

Updated Informative Digest

ADOPTION OF AN AIRBORNE TOXIC CONTROL MEASURE TO REDUCE EMISSIONS OF TOXIC AIR CONTAMINANTS FROM OUTDOOR RESIDENTIAL WASTE BURNING

Sections Affected

Section 93113 was added to Subchapter 2, Chapter 1, Division 3, title 17, California Code of Regulations (CCR).

Background

Residential waste burning is the practice of outdoor burning of household wastes associated with one- and two-unit family homes. These household wastes include materials such as garbage, paper, cardboard, cloth, plastics and processed wood. Typically, 55-gallon metal drums known as burn barrels are used for this burning. Residential waste burning generates a number of toxic air contaminants, including polychlorinated dibenzo-p-dioxins and dibenzofurans (collectively referred to as dioxins), benzene, 1,3-butadiene, polycyclic aromatic hydrocarbons (PAHs), and polychlorinated biphenyls. These toxic air contaminants may result in substantial health impacts including cancer and immune system damage. The Office of Environmental Health Hazard Assessment has identified dioxins and PAHs as two of the initial five toxic air contaminants that may cause infants and children to be especially susceptible to illness.

Other air pollutants found in smoke produced from residential waste burning include particulate matter and oxides of nitrogen. Most of the particulate matter emitted from residential waste burning is small enough to be inhaled and can be especially harmful to people with existing respiratory illness, the aged, and the very young. Exposure to such particles may worsen existing disease conditions and can produce symptoms ranging from breathing difficulties to increased respiratory infection and even death.

Individual air pollution control district and air quality management district (air district) rules address the types of residential waste that is allowed to be burned. Current rules in 27 air districts allow the burning of some form of residential waste other than natural vegetation in all or part of the air district. Six of these air districts allow all forms of residential waste to be burned in all or part of the air district. The remaining 21 air districts prohibit the burning of household garbage, but may allow the burning of other materials such as paper, cardboard, cloth, or processed wood.

Description of the Regulatory Action

The ATCM prohibits the outdoor burning of residential waste materials other than natural vegetation, as well as the use of burn barrels. The ATCM also requires any residential

burning to take place only on permissive burn days and requires the use of an ignition device approved by the air pollution control officer. Exemptions are included for the burning of paper and cardboard and for the use of burn barrels in very low population density areas.

At a public hearing on February 21, 2002, the Air Resources Board (Board) approved the ATCM with certain modifications to the originally proposed language. These modifications were suggested by Air Resources Board (ARB) staff in response to public comments received since the release of the proposed regulation on January 4, 2002. Following is a summary of the modifications:

1. In subsection (b), "Definitions," definitions for *"approved transfer station or disposal facility," "available regular waste pickup service," "communal or community dumpster," "mandatory regular waste pickup service,"* and *"voluntary regular waste pickup service"* were deleted and definitions for census zip code, chief fire official, incorporated place, and population density were added to reflect terminology used for exemption criteria in the modified regulation.
2. In subsection (d), "Compliance Schedule," the effective date of the prohibitions was changed to January 1, 2004. Also, a provision was added for ARB to conduct a public education and outreach program, beginning no later than January 1, 2003. This schedule allows additional time for outreach and education before the prohibitions become effective.
3. Subsection (e), "Exemptions," was modified to provide specific exemption criteria based upon population density within census zip code areas, in response to a concern that the initial exemption criteria lacked certainty. The modified exemption criteria are:
 - Census zip codes with a population density less 3.0 people per square mile receive an automatic exemption. In these areas, dry, non-glossy paper and cardboard may be burned, and burn barrels may be used.
 - Census zip codes with a population density between 3.0 and 10.0 persons per square mile may be exempted to allow the burning of dry, non-glossy paper and cardboard at the direction of the local air district Board, and burn barrels may be used based upon overriding fire safety concerns at the request of the ranking local fire official. However, the air district may delineate sub-areas of the census zip code where the prohibitions would still apply.
 - No exemptions will be provided in census zip codes with a population density greater than 10.0 people per square mile, and in all incorporated places. However, in this highest density tier, the air district may delineate sub-areas of the census zip code to be exempted, if the population density is less than or equal to 3.0 persons per square mile in the sub-area. In these sub-areas, dry, non-glossy paper and cardboard may be burned, and burn barrels may be used.
4. The process for designating exemption areas in subsection (e) was modified such that:
 - ARB will provide the air districts a listing of incorporated places and population density in each census zip code area within each air district by May 1, 2003, and every ten years thereafter.

