiler category to over 150 models in the charbroiler category. To date, other districts have not formally established a precertification program.

In September 1994, with the signing of Assembly Bill 3215 (H&SC section 39620) by Governor Wilson, the ARB was directed to develop and implement a statewide Equipment Precertification Program. Section 39620 initially required the Board to implement a program to assist local districts to improve the efficiencies in the issuance of permits. The amendments to H&SC section 39620 require ARB staff to develop a voluntary Equipment Precertification Program in coordination with districts, industry, and other interested parties. The program is to be developed in coordination with the districts and will not affect the district authority regarding permitting and compliance requirements. The districts will continue to issue permits and verify compliance with district-specific rules and regulations. Establishing a statewide program

provides districts with a tool which may be used to satisfy H&SC section 42320 through 42323. The purpose of this program is to precertify "simple, commonly used equipment and processes". By precertifying this type of equipment, businesses should be able to obtain permits faster than they would had they not purchased precertified equipment. This program has been designed to assist the districts by reducing the amount of work required in their evaluations, without decreasing the overall integrity of permit programs.

4. Background on other California Environmental Technology Certifications

There are several Cal/EPA agencies developing environmental technology certification programs. The Department of Toxic Substance Control has been authorized by AB2060 to establish a certification program for hazardous waste environmental technologies. This program was developed to include the following technologies: hazardous waste management, site mitigation and waste minimization, and pollution prevention. This certification is intended to evaluate the effectiveness, reliability and protectiveness of environmental technologies.

The Legislature also authorized Cal/EPA [H&SC 39620(b)(4)] to evaluate the feasibility and benefit of expanding precertification to other agencies and environmental media, such as water quality and solid waste. An intra-agency task force, starting in January 1995, was formed to make recommendations on the implementation of a coordinated multi-media certification program. One recommendation was to form the Office of Environmental Technology (OET) which was created by the Administration and the Legislature via the 1995 Budget Act. The primary role of the OET (located within the Compliance Division of the ARB) is to provide an administrative infrastructure to coordinate the management of the separate environmental technology certification programs of the various boards and departments within Cal/EPA. The OET will also coordinate multi-media certifications, attract manufacturers into the environmental technology certification programs, promote the acceptance of certified technologies by businesses and regulatory agencies, and assist in the development of common guidelines and approaches to the certification programs.

5. Statutory Authority

The Board has been given the authority to develop and implement a statewide equipment precertification program under H&SC section 39620. The Board, in coordination with the districts, is required to develop criteria and guidelines for precertification of simple, commonly used equipment and processes. In addition, H&SC sections 39600 and 39601 provides the Board the authority to adopt standards, rules, and regulations necessary to properly execute its duties under other provisions of law.

B. EQUIPMENT AND PROCESS PRECERTIFICATION

1. What is statewide equipment precertification?

Statewide equipment precertification, as described in the proposed Criteria, is a voluntary program for manufacturers of commonly used equipment which emit criteria and hazardous air

pollutants. The purpose of the program is to assist districts in their efforts to streamline the air pollution permit process. There are two parts to the proposed equipment precertification process; a performance verification/precertification and a regulatory precertification.

The performance verification/precertification is required of all applicants of the program. This evaluation is designed to verify performance claims made by manufacturers with regard to specific equipment models. Performance claims are made by applicants in the Scope of the Precertification as part of the application package. All manufacturer claims must be supported through verification testing and validated by ARB staff review.

In addition to the performance precertification, applicants have the opportunity to receive an evaluation of regulatory compliance with district rules and regulations with a regulatory precertification. ARB staff will work closely with applicants to verify equipment performance and to determine applicable federal and State air pollution laws. When regulatory precertifications are requested, ARB staff will communicate and coordinate with applicable districts to obtain districts determinations related to compliance with local air pollution rules, and regulations.

2. What is commonly used equipment?

Commonly used equipment, as defined in the proposed Criteria, means equipment or processes that are mass produced and commercially available for operation by numerous sources under similar conditions. Other equipment, which may replace equipment already in common use and may result in greater efficiencies or reduced emissions, may also be considered under this program.

To assist in streamlining the air pollution permitting process, it is critical that precertified equipment be able to operate in multiple locations under similar operating conditions. Businesses which purchase precertified equipment may receive permits more quickly when they agree to operate equipment under the recommended operating conditions. Therefore, a priority scheme has been established in the Criteria to ensure that the goals of the precertification program are met. First priority is given to simple equipment or processes based on its permit streamlining potential. Priority is then given to ARB targeted equipment classifications, district priority equipment classifications, and equipment or processes that may provide additional permit streamlining benefits, emission reductions, or pollution prevention. The various equipment classifications are developed through consultation with other divisions within the ARB, districts, and industry.

3. What is the scope of the precertification?

As defined in the Criteria, the scope of the precertification shall be submitted by the applicant and shall state the applicant's claims regarding the performance, emissions, or efficiency of the equipment or process. The scope shall include information related to the precertification standards and specification. It should also identify test procedures for

verification testing previously conducted or which will be conducted, data quality objectives, and the calculation procedures and methods which will be used to verify the claims made.

a. What are precertification standards and specifications?

Precertification standards relate to specific equipment classifications, for example, natural gas fired boilers, internal combustion engines, or dry cleaning equipment. These standards are measurable values resulting from the equipment's performance. These general requirements are based on emissions, efficiency, work practice, or other specific criteria applicable to the equipment or processes within the general category of the equipment being precertified. The measured values could include emission rates for various pollutants, operating efficiencies, and parameters for operating temperatures. The applicant may claim that the equipment will achieve or perform better than accepted standards in a given equipment classification.

Precertification specifications are parameters related to a particular piece of equipment or process. These parameters ensure the specific piece of equipment meets the precertification standards identified in the scope of the precertification. Specifications will vary with each application even for similar equipment models within a general category of equipment. Specifications include critical operating parameters which can be monitored to assure that the equipment is achieving the precertification standards described above. The recommended operating conditions for districts will be based on precertification specifications.

b. What test procedures are required?

Testing procedures are required, to support existing test or new test data, as part of the application package and may vary with each individual precertification application. The test method described must be an ARB adopted test method or an Executive Officer approved alternate test method. If an ARB adopted test method is being used, the test method need only be referenced as opposed to including a full written version of the test method. When requesting permission to use an alternative test method, the applicant must supply details with respect to the sampling and laboratory methods, provide at least three sets of data (two of which must be under different source operating conditions) generated using both the alternative and the approved method, and provide information identifying the use and limitations of the testing method. The test method must produce data which can be compared to the claims presented in the scope of the precertification and meet the data quality objectives.

c. What is verification testing?

As described in the Criteria, verification testing is source, bench or laboratory testing which is conducted during or prior to the evaluation of the precertification package. These tests will provide test data needed to verify the performance of the equipment or process to be precertified. Testing is used to assess if the equipment or process meets the claims made by the applicant in the scope of the precertification. The applicant is responsible for performing and reporting the results of the verification testing after the testing protocol has been approved. Testing should be conducted by a qualified independent testing company unless prior

authorization has been obtained by ARB. Testing must be conducted pursuant to the requirements of the Criteria and the approved protocol to ensure that the data is complete, representative of the equipment, and accurate. The test must also provide enough data to determine the claimed emissions or efficiencies and verify the operating conditions and specifications.

1. What are testing protocols?

Testing protocols are the detailed plan for how verification testing will be conducted. The testing protocol is a document prepared by the applicant or contractor prior to conducting the verification test that details the procedure involved in systematically acquiring emissions data. The Criteria requires that testing protocols include information about the test (time frame, process description, equipment used, test site specifications, etc.). It must also include information regarding the individuals conducting the test (affiliation, business location, qualifications, etc.). Additionally, it must include information about how the quality of the data is going to be assured (calibration techniques, estimated limits of detections, frequency distributions, etc.) .

2. What are test reports?

Test reports are the documents which summarize the results of the verification testing. The Criteria requires that test reports include the supporting data, documents both the test and operating conditions, and includes any assumptions made. The reports must include sufficient data and results to allow ARB staff to determine if the precertification standards have been met.

d. What are data quality objectives?

Data quality objectives are specified in the Criteria and are the targeted goals for the quality of data generated during verification testing. The objectives detail how thorough the test results must be, along with measurable parameters that assure the data will be measured within a specified limit of tolerance. Since the data will be used to draw conclusions concerning the validity of the claims made by the applicant, the test design should assure that the data is reliable enough to validate the applicant's claims. Testing objectives should be agreed upon prior to conducting the testing. This will assist to ensure that all necessary information will be obtained during the verification testing.

The data must be representative of normal operating conditions. The testing methods and specifications must be documented. In addition, the method of generating the data must have a known or calculated precision, bias or accuracy, and sensitivity. The data generated must also be complete and comparable to the precertification standards.

e. How will the results be calculated from the data?

Calculation procedures indicating how the measured test data is converted from its raw form into a value comparable to the applicant's claims must be included as part of the Scope of

the Precertification. Calculations must be clear, well documented, and of demonstrated reliability. The calculation procedures should include all the details about the assumptions and conversions necessary to make this comparison.

4. What are the Guidelines for Equipment Precertification?

The Guidelines for Equipment Precertification constitutes a "plain English" version of the regulation and Criteria. It is a document that provides information about the procedures used to select and evaluate equipment and processes for potential precertification. It describes the main purpose of the program and is designed to aid the applicant in meeting the requirements of the program. The guidance document provides examples of formats, applications, etc.. The guidelines are not an ARB regulation and do not establish any legal requirements but rather are designed to assist the applicant in submitting a complete package for review by ARB staff.

C. SUMMARY OF THE PROPOSED REGULATION

1. What regulations are to be added?

As the Criteria were being developed, ARB staff decided that the Criteria should be incorporated into the California Code of Regulations (CCR) by reference. Due to its length, it is impractical to publish the Criteria in the CCR, especially since the Criteria was written to apply to a limited audience primarily consisting of applicants, district staff, and ARB staff. ARB staff is committed to making the criteria available upon request. A copy of the criteria along with the Guidelines will be provided to all applicants for precertification. ARB staff proposes to have the Board adopt a reference to the Criteria within section 91400 of Title 17 of the California Code of Regulations. This reference will clearly identify the title of the Criteria and the date of Board approval.

2. What is included within the Criteria?

The proposed Criteria outlines the process which must be followed and the requirements which must be met prior to the issuance of a precertification. The Criteria consists of four general areas: pre-application procedures, application package requirements, precertification procedures, and administrative procedures. The Criteria also includes applicability and definition sections which identifies the legal authority for the Criteria, lists the basic elements of the Criteria, and identifies that ARB staff will develop guidelines for the process. The definition section defines specific terms which are used within the Criteria.

3. Why are pre-application procedures included in the Criteria?

Pre-application procedures are provided in the Criteria to screen potential applicants to ensure that they are eligible for the program; ensure that resources are devoted to evaluating higher priority applications; ensure that applications are more likely to be complete upon initial submittal; and provide a mechanism for estimating precertification fees. During the pre-

application procedure, the manufacturer (applicant) requests that its equipment or process be evaluated against eligibility and priority criteria for the program. Upon determination that the equipment is eligible for the program, a pre-application meeting will be arranged, and fees will be estimated. The Guidelines in Appendix D includes a flow chart which outlines the pre-applications procedures.

a. How will applicants request precertification?

Prospective applicants for precertification must complete a brief written request for equipment precertification. The Guidelines include an example request form. ARB staff will review the information submitted on the request for equipment precertification to ensure that the eligibility criteria are met and that the factors impacting priority are noted for consideration.

b. How will eligibility and priority of each request be determined?

ARB staff will review each request to determine eligibility to participate in the precertification program. Eligibility will be limited to equipment or processes that are related to air quality; the equipment that is, or has the potential to be, commonly used; and equipment that does not pose a significant potential hazard to public health and safety and the environment when operated according to manufacturer's instructions. Requests may be prioritized as they are received using the following criteria; is the equipment or process required to receive a permit from districts, has the equipment been identified as simple and/or a priority equipment classification by districts, and is the equipment affected by ARB regulations or programs (e.g. Air Toxics Control Measures, Hot Spots program, etc). Additional priority criteria may include date of submittal, availability of validated data, and ARB staff resources.

c. How will pre-application information be exchanged?

If the equipment or process meets the eligibility criteria for the equipment precertification program, ARB staff will arrange a pre-application meeting or conference call with the applicant. The pre-application meeting between the applicant and ARB staff will be used as a forum to determine the type of precertification sought, the claims that the applicant would like to verify during precertification and the data needed to support the applicant's claims. ARB staff will work with the applicant to determine what information will be required in the application package and to identify if additional verification testing is needed. After the pre-application meeting, ARB staff will use information provided by the prospective applicant to: 1) advise the applicants regarding the necessary information required to submit a complete application package, and 2) calculate the estimated fee. Issues regarding confidentiality will be discussed and handled in accordance with existing state regulations.

4. What must be included in an application package?

Eligible applicants for precertification are invited to prepare and submit an application package which consists of several major components. An application package shall include a completed written application, a scope of the precertification, and one-half of the estimated

precertification fee. It should also include test report(s) from previously conducted tests and/or test protocol(s) if new testing is to be conducted. The precertification application package must include the specific information requested by ARB staff during pre-application procedures.

a. How should an application be prepared?

The written application can be a letter with attachments or can be an extensive multi-page document depending upon the equipment. The application should provide information on the applicant, company, or organization and the reason for the application. The application should also include information on the equipment or process, information on the materials used, and the potential emissions. The applicant is also asked to provide design and block diagrams, installation, operation, and maintenance procedures. The application should also contain a statement that the information provided is true and correct, and should be signed by an authorized representative.

b. Who prepares the scope of the precertification?

The scope of the precertification is to be prepared by the applicant. However, it is anticipated that ARB staff will provide assistance during the pre-application process. ARB staff has developed examples for scope of the precertification for targeted equipment categories and will develop additional examples with input from local districts on the standards, specifications, test procedures, data quality objectives, and calculation procedures within each category.

c. Who must prepare test protocols and test reports?

If new or additional testing is required, the applicant must prepare a written testing protocol which describes how each source or laboratory test method will be applied to each emission point for the equipment or process to be precertified. The testing protocol will be reviewed by ARB staff which will approve or will recommend modifications, additions, or deletions to the protocol. Staff will provide guidance to the applicant that will help delineate applicable sampling/analytical methodologies, statistical analysis methods, and quality assurance and quality control procedures to be used.

The applicant is responsible for ensuring that the tester has conducted data reduction, conducted quality assurance procedures, and prepared the test reports. The test reports shall be submitted to ARB staff with the application package or within the specified time-frame identified in the test protocol. The reports must be prepared in a acceptable format. Example formats will be provided upon request. The test reports must include all of the actual test values for the information required to be included in the precertification testing protocol.

Testing which has been conducted prior to the submittal of a precertification application may be used in the application. However, the testing must have been performed in accordance with the adopted ARB test methods (or equivalent) unless provisions for alternative methods have been satisfied. These source test results must show comparable results when evaluated against the proposed standards. Documentation of the operating parameters during the source

tests must also be available. The results of previous testing cannot be used if the equipment tested has undergone a change, including but not limited to change in input materials, change in air pollution control equipment, or a change in the equipment design which would result in a reduction in the ability to achieve a performance standard.

5. Why are precertification procedures included in the Criteria?

Precertification procedures include the process and the schedules that ARB staff will follow in order to evaluate the data and issue precertifications. These procedures are included to ensure that each application for precertification is treated in a responsive and timely manner. A flow chart showing the precertification procedures is included in the Guidelines in Appendix D.

a. How will an application package be reviewed?

ARB staff will initially review the precertification application package for deficiencies or omissions and will work closely with the applicant to expeditiously resolve any issues and to provide direction on what is required to complete the package. Staff will evaluate the scope of the precertification to determine if standards and specifications are appropriate and if the test method, data quality objectives, and calculation procedures are identified. Staff will identify if the equipment and process can be evaluated for precertification based on currently available data contained in test reports or will require additional testing. It is the applicant's responsibility to prepare a comprehensive precertification application package that presents available data and other information which support the desired scope of the precertification.

b. How will the testing protocol be reviewed?

If test protocols are included in the package, they will be reviewed to determine how each test method will be applied to each emission point. The protocols will be checked to verify the dates for testing in order to make arrangements for observing the testing and to identify the independent testing company performing the testing. The test protocols will be reviewed to determine the adequacy of the procedures for obtaining representative data under anticipated stack conditions, the appropriateness of the measurement methods for each pollutant, and the adequacy of the quality assurance plan for all verification testing. Applicants will be notified within 30 days of receipt if the test protocols are approved or will require modification.

c. How will verification testing be evaluated?

After the ARB approves the test protocols, the applicant is responsible for performing and reporting the results of the verification testing. ARB staff may oversee the testing and will evaluate the results of verification testing.

1. What are verification testing requirements?

The Criteria specifies that the applicant must conduct verification testing at a site within the State of California to enable ARB staff oversight of the testing unless special provisions to

test out of state are approved in advance. The testing site must either operate or be capable of operating this type of equipment. The applicant must arrange with the operator of the site to allow safe access to the test site by ARB staff prior to and during the testing. The applicant must also ensure that the proper sampling facilities are provided including sampling ports, platforms, clearance for sampling equipment, access to electrical power, and that all other safety requirements including exposure of personnel to weather, process temperatures, hazardous materials, and other factors are addressed. The applicant and operator are responsible for complying with all local requirements. The applicant should ensure that the quality assurance plan and quality control checks included in the test protocol are performed throughout precertification testing. The applicant is responsible for submitting a written notice of the dates when precertification testing will be conducted.

