

State of California  
AIR RESOURCES BOARD

Resolution 05-56

November 17, 2005

Agenda Item No.: 05-11-2

WHEREAS, sections 39600 and 39601 of the Health and Safety Code authorize the Air Resources Board (ARB or Board) to adopt standards, rules and regulations and to do such acts as may be necessary for the proper execution of the powers and duties granted to, and imposed upon, the Board by law;

WHEREAS, Assembly Bill 471 (AB 471) was passed by the California Legislature in 2004, signed by the Governor, and codified in Health and Safety Code section 39630 *et seq.* AB 471 prohibits cruise ships from conducting onboard incineration while operating within three miles of the California coast. This law became effective January 1, 2005;

WHEREAS, although AB 471 does not specify whether the cruise ship onboard incineration prohibition zone is measured in nautical miles (also known as geographical miles) or statute miles, AB 471 is clear that such prohibition is “to the extent allowed by federal law” (Health and Safety Code section 39632) and federal law granted to the states, lands and natural resources within three geographical miles seaward of the coastline (Title 43, United States Code section 1311);

WHEREAS, AB 471 further requires that ARB enforce Health and Safety Code division 26, part 2, chapter 3.3 (section 39630 *et seq.*);

WHEREAS, in enacting Division 37 of the Public Resources Code, the Legislature required the California Environmental Protection Agency (Cal/EPA) to gather information and evaluate potential impacts on the environment by the cruise ship industry;

WHEREAS, Cal/EPA convened a task force that prepared a report entitled Regulation of Large Passenger Vessels in California (August 2003), and the report concluded that cruise ships are a significant source of air pollutants, including criteria pollutants and toxic air contaminants, and recommended the State regulate cruise ships to protect the State’s air, water quality, and marine environment;

WHEREAS, in 2003, the cruise ship industry estimated a 25 percent increase in the number of vessels that will operate in the waters of the State over the next ten years;

WHEREAS, in April 2005, ARB sent out the Cruise Ship Onboard Incinerator Survey (Survey) to the affected industry in order to gather information on incinerator and waste handling practices;

WHEREAS, the Survey revealed that cruise ships incinerate a wide variety of wastes, including paper, rags, glass, metal, bottles, crockery, light plastics, medical waste, used oil, oily sludge, and dried black water residue; operate their incinerator(s), on average, twelve hours per day for five to six days per week; and 40 percent of the cruise ship incinerators are equipped with some type of air pollution control device;

WHEREAS, the Survey further revealed that prior to January 1, 2005, of the two cruise ships that incinerated waste within three miles of the California coast, one ship incinerated about 70 percent of its total waste within three miles of the California coast;

WHEREAS, section 41511 of the Health and Safety Code provides that for the purpose of carrying out its duties, ARB may adopt rules and regulations to require the owner or the operator of any pollution emission source to take such action as ARB may determine to be reasonable for the determination of the amount of emissions from such source;

WHEREAS, under section 39650 of the Health and Safety Code, the Legislature finds and declares that it is the public policy of the State that emissions of toxic air contaminants should be controlled to levels which prevent harm to the public health;

WHEREAS, toxic air contaminants associated with cruise ship onboard incineration may include, but are not limited to, arsenic, beryllium, cadmium, chromium, hydrochloric acid, lead, manganese, nickel, polychlorinated dibenzodioxins (dioxins), polychlorinated dibenzofurans (furans), and polycyclic aromatic hydrocarbons;

WHEREAS, ARB has formally identified all of the substances listed above as toxic air contaminants pursuant to the California Toxic Air Contaminant Program (Assembly Bill 1807: Health and Safety Code sections 39660-39662) without the identification of a threshold level below which no significant adverse health effects are anticipated; in addition, all of these substances have been listed as hazardous air pollutants by the United States Environmental Protection Agency under the Federal Clean Air Act (42 U.S.C. 7412);

WHEREAS, sections 39658, 39665, 39666, and 39667 of the Health and Safety Code authorize the Board to establish airborne toxic control measures (ATCM) for substances identified as toxic air contaminants in accordance with specified criteria;