- Air districts must submit their Requests for Exemption to ARB, with appropriate documentation, by August 1, 2003.
 - ARB will review the Requests for Exemption for completeness and approve the exemption areas with a written confirmation by January 1, 2004.
 - ARB will make available a listing of all exemption areas by January 1, 2004.
 - The exemption area designation process will be repeated every 10 years thereafter, rather than every five years, until there are no areas qualifying for the exemption pursuant to the exemption criteria.
 - Air districts must re-evaluate the exempted sub-areas every five years to confirm that they still meet the population density criteria for exemption.
5. The requirements for Requests for Exemption were modified in the following ways:
- The air district must hold a public meeting on the Request for Exemption and adopt it using an enforceable mechanism.
 - To prevent backsliding, the air district must submit an analysis of local controls regarding bans on, or requirements for, the use of burn barrels or incinerators and for bans on burning of paper or cardboard in the exemption areas. Burn barrels may continue to be used in any jurisdiction where a local ordinance or other enforceable mechanism requiring their use is in effect as of January 1, 2002, unless it is subsequently rescinded or revoked. Conversely, an air district may not seek an exemption for the use of burn barrels in any jurisdiction that bans their use through air district rules, local ordinances, or other enforceable mechanisms in effect on January 1, 2002, or thereafter. Air districts may not request exemptions for burning paper and cardboard if it is already prohibited under air district rules in effect as of January 1, 2002, nor request an exemption for any jurisdiction where a local ordinance or other enforceable mechanism already prohibits burning these materials.
 - Air districts must include a written commitment to public education on minimizing hazards from residential burning, through a permit program or equivalent mechanism.
 - The Request for Exemption must include written documentation from the chief fire official with primary jurisdiction over fire safety within the medium population density exemption area that burn barrels or incinerators must be used to avoid unacceptable fire risk.

We also added to the rulemaking record the following additional documents and information that support the proposed action:

ARB (2000). Risk Reduction Plan to Reduce Particulate Matter Emissions from Diesel-Fueled Engines and Vehicles. Air Resources Board, Stationary Source Division, Mobile Source Control Division. Sacramento, California. (Diesel Risk Reduction Plan)

Nakao, T., Aozasa, O., Ohta, S., Miyata, H. (2000). "Formation of Dioxin Analogues on Combustion Process with Unregulated Small Incinerator." Submitted paper in Organohalogen Compounds. 46:205-208. (Nakao paper)

The Board in its resolution of approval also made the following directives.

1. The Executive Officer should work with the California Air Pollution Control Officers Association, the Regional Council of Rural Counties, federal, state, and local fire agencies, and public health organizations to initiate a public education and outreach program to assist the air districts in implementing the ATCM.
2. The Executive Officer should work with the Integrated Waste Management Board in its efforts to address local landfill diversion issues and to promote recycling and waste reduction through local educational programs.
3. The Executive Officer should work with the California Air Pollution Control Officers Association to provide local maps clearly identifying exempt areas and to assist the air districts in filing expeditiously requests for exemptions where appropriate.
4. The Executive Officer should report back to the Board within one year of the implementation date of the ATCM on the progress of air district implementation of the regulation and the ARB's outreach and education efforts to facilitate compliance with the ATCM's requirements.

On May 15, 2002, we released a Notice of Public Availability of Modified Text (Modified Text) for a 15-day comment period. The Modified Text provided revised regulatory language per the direction of the Board at its February 21, 2002, hearing. After considering the comments received, the Executive Officer made several nonsubstantive changes, i.e. changes without regulatory effect. These changes included: 1) modifying the definition of "air pollution control district" in subsection (b)(1) by removing the reference to Governing Board, 2) adding a citation for the definition of FIPs code in the definition of "incorporated place" in subsection (b)(14), 3) adding clarifying language to the definition of "population density" in subsection (b)(18), affirming that it be calculated as persons per square mile, and 4) adding language to subsections (e)(2), (e)(3), and (e)(5) further clarifying that the population density calculations apply to the unincorporated areas or sub-areas of the census zip code. The Executive Officer determined that Board reconsideration of the approved regulatory changes with the clarifying language was not necessary. The Executive Officer issued Executive Order G-02-69 adopting the regulation, which is incorporated by reference herein.