2. Who will oversee testing?

ARB staff must be notified of all testing so it may observe the source testing required for the application, to ensure that the testing is conducted in accordance with the protocol and good scientific and engineering practices. The tester may be required to analyze audit materials or split samples for analysis by state testing laboratories. Minor modifications from the testing protocol may be approved by the ARB staff on-site. However, major deviations from the methods or procedures included in the protocol or the use of alternative methods must be approved in writing by the ARB Executive Officer prior to the dates of testing.

The testing organization shall record sufficient test and process data at the time of the test to permit the later determination of emissions, the evaluation of test results, and the verification of operating conditions as specified in the application or the testing protocol.

3. How will a test report be evaluated?

The ARB staff will conduct a detailed review and evaluation of the verification test reports to determine if all the information required by the scope of the precertification or the test protocol is included in the report. The ARB staff evaluation will indicate if: the test procedures were conducted in accordance with the methods and protocols; all the actual test data is included; the proper quality assurance testing was performed; the data meets data quality objectives; and the data indicate that the performance standards or specifications have been satisfied in a manner which supports the issuance of a precertification. For regulatory precertifications, ARB staff must work closely with district staff to determine if the test report adequately demonstrates compliance with any affected district rules and regulations. ARB staff will recommend acceptance of results or will prepare recommendations to address issues raised by the inability to meet the scope of the precertification, or recommend additional steps which should be performed.

d. When will an application package be considered complete?

After receipt of the test reports, ARB staff will perform a completeness review of the precertification submittal package and will notify the applicant of the results within 30 days if it

has been accepted for filing. If the application package is deficient or there is insufficient data to support the desired precertification claim, the applicant may either provide the additional information, or may revise or limit the scope of the precertification, propose a test protocol to collect the data necessary to support the desired claims, or withdraw the application for precertification. Revisions or additional information will be reviewed within 15 days of receipt. If an applicant chooses not to accept the above options, ARB staff will prepare and release an evaluation report with the justification as to why the precertification was denied.

e. How will preliminary evaluation reports be prepared and reviewed?

ARB staff will prepare a draft evaluation report to document the specific data, reports, literature, and other information which were reviewed during the precertification evaluation. The evaluation report will also describe the equipment or process, the scope of the precertification, and the evaluation of verification testing with respect to the proposed precertification claim(s). The evaluation report will also present the data and results of verification tests performed and an analysis of the data with respect to the scope of the precertification. The evaluation report will also present recommendations on suggested operating conditions for districts to include on permits.

The draft evaluation report will be provided to the applicant, appropriate ARB technical staff, and to applicable districts for review and comment, depending on the particular equipment, process, or technology, its complexities, and the issues associated with its precertification. For regulatory precertification, the districts will be requested to review the draft evaluation report, list the applicable air rules and regulations in their district, provide additional required permit conditions for their district, and determine if the equipment or process will comply with district rules and regulations. Reviewing parties will have 30 days to respond and provide comments.

ARB staff will prepare a final evaluation report which addresses comments on the draft evaluation report received through the review process. This final evaluation report will be prepared for approval by the ARB Executive Officer within 90 days of the application being deemed complete. This time period may be extended in cases where additional information is submitted, when additional testing is conducted, or for good cause.

f. What will be issued upon approval of precertification?

After payment of the remaining fees, the ARB Executive Officer shall precertify the equipment or process by signing an Executive Order and approving the final report. Copies of the ARB Executive Order and the evaluation report will be provided to the applicant, maintained in the ARB's files, and made available upon request.

6. What other administrative requirements and procedures are in the Criteria?

The Criteria for Equipment and Process Precertification includes several other administrative requirements and procedures which impact applicants for precertification. These

include: limitations and disclaimers, duration and renewal, modifications, suspension and revocations, hearing procedures, and fee assessment procedures.

a. What restrictions are there on the use of a precertification?

It must be understood by both applicants and purchasers of precertified equipment that precertification is not an endorsement by the ARB as to the quality or utility of the equipment or process, nor does it represent that the equipment or process is any more or less harmful or beneficial to air quality than any other similar equipment or process. Issuance of precertification means that ARB staff has evaluated the test data supplied by, or on behalf of, the manufacturer of the equipment or process, and the equipment or process has met air quality related claims in the scope of the precertification. Precertification by the ARB does not represent any guarantee of the performance or safety of the equipment or process. The ARB shall not be liable in any way in the event that the device or process fails to perform as advertised by the supplier or as expected by the consumer. The ARB shall not be liable for any injury to person or property resulting from the use of the equipment or process.

The holder of an equipment or process precertification may indicate that the equipment has been precertified by the ARB to meet the scope of the precertification when operated in accordance with specific operating conditions. A precertification can not be represented to take the place of a required certification under state law nor may it be represented to be a permit to construct or operate required by a district. A holder should always provide the precertification number and the date of issuance when referencing precertification and should provide copies of the Executive Order and evaluation report when providing information on the precertification to an interested party or potential user.

b. How long is a precertification valid?

The precertification of equipment shall be valid for up to three (3) years unless the equipment is modified. A precertification can be valid for less than the maximum duration if the equipment is changed or modified while retaining the same model/identification name/number. The executive order will specify the length of the precertification and the date of expiration. At least once prior to the actual date of expiration, the holder of the precertification will be contacted to determine if a renewal of the precertification will be sought. If no modifications to the equipment or process, change of ownership, or changes in applicable regulations have occurred, the precertification may be renewed for another three years upon receipt of renewal application and fees.

c. How can a precertification be modified?

If previously precertified equipment is modified in such a manner that will likely result in a change in the emissions, efficiency, or other specific criteria or operating conditions of the equipment, the holder of the precertification documentation can apply for a revision to the precertification. In addition, changes for modified regulatory precertifications may be needed whenever changes in applicable district rules and regulations, or other state or federal regulations

occur. Applications for modifications to precertifications must be submitted and will result in the assessment of modification fees based upon a new estimation of the number of hours needed to modify the precertification to address the changed parameters. Failure to apply for modifications may result in the revocation of an existing precertification.

If a change of ownership occurs in the holder of a precertification, the company may apply for a change of ownership. The revised Precertification Documentation will be issued upon receipt of the change of ownership application and the payment of the associated processing fee. The revised Precertification Documentation will be valid for the duration of the original precertification or until modification or revocation.

d. How can a precertification be revoked or suspended?

A precertification may be suspended or revoked upon written determination by the Executive Officer on the basis of any information that the equipment or process may pose a significant risk or actual hazard to the public health and safety or to the environment. A precertification may also be suspended or revoked if issued based upon any information submitted to the ARB which was inaccurate, misrepresented, or if any pertinent information was omitted. Repeated misrepresentation of the equipment or process precertification in any advertising or other oral or written communication, may be grounds for revocation. In addition, failure by the holder of the precertification to maintain the quality of the equipment or process at a level equal to or better than was provided to obtain the precertification may also be grounds for revocation. Revocation of regulatory precertifications may also be based upon information from districts on pending enforcement actions that the equipment is not able to operate in compliance with air pollution regulations.

e. How can a decision on precertification be appealed?

Applicants or holders of performance precertifications may request in writing that a hearing be conducted to review the actions taken. The request should contain information describing the action taken and contain a statement of the facts supporting the appeal. A hearing shall be conducted by a qualified and impartial hearing officer appointed by the ARB Executive Officer. The applicant also has an option to conduct the hearing through written submission. The hearing officer has the authority to uphold, modify, or overturn the action taken.

f. How much will a precertification cost?

Each precertification will involve a different amount of state resources due to the variations in the complexity of the equipment, the amount of testing conducted, and the amount of data to evaluate. In order for the state to recover the costs of the program, the criteria proposes to base precertification fees on the actual hours spent by ARB staff to evaluate the air pollution equipment and processes, and making a precertification decision. However, applicants will be given some certainty of costs prior to submitting an application. The criteria includes a process for providing an applicant with an estimate of fees up-front.

Based upon information from the pre-application meeting, ARB staff will provide the applicant with a written estimate of the total precertification fees. This will include the estimated hours needed by the ARB to complete the precertification. The estimated hours will be multiplied by an hourly rate (determined annually) which includes direct and indirect costs associated with precertification. It is anticipated that basic precertifications will take approximately 8 to 24 hours to review and process, more complex precertifications will vary in the amount of time required. Additional charges may be included if extensive or out-of-state travel are required, testing by ARB staff or contractors is needed, or extensive testing oversight, auditing or specialized evaluations are required.

g. When must the precertification fees be paid?

A prepayment of one-half of the estimated precertification fee must be paid when the application is submitted. The remaining fees will be due upon the completion of the evaluation report and preparation of an invoice which shows the hours accrued to date, the hours required for processing the final evaluation report and the Executive Order, and the remaining balance due. Upon receipt of the final payment of the fees, the precertification will be issued. The criteria also includes provisions to deal with the failure to pay the remaining fees, refunding of remaining fees upon withdrawal of application, and revision of fees in cases where insufficient information was available or significant changes were made to the scope of the precertification after initial estimation of fees.

h. Why are fees charged for renewal, modifications, or change of ownership?

Equipment, processes, control technology, and air pollution regulations change over time. To deal with this dynamic state of affairs, the proposed criteria includes a mechanism for periodic review of precertifications in order to verify that the equipment is still available for sale in California, that the equipment has not been modified since the initial precertification, and that the equipment could still operate in compliance within districts in California. The criteria also includes provisions to ensure that other modifications to precertified equipment which will likely result in a change in the emissions, efficiency, or other specific criteria or operating conditions of the equipment are handled at reduced fees. Finally, the criteria is designed to ensure that change of ownership of the precertification or manufacturer of the equipment is handled as simply as possible while still maintaining current precertifications. In each of these cases, reasonable fees will be based upon the time needed to modify the precertification to address the changed parameters.

III.

REGULATORY ALTERNATIVES AND POTENTIAL IMPACTS

A. REGULATORY ALTERNATIVES

1. Implement Program without Regulation

One alternative for establishing the ARB's equipment precertification program is to develop the program and execute it without adopting a regulation. Developing the program in this manner may cause some liability issues for the state. For example, if a business is rejected from the program for any reason, it might claim that the state did not perform the service offered. In addition, an applicant may claim that some applicants are treated more or less favorably than others. The result could be manifested in a law suit against the state. Establishing this program with a regulation provides assurance as to the requirements and responsibilities of the applicant and the ARB. In addition, with no regulation in place the ARB can not develop enforceable standards for an equipment precertification program or collect fees to cover the estimated costs of precertifying equipment. The California Health and Safety Code (H&SC), section 39620.2 states that the state Board shall charge a reasonable fee for precertification, not to exceed the state Board's estimated costs. Payment of the fee shall be a condition of precertification. Therefore, it is recommended that a regulation be adopted by the Board for the establishment of the equipment precertification program.

2. Local Air District Precertification

Currently, ten districts are required to develop equipment precertification programs as a result of the Air Pollution Permit Streamlining Act (H&SC 42320-42323). One district has implemented a formal program which precertifies equipment to be in compliance with district rules and regulations. If the remaining districts were to implement individual district programs, equipment manufacturers which desire to have their equipment precertified would be required to demonstrate their equipment in multiple districts. Individual district programs would address district specific requirements and issues resulting in a variety of precertification requirements and fees for manufacturers.

An equipment manufacturer wishing to precertify equipment would be subject to a cumbersome, time intensive, and costly process. Multiple programs implemented at a district level would contribute to the perception of a patchwork regulatory process. In addition, few districts have the time and resources to establish such a program but are required to by state law. Therefore it is recommended the equipment precertification program be developed as a statewide program and implemented in coordination with districts. Establishing the program in this manner will provide districts with a tool to meet the requirements in the Air Pollution Permit Streamlining Act and reduce and streamline duplicative requirements and testing for manufacturers.

3. Self-Certification

Self-certification is another alternative for the development of the ARB's equipment precertification program. Through self-certification, businesses would make determinations and claims of equipment performance and regulatory compliance. This type of implementation would be no different from existing business practices. Currently, manufacturers conduct product testing to determine the emissions associated with a product. Data may be used to make claims in advertising but do not assist a client in receiving permits in an expedited manner. In addition, there is no method of validating that acceptable testing methods were used to obtain the emissions information. The test data and information obtained from manufacturer testing may be used by a district for an initial engineering evaluation. However, a source test will usually be required after the equipment is installed to verify compliance with district rules and regulations.

An equipment precertification program based on self-certification would not assist in the efforts to streamline the air pollution permitting process. Businesses may currently make claims with regard to equipment in an inconsistent manner with few checks and balances to validate data or claims from a manufacturer. Businesses purchasing self-certified equipment would be required to comply with current laws and obtain air pollution permits with no streamlining benefit. Self-certification will not provide the independent third party data and information which districts require to ensure reliable emission statistics for permitting. Therefore, it is not recommended that self-certification be considered as a viable alternative for the development of the ARB's equipment precertification program.

B. LEGAL REQUIREMENTS APPLICABLE TO THE IMPACT ANALYSIS

The California Environmental Quality Act (CEQA) requires the ARB to consider the potential adverse environmental impacts of proposed regulations. Because the ARB's program involving the adoption of regulations has been certified by the Secretary of Resources (See Public Resources Codes section 21080.5), CEQA allows the ARB's environmental analysis to be included in the ARB Technical Support Document (TSD) in lieu of preparing an environmental impact report or negative declaration. In addition, the ARB will respond in writing to all significant environmental points raised by the public during the public review period or at the Board hearing. These responses will be contained in the Final Statement of Reasons for the modifications to the proposed regulations.

C. POTENTIAL ENVIRONMENTAL IMPACTS

1. Summary of the Environmental Impacts

The ARB's statewide equipment precertification program will have no negative environmental impacts. This program does not affect any federal, State, or district authority or responsibility for issuing air pollution permits, certifications, or registrations to businesses required to obtain them. In addition, the use of precertified equipment does not relieve or reduce the need to comply with any applicable federal, State, or local air pollution laws.

The equipment precertification program is a voluntary program for equipment manufacturers which desire to obtain an independent verification of equipment performance and an evaluation of regulatory compliance with federal, State, and local district rules and regulations. This program is intended to reduce the amount of time required for equipment purchasers to obtain air pollution permits from districts. Participation in this program is voluntary for districts, equipment manufacturers, and equipment purchasers.

The equipment precertification program may have a positive impact on the environment by providing incentives for businesses to purchase equipment that is precertified. The purchase of precertified equipment will provide some certainty of complying with air pollution laws when operated under the recommended conditions. In addition, businesses purchasing precertified equipment which emit substantially below district allowable emission limits will also assist in improving air quality.

2. Impact on Local Ambient Air Quality

The ARB's statewide equipment precertification program will not have a negative impact on local ambient air quality. This program does not relieve businesses from complying with federal, State, or local district rules and regulations.

This program should have a positive impact on local ambient air quality from businesses which purchase precertified equipment. It is the intent of the equipment precertification program to precertify equipment which have emission reduction benefits when compared to emissions allowed by federal, State, and district rules and regulations.

3. Impact upon Global Warming, Ozone Depletion, and Airborne Toxics

The ARB's statewide equipment precertification program will not have a negative impact upon global warming, ozone depletion, and airborne toxics. This program does not impose or eliminate any requirements for businesses affected by laws with respect to global warming, ozone depletion, or airborne toxics.

4. Impact on Water Quality, Hazardous Waste, and Solid Waste Disposal

The ARB's statewide equipment precertification program will not have a negative impact on water quality, hazardous waste, and solid waste disposal. This program does not impose or eliminate any existing requirements for businesses affected by laws with respect to water quality, hazardous waste, and solid waste disposal. The program may have beneficial impacts on water quality, hazardous waste, and solid waste disposal by promoting the coordination between Cal/EPA boards and departments in evaluating multi-media impacts of equipment, processes, and technologies during precertification.

D. POTENTIAL ECONOMIC IMPACTS

1. Summary of the Economic Impacts

ARB staff has conducted an analysis of potential economic impacts of the proposed regulation and criteria for equipment and process precertification. Section 11346.3 of the Government Code requires that, in proposing to adopt or amend any administrative regulation, state agencies shall assess the potential for adverse economic impact on California business enterprises and individuals. The assessment shall include a consideration of the impact of the proposed regulation on the ability of California businesses to compete with businesses in other states, the impact on California jobs, and the impact on California business expansion, elimination, or creation. Based upon our analysis, we have determined that the proposed regulation will not have any significant adverse impacts on the economic status of the state. The following discussion provides the basis for our findings.

2. Businesses Affected

The proposed criteria and regulation for the ARB's equipment precertification program affects the manufacturers of air pollution related equipment and businesses which purchase, install, and operate precertified equipment at a stationary source in California. However, the program is voluntary and does not require or mandate participation by any equipment manufacturer, company, or business entity. Some examples of manufactured equipment and processes that will be considered for precertification include: boilers and water heaters for steam and hot water generation, dry cleaning equipment, stationary internal combustion engines, and degreasers.