WHEREAS, for toxic air contaminants for which the Board has not specified a threshold exposure level, section 39666 of the Health and Safety Code requires ATCMs to be designed to reduce emissions to the lowest level achievable through the application of best available control technology or a more effective control method, considering factors specified in section 39665, unless the Board determines, based on an assessment of risk, that an alternative level of emissions reduction is adequate or necessary to prevent an endangerment of public health;

WHEREAS, in AB 471, the Legislature specifically required a prohibition of cruise ships from conducting onboard incineration while operating within three miles of the California coast, without regard to any best available control technology or a more effective control method;

WHEREAS, ARB staff has proposed an ATCM for cruise ship onboard incineration based upon AB 471 and potential risks to public health;

WHEREAS, the National Oceanic and Atmospheric Administration (NOAA), an agency of the United States Department of Commerce, prepares nautical charts;

WHEREAS, NOAA periodically updates its nautical charts to reflect changes to the marine environment, including the Three Nautical Mile Line;

WHEREAS, other nautical charts or maps depicting the Three Nautical Mile Line are published by other sources, including international sources;

WHEREAS, in developing the proposed ATCM, ARB staff met and worked with affected private industry, federal, State, and local agencies, and the public;

WHEREAS, ARB staff prepared a report, entitled the Initial Statement of Reasons for the Proposed Airborne Toxic Control Measure for Cruise Ship Onboard Incineration (Initial Statement of Reasons);

WHEREAS, the Initial Statement of Reasons further identified and explained the need and appropriate degree of regulation for cruise ship onboard incineration;

WHEREAS, the Initial Statement of Reasons further discussed, to the extent data could reasonably be made available, the factors specified in Health and Safety Code section 39665(b) which include emissions, exposure, and potential cancer risk remaining after implementation of the proposed ATCM, feasible control options, potential environmental impacts, and cost impacts for the affected industry, local districts, the State, and local government;

WHEREAS, in accordance with Health and Safety Code section 39665(c), the report and any relevant comments received during public consultation with the

local air districts, affected sources, and the public were made available for public review and comment 45 days prior to the public hearing to consider the proposed ATCM;

WHEREAS, as part of the Initial Statement of Reasons, staff performed a multipathway risk assessment for the Ports of Los Angeles and Long Beach and determined that the potential residential cancer risk remaining after implementation of the proposed ATCM was approximately 1.5 chances per million people exposed. For noncancer chronic health impacts, the hazard index is less than 0.1. For acute health impacts, the hazard index is less than 0.3. In general, a hazard index less than one is not a concern to public health;

WHEREAS, concepts and drafts of the ATCM were discussed at three workgroup meetings and at two public workshops, which were held on May 17, 2005 and August 24, 2005;

WHEREAS, in accordance with the above authority, ARB staff has now proposed adoption of the ATCM and concluded that the proposed requirements set forth therein would reduce public exposure to emissions of toxic air contaminants associated with cruise ship onboard incineration;

WHEREAS, staff evaluated and concluded that the overall costs associated to the affected industry are negligible;

WHEREAS, the costs to ARB for enforcement of the proposed ATCM are expected to be absorbed into the existing ARB budget for the current year. As the cruise industry is expected to grow over the next ten years, the need for additional resources to enforce the proposed ATCM is likely and will be considered at a future date;

WHEREAS, the California Environmental Quality Act (CEQA), section 21080.5 of the Public Resources Code and Board regulations at title 17, CCR, section 60006, require that no project that may have significant adverse environmental impacts be adopted as originally proposed if feasible alternatives or mitigation measures are available to reduce or eliminate such impacts;

WHEREAS, a public hearing and other administrative proceedings have been held in accordance with the provisions of chapter 3.5 (commencing with section 11340), part 1, division 3, title 2 of the Government Code;

WHEREAS, in consideration of the Initial Statement of Reasons, written comments, and public testimony it has received, the Board finds that:

Existing federal, State, and local regulations do not sufficiently protect the public health from toxic air contaminants associated with cruise ship onboard incineration;

Cruise ship onboard incineration results in emissions of toxic air contaminants which may include, but are not limited to, arsenic, beryllium, cadmium, chromium, hydrochloric acid, lead, manganese, nickel, polychlorinated dibenzodioxins (dioxins), polychlorinated dibenzofurans (furans), and polycyclic aromatic hydrocarbons;