3. Potential Cost Impacts

The ARB's statewide equipment precertification program will have no, or an insignificant, potential cost impact on applicants for precertification. Since precertification is optional for manufacturers, businesses will likely only participate if it is financially advantageous. The equipment precertification program is based on "fee for service" and will provide a written estimate of costs to an applicant prior to any financial commitment on the part of the business. The average precertification fees will likely range between $480 and $1440.00 based on current hourly rates.

Potential cost impacts to business includes the cost of verification testing. Manufacturers have identified that testing for precertification may be expensive. Monitoring and Laboratory Division staff at ARB has recently surveyed private source testing companies to obtain estimates of source test costs for gaseous pollutants using ARB Method 100. These costs averaged $2,800 per day of testing. Compliance Division staff estimates that gaseous vapor recovery certification testing costs $2,500 per day while particulate testing costs over $3,500 per day. Costs associated with testing for other pollutants, including toxic airborne contaminants, will likely be higher. Manufacturers are free to determine where to have their equipment tested and are free to choose

their own independent qualified testing company. It is anticipated that the majority of testing will be conducted at sites in California by California based testing companies.

4. Potential Impacts on Business

The ARB's statewide equipment precertification program is most likely to have a beneficial impact on California businesses. This program does not impose or eliminate any requirements for businesses affected by laws with respect to global warming, ozone depletion, or airborne toxics. In addition, this program does not mandate any fees for business. Participation in this program is voluntary, therefore fees associated with this program are at the discretion of any participating business. On the contrary, the precertification program should eliminate duplicative testing to verify the performance of the equipment and reduce the amount of time needed to conduct an engineering evaluation at each district resulting in efficiencies and cost savings. The program provides manufacturers an opportunity to have equipment performance verified with respect to emissions of air pollutants. In addition, a company may request an evaluation to determine compliance with federal, state, and district rules and regulations. California businesses which purchase precertified equipment may receive an expedited permit at a reduced initial fee. Since individual businesses are free to participate in the program, no business will participate unless it finds that its participation would have favorable economic impacts.

5. Potential Impact on Employment

Since the proposed regulation and criteria is a voluntary program and does not impose any significant costs on business, we do not expect any significant change in employment due to the precertification program. The increased use of verification testing may provide opportunities for job growth in the private testing sector.

6. Potential Impact on Business Creation, Elimination, or Expansion

No change is expected to occur in the status of California businesses as a result of the proposed equipment precertification program. The program may have beneficial impacts for small California business due to streamlining of the permitting process and potential decrease in initial permit fees.

7. Potential Impact on Business Competitiveness

Since the proposed regulation and criteria affect all manufacturers and marketers in the same way regardless of their location, California businesses will not be at a competitive disadvantage when compared to businesses in other states.

8. Cost to Districts and State Agencies

Precertification of equipment is voluntary, therefore this program would not create costs to any state agency, local agency, or school district. This program may result in cost savings to

these same agencies if they receive expedited permits or reduced permit fees when installing precertified equipment. Cost to the ARB will be recovered under the fees collected for precertification. Districts are to incur initial costs in determining regulatory precertifications, however, this would be offset through the reduced staff time necessary to process applications under this permit streamlining effort.

APPENDIX A:

Proposed Regulation Order

PROPOSED REGULATION ORDER

Adopt new section 91400, Article 1, Subchapter 5.5, Chapter 1, Division 3, Title 17, California Code of Regulations, to read as follows:

[Note: The entire text of section 91400 set forth below is new language proposed to be added to the California Code of Regulations.]

§ 91400. Equipment and Process Precertification

The Executive Officer may precertify simple, commonly used equipment and processes in accordance with the Air Resources Board's "Criteria for Equipment and Process Precertification" which is incorporated by reference herein. (Adopted: [date of adoption]).

Note: Authority cited: Sections 39600, 39601, and 39620, Health and Safety Code; Reference: Sections 39000, 39001, 39002, 39003, 39010, 39500, 39515, 39516, 39620, 41511, 41512, 42322, and 57001, Health and Safety Code.

APPENDIX B:

Proposed Criteria for Equipment and Process Precertification

State of California
AIR RESOURCES BOARD

CRITERIA FOR
EQUIPMENT AND PROCESS PRECERTIFICATION

Adopted: [date of adoption]

California Air Resources Board

Criteria for Equipment and Process Precertification

California Air Resources Board

Criteria for Equipment and Process Precertification

I. General Applicability

(a) These criteria establish provisions for the ARB Executive Officer to precertify simple, commonly used equipment and processes pursuant to Section 91400, Chapter 1, Division 3, Title 17 of the California Code of Regulations and Section 39620, Chapter 3.1, Division 26 of the Health and Safety Code.

(b) These criteria set forth basic precertification requirements, including, but not limited to: equipment and process eligibility; pre-application procedures; application package requirements; verification testing requirements; precertification procedures; modification, suspension or revocation procedures; and fee assessment procedures.

(c) ARB staff may develop guidelines to assist interested parties in accessing the precertification process.

II. Definitions

(a) For the purposes of this criteria, the following definitions apply:

(1) Air District or District. Refers to any of California's local air pollution agencies, including air pollution control districts and air quality management districts.
(2) Applicant. Refers to a person, group of persons, or any organization applying for precertification of equipment or process.
(3) Application Package. Compilation of information that is required to be submitted by the applicant. The package shall include a written application for precertification with detailed information regarding the equipment or process, a written scope of the precertification; test protocols, reports, and data;

and partial payment of precertification fees.

(4) ARB. Refers to the State of California Air Resources Board.

(5) ARB Executive Officer. Refers to the Executive Officer of the ARB or his/her authorized representative or designee.

(6) Board or State Board. Has the same meaning specified in section 39053 of the Health and Safety Code.

(7) Commonly Used. Equipment or processes that are mass-produced and commercially available for operation by numerous sources under the same or similar conditions. This may also include modifications to, replacements for, or innovative alternatives to existing equipment or processes already in use at numerous sources.

(8) Data Quality Objectives. Qualitative and quantitative measurements or statements that must be obtained from the environmental data operations in order to demonstrate that the desired and expected result has been achieved. These may include parameters including accuracy or bias, precision, representativeness, comparability and completeness needed to support issuance of a precertification.

(9) Days. Means calendar days except where specified as working days.

(10) Equipment or Air Pollution Equipment. Any article, machine, or other contrivance which may emit, produce, prevent, reduce, control, treat, test, or monitor air pollutants or air quality.

(11) Performance Precertification. A preliminary engineering evaluation of equipment or process to verify performance claims and to identify the range of operating conditions under which verification testing was conducted.

(12) Precertification. See Performance Precertification or Regulatory Precertification.

(13) Precertification Specifications. Equipment or process specific requirements which must be satisfied during verification testing, as identified in the scope of the precertification or determined by ARB staff during evaluation and testing of the equipment.

(14) Precertification Standards. General requirements for equipment or processes which must be satisfied during verification testing, as identified in the scope of the

precertification, and which are based upon emissions, efficiency, work practice or other specific criteria applicable to all equipment or processes within a general category.

(15) Process or Air Pollution Process. A systematic series of steps taken including but not limited to the materials, methods, products, devices, equipment, applications, or technologies which may emit, produce, prevent, reduce, control, treat, test, or monitor air pollutants or air quality.

(16) Regulatory Precertification. An identification and evaluation of the regulatory requirements associated with use of the equipment which has successfully undergone a performance precertification. Regulatory precertification shall include recommended permit conditions to be adopted by a district having jurisdiction over the location where the equipment or process is operated.

(17) Scope of the Precertification. The document identifying the applicant's claims regarding performance, emissions or efficiency of the equipment or process; and the test procedures, data quality objectives, and calculation procedures which will be followed to verify the claims.

(18) Test Procedures or Methods. Specific written procedures for identification, measurement and evaluation of one or more qualities, characteristics, or properties of a material, product, system, or service that produces a test result.

(19) Verification Testing. Tests conducted during or prior to the evaluation of the application package to provide test data to support applicant's claims.

III. Pre-Application Procedures

(a) An applicant must prepare a written request for precertification which shall include:

(1) the name of applicant, contact person, mailing address, and telephone number;

(2) a brief description of the equipment or process, how it operates, and potential air pollutants emitted,

reduced, controlled or monitored by the equipment or process;

(3) a statement that the equipment or process does not pose a significant potential hazard to public health and safety or to the environment if operated in accordance with manufacturer's recommendations;

(4) information which supports a determination that the equipment or process is commonly used; and

(5) a brief description of potential precertification standards and an indication if performance or regulatory precertification will be sought.

(6) Any additional information requested by ARB staff in order for it to make a determination regarding eligibility or priority for precertification;

(b) ARB staff shall review the request and determine whether or not the proposed equipment or process is appropriate to precertify based upon the eligibility criteria within 15 days.

(c) Upon the determination that the equipment or process is eligible for precertification, the applicant and ARB staff may meet or exchange additional information on the equipment and process being submitted for precertification, the scope of the precertification including performance claims and available test data, the requirements for the application package, the process and procedures for precertification, and the fee assessment procedures. Based upon the information received, ARB staff shall prepare a written estimate of its costs.

IV. Eligibility Criteria

(a) In order for the equipment to be considered for precertification by ARB Executive Officer, the equipment or process must not pose a significant potential hazard to public health and safety or to the environment if operated in accordance with manufacturer's recommendations. The equipment or process must be related to air quality requirements in California and must be commonly used.

(b) The ARB Executive Officer may grant priority to: simple equipment or processes; ARB staff targeted equipment classifications, including equipment subjected to Board adopted regulations or control measures; district priority equipment classifications or district precertified equipment; and equipment or processes which may result in permit streamlining, emission reductions, or pollution prevention. ARB staff may review such an application in advance of other applications from applicants that do not meet these criteria.

V. Precertification Application Package Requirements

A Precertification Application Package shall include a written Application, a Scope of the Precertification, Testing Protocols and/or Test Reports, and the payment of one-half of estimated fees pursuant to section XVII.

VI. Requirements for Applications

All applications for precertification shall be in writing and shall be signed by an authorized representative of the applicant. The applicant shall affirm that the information provided in the application package is true and correct and that the applicant shall pay any and all fees assessed in accordance with the precertification criteria.

(a) Performance Precertification. Applicants for performance precertifications shall provide all of the following information to ARB staff, unless ARB staff indicates to the applicant that a particular item need not be submitted.

(1) Name of applicant, contact person, mailing address, and telephone number if different from information submitted on request for precertification;
(2) Legal status of the applicant (corporation, partnership, individual owner, etc.);
(3) Reason for the application (new application, request for modification, transfer of ownership, etc.);
(4) Name of equipment, model numbers, and a description of the equipment or process and how it operates unless ARB

staff indicate that sufficient details were provided in the request for precertification;

(5) Materials/Input streams for which the equipment or process is to be precertified, including maximum production and usage rates;

(6) Description of criteria pollutants, non-criteria air pollutants and precursors emitted from equipment, points of emission, and all other output streams from use of the equipment and processes. Include mass emission rates, stack concentrations, stack conditions, and other data for evaluation of impact of emissions;

(7) Equipment or process design and block diagram;

(8) Equipment or process operation parameters and operation procedures (e.g. temperature, pressure, velocity);

(9) Description of air pollution control equipment, monitoring devices, and emissions related safety features;

(10) Detailed written installation, operation, training, inspection, maintenance and emergency/upset instructions for the use of the precertified equipment or process to ensure that the equipment or process is operating properly;

(11) Any additional information requested by ARB staff in order for it to make a determination regarding suitability for precertification;

(b) Regulatory Precertification. In addition to all of the information required by subdivision (a), applicants for regulatory precertifications shall also provide the following supplemental information to ARB staff:

(1) identification of air districts to be included in regulatory precertification evaluation;

(2) Any additional information requested by the staff of the ARB or an identified district in order to make a determination regarding suitability for regulatory precertification.

VII. Requirements for a Scope of the Precertification

All applicants seeking an air pollution equipment and process precertification shall include a scope of the

precertification as part of the application package. The scope of the precertification shall include the precertification standards, precertification specifications, test procedures, data quality objectives, and calculation procedures.

a) Precertification Standards shall be proposed by the applicant in the scope of the precertification. These may include performance claims, state, federal, and local air district prohibitory rule related standards, Best Available Control Technology determinations, or Airborne Toxic Control Measure standards which are based upon emissions, efficiency, or written criteria applicable to all equipment within a general category.

(b) Precertification Specifications applicable to the specific equipment or process shall be proposed by the applicant in the scope of the precertification or may be determined by the ARB staff during review, evaluation, or testing of the equipment or process. These may include critical operating parameters, performance claims, permit conditions, parameters for indicating gauges, monitoring or detection devices, or alarms. Precertification specifications shall be monitored during verification testing and may provide a basis for compliance testing or monitoring of the in-use equipment to achieve and maintain the performance levels equal to or greater than the level of the precertification standards and ensure that it is operated properly and used safely.

(c) Test Procedures shall be identified by the applicant for all verification testing. Board adopted test methods shall be used for verification testing. The applicant may propose to use methods approved by other agencies or other alternative sampling and analysis methods within the scope of the precertification. The applicant shall provide sufficient information to enable the ARB Executive Officer to determine in writing that the alternative method is substantially equivalent to the Board adopted method for the precertification or that the Board adopted method is not adequate to characterize the emissions or performance.

(d) Data Quality Objectives shall be identified by the applicant in the scope of the precertification to ensure that the data

will meet a minimum level of acceptance. Data must be generated with an accepted, verified, or calculated precision, bias or accuracy, and sensitivity; the data must be comparable to the precertification standards and specifications; the data must be complete; and the results must be representative of the make or model of the equipment or process, of normal operating conditions, and of the actual emissions from the equipment.

(e) Calculation procedures to convert test data into results which can be compared to the standards or specifications shall be identified by the applicant. The calculation procedures must result in an accurate and comprehensive characterization of emissions or efficiency, be clear, well documented, easy to verify, and be of demonstrated reliability. Each applicant may generate equipment specific emission factors from the verification test data in emissions per applicable unit of usage and maximum hourly emissions.

VIII. Requirements for Testing Protocols and Test Reports

The applicant shall submit written testing protocols for all verification testing to be conducted and/or written test reports for previously conducted testing as part of the application package. Upon completion of verification testing conducted under approved protocols, the applicant shall submit written test reports within the time-frame specified in the protocol.

(a) All testing protocols shall include the following:

(1) The time-frame or approximate dates during which the testing will be performed and the location of the test site;
(2) Name and qualifications of companies and/or persons who will conduct the testing including all sampling and analytical procedures (including copy of independent tester executive order provided pursuant to Section 91207, Title 17, California Code of Regulations, or similar written district approval or accrediation, if the tester has been approved for the proposed test method);

(3) Brief description of the equipment or process tested;
(4) Approximate values or range of values for process reactant composition and rates, fuel composition and firing rates, other process operating parameters and conditions to be monitored during the specific test;
(5) Source test, sampling and analysis methods (alternative methods must be described in detail);
(6) Equipment specifications and drawings as needed to plan and interpret source test results, including but not limited to stack dimensions and port configuration;
(7) Approximate stack conditions including: temperature; concentrations of each measured pollutant; mass emission rates; oxygen, carbon dioxide and moisture content; exhaust gas velocity and volumetric flow rate;
(8) Quality assurance plan including: calibration data, traceability of calibration gases, frequency of checks, and acceptance criteria; quality control data including frequency of zero, span, drift, audit, blank and spiked samples; and chain of custody documentation;
(9) Estimated limit of detection, proposed number of test runs, number of sampling points, planned sample volumes and times, and any other pretest calculations required for each method;
(10) Applicable precertification standards, precertification specifications, or other operating conditions affecting emissions during operation;
(11) Estimated date on which (or number of days until) the test report will be submitted.

(b) All test reports must include the following information:

(1) All actual test values for the information required for test protocols as listed in section (a) and in the scope of the precertification;
(2) Supporting data and documentation of test conditions and all operating conditions specified in the scope of the precertification;
(3) Test reports or written results from prior testing shall also show that testing was conducted following adopted or approved alternative methods and results must be compatible with scope of the precertification including proposed standards, specifications, and data quality objectives. Test reports generated by

independent testing and reports that have been reviewed and considered valid by an air district or by ARB staff are preferred.

IX. Confidentiality of Information.

Information submitted to the ARB Executive Officer pursuant to these criteria may be claimed as confidential by the applicant. If a claim is asserted, such information shall be handled in accordance with the procedures specified in Title 17, California Code of Regulations, Section 91000-91022. The ARB Executive Officer may consider such confidential information in reaching a decision on a precertification application.

X. Verification Testing Requirements

For all verification testing to be conducted during precertification:

(a) The applicant shall identify a suitable test location within the State of California which either operates or is capable of operating the equipment or process unless prior written approval of the site is received from the ARB Executive Officer. The applicant shall ensure that safe access and proper sampling facilities are available and that the site complies with all local requirements. The applicant shall provide a written notice of the test date(s) and time at least 15 days prior to the testing and shall provide 5 days advance notification of any adjustments in the date(s) or time.

(b) The applicant or contractor for the applicant is responsible for conducting verification testing, completing the quality assurance plan and quality control checks, completing data reduction and validation, and preparing the test report within the time frames identified in the test protocol. Testing shall not begin until after the approval of the testing protocol.

(c) All testing shall be conducted by qualified independent testing companies, unless written approval is given by the ARB Executive Officer.

(d) Verification testing shall not be performed by the applicant or contractor for the applicant which has a conflict of interest as defined in Section 91208, Title 17, California Code of Regulations without prior written approval of the ARB Executive Officer.

(e) The applicant or contractor for the applicant shall record sufficient test and process data at the time of the test to determine emissions or efficiency, verify operating conditions and specifications, and evaluate test results including unusual occurrences, results, and testing conducted prior to the start of actual verification testing.

(f) All verification testing shall be conducted while the equipment is operated under representative operating conditions and all samples collected must be representative of the emissions or efficiency under the test conditions. Testing under non-representative operating conditions may only be performed when determining an acceptable operating range for precertification specifications.

(g) ARB staff may be present to observe all aspects of field, source, bench, or laboratory testing and to approve minor modifications to testing protocol. Major deviations to the testing protocol must be approved in writing by the ARB Executive Officer. When appropriate, ARB staff may require analysis of audit materials or collection of split confirmation samples.

XI. Precertification Procedures

(a) ARB staff, upon receipt of application packages (including one-half of estimated fees pursuant to section XVII) for Performance and Regulatory Precertifications, shall:

(1) Review the test protocols and notify the applicant in writing within 30 days of receipt whether or not the protocols are approved or will require modification;
(2) Evaluate verification testing including the oversight of testing and the review of test reports to determine if test procedures were conducted in accordance with methods, data met data quality objectives, and test

results satisfy precertification standards and specifications;

(3) Review the application package and notify the applicant in writing within 30 days of receipt of test reports whether or not the application package has been determined to be complete and accepted for filing or to be deficient. If deficient, the ARB staff shall identify the specific information required to make the application package complete.

(4) Review and revise completeness determination and provide notification to applicant within 15 days of receipt of additional information provided for a deficient application package;

(5) Prepare a preliminary evaluation report which describes the equipment or process, the scope of the precertification, the evaluation of verification testing, recommendations on suggested operating conditions and a recommendation for the Executive Officer to issue or deny the precertification. If denied, the ARB staff shall provide the reasons for the denial.

(6) Provide the applicant and applicable local air districts an opportunity to review the preliminary evaluation report prior to approval and request that comments be submitted within 30 days of receipt of preliminary report.

(7) Prepare the final evaluation report for approval by the ARB Executive Officer within 90 days of the application being deemed complete. The time period may be extended for:

(A) evaluation of information submitted by an applicant in response to request from ARB staff to clarify, amplify, correct, or otherwise supplement the application package or test reports; or

(B) evaluation of additional verification testing; or

(C) good cause as provided by Government Code Section 15376;

The time period may also be extended by mutual agreement of ARB staff and the applicant.

(9) Request and receive payment of remaining fees, pursuant to section XVII;

(10) Issue precertification consisting of an Executive Order and the approved evaluation report after receipt of

remaining fees. After approval and signature, evidence of precertification shall be maintained in ARB files and shall be made available upon written request to the ARB Executive Officer.

(b) In conjunction with all of the procedures outlined in subdivision (a), ARB staff shall use the following procedures to evaluate application packages for regulatory precertification. ARB staff shall:

(1) Review the supplemental documentation submitted by the applicant of the air pollution equipment or process for completeness and adequacy;
(2) Consult with specified air districts during the review of the evaluation report and during determination of operating conditions;
(3) Determine applicable state, federal and district regulations.
(4) Request that districts notify ARB staff if equipment or process will comply with district rules and regulations within 30 days of receipt of preliminary report.

(c) The decision on an application for precertification under this section is exempt from the requirements of Chapter 3.5 (commencing with Section 11340), and Chapter 4 (commencing with Section 11370), and chapter 5 (commencing with Section 11500) of Part 1 of Division 3 of Title 2 of the Government Code, and shall not be subject to the review and approval of the Office of Administrative Law.

XII. Precertification Limitations and Disclaimers

(a) Precertification by the Board means only that ARB staff has verified emission test data supplied by or on the behalf of the manufacturer of the equipment or process. Precertification does not represent any endorsement whatsoever by the Board as to the quality or utility of the equipment or process, nor does it represent that the equipment or process is any more or less harmful or beneficial to air quality than any other similar equipment or process. Precertification by the Board does not represent any guarantee of the performance or safety of the

equipment or process. Precertification does not represent the absence of any pollutant nor is the Board or its staff liable for failing to verify the existence or levels of any pollutant which is not identified in the scope of the precertification. The Board and ARB staff shall not be liable in any way in the event that the equipment or process fails to perform as advertised by the supplier or as expected by the consumer. The Board and ARB staff shall not be liable for any injury to person or property resulting from the use of any precertified equipment or process. The holder shall not make any claims of any kind which implies endorsement by the Board or ARB staff with respect to this equipment or process in any advertising or other oral or written communication.

(b) Precertification by the Board does not represent, nor may it be used to, satisfy the requirements for obtaining other certifications required under state law.

(c) Precertification by the Board does not represent, nor may it be used as, a permit to operate unless authorized under local district regulation. Precertification does not affect the existing district authority regarding permitting or compliance requirements.

(d) The holder of an air pollution equipment or process precertification shall cite the precertification number and date of issuance whenever the precertification is used or referred to.

(e) When providing information on the precertification to an interested party, the holder of an air pollution equipment or process precertification shall at a minimum provide the full text of the signed Executive Order and evaluation report.

XIII. Duration and Renewal of Precertification

(a) The maximum duration of air pollution equipment or process precertification is three (3) years. The actual duration of the precertification, if less than three years, shall be specified within the Executive Order.

(b) The holder of a precertification may apply for a renewal at least 90 days prior to the expiration of the precertification. ARB staff shall verify that the equipment has not been modified and is not currently subject to suspension or revocation procedures. ARB staff shall re-evaluate the equipment or process to determine if standards and specifications continue to be satisfied. Applicant shall be notified if any changes are required prior to re-issuance or denial. The maximum duration of each re-issued precertification shall be three years.

(c) Fees for a renewal of a precertification shall be assessed in accordance with Section XVII.

XIV. Modifications to Precertifications

(a) The holder of a precertification shall apply for a revision to the precertification whenever the equipment is modified or altered in a manner that may result in change of emissions, efficiency, specific criteria, or operating conditions.

(b) The holder of a regulatory precertification shall apply for a revision to the precertification within 60 days of notification by ARB staff of changes in applicable district, state or federal regulations. Failure to apply for revision may result in suspension or revocation of precertification.

(c) During the time interval ARB staff is evaluating the revision, the existing precertification shall remain valid unless suspended or revoked.

(d) Fees for an evaluation of any revision to a precertification shall be assessed in accordance with Section XVII.

XV. Suspension or Revocation of Precertification

(a) The ARB Executive Officer may, for cause, suspend or revoke a precertification in any of the following circumstances:

(1) The holder of precertification is in violation of one or more terms and conditions of the precertification;
(2) the holder of a precertification is misrepresenting the meaning, findings, effect, or other material aspect of the precertification;
(3) the holder of a precertification has made material misrepresentations or provided misleading information in the course of the precertification process;
(4) the holder of a precertification has made material misrepresentations or provided misleading information in the course of selling, marketing, advertising, or otherwise promoting the equipment or process that is the subject of the precertification;
(5) the equipment or process which is the subject of the precertification is found, in actual use, not to comply with the findings set forth in the Executive Order and evaluation report. For the purposes of this section, noncompliance with the precertifications may include, but is not limited to:
    (A) a repeated failure to perform to the standards set forth in the precertification;
    (B) a material difference in design or construction of the process or equipment as precertified versus as provided for use to the public;
    (C) whenever the equipment is modified in a manner that may result in change of emissions, efficiency, specific criteria, or operating conditions;
    (D) an inability of the equipment or process to operate in compliance with air pollution regulations, based upon information from a local air district or upon pending enforcement actions taken by the ARB, local air district, or U.S.EPA for non-compliance with air pollution rules and regulations;
(6) transfer or change of ownership of rights to manufacture or otherwise produce the equipment or process that is the subject of the precertification;
(7) any other activity which may mislead a prospective consumer or permitting authority with respect to the equipment or process that is the subject of the precertification.

(b) A precertification holder may be subject to a suspension or revocation action pursuant to this section based upon the actions of an agent, employee, licensee, or other authorized representative.

(c) In the event that the ARB Executive Officer suspends or revokes a precertification, an investigation may be made by the ARB Executive Officer to gather evidence regarding continuing violations of the terms or conditions of the precertification or the precertification program.

(d) Any precertification holder whose precertification is suspended or revoked may request a public hearing pursuant to Section XVI to review the suspension or revocation action.

(e) Nothing in this section shall prohibit the ARB Executive Officer from taking any other action provided for by law, including the prosecution of an action in court.

XVI. Hearing Procedures

(a) Any applicant for or holder of performance precertification whose application or performance precertification has been denied, suspended, or revoked and who desires a hearing to review the action taken may request a hearing by sending a request in writing to the ARB Executive Officer. A request for hearing shall include all the following:

(1) name of applicant or precertification holder;
(2) name or identifying description of equipment or process that is the subject of the application package or precertification;
(3) number of the precertification (if applicable);
(4) copy of the Executive Order revoking or suspending precertification or a written notification of denial;
(5) a statement of facts setting forth the basis of challenging the denial, suspension, or revocation (mere conclusory allegations shall not suffice);
(6) a brief summary of evidence in support of the statement of facts required in (5) above; and
(7) signature of authorized person requesting the hearing.

(b) A request for a hearing shall be mailed within ten (10) days of the issuance of the denial, suspension, or revocation.

(c) A hearing requested pursuant to this section shall be heard by a qualified and impartial hearing officer appointed by the ARB Executive Officer. The hearing officer may be an employee of the Board, but may not be any employee who was involved with the precertification at issue. In addition, the hearing shall be conducted within these guidelines:

(1) The requester shall have the burden of showing that the denial, suspension, or revocation action was improper based on one or more of the following:
   (A) the action was not supported by the evidence;
   (B) the factual basis for the action was mistaken;
   (C) the action was arbitrary and capricious; or
   (D) the action was unnecessarily harsh in relation to the facts underlying the revocation or suspension.

(2) The Board may be represented by staff familiar with the precertification program and may present rebuttal evidence. The Board may be represented by counsel.

(3) Technical rules of evidence shall not apply to the hearing, except that relevant evidence may be admitted and given probative effect only if it is the kind of evidence upon which reasonable persons are accustomed to rely in the conduct of serious affairs. No action shall be overturned based solely on hearsay evidence, unless the hearsay evidence would be admissible in a court of law under a legally recognized exception to the hearsay rule.

(4) The hearing shall be recorded. The recording may be made electronically or by certified shorthand reporter.

(5) The hearing officer shall render a written decision within 30 working days. The hearing officer may do any of the following:
   (A) uphold the denial, suspension, or revocation action as issued;
   (B) reduce a revocation to a suspension;
   (C) increase a suspension to a revocation if the precertification holder's conduct so warrants;
   (D) overturn a denial, suspension, or revocation in its entirety.

(6) The hearing officer shall consider the totality of the circumstances of the denial, suspension, or revocation, including but not limited to credibility of witnesses, authenticity and reliability of documents, and qualifications of experts. The hearing officer may also consider relevant past conduct of the applicant including any prior incidents involving other ARB certification programs.

(7) The hearing officer's written decision shall set forth findings of fact and conclusions of law as necessary.

(d) In lieu of the hearing procedure set forth in (c), above, an applicant may request that the hearing be conducted by written submission. The applicant may submit a written explanation of the basis for the appeal and submitting appropriate documents in support of the applicant's position:

(1) ARB staff may submit a written response and documents in support of the ARB Executive Officer's action;

(2) The precertification holder may submit one rebuttal statement (which may include supporting documentation as attachment(s));

(3) If the precertification holder submits a rebuttal, ARB staff may submit one rebuttal statement (which may include supporting documentation as attachment(s));

(4) The hearing officer shall be designated in the same manner as set forth in (c) above. The hearing officer shall receive all statements and documents and render a written decision. The hearing officer's decision shall be mailed to the precertification holder no later than thirty (30) working days after the final deadline for submission of papers.

XVII. Fee Assessment Procedures

(a) ARB staff shall assess and collect reasonable fees for precertifications to recover the estimated costs to the ARB for evaluating air pollution equipment and processes, and issuing precertification.

(b) Precertification fees shall be based upon the actual hours spent by ARB staff to evaluate the equipment or processes. After the pre-application meeting, ARB staff shall notify the applicant as to estimated total hours by staff classification anticipated to determine eligibility, conduct the pre-application meeting, prepare an estimate of the precertification fees, process the application, complete the evaluation, prepare the evaluation report, and issue the precertification. The estimated hours shall be multiplied by an hourly rate as determined on an annual basis by the ARB Executive Officer. The hourly rate shall include direct and indirect costs associated with precertification. Additional charges may be included if extensive travel is required, if ARB testing is needed, or if specialized evaluations or testing oversight are necessary.

(c) One-half of the precertification fees shall be due and payable to the ARB as part of the application package.

(d) The remaining fees shall be due and payable to the ARB upon written notification of the successful completion and approval of the Evaluation Report. The remaining fees shall not exceed the cost of the work performed plus the cost of processing the Executive Order and final evaluation report.

(e) Precertification Fees paid that are not used prior to an application being withdrawn or denied shall be refunded upon request.

(f) Failure to pay fees when due may result in written notice of cancellation of precertification application. A canceled application may be reinstated by payment of applicable fees plus 10 percent within 90 days of notice.

(g) ARB staff may revise the estimated fees when insufficient information is provided at the pre-application meeting or in the application package, if significant changes in the scope of the precertification are needed, or if test data submitted is not sufficient to support precertification without additional testing, revision or re-evaluation. The applicant shall receive a revised estimate of the additional hours necessary to complete the evaluation of the precertification application along with a written

justification for the revision. The applicant shall have the option of paying an additional amount sufficient to cover remaining costs, requesting a reduction in the scope of the precertification, or requesting withdrawal of the application.

(h) Renewal fees shall be based upon the actual hours spent by ARB staff to maintain the existing precertification, re-evaluate the equipment or process and to reissue the documentation. Renewal fees shall be due and payable to the ARB prior to expiration of the precertification or upon written notification.

(i) Change of ownership fees shall be assessed at two and one-half hours of staff time multiplied by the current hourly rate. These fees shall be due and payable to the ARB upon submittal of request for change of ownership.

(j) Fees for modifications to precertifications shall be recalculated based upon number of hours needed to evaluate and modify precertification in accordance with subsection (b) through (f) above. These fees shall be due and payable to the ARB upon submittal of request for modification.

APPENDIX C:

Health and Safety Code
Section 39620

CALIFORNIA HEALTH AND SAFETY CODE

CHAPTER 3.1. PERMIT ASSISTANCE

(Chapter 3.1 added by Stats. 1992, Ch. 1096, Sec. 1.)

39620. (a) The state board shall implement a program to assist districts to improve efficiencies in the issuance of permits pursuant to this division. The program shall be consistent with the requirements of Title V.

(b)(1) The program shall include a process, developed in coordination with the districts, for the state board to precertify simple, commonly used equipment and processes as being in compliance with applicable air quality rules and regulations, under conditions specified by the state board. The state board shall develop criteria and guidelines for precertification in coordination with the districts.

(2) The state board shall charge a reasonable fee for precertification, not to exceed the state board's estimated costs. Payment of the fee shall be a condition of precertification.

(3) Precertification shall not affect any existing authority of a district regarding permitting and compliance requirements. Precertification shall constitute a preliminary evaluation of the equipment or process, and a recommendation by the state board for permit conditions to be adopted by a district having jurisdiction over particular equipment or a particular process, that would allow district permitting staff to more quickly process permit applications for air pollution sources.

(4) The California Environmental Protection Agency, within existing resources, and in consultation with appropriate state and local regulatory agencies, shall evaluate the feasibility and benefits of expanding the precertification program to involve other state and local regulatory agencies with jurisdiction over other environmental media, including land and water.

(Amended by Stats. 1994, Ch. 429, Sec. 1)

APPENDIX D:

Guidelines for the Equipment Precertification Program

EQUIPMENT PRECERTIFICATION PROGRAM GUIDELINES

APRIL 1996

California Environmental Protection Agency

Air Resources Board

This document describes the Equipment Precertification Program procedures used to select and evaluate equipment and processes for potential certification. The document was prepared by the California Air Resources Board (ARB) in coordination with the California Air Pollution Control Officers Association and the local air pollution control and air quality management districts in the State of California.

Persons interested in obtaining more information on the Equipment Precertification Program should contact the Stationary Source Division (SSD) of the ARB at:

Equipment Precertification Program
California Air Resources Board, SSD
P.O. Box 2815
Sacramento, CA 95812-2815
Phone: Within CA (800) 272-4572
Outside CA (916) 322-3656
FAX: (916) 445-5023

This guidance document is not an ARB regulation and does not establish legal requirements. This document is also not intended to provide a procedure which guarantees success in a product receiving precertification. Due to the individual nature of each application, it is not possible for this document to identify all of the information that will be required to precertify equipment. However, after a pre-application meeting with ARB staff, the applicant will receive a written summary of the necessary information to constitute a complete application package. It is recommended that the language of the equipment precertification regulation and criteria be reviewed along with this document. If there are any questions about the information in this document or language in the precertification regulation, you are encouraged to call Raymond Menebroker, Chief of the Project Assessment Branch, Stationary Source Division, at (916) 322-6026.