Cruise ship onboard incineration may result in potentially harmful airborne concentrations of these toxic air contaminants, which may pose a significant health risk to exposed members of the public;

The proposed ATCM would significantly reduce exposure and protect health more effectively than any other possible alternative evaluated;

The proposed ATCM complies with the requirements of State law for control of sources of toxic air contaminants identified by the Board;

The economic impacts of the proposed ATCM have been analyzed as required by California law, and the conclusions and supporting documentation for this analysis are set forth in the Initial Statement of Reasons;

The benefits to human health, public safety, public welfare, or the environment justify the costs of the regulatory requirements;

No reasonable alternative considered or that has otherwise been identified and brought to the attention of ARB would be more effective in carrying out the purpose for which the ATCM is proposed, or would be as effective and less burdensome to the affected private persons, businesses, and public agencies than the proposed ATCM;

The proposed ATCM is consistent with ARB's environmental justice policy by reducing health risks from toxic air contaminant emissions associated with cruise ship onboard incineration in all communities where cruise ships operate within three miles of the California coast, including those with low-income and ethnically diverse populations;

The proposed ATCM is necessary in order to protect public health by reducing exposure to toxic air contaminant emissions associated with cruise ship onboard incineration;

It would be cumbersome, unduly expensive, or otherwise impractical to publish the NOAA nautical charts in the California Code of Regulations;

The NOAA nautical charts, which are incorporated by reference in the proposed ATCM, are available through NOAA's website at <http://chartmaker.ncd.noaa.gov/staff/charts.htm>; and

Use of NOAA nautical charts, as opposed to charts or maps from other sources, including international sources, would promote consistency, reliability, and enforceability;

WHEREAS, the Board further finds, in accordance with Health and Safety Code section 39650(e), that while absolute and undisputed scientific evidence may not be available to determine the exact extent of risk from emissions of cruise ship onboard incineration, it is necessary to take action to protect public health;

WHEREAS, the Board further finds, based on its independent judgment and analysis of the entire record before it, that with respect to the requirements of CEQA and the Board's regulations, the proposed ATCM will not have a significant adverse environmental impact on the environment, but instead, will result in the reduction of exposure to residents and workers for people living or working near ports and along the California coast;

WHEREAS, the reporting requirements applicable to businesses under the proposed ATCM are necessary for the health, safety, and welfare of the people of the State of California; and

WHEREAS, the recordkeeping requirements in the proposed ATCM are also required under Regulation 9 of Annex V of the International Convention for the Prevention of Pollution from Ships, 1973, as modified by the Protocol of 1978 (MARPOL 73/78).

NOW, THEREFORE, BE IT RESOLVED that the Board hereby adopts new section 93119, title 17, CCR, as set forth in Attachment A hereto.

BE IT FURTHER RESOLVED that, pursuant to sections 39515, 39516, 39600, and 39601 of the Health and Safety Code, the Board expressly delegates to the Executive Officer the authority to adopt updated NOAA nautical charts when there is a change in chart number or name; or when there is a revision to the Three Nautical Mile Line as shown on the respective NOAA nautical charts, to conduct public hearings, if necessary, and to take such actions that are necessary to incorporate by reference, into the California Code of Regulations, those updated charts.

BE IT FURTHER RESOLVED that the Executive Officer shall publish in the California Regulatory Notice Register and notify potentially affected cruise ship owners or operators, regarding revisions to the NOAA Nautical Charts updated by NOAA, at least 30 days before the updates take effect.

BE IT FURTHER RESOLVED that the Board directs ARB staff to:

Enforce this regulation, rather than encouraging district-by-district adoption of different regulations, to ensure that California speaks with “one voice” with regard to regulating foreign-flagged vessels; and

To take the lead role in implementing and enforcing the ATCM and to ensure compliance with the regulation through on-site inspections, review of records, and other enforcement actions as necessary.

I hereby certify that the above is a true and correct copy of Resolution 05-56, as adopted by the Air Resources Board.

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Lori Andreoni, Clerk of the Board

Resolution 05-56

November 17, 2005

Identification of Attachment to the Board Resolution

**Attachment A:** Proposed Airborne Toxic Control Measure for Cruise Ship Onboard Incineration (section 93119, title 17, California Code of Regulations) as set forth in Appendix A to the Initial Statement of Reasons, released September 30, 2005.