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INTRODUCTION

California businesses have identified equipment precertification as a high priority for simplifying and streamlining the air pollution permitting process and for promoting uniformity between local air pollution control and air quality management districts (air districts). In response, Governor Wilson signed Assembly Bill (AB) 2781 in 1992 and AB 3215 in 1994. AB 3215 gives the California Air Resources Board (ARB) the authority to create a precertification program for equipment permitted by the local air districts. The ARB, in coordination with air districts and industry, is developing a voluntary Equipment Precertification Program. The purpose of the program is to help assist districts to improve efficiencies in the issuance of air permits and to establish a process to precertify simple, commonly used equipment and processes. In addition, the program will establish a system to assist businesses in understanding and meeting the requirements of various air districts through equipment evaluation and regulatory review in coordination with air districts.

Currently, air districts rely on information provided by air pollution permit applicants for permit processing and for conducting engineering evaluations. Many times air pollution permit applications are incomplete due to missing or omitted information required by districts to perform the engineering evaluation. The equipment precertification program will assist air districts in simplifying the permitting process by providing equipment-specific information when applicants purchase precertified equipment and agree to operate it within a given set of operating conditions.

The Equipment Precertification Program provides equipment manufacturers with an opportunity to have equipment and/or processes evaluated by the State of California. Equipment will be precertified if the product meets performance and regulatory requirements as established by the ARB, the air districts (including appropriate committees of the California Air Pollution Control Officers Association), and the precertification applicant. Specifically, the Equipment Precertification Program will consist of a performance precertification and a regulatory precertification.

The performance precertification is an independent performance verification of equipment and processes with regards to manufacturers claims and specifications. All participants of the precertification program must go through the performance verification process. A regulatory precertification may be requested to accompany the performance precertification. The regulatory precertification is a regulatory review of the performance precertification to determine equivalence with applicable federal, State and local air pollution rules and regulations. The regulatory precertification does not replace the need for an air district to make site specific equipment applicability determinations with regard to federal, State, and local requirements. These requirements could include programs such as Title V, New Source Review, Best Available Control Technology, Health Risk Assessments, and others. Information regarding precertified equipment will be made available to air districts, state and territorial air agencies, the U.S. EPA,

the business community, and the general public. It is anticipated that precertified equipment information will be included on the ARB electronic bulletin board.

These guidelines have been developed to provide precertification applicants with the information necessary to have equipment precertified by the ARB. The guidelines are divided into seven sections to guide equipment manufacturers through the precertification process. The sections are listed below with a brief description:

- Section 1 - Legal Background, identifies the authority which directs the ARB to establish the precertification program.

- Section 2 - Description of Precertification Process, describes the procedure that an applicant will follow to precertify equipment or processes.

- Section 3 - Scope of the Precertification, explains how the applicant and the ARB staff will develop an agreement as to the technical requirements for validating a manufacturers performance claim. This includes identifying standards, specifications, test methods and procedures, and data quality objectives.

- Section 4 - Evaluation of Verification Testing, describes the process for submitting test protocols and data, oversight of testing, and documentation of test conditions and reports.

- Section 5 - Evaluation Report and Precertification Documentation, explains the steps the ARB will take to document and issue precertification decisions.

- Section 6 - Precertification Fees, explains the fee calculation procedures and renewal information.

- Section 7 - Definitions, defines and explains terms used throughout the document for describing the precertification process.

The appendices contains various reference materials and sample documents to further assist applicants through the precertification process. If any questions arise regarding these guidelines or the precertification process in general, please contact the ARB at the phone number located on the inside cover of this document.

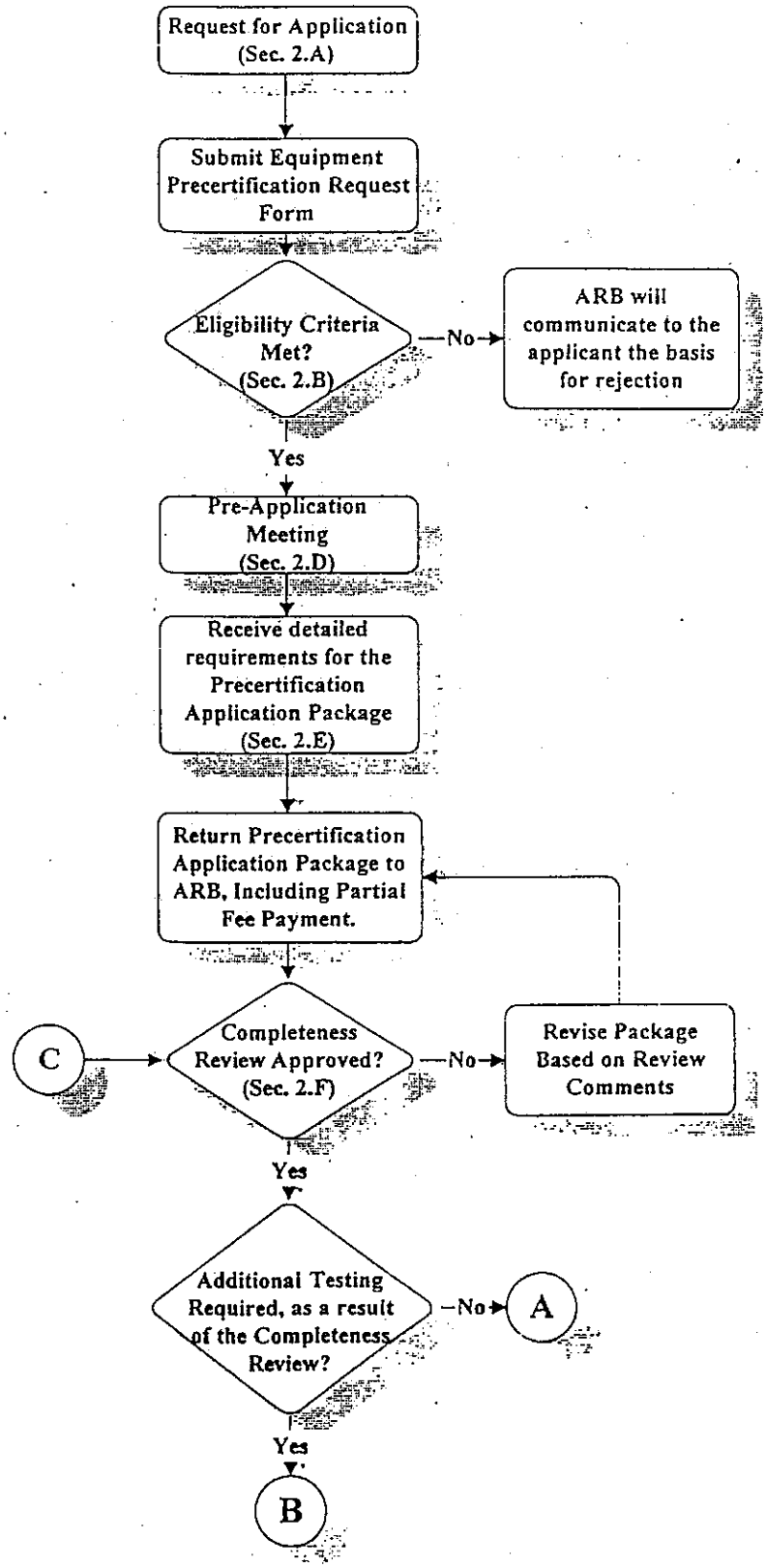
Section 1
LEGAL BACKGROUND

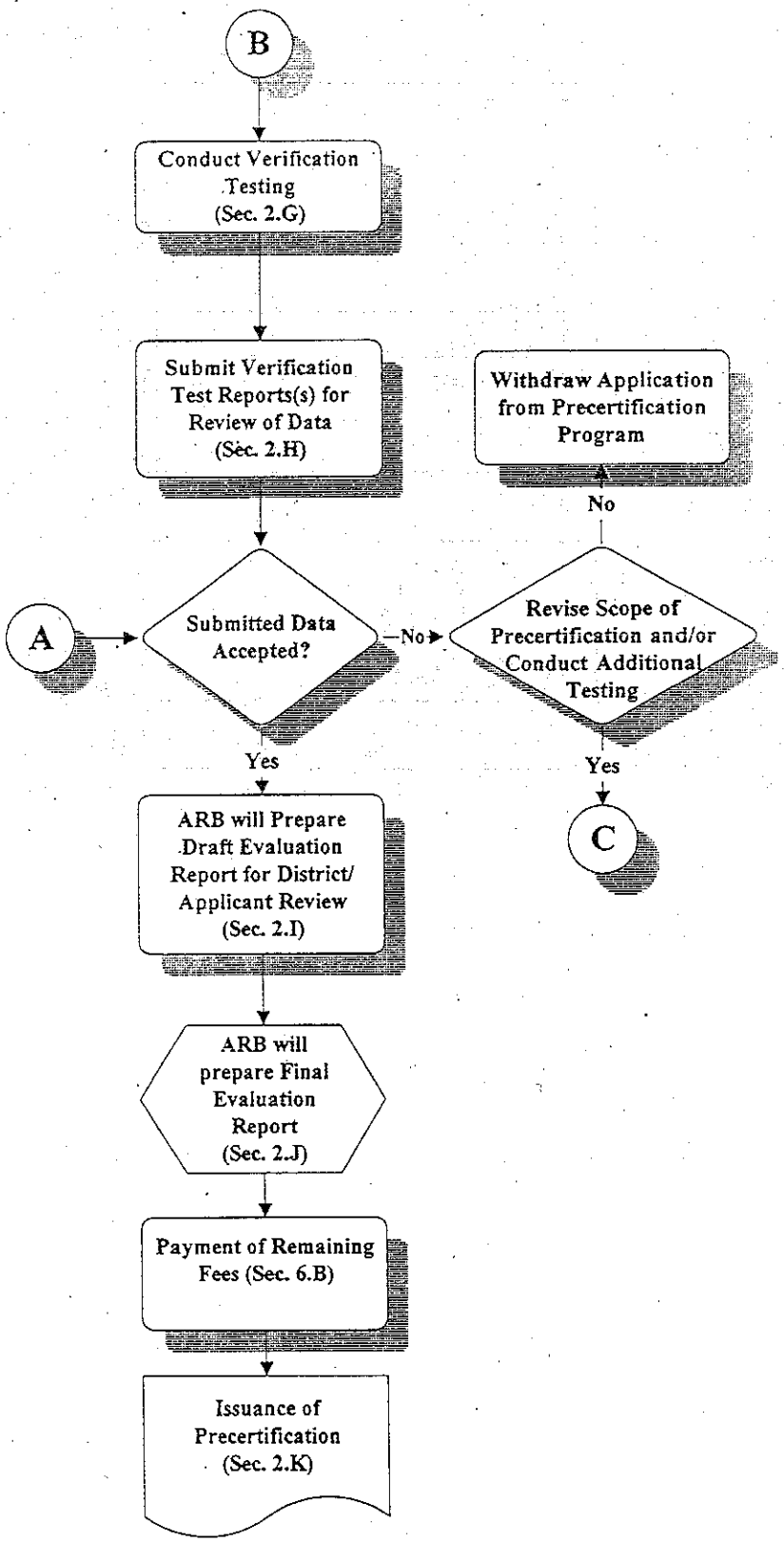
The Air Pollution Permit Streamlining Act (California Health and Safety Code section 42320-42323) requires air districts with populations greater than 250,000 to implement a precertification program for mass-produced equipment operated by many sources throughout the local area. This concept has been expanded into a statewide program through the adoption of Assembly Bill 3215 (California Health and Safety Code section 39620), signed into law by Governor Wilson in September 1994.

The ARB is developing a voluntary Equipment Precertification Program in coordination with air districts, industry, and other interested parties. The ARB has been given the authority to develop and implement the Equipment Precertification Program under California Health and Safety Code section 39620 (See Appendix A). Specifically, the ARB is required to implement an equipment precertification program to assist districts with improving efficiencies in the issuance of air pollution permits. The program is to be developed in coordination with the air districts and shall not affect any existing air district authority regarding permitting and compliance requirements. Air districts will continue to issue permits and verify compliance with district-specific rules and regulations.

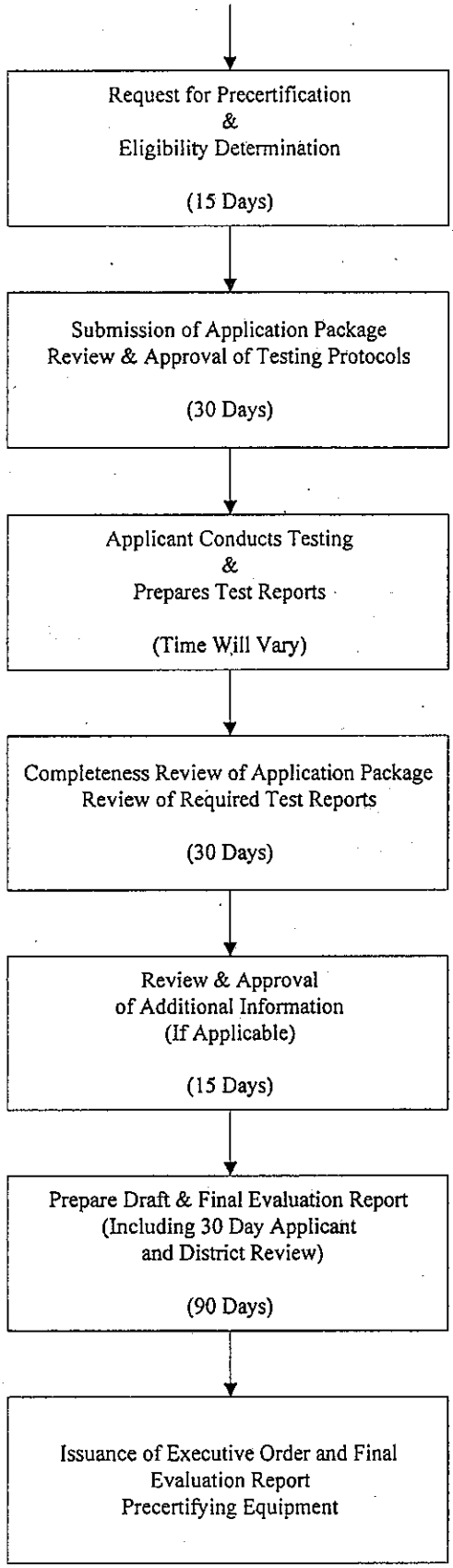
Equipment precertification, as defined under Health and Safety Code section 39620, is meant to constitute a preliminary engineering evaluation of the equipment or process and provide recommended permit conditions. Criteria and guidelines are required to be developed for the program in order to clearly communicate program requirements to applicants. These guidelines explain program procedures and include examples of applications to assist applicants through the precertification process. The ARB is required to charge a reasonable fee to recover the cost for precertifying equipment and payment of the fee shall be a condition for precertification.

Description of Precertification Process




B
Conduct Verification Testing (Sec. 2.G)
Submit Verification Test Reports(s) for Review of Data (Sec. 2.H)
Withdraw Application from Precertification Program
No
A
Submitted Data Accepted?
No
Revise Scope of Precertification and/or Conduct Additional Testing
Yes
Yes
C
ARB will Prepare Draft Evaluation Report for District/ Applicant Review (Sec. 2.I)
ARB will prepare Final Evaluation Report (Sec. 2.J)
Payment of Remaining Fees (Sec. 6.B)
Issuance of Precertification (Sec. 2.K)

Time Line for Precertification Process



Section 2
DESCRIPTION OF PRECERTIFICATION PROCESS

This section describes the steps of the precertification process. It provides general guidance regarding information that will be requested from an applicant, eligibility requirements, the pre-application meeting, the precertification application package, evaluation of test data and reports, and the issuance of the Precertification Document. References to sources of more detailed guidance are made throughout the section to assist the reader in locating specific information regarding the program. In addition, a flow chart has been provided on the previous page to give a graphical description of the process.

Upon request, ARB staff will provide interested parties with information regarding the Equipment Precertification Program. A fact sheet (See Appendix B) will be mailed to interested parties which briefly discusses the program objectives, possible benefits of precertifying equipment to manufacturers and businesses, and the current overall status of the program. A copy of these guidelines (The Equipment Precertification Program Guidelines) and an Equipment Precertification Request Form (See Appendix C) will be enclosed with the fact sheet to assist the applicant in the precertification process.

A. Request for Application

Due to the complex and varied nature of potentially precertifiable equipment and processes, we recommend that prospective applicants read the criteria and guidelines carefully and, if any questions remain, discuss program requirements with ARB staff prior to submitting the Equipment Precertification Request Form. During these discussions, program staff will not attempt to determine whether the equipment or processes meet the eligibility requirements (See Section 2.B). However, program staff will provide assistance to help prospective applicants complete and return the request form and will continue to provide assistance throughout the application process.

If after reading the criteria and guidelines, the prospective applicant wishes to enter the Equipment Precertification Program, the applicant should proceed by submitting the Equipment Precertification Request Form.

B. Program Eligibility Criteria

One of the objectives of the Equipment Precertification Request Form is to assist program staff with determining if the eligibility criteria are met. Specifically, to be eligible to participate in the precertification program, the equipment or process must:

- be related to air quality,
- be commonly used, and

- not pose a significant potential hazard to public health and safety and the environment.

Other criteria may be used to prioritize requests as they are received. Considerations in prioritizing precertification requests are determined by the following criteria:

- is the equipment or process required to receive a permit from local air districts,
- has the equipment been identified as simple and/or a priority equipment classification by districts, and
- is the equipment affected by ARB regulations or programs (e.g. Air Toxics Control Measures, Hot Spots program, etc).

Program staff will review the Equipment Precertification Request Form to ensure that the eligibility criteria are met and that the factors impacting priority are considered.

C. Decision on Eligibility

If the equipment or process is not currently eligible for the Equipment Precertification Program, ARB staff will inform the applicant and explain the basis for that decision (see criteria above) as well as discuss any other options which may be available to the applicant for participating in the program. If the equipment or process meets the eligibility criteria for the Equipment Precertification Program, ARB staff will:

- identify a contact person within the ARB that will be responsible for tracking and evaluating the precertification application package and ultimately developing the Precertification Documentation, and
- arrange a pre-application meeting at the applicants request.

D. Pre-Application Meeting

A pre-application meeting between the applicant and ARB staff may be used as a forum to discuss and determine the following:

- the claims that the applicant would like to make as part of the precertification,
- the availability of existing data to support the applicant's claims,
- if new verification testing needs to be conducted to obtain necessary data,
- if a Regulatory Precertification is desired,

- if the technical expertise to perform the precertification evaluation is available within the ARB. If not, what type of technical expertise is required and are outside experts available, and

  - what level of staff or contract resources will be required to precertify the equipment or process.

In addition, it will be explained to prospective applicants the ARB is required to charge a reasonable fee for precertifying equipment to recover the cost of running the program and that payment of the fee is a condition of precertification (See Section 6 - Precertification Fees). The cost of precertification will generally be less for equipment or processes which have been operated at full-scale and have independently validated data than for those which require additional testing and independent validation of data. Issues regarding confidentiality will be discussed and handled in accordance with existing State regulations.

E. Precertification Application Package

ARB staff will work with the applicant to determine what information will be required in the precertification application package. ARB staff will use information provided by the prospective applicant to:

- advise applicant regarding the necessary information required to submit a complete precertification application package, recommend staff requirements, both in-house and external to the ARB, needed to perform evaluations of the equipment or process as appropriate, and

- calculate the estimated precertification fee (See Section 6).

ARB staff will contact the applicant and provide the following: 1) information concerning what is required as part of the precertification application package; and 2) the estimated precertification fee.

The applicant shall prepare and submit a complete precertification application package. The precertification application package shall include a completed precertification application form, a scope of the precertification (See Section 3), and one-half of the estimated precertification fee (See Section 6.B). It should also include test protocol(s) if new testing is to be conducted (See Section 4.A) and/or test report(s) from previously conducted testing (See Section 4.C). The precertification application package must include the specific information requested by ARB staff.

F. Completeness Review

ARB staff will perform a completeness review of the precertification application package and will notify the applicant of the results within 30 days of receiving the package. ARB staff will first review the precertification application package for minor deficiencies or omissions. ARB staff will work closely with the applicant to expeditiously resolve any issues and to provide clear direction on what is required to complete the application package, rather than engaging in extensive formal written documentation of deficiencies.

Part of the completeness review will be to determine whether or not the equipment or process and its application can be evaluated for precertification based on currently available data/information. Therefore, it is the applicant's responsibility to prepare a comprehensive precertification application package that focuses on presenting available data and other information which support the desired scope of the precertification. Data validated by an independent third party is preferred.

If ARB staff finds that there are insufficient data to support the desired precertification claim, ARB staff will work closely with the applicant to revise and develop a mutually agreeable scope of the precertification that can be supported by currently available data and/or through additional verification testing. In revising the scope of the precertification, the applicant may either limit the scope of the precertification desired, provide additional data to support the desired claims, propose a test protocol of adequate scope to supply the data necessary to support the desired claims, or withdraw the application for precertification. Applicants will receive guidance from ARB staff on the requirements for verification testing activities.

G. Verification Testing

If the precertification application package requires verification testing, as identified during the completeness review, ARB staff will work with the applicant to review and approve the test protocol(s) (See Section 4.A). After ARB staff approves the verification test protocol, the applicant is responsible for performing and reporting the results of the verification testing. The ARB may oversee verification testing if deemed necessary.

H. Review of Data

A detailed review of the verification test reports will be conducted by ARB staff (See Section 4.I). ARB staff will coordinate with appropriate district staff to determine if verification test data are adequate to precertify the equipment or process. For regulatory precertifications, ARB staff will work closely with air district staff to facilitate compliance determinations with respect to district-specific rules and regulations. If the submitted data are not adequate to support the scope of the precertification, the applicant will have the option to conduct additional testing, revise the scope of the precertification to fit the supplied data, or withdraw the precertification application. If an applicant chooses not to accept the above options, ARB staff will prepare and release a Final Evaluation Report with the justification as to why the precertification was denied.

I. Prepare Draft Evaluation Report

A draft Evaluation Report will be prepared to document specific data, reports, literature, and other information which were reviewed during the precertification evaluation. The Evaluation Report will also present the data and results of verification tests performed and an analysis of the data with respect to the scope of the precertification (See Section 5.A). The applicant and applicable local air districts will receive the draft evaluation report for review.

J. Final Evaluation Report

ARB staff will prepare a Final Evaluation Report which addresses any comments received through the review process and which will be submitted to the ARB Executive Officer for approval (See Section 5.B). Copies of the final evaluation report will be made available to the public upon request.

K. Issue Precertification Documentation

After payment of the remaining fees, the Precertification Documentation will be issued. The Precertification Documentation shall consist of a signed ARB Executive Order and an approved Final Evaluation Report. In addition, a certificate may be issued by the ARB. The precertification of equipment shall be valid for up to three years unless equipment is modified.

Section 3
SCOPE OF THE PRECERTIFICATION

After the pre-application meeting, the applicant will be responsible for proposing the initial scope of the precertification which will be included as part of the precertification application package. The purpose of the scope of the precertification is to identify what claims the applicant is trying to show and how the applicant will prove or verify the claims. The applicant and the ARB must clearly understand what claims or requirements (standards and specifications) the equipment and process will be compared to and how the comparison will take place (test procedures, data quality objectives, and calculation procedures). The scope of the precertification will identify any precertification standards, precertification specifications, test procedures which will be used to verify adequate performance, data quality objectives, and calculation procedures. During the completeness review, ARB staff will work closely with the applicant to finalize a mutually agreeable scope of the precertification. An example of a format for the scope of the precertification is included in Appendix C.

A. Precertification Standards

A Precertification Standard is a requirement which the equipment or process must meet that is either based upon: 1) emissions from the equipment, process, or material during operation; 2) an efficiency in reducing emissions from the equipment or process; or 3) other performance or work practice criteria which are specific to all equipment or processes within a general category, such as all combustion equipment or all monitoring equipment.

Emission based standards typically limit the amount of pollution which can be emitted from categories of equipment on a mass basis or on a concentration basis. These also can include emissions per process unit or per unit of time, such as million BTU or pounds per hour.

Efficiency based standards usually compare the amount of pollutants emitted to the amount of pollutants which were controlled or not emitted. As an example, the Air Toxic Control Measure (ATCM) for non-ferrous metal melting requires an efficiency of 99% in reducing the emissions of particulate matter, where the efficiency is determined by measuring the mass at the inlet of the control device and the mass at the outlet of the control device.

Criteria based standards are often for equipment or systems for which explicit performance or work practice criteria need to be satisfied for all equipment within a category and which are not a direct measure of emissions or efficiency. As an example, all continuous emission monitors may be required to meet general requirements for having a data recording system, instrument span of at least 2 to 4 times expected concentration, and accuracy within $\pm$ 20% of an applicable emission standard when compared during field accuracy test.

As part of the application package, the applicant will propose precertification standards for the equipment or process. In the case of performance precertifications, ARB staff will review the appropriateness of the proposed standards for the equipment and the type and quantity of each

pollutant emitted or controlled by the equipment or process. For regulatory precertifications, the ARB staff will consult with air districts and will review specified federal, State and air district rules and regulations to evaluate the equivalency of the proposed precertification standards to those cited in the regulations. District standards are found in both prohibitory rules and in Best Available Control Technology (BACT) determinations. Some districts have indicated that precertification to BACT related standards will initially receive greater acceptance than precertification to prohibitory rule related standards. Regulatory precertifications will vary in applicability between air districts and will be subject to potential modification due to changes in district prohibitory rules or BACT determinations. For certain types of equipment, appropriate regulatory precertification standards may be found in a Statewide ATCM, such as perchloroethylene dry cleaning equipment. Other cases may require review of Federal New Source Performance Standards (NSPS) or Maximum Achievable Control Technology (MACT) standards. The ARB staff will work with the applicant to resolve minor deficiencies and to make any necessary revisions to the scope of the precertification.

B. Precertification Specifications

Precertification Specifications include any other requirement determined during application and testing which may be specific to the particular equipment or process undergoing precertification and which may provide a basis for simple testing or monitoring of the system or equipment while in use. The testing or the monitoring of precertification specifications will provide a basis for determination that the equipment is operating at a level of performance which should result in the compliance with a Precertification Standard. Recommendations on suggested operating conditions for air districts to include on permits will often be based upon the testing or monitoring of Precertification Specifications. For example, a paint spray booth, which uses dry filters, may be required to have all exhaust air pass through filter media of at least 2 inches in thickness resulting in a pressure drop of not more than 0.25 inches water in order to keep equipment in compliance with emission based limitations (precertification standards) for PM-10 and for prevention of public nuisance.

In the Scope of Precertification, the applicant will propose precertification specifications applicable to the specific equipment or process. These may include critical operating parameters, specifications based upon performance claims, and specifications for indicating gauges, detection devices, and alarms. During the completeness review, the ARB, with the assistance from the air districts and applicable committees of California Air Pollution Control Officers Association, will identify existing district specifications or standard operating conditions from similar equipment and will work with the applicant to revise the scope of the precertification. Precertification specifications should be monitored or tested during performance verification testing. Other precertification specifications may be identified during application and testing of the equipment which may result in additional recommendations for operating conditions. It is likely that there will be cases where new technology is being demonstrated or where specific performance claims are made by the manufacturer when the precertification specifications do not fit in the categories described above.

C. Precertification Test Procedures

In preparing the scope of the precertification, the applicant must identify all the test procedures which either will be used or which were used for previously conducted testing for each standard and specification. These procedures will also need to be described within individual test protocols and/or test reports submitted by the applicant. The specific precertification test procedures which will be necessary for the approval of a precertification application cannot be listed within this criteria and guideline document due to the variation in the types of equipment and the variation in the nature of the emissions. However, some general requirements and the process for evaluation and approval of precertification test procedures will be discussed.

Regulatory agency approved test methods must be used whenever these methods are appropriate for the precertification standard or specification. For most precertifications, ARB adopted source test methods should be utilized. However, for the precertification to be accepted by the South Coast Air Quality Management District (AQMD) or by the Bay Area AQMD, the manufacturer should be prepared to compare the results obtained while using the district approved methods to the ARB adopted methods unless an equivalency determination has been made by the district or the ARB. If no appropriate ARB method has been approved, the United States Environmental Protection Agency (U.S. EPA) or the National Institute for Occupational Safety and Health (N.I.O.S.H.) adopted methods may be considered for use with certain sample types (matrices) or categories of equipment. Methods approved by national associations including but not limited to the American Society for Testing and Materials (ASTM), and the Association of Official Analytical Chemists (AOAC) methods may be proposed for use by the applicant or by the ARB, especially in cases where bench or laboratory tests are conducted for performance specifications.

In the scope of the precertification, the applicant may propose to utilize alternative sampling and analysis methods to accomplish the performance verification testing. However, the use of alternative methods must be approved in writing by the ARB Executive Officer. The applicant must provide sufficient information to enable the ARB Executive Officer to determine if the alternative method is equivalent to adopted methods or if the adopted methods are not adequate to characterize the emissions or performance. When applying for permission to use alternative test methods, the applicant shall provide details of the sampling method, details of the laboratory method, a minimum of three sets of parallel tests (with the adopted and proposed method if applicable) with two of these sets of tests under different source operating conditions, and a list of appropriate uses and limiting conditions for the alternative test method. It should be understood that determining appropriateness and comparability of alternate test methods may be procedurally involved and may result in delays in precertification.

Testing for precertification should be conducted by qualified independent testing companies to ensure that the results are acceptable to air districts. Many air districts prohibit the use of testing companies which have a conflict of interest with the owner, operator or manufacturer of the equipment. The applicant may propose to use qualified dependant or in-

house testers for some verification testing provided they obtain prior written approval from the ARB staff. While the ARB cannot endorse or recommend individual testing companies, the ARB and several air districts recommend that source tests be conducted by ARB approved Independent Contractors. A list of these contractors can be obtained from the ARB's Compliance Division at (916) 327-1521. For certain types of laboratory testing, a list of certified laboratories is available from the California Department of Health Services Environmental Laboratory Accreditation Program at (510) 540-2800 for hazardous wastes. Another source of accredited laboratories is the National Voluntary Laboratory Accreditation Program at (301) 975-3000.

D. Data Quality Objectives

The data or measurements generated during testing must be of sound quality or achieve data quality objectives in order to support the issuance of a precertification. Data quality objectives are quantitative measurements that must be obtained from the environmental data operations in order to demonstrate that the desired and expected result has been achieved. It is to the benefit of both the applicant and the ARB staff to agree up-front on how good the data must be prior to conducting the verification testing. With the variation in the types of equipment, emissions, and test procedures, the scope of the precertification will provide for a case-by-case agreement on the data quality objectives. However, similar types of equipment will be held to similar standards, specifications, and data quality objectives. In general, the data must be generated by sampling and analytical methods with accepted or verifiable precision, bias or accuracy, and sensitivity. The data must be comparable to the performance standards. Additionally, all data generated must be complete and the results must be representative of normal operating conditions. The ARB will review the proposed scope of the precertification to determine if each data quality objective is adequately addressed.

The applicant should also try to indicate how the precision, bias or accuracy, and method sensitivity for the test methods included in the scope of the precertification will be shown for verification testing. For example, precision (the agreement between repeated measurements of the same quantity) may be shown as relative percent differences between field duplicates. Bias or accuracy, the agreement between a measurement and an accepted or known value may be shown by the percent recovery of matrix spikes. Method sensitivity including detection levels, linearity, and blank levels should be adequate to verify the standard or specification. Method sensitivity requirements are often addressed in the sampling and analysis method used.

The applicant should make sure that the data from testing will be comparable to the standards and specification and will be complete. Comparability is the degree to which one data set can be compared to another. This is achieved by the use of consistent methods and by the traceability of standards to a reliable source. Completeness is a comparison between the number of measurements that are considered to be valid with the number of measurements needed to achieve a desired level of confidence in the result. For most source test methods, three sampling runs are required because it results in a significant increase in the reliability of the test results

over two runs without the greater expense required for four runs. For example if a method has a 10% standard deviation, one can be 95% confident that the true value is within an interval ± 25% of the mean of three sample runs.

Representativeness is the degree to which a sample or group of samples is indicative of the population being studied. The applicant should show that the equipment tested represents all units of that model, that the equipment is being operated under representative conditions during testing, and that the samples are representative of the emissions without having to collect and analyze an extremely large number of samples. All verification testing should be conducted while the equipment is operated under "normal" or representative operating conditions. Representative operating conditions shall be considered to include equipment operated in accordance with the manufacturer's established parameters, following established maintenance practices, under a range of process rates or loads which represent a maximum, minimum, and average level of emissions (if possible), and consistent with safe operating practices. For example, an industrial boiler would typically operate at low-fire, high-fire, and a mid-range fire. The emissions would be measured at each setting while documenting various operating parameters which verify the operating conditions. For steady state operations, the process should be maintained within the representative operating conditions while testing. For cyclic operations, the sampling period should be planned to span at least one complete cycle. Cycles of extended duration can be broken into definable parts with sampling occurring in representative portions of those parts. In addition, all test results must be adjusted to standard conditions appropriate for the category of equipment and for the pollutant measured. Finally, all verification testing should be conducted so that all samples obtained are representative of the emissions; that the materials used to collect, transport, or store samples do not alter the composition or nature of the samples; and that the samples are not subjected to leakage or contamination prior to analysis.

E. Precertification Calculation Procedures

During the application process, the manufacturer, distributor, or dealer will be responsible to identify the calculations needed to convert test data into values which can be compared directly to each standard and specification. Every precertification calculation procedure should result in an accurate and comprehensive characterization of the emissions or efficiency under representative operating conditions. Calculations must be clear, well documented, easy to verify, and of demonstrated reliability. The scope of the precertification should include the stepwise procedure used to reduce the data to enable independent checks of calculations.

Most precertification calculations will result in calculation of an equipment-specific emission factor. In accordance with an adopted test method, the applicant will calculate and report an equipment-specific emission factor for the pollutant measured based upon the mass emission rate during the test. This mass emission rate shall then be calculated in terms of most representative "usage unit" which shall be a measure of an operating condition which best characterizes the dependance of the emissions on the operating conditions. For example, a usage

unit for a boiler could include cubic feet of gaseous fuel. Given the known heat content of the fuel, an equipment-specific emission factor can be calculated in the form of mass per unit of energy. Hours of operation should not be used as a usage unit unless the equipment undergoes very limited variation over time during long term operation.

Published emission factors obtained from sources such as U.S. EPA Document AP-42, Compilation of Air Pollutant Emission Factors may not be used in place of verification test results for precertifications. Emission factors obtained from applicant test data which has been generated under substantially similar conditions for substantially similar equipment or processes or which differ primarily by size or throughput (scale) as those for which a precertification is pending may be submitted for review.

The applicant should calculate maximum hourly emissions, in pounds per hour, from the mass emission rate and maximum operating limit of the equipment that can reasonably be expected in a one hour period. For example, if a small boiler could burn a maximum of 5,000 cubic feet of natural gas per hour, then the maximum emissions would be the emission factor (grams per cubic feet of natural gas) multiplied by maximum usage to result in grams (or pounds) per hour. The maximum operating limit of the equipment shall be the best possible representation of the process conditions that produce the maximum emissions with the range of allowable conditions under routine operation or predictable upset, but not including conditions reflecting atypical shut-down of control equipment.

Section 4
EVALUATION OF VERIFICATION TESTING

After agreement on the scope of the precertification, the applicant and the ARB will determine if the precertification can be supported by currently available data and/or through the use of additional source, bench, or laboratory testing. The ARB will review the information submitted with the application to determine if test data are required for the approval of the precertification application. The ARB will review any submitted data from previously conducted tests to identify data/information deficiencies and to determine if it achieves the desired data quality objectives.

If previously conducted testing does not meet data quality objectives as outlined in the scope of the precertification, then the applicant will be requested to prepare a testing protocol for additional source testing (or bench / laboratory testing where appropriate). The ARB will provide guidance to the applicant that will help delineate applicable sampling/analytical methodologies, statistical analysis methods, and quality assurance and quality control procedures to be used. The preparation of protocols and reports and all of the verification testing shall be performed by the applicant or an independent contractor for the applicant. However, the ARB Executive Officer may opt to conduct some or all of the testing and may include cost of testing within the estimated precertification fee (See Section 6.A) .

A. Submittal of Testing Protocol

If additional testing is required, the application for precertification shall include a written testing protocol which describes how each source or laboratory test method will be applied to each emission point for the equipment or process to be precertified. The testing protocol will be reviewed by the ARB. The ARB will approve or recommend modifications, additions, or deletions to the protocol within 30 days of receipt. All recommendations are subject to negotiation, however failure to address the recommendations may invalidate the results of the precertification testing. The testing protocol shall include the following information:

(a) The time-frame or approximate dates for which the testing will be performed;

(b) Name and qualifications (including Independent Tester Executive Order if applicable) of companies and/or persons who will conduct the testing including all sampling and analytical procedures;

(c) Process description;

(d) Approximate values or range of values for process reactant composition and rates, fuel composition and firing rates, other process operating parameters (e.g., feed rates, pressures), and other operating conditions to be monitored during the specific test (e.g., change in fuel type, grate-blowing frequency);

(e) Source test, sampling and analysis methods (alternative methods must be described in detail);

(f) Equipment specifications and drawings as needed to plan and interpret source test results, including but not limited to stack dimensions (including diameter and height) and port configuration;

(g) Approximate stack conditions including temperature; concentrations of each measured pollutant; mass emission rates; oxygen, carbon dioxide and moisture content; exhaust gas velocity and volumetric flow rate;

(i) Calibration data including traceability, frequency of checks, and acceptance criteria for all calibration measurements; quality assurance plan and quality control data including zero, span drift, audit, blank and spiked samples; and chain of custody documentation;

(j) Estimated limit of detection, proposed number of test runs (minimum of 3 runs for most methods), number of sampling points, planned sample volumes and times, and any other pretest calculations required for each method;

(k) applicable precertification standards and specifications;

(l) estimated date on which the test report will be submitted.

B. Site Location, Sampling Facility, and Test Dates

The applicant will be responsible for identifying a suitable location for performance verification testing. The testing site must be located within the California unless special provisions are approved in advance. The testing site must currently either operate or be capable of operating this type or similar types of equipment. The applicant must arrange with the operator of the site to allow safe access to the test site by the ARB staff prior to and during the testing. The applicant must also ensure that the proper sampling facilities are provided including sampling ports, platforms, clearance for sampling equipment, access to electrical power, and that all other safety requirements including exposure of personnel to weather, process temperatures, hazardous materials, and other factors are addressed. The applicant and operator are responsible for complying with all local requirements.

The applicant is responsible for submitting a written notice of the dates when precertification testing will be performed at least 15 days prior to the first day of testing. Testing should not occur until after the approval of testing protocol. The applicant or designated representative must provide notification at least 5 business days in advance of any proposed adjustment to the testing dates.

C. Submittal of Data from Previously Conducted Testing

Testing conducted prior to the submittal of a precertification application must meet several additional data quality objectives. First, the testing must have been performed in accordance with the adopted regulatory agency test methods (ARB or equivalent) unless the provisions for alternative methods have been satisfied. These source test results must show comparable results when evaluated against the proposed performance standards. Documentation of the operating parameters during the source tests must also be available. Submittal of data and the reports for previously conducted source tests (or bench / laboratory) which have been reviewed and considered to be valid by a air district or by the ARB's Monitoring and Laboratory Division (MLD) are preferred. Copies of these reviews should be included with the test reports, if available.

The results of previous testing cannot be used if the equipment tested has undergone a change, including but not limited to change in input materials, change in air pollution control equipment, or a change in the equipment which would result in a reduction in the ability to achieve a performance standard. Previously conducted test results can also be submitted to support the likelihood that the equipment will achieve the proposed performance standards under a range of operating conditions, such as under extremes in temperatures, feed rates, etc. and may be used to support a reduction in the scope of verification testing.

D. Field/Source Test Oversight

The ARB staff will (as deemed necessary) observe field/source testing required for the application; to ensure that the testing is conducted in accordance with the protocol and good scientific and engineering practices. When appropriate, the ARB staff may require analysis of audit materials and may require collection of split confirmation samples for analysis by state testing laboratories. Minor modifications from the testing protocol may be approved by the ARB staff on-site. However, major deviations from the methods or procedures included in the protocol or the use of alternative methods must be approved in writing by the ARB Executive Officer. Major deviations may require a detailed review and should be submitted and approved prior to the test.

E. Bench or Laboratory Testing

The ARB staff may (as deemed necessary) observe bench or laboratory testing required for the application. However, it is more likely that an applicant may be required to either analyze audit materials or collect split confirmation samples for analysis by state testing laboratories.

F. Documentation of Test Conditions

The applicant shall record sufficient test and process data at the time of the test to permit the later determination of emissions, the evaluation of test results, and the verification of operating conditions as specified in the application or the testing protocol. Representatives of the

testing organization shall record all data from the sampling train onto field data sheets during the test and these data sheets will be provided for evaluation. Additionally, the tester should record any unusual occurrences in the process operation, unusual test readings, or any other items which may impact the test results. The tester should note any testing conducted prior to the actual precertification testing including sampling and analysis which was conducted to optimize the performance of their equipment and revise the representative operating conditions of the equipment.

G. Quality Assurance Testing

The applicant should ensure that the quality assurance plan and quality control checks included in the test protocol are performed throughout precertification testing by the personnel conducting the testing. These procedures may consist of a complete sampling audit with simultaneous testing with different equipment and operators, or it may consist of an analysis audit with the submittal of spiked samples, blind duplicate samples, or split samples between different laboratories. Other quality control checks include collocated , split, or replicate samples; matrix spikes, spiked blanks, and surrogates or internal standards; field, trip, method, reagent, or instrument blanks; and other checks including standard reference materials, control charts, etc. These results will be included within the test report.

H. Submittal of Test Report

The applicant or the contractor for the applicant is responsible for conducting data reduction, validation, and preparation of test reports. The test reports shall be submitted to the ARB staff with the application package or within the specified time-frame identified in the test protocol. The reports should be prepared in a format acceptable to the ARB, which will provide example formats upon request. The test reports should include all of the actual test values for the information required to be included in the precertification testing protocol.

I. Evaluation of Test Results

The ARB staff will conduct a detailed review and evaluation of the verification test reports to determine if all the information required by the scope of the precertification or the test protocol is included in the report. The ARB staff evaluation 1) should indicate if the test procedures were conducted in accordance with the methods, 2) if all the actual test data is included, 3) if the proper quality assurance testing was performed, 4) if the data met the data quality objectives, and 5) if the data indicate that the performance standards or specifications have been satisfied in a manner which supports the issuance of a precertification. The data reduction for at least one set of test results will be checked by the ARB. Additionally, audit data sets may be inserted into the calculations procedures to check the appropriateness of the calculations. The data will then be evaluated for representativeness of actual emissions and for the variability in the test results. Regulatory precertifications will include the evaluation listed above and in addition the ARB will work closely with district staff to determine if the test report adequately demonstrates compliance with any affected district rules and regulations. The ARB

will recommend acceptance of results or will prepare recommendations to address issues raised by the inability to meet the scope of the precertification, or will recommend additional steps which should be performed.

Section 5
EVALUATION REPORT & PRECERTIFICATION DOCUMENTATION

After the evaluation of the application package including all verification testing, the ARB will prepare an Evaluation Report and process the Precertification Documentation. The following areas will be discussed including the preparation and review of a draft Precertification Evaluation Report, the approval of the Evaluation Report, the approval of the Precertification Documentation, the grounds for the revocation of precertifications, requirements for the modification of precertified equipment or processes, and limitations upon the use of precertification in advertising or marketing claims.

A. Draft Precertification Evaluation Report

The ARB will prepare a draft Evaluation Report to document the specific data, reports, literature, and other information which were reviewed during the precertification evaluation. This report will also describe the equipment or process, the scope of the precertification, and the evaluation of verification testing with respect to the proposed precertification claim(s). The draft Evaluation Report will also present recommendations on suggested operating conditions for air districts to include on permits.

The draft Evaluation Report may be reviewed by ARB and local air districts, depending on the particular equipment, processes, or technology, its complexities, and the issues associated with its precertification. Reviewing parties will have 30 days to respond and provide any review comments. The ARB will forward to the applicant the revised draft Evaluation Report. The applicant will be given the opportunity to review and submit comments on the Evaluation Report before it is finalized.

B. Approval of Precertification Evaluation Report

The ARB will prepare a final Evaluation Report which addresses comments on the draft Evaluation Report received through the review process. The ARB Executive Officer shall approve and sign the Evaluation Report after it is determined to be complete, and the report documents successful completion of the scope of the precertification.

C. Precertification Documentation

The ARB Executive Officer shall precertify any equipment or process with an approved and signed Precertification Evaluation Report. Precertification Documentation shall consist of an ARB Executive Order (which shall include the Evaluation Report) signed by the ARB Executive Officer. In addition, a certificate may be issued. Copies of the ARB Executive Order and the Evaluation Report shall be maintained in the ARB's files and shall be made available upon request. A listing of approved precertifications may be maintained on the ARB Electronic Bulletin Board System which can be accessed by air districts, industry, and the public.

D. Revocation of Precertification

Precertification may be suspended or revoked upon written determination by the ARB Executive Officer on the basis of any information that the equipment or process may pose a significant risk or actual hazard to the public health and safety or to the environment. Petitions for review of the revocation shall be handled in accordance with the procedures set forth in the Equipment Precertification Regulation.

Precertification may also be suspended or revoked if issued based upon any information submitted to the ARB which was inaccurate, misrepresented, or if any pertinent information was omitted. Repeated misrepresentation of the equipment or process precertification in any advertising or other oral or written communication may be grounds for revocation. In addition, failure by the holder of the precertification to maintain the quality of the equipment or process at a level equal to or better than the equipment in precertification evaluation may also be grounds for revocation. Revocation of regulatory precertifications may also be based upon written petitions from local air districts that the equipment is not able to operate in compliance with air pollution regulations upon initial or renewal of air district permitting.

E. Modification of Precertification

If previously precertified equipment is modified in such a manner that will likely result in a change in the emissions, efficiency, or other specific criteria or operating conditions of the equipment, the holder of the precertification can apply for a revision to the precertification. In addition, changes for modified regulatory precertifications may be required whenever changes in applicable air district rules and regulations, or other state or federal regulations occur. Applications for modifications to precertifications must be submitted and will result in the assessment of modification fees based upon a new estimation of the number of hours needed to modify the precertification to address the changed parameters. Failure to apply for modifications may result in the revocation of an existing precertification.

If a change of ownership occurs in the holder of a precertification and the equipment type does not change, the company may apply for a change of ownership. Upon receipt of an change of ownership application and the payment of a fee for processing a change of ownership, revised Precertification Documentation will be issued. The revised Precertification Documentation will be valid for the duration of the original precertification or until modification or revocation.

F. Duration of Precertification

The maximum duration of air pollution equipment or process precertifications will be three (3) years. A precertification can be valid less than the maximum duration if the equipment is changed or modified while retaining the same model/identification name/number. The Precertification Documentation will specify the length of the precertification and the date of expiration. At least once prior to the actual date of expiration, the holder of the precertification will be contacted to determine if a renewal of the precertification will be sought. If no

modifications to the equipment or process, change of ownership, or changes in applicable regulations have occurred, the precertification may be renewed for another three years upon receipt of renewal application and fees.

G. Disclaimers

Issuance of Precertification Documentation means that the equipment or process has been precertified by the ARB with respect to emissions or control of air pollutants to meet the claims within the scope of the precertification application and that the ARB staff has evaluated the test data supplied by or on behalf of the manufacturer of the equipment of process. Precertification does not represent any endorsement whatsoever by the ARB as to the quality or utility of the device or process, nor does it represent that the equipment or process is any more or less harmful or beneficial to air quality than any other similar equipment or process. Precertification by the ARB does not represent any guarantee of the performance or safety of the equipment or process. The ARB shall not be liable in any way in the event that the device or process fails to perform as advertised by the supplier or as expected by the consumer. The ARB shall not be liable for any injury to person or property resulting from the use of the equipment or process.

H. Limitations on Use of Precertification

The holder of a precertification may not make any claim of any kind which implies any endorsement whatsoever by the ARB as to the quality or utility of the device or process. The holder may not claim that precertification by the ARB represents that the equipment or process is any more or less harmful or beneficial to air quality than any other similar equipment or process. Claims such as, "Approved by the Air Resources Board", shall not be made with respect to this equipment or process in any advertising or oral written communication.

However, holders of an air pollution equipment or process precertification can indicate that the "equipment has been precertified by the ARB to have met the scope of the precertification when operated in accordance with specific operating conditions outlined in precertification (number) issued on (date)." Variations of this general statement including the phrase "ARB Precertified Equipment" may be used. However, the holder must always provide the precertification number and the date of issuance. When providing information on the precertification to an interested party the holder of the precertification shall provide the full text of the Executive Order, and shall make available copies of the Evaluation Report.

Section 6
PRECERTIFICATION FEES

The ARB is required to charge reasonable fees for precertifications to recover the estimated costs to the ARB for evaluating air pollution equipment and processes, and making a precertification decision.

A. Precertification Fee Calculation Procedures

Due to variation in complexity of potential precertification applications, precertification fees will be based upon the actual hours spent by the ARB staff to evaluate the equipment or processes. After the pre-application meeting, the applicant will be provided with a written estimation of the total precertification fees. This estimate will include the projected total hours needed to determine eligibility, conduct the pre-application meeting, prepare an estimate of the precertification fees, process the application, review of test protocol, review of test data, complete the engineering evaluation, prepare the evaluation report, and process the precertification documentation. The estimated hours will be multiplied by an hourly rate for each staff classification as determined on an annual basis by the ARB Executive Officer. The hourly rate will include direct staff charges (salaries and benefits) and program operating expenses (travel, phones, rent, general expenses, etc.). Additional charges may be included if extensive or out-of-state travel are required, if testing by ARB staff or by ARB contractors are needed, or if extensive testing oversight, auditing or specialized evaluations are required.

The applicant will be given an opportunity to reduce the estimated fees. When the notification is received, the applicant may request a conference with staff to review the cost estimate and may propose to provide additional information that would reduce the time spent evaluating the application. If this conference results in a reduction of fees, a modified estimation of fees will be prepared.

It is possible that the estimated fees may not be enough to recover the cost of the precertification as required under State law. ARB staff may revise the estimated fees in cases where sufficient information is not available at the pre-application meeting or in the application package, if significant changes in the scope of the precertification are needed, or if test data submitted is not sufficient to support precertification without additional testing, revision or re-evaluation. In these cases, the applicant will be notified prior to exceeding the estimated fees. The notification will contain a revised estimate of the additional hours necessary to complete the evaluation of the precertification application along with a written justification for the revision. The applicant will have the option of paying an additional amount sufficient to cover remaining costs, requesting a reduction in the scope of the precertification, or requesting withdrawal of the application.

B. Precertification Fee Payment

A prepayment of one-half of the estimated precertification fee will be due and payable to the ARB upon submittal of an application for precertification. Upon receipt of the payment, the fees shall be deposited and the hours spent will be credited against the payment. Failure to pay the initial fee will delay the processing of an application and may result in the return of the application.

The remaining fees will be due and payable to the ARB upon written notification of the successful completion and approval of the Evaluation Report. An invoice will be prepared which will show the hours accrued to date, the hours required for processing the final precertification documentation, and the remaining balance due. The remaining fees due will not exceed the cost of the work performed plus the cost of processing final precertification documentation. Upon receipt of the final payment of the fees, the Executive Order and final Evaluation Report will be issued.

Failure to pay the remaining fees within 30 days of notification may result in written notice of cancellation of the precertification application. A canceled application may be reinstated within 90 days by payment of the applicable fees plus an additional 10 percent. Precertification Fees paid that are not used prior to an application being withdrawn or denied shall be refunded upon request.

C. Renewal of Precertification

Renewal fees will be required for the periodic renewal of precertifications. Renewal fees will be based upon the actual hours spent by ARB staff to maintain existing precertification documentation, re-evaluate the equipment or process and to reissue the documentation. Renewal fees shall be due and payable to the ARB prior to expiration of the precertification or upon receipt of a billing invoice.

If a change of ownership occurs by the manufacturer, distributor, or dealer that has been issued a precertification and the equipment type does not change, the company may apply for a change of ownership. An administrative fee will be charged for processing a change of ownership application and the issuance of a new precertification order. A change of ownership fee will be assessed at two and one-half hours of staff time multiplied by the current hourly rate.

D. Modifications of Equipment

A new precertification fee will be required for previously precertified equipment if the equipment is modified in such a manner that will likely result in a change in the emissions, efficiency, other specific criteria, or operating conditions of the equipment. In addition, new fees may be required if a holder wants to maintain a regulatory precertification after changes are adopted in applicable air district rules and regulations, or other state of federal regulations. New precertification fees will be required if the holder would like to reinstate a precertification that

has been canceled or revoked. The new precertification fee will be recalculated based upon a new estimation of the number of hours needed to modify the precertification to address the changed parameters. Fees for modifications to precertifications shall be recalculated based upon number of hours needed to evaluate and modify precertification in accordance with subsection (b) through (f) above. These fees shall be due and payable to the ARB upon submittal of a request for modification.

Section 7
DEFINITIONS

Below are the definitions of terms used throughout the guidelines. The defined terms are indicated by bold/italic font.

ARB Executive Officer refers to the Executive Officer of the ARB or his/her authorized representative or designee.

Commonly Used refers to equipment massed produced and commercially available for operation by numerous sources under the same or similar conditions. This may also include modifications, innovations, or replacements for existing equipment or processes.

Completeness Review means the evaluation of the information submitted in the precertification application package. The information will be reviewed to determine the appropriateness of the data supplied and the need for any additional information in order to deem the package complete. If the testing information that is submitted in the package is determined to be inadequate, then additional testing will be required.

Eligibility Criteria are the standards used to qualify and prioritize equipment and processes for the Equipment Precertification Program.

Equipment Precertification Request Form is a questionnaire that identifies an applicants interest in the precertification process. Once the request is received and the eligibility requirements have been met, a pre-application meeting will be scheduled between the ARB and the applicant.

Performance Precertification means a preliminary evaluation of the equipment or process and a recommendation by the ARB for permit conditions to be adopted by districts having jurisdiction over particular equipment or processes.

Pre-Application Meeting is a meeting conducted between the ARB and the precertification applicant to discuss objectives, criteria, and information required for making a determination regarding precertification.

Precertification Document/Documentation is the written public record of the precertification evaluation which includes a final evaluation report of the equipment or process, the executive order, and the precertification certificate if applicable.

Precertification Application Package is a compilation of information, determined as a result of the pre-application meeting, that is required to be submitted by the applicant. The package will include a precertification application form with detailed information regarding the equipment or process that is to be precertified, test protocols, reports and data, a written scope of the precertification that is being requested, and partial payment of the precertification fees.

Regulatory Precertification means an evaluation of regulatory requirements associated with the use of equipment in addition to the requirement for the Performance Precertification. The Regulatory Precertification shall specify the regulation(s) under which precertified equipment may be operated.

Scope of the Precertification means the identification, by the applicant, of claims regarding equipment performance, emissions, or efficiency of the equipment or process that is to be precertified, including test procedures, data quality objectives, and calculations which will be followed to verify the claims.

Verification Testing means tests which are conducted during or prior to the evaluation of the precertification application package to provide test data required for the precertification of the equipment or process.

CALIFORNIA ENVIRONMENTAL PROTECTION AGENCY
AIR RESOURCES BOARD
EQUIPMENT PRECERTIFICATION PROGRAM

FACT SHEET

WHAT IS EQUIPMENT PRECERTIFICATION?

ASSEMBLY BILL 3215 (AB3215, PRINGLE, 1994) REQUIRES THE AIR RESOURCES BOARD (ARB) TO DEVELOP, IN COORDINATION WITH LOCAL AIR DISTRICTS, A STATEWIDE EQUIPMENT PRECERTIFICATION PROGRAM. SPECIFICALLY, EQUIPMENT PRECERTIFICATION IS AN INDEPENDENT PERFORMANCE VERIFICATION OF EQUIPMENT, PROCESSES, OR TECHNOLOGY. A STATEWIDE EQUIPMENT PRECERTIFICATION PROGRAM MAY EXPEDITE THE LOCAL AIR POLLUTION PERMIT PROCESS AND ENCOURAGE MORE CONSISTENT AND UNIFORM OPERATING CONDITIONS THROUGHOUT THE STATE. IT MAY PROVIDE A MECHANISM FOR FOSTERING THE GROWTH OF THE ENVIRONMENTAL TECHNOLOGY INDUSTRY WITHIN CALIFORNIA BY PROVIDING GREATER ACCEPTANCE OF NEW AND INNOVATIVE TECHNOLOGY.

WHY DOES CALIFORNIA NEED AN EQUIPMENT PRECERTIFICATION PROGRAM?

BUSINESSES IDENTIFIED EQUIPMENT PRECERTIFICATION AS A HIGH PRIORITY PROGRAM TO SIMPLIFY AND STREAMLINE THE AIR POLLUTION PERMITTING PROCESS AND AS A WAY TO PROMOTE UNIFORMITY BETWEEN LOCAL AIR DISTRICTS. THE AIR POLLUTION PERMIT STREAMLINING ACT REQUIRES THE MOST POPULATED DISTRICTS TO IMPLEMENT A PRECERTIFICATION PROGRAM FOR MASS-PRODUCED EQUIPMENT WHICH IS OPERATED BY MANY SOURCES THROUGHOUT THE LOCAL AREA. THIS IDEA WAS EXPANDED INTO A STATEWIDE PROGRAM THROUGH THE ADOPTION OF AB3215 (CALIFORNIA HEALTH AND SAFETY CODE SECTION 39620). SIGNED INTO LAW BY GOVERNOR WILSON IN SEPTEMBER 1994.

WHAT BENEFIT IS THERE FOR EQUIPMENT MANUFACTURERS?

BENEFITS OF PRECERTIFYING EQUIPMENT WILL VARY WITH EACH COMPANY. MANUFACTURERS MAY ONLY HAVE TO DEMONSTRATE AND SOURCE TEST EQUIPMENT TO ONE AIR AGENCY WITHIN CALIFORNIA. YOUR EQUIPMENT WILL THEN BE LISTED, ALONG WITH OTHER PRECERTIFIED EQUIPMENT, BY THE ARB. THE LIST WILL BE MADE AVAILABLE TO LOCAL DISTRICTS, STATE AND TERRITORIAL AIR AGENCIES, THE U.S.EPA, THE BUSINESS COMMUNITY, THE GENERAL PUBLIC, AND ON THE ARB ELECTRONIC BULLETIN BOARD.

WHAT BENEFIT IS THERE FOR BUSINESSES USING PRECERTIFIED EQUIPMENT?

FOR FACILITIES WHICH PURCHASE PRECERTIFIED EQUIPMENT, DISTRICTS ARE PREPARING EXPEDITED PERMITTING PROCESSES TO ENABLE PERMITS TO BE OBTAINED MORE QUICKLY. IN SOME DISTRICTS, PERMITS MAY BE ISSUED OVER THE COUNTER. ADDITIONALLY, SOME DISTRICTS ARE CONSIDERING REDUCED FEES FOR PRECERTIFIED EQUIPMENT DUE TO THE DECREASED STAFF EVALUATION TIME. CERTAIN EQUIPMENT MAY EVEN BE EXEMPT FROM INITIAL START-UP SOURCE TEST REQUIREMENTS.

HOW CAN I GET MY EQUIPMENT PRECERTIFIED?

EXPRESS YOUR INTEREST IN THE PROGRAM BY COMPLETING AND RETURNING AN EQUIPMENT PRECERTIFICATION REQUEST TO DETERMINE ELIGIBILITY FORM TO:

MR. BRADLEY BRANSEN
AIR RESOURCES BOARD, SSD
P.O. BOX 2815
SACRAMENTO, CA 95812.

IF YOU HAVE NOT RECEIVED A REQUEST FORM, ONE MAY BE OBTAINED BY CONTACTING MR. BRANSEN AT (916) 322-2341. AS THE PROGRAM IS IMPLEMENTED, INFORMATION WILL BE DISTRIBUTED INFORMING YOU OF THE ONGOING PILOT PROGRAM AND FUTURE APPLICATION PROCEDURES.

PHASE I PILOT PROGRAM

APPLICATIONS TO PARTICIPATE IN THE FIRST PHASE OF A PILOT PROGRAM WERE ACCEPTED DURING THE FALL OF 1995, AFTER THE PREPARATION OF THE DRAFT GUIDELINES FOR THE PROGRAM. PHASE I OF THE PILOT WAS USED TO FURTHER REFINE THE CRITERIA AND GUIDELINES.

PHASE II PILOT / PROGRAM IMPLEMENTATION

THE SECOND PHASE OF THE PILOT PROGRAM IS ACCEPTING APPLICATIONS FOR PROVISIONAL CERTIFICATIONS UNTIL THE PROGRAM OBTAINS FINAL REGULATORY APPROVAL. COMPANIES THAT WISH TO PARTICIPATE SHOULD NOTIFY MR. BRANSEN AT (916) 322-2341 OR MR. STEVEN GIORGI AT (916) 327-5766.

AIR RESOURCES BOARD
2020 L STREET
P.O. BOX 2815
SACRAMENTO, CA 95814-2815

Pilot Program
Request To Determine Eligibility for
ARB Precertification of Equipment or Processes

Please complete this request form in order to determine if your equipment qualifies for participating in the Air Resources Board (ARB) equipment and process precertification program under California Health and Safety Code section 39620. You may also provide any additional preliminary information you feel will assist ARB staff in evaluating your equipment or process using the eligibility criteria described in the guidelines for the equipment precertification program. When you have completed the request form, please mail the form and any supporting information to: Mr. Steven Giorgi, ARB, Program Assistance Section, P.O. Box 2815, Sacramento, CA 95812. Or you may fax the information to (916) 445-5023. If you have any questions on the precertification program, please contact Mr. Bradley Bransen at (916) 322-2341 or Mr. Giorgi at (916) 327-5766. Thank you for your cooperation.

1. Please provide or verify the following information concerning your company/affiliation:

   Company Name _____

   Address _____

   _____

   Contact Person _____

   Phone Number _____

   FAX Number _____

2. Name of Equipment: _____

   _____

3. Model Number(s): _____

   _____

4. Will you be requesting:

   Performance Precertification? ☐ yes
   Regulatory Precertification? ☐ yes*

   * All Districts? ☐ Major Districts Only? ☐
   Selected Districts Only? ☐

5. Equipment / Process General Category: _____
   (Boiler, I.C. Engine, Dry Cleaning Machine, etc.)

6. Briefly describe your equipment / process, how it operates, and how it impacts air quality (include air pollutants emitted, reduced, or measured) :

_____

_____

_____

_____

_____

_____

_____

_____

_____

b-1

7. Briefly describe potential precertification standards and/or specifications (performance claims) your equipment will achieve (emissions, efficiency, or specific criteria):

_____

_____

_____

_____

8. Will your equipment / process pose a significant potential hazard to public health, safety, or to the environment when operated in compliance with precertification specifications? ☐ yes ☐ no ☐ not sure

9. Is the equipment / process commonly used? ☐ yes ☐ no ☐ not sure

Estimated total number of units installed in California: _____

Estimated number of units sold in California per year: _____

(*) If no, is your equipment a modification to, replacement for, or an innovative alternative to commonly used equipment? ☐ yes ☐ no ☐ not sure

10. Please check one box for each priority related question:

a. Is your equipment / process required to obtain permits to operate in any air district in California?	☐ yes	☐ no	☐ not sure
b. Is the equipment/process simple?	☐ yes	☐ no	☐ not sure
c. Is the equipment subject to ARB regulation?	☐ yes	☐ no	☐ not sure
d. Is equipment in a district priority category?	☐ yes	☐ no	☐ not sure
e. Can equipment result in emission reductions?	☐ yes	☐ no	☐ not sure
f. Can equipment result in pollution prevention?	☐ yes	☐ no	☐ not sure
g. Can equipment result in permit streamlining?	☐ yes	☐ no	☐ not sure

11. Status of Data from Verification Testing of Equipment or Process which supports your claim:

a. Do you have any current test data for your equipment?	☐ yes	☐ no	☐ not sure
b. Do you have test data from a pilot plant?	☐ yes	☐ no	☐ not sure
c. Do you have test data from exisiting permitted sites?	☐ yes	☐ no	☐ not sure
d. Was your test data reviewed by districts or the ARB?	☐ yes	☐ no	☐ not sure

12. Please list any other literature, brochures, technical specification sheets or additional preliminary information you have included to assist ARB staff in evaluating the eligibility of your equipment or process:

_____

_____

_____

Please mail the form and any supporting information to:

Steven Giorgi
California Air Resources Board, SSD
P.O. Box 2815
Sacramento, CA 95812
FAX: (916) 445-5023

Example Scope of the Precertification for Perchloroethylene Dry Cleaning Machines

The following is an example of the type of information the scope may include. The information required to support an applicant's claim may require additional (or less) information depending on both the applicant's claim and objectives of verification testing.

Precertification Standards: The following precertification standards will be verified during the precertification:

Proposed Standards requiring test procedures to be used:

Primary Control System
- Achieve outlet vapor temperature less than or equal to 7.2 degrees C (45 degrees F)*

Secondary Control System (Integral)
- Concentration of 300 parts per million by volume (ppmv) or less in drum at end of drying cycle*

Proposed Standards that may be verified by alternative means:

Primary Control System
- Operate during both heated and cool-down phase of drying cycle to reduce mass of perc.
- No exhaust to atmosphere or workroom
- Does not require the addition of water to secondary system that results in physical contact between water and perc.
- Visible thermometer -18 to 66 degrees C (10 to 150 degrees F)

Secondary Control System (Integral)
- Holding capacity equal to 200% of maximum quantity of perc vapor in drum
- Designed to function with primary control system
- No exhaust to the atmosphere or workroom
- Does not require the addition of water to secondary system that results in physical contact between water and perc.

Precertification Specifications: Briefly describe potential specifications or critical operating parameters which can be monitored to assure equipment is achieving precertification standards:

What are critical operating parameters for Secondary Control System?
How does the operator know Secondary Control System (carbon adsorber) needs regeneration?
Please list any claims you want to make specific to liquid leaks and vapor leaks
Please verify lint / button trap cleaning schedule (every four cycles per maintenance recommendations).
Any critical parameters for button trap drying system?
Verify door will not open when running and handle will remain locked for 30 seconds after machine has stopped.
Verify lids of air filter, button trap, etc. will shut down machine when opened.
Any other areas of potential emissions / leaks which your equipment is designed to prevent?
What are critical parameters for refrigeration unit that can be monitored by operator?
How does operator know refrigeration unit is not operating correctly? i.e. drying time extended, etc.?
Verify that machine will stop when still cooling water (or refrig.) flow stops.
Are there any critical parameters for the still safety valve for solvent vapors?

Test Procedures: The following test procedures to be used to verify each asterisked (*) standard or specification.

Concentration: ARB Method 422 or NIOSH 1003
Temperature: Temperature sensor with output to recorder

An alternative test method may be used if deemed acceptable by the Executive Officer of the ARB. Field validation of alternative method in accordance with U.S. EPA Method 301 may be required for approval.

Data Quality Objectives:

	Precision	Average Bias	Limit of Detection
ARB Method 422	13.8%	5.4%	0.075 (ppb)

Comparability: Achieved by use of approved methods.
Completeness: 3 Sets of valid test data
Representativeness:
- Population: Use standard model configuration with smallest capacity secondary system with largest capacity machine. Recent installation in California preferred for testing, with comparison to factory generated test data
- Operating Conditions: Normal operating conditions defined in Air Toxic Control Measure (ATCM) and test protocol.
- Sampling: Achieved by following sampling procedures outlined in the approved methods and test protocol.

Calculation Procedures: Briefly describe calculations which will be used to report precertification test results and emission factors for district permitting of precertified equipment:

Precertification Test Results: Calculated in accordance with ARB Method 422 Appendix E.

Emission Factor Calculation: If desired by the applicant, precertification test results may be used to calculate new drum emission factors or waste factors following procedure described in Appendix H of the ATCM.