



Air Pollution Control Board

Greg Cox	District 1
Dianne Jacob	District 2
Pam Slater-Price	District 3
Ron Roberts	District 4
Bill Horn	District 5

June 15, 2004

TO: Workshop Participants
Other Interested Parties

**IMPLEMENTATION OF NEW
AIRBORNE TOXIC CONTROL MEASURE
TO REDUCE EMISSIONS OF TOXIC AIR CONTAMINANTS
FROM OUTDOOR RESIDENTIAL WASTE BURNING**

WORKSHOP REPORT

On November 7, 2003, the Air Pollution Control District conducted a public workshop to receive comments regarding the implementation of a new state Airborne Toxic Control Measure to Reduce Emissions of Toxic Air Contaminants From Outdoor Residential Waste Burning. The workshop report and a copy of the state regulation are enclosed.

If you have any questions, please call Cara Bandera at (858) 650-4592, Steven Moore at (858) 650-4598, or myself at (858) 650-4590.

MICHAEL R. LAKE, Assistant Director
Air Pollution Control District

Enclosures

MRL:SM:CB:ls

**AIR POLLUTION CONTROL DISTRICT
COUNTY OF SAN DIEGO**

**AIRBORNE TOXIC CONTROL MEASURE (ATCM) TO
REDUCE EMISSIONS OF TOXIC AIR CONTAMINANTS
FROM OUTDOOR RESIDENTIAL WASTE BURNING**

WORKSHOP REPORT

A workshop notice for the implementation of the Airborne Toxic Control Measure (ATCM) to Reduce Emissions of Toxic Air Contaminants from Outdoor Residential Waste Burning (Title 17 of the California Code of Regulations, Section 93113) was mailed to all known individuals who were issued Burn Permits in San Diego County under the Air Pollution Control District (District) Rule 101. Notices were also mailed to all Economic Development Corporations and Chambers of Commerce in San Diego County, the U.S. Environmental Protection Agency (EPA), the California Air Resources Board, and other interested parties. Twenty-one San Diego East County fire agencies were also notified of this ATCM through a notice and public meeting held on September 30, 2003.

A workshop was held on November 7, 2003. Three people attended the workshop. Oral comments were received during the workshop from affected persons. Written comments were also received.

The written and oral comments and District responses are as follows:

1. WRITTEN COMMENT

The County has closed the transfer station at Warner Springs and the trash must be hauled to Anza Station in Riverside County or the Ramona Station. As a result, many backcountry residents will ignore this regulation, and the District will have no effective means to enforce this measure on backcountry private property.

DISTRICT RESPONSE

Enforcement of the ATCM on backcountry private property will primarily be through responses to complaints received by the District. The District will also coordinate with the California Department of Forestry (CDF), who may also report burning of residential waste to the District, when they discover any during their responses to reports of smoke.

2. WRITTEN COMMENT

Many tribal lands will not comply with any District regulations because they claim sovereignty over their land.

DISTRICT RESPONSE

This toxic control measure does not apply on tribal lands. Under Title III, Section 301(d) of the federal Clean Air Act, the EPA is authorized to treat Indian tribes as states. As such, Indian tribes do not fall under the regulatory authority of state or local agencies. Instead, the EPA retains authority for all sources of air pollution that are located on tribal lands. However, EPA is currently in the process of developing regulations, which will enable them to transfer permitting authority over to tribal governments on a case-by-case basis.

3. WRITTEN COMMENT

The amount of pollutants generated from backcountry trash burning must be minute, particularly in comparison with the pollutants emitted from aircraft at Lindberg Field, North Island, and Miramar.

DISTRICT RESPONSE

Burning residential waste results in the formation of dioxins, which are toxic air contaminants. While dioxins may be emitted in minute amounts from residential waste burning they have a high cancer potency compared to other toxic air contaminants. Dioxin emissions from residential waste burning may increase a person's risk of developing cancer and other serious health effects. The main purpose of this ATCM is to reduce emissions of dioxins from residential waste burning. With regard to toxic emissions, although aircraft emit many pollutants that can have adverse health impacts, EPA has not reported dioxins to be among the pollutants emitted.

For regular burning of residential waste at a single site, the state Air Resources Board has estimated that total cancer risk is as high as 428 chances per million at a location 65 feet away from the waste burning site. For this case, the estimated cancer risks for inhalation and skin exposure are about 8 and 3 chances per million, respectively. The remainder of the risk is due to potential ingestion of dioxin-contaminated material. Typically, cancer risk greater than one in a million is considered significant.

See also the responses to Comment Nos. 12 and 13.

4. WORKSHOP COMMENT

The amount of pollutants generated from backcountry trash burning must be minute in comparison to the pollutants that flow over the border from Mexico.

DISTRICT RESPONSE

The toxic air contaminants, in particular dioxin, emitted even in small quantities from residential waste burning create significant health risks to nearby residents. Air pollutants emitted in Mexico are less of a concern for San Diego County since most of the year, the

prevailing winds in San Diego County blow southeast towards Mexico. There is only a limited impact on San Diego County air quality caused by transport of polluted air from Mexico.

5. WORKSHOP COMMENT

Why must residents of Potrero, California, be burdened with the difficulties that the ATCM will impose, while worse pollution is generated from cars traveling in and out of San Diego from across the border in Mexico?

DISTRICT RESPONSE

These are two separate issues. The ATCM has been developed to reduce a significant health risk from toxic air contaminants emitted as a result of residential waste burning.

Past state legislation has attempted to address emissions from vehicles from Mexico. More recently, new federal incentive programs may be successful in reducing pollution from Mexican vehicles. See also the District's response to Comment No. 3

6. WORKSHOP COMMENT

The majority of residents in the East County may not have received notification of the public meeting if those notices were not mailed to a P.O. Box. Due to the remote locations of some of these homes, mail is not directly delivered to a residential address.

DISTRICT RESPONSE

The public meeting notices were sent to individuals who were issued Burn Permits in 2002. The burn permit information available included only home addresses. The District made additional efforts to notify the public by placing one-day advertisements in four area newspapers: San Diego Union Tribune, Julian News, Alpine Sun, and Borrego Sun.

7. WORKSHOP COMMENT

About once every two months, some residents burn paper waste and junk mail for disposal. Due to the requirements of the regulation, will this waste now have to be taken and disposed of in a landfill? Are the toxins contained in these waste products eventually going to wind up in the water supply after leaking out of the landfill?

DISTRICT RESPONSE

The airborne toxic control measure (ATCM) prohibits the outdoor burning of residential waste products including paper. Paper waste must be recycled or disposed of in a landfill. The ATCM was designed to reduce public exposure to dioxins and other toxics that are

emitted from outdoor residential waste burning. Since dioxins from residential waste are primarily emitted when waste is burned, the potential amount of dioxins entering the environment in the event that residential waste is disposed of in a landfill is very small. Recyclable items such as paper can be separated and prepared for pickup by a recycling service or be dropped off at a local recycling center.

8. WORKSHOP COMMENT

Who voted the ATCM into law and why was it developed?

DISTRICT RESPONSE

On February 21, 2002, the state Air Resources Board adopted the new ATCM to reduce emissions of dioxins by prohibiting outdoor residential waste burning. California law regulating toxic air contaminant emissions was adopted by the legislature in 1983 and codified in the state Health and Safety Code. The California Health and Safety Code (Sections 39650 through 39675) requires adoption of regulations designed to reduce emissions of toxic air contaminants to protect public health. The state Air Resources Board is required to identify toxic air contaminants and develop ATCMs to reduce emissions to the lowest level achievable. Local air pollution control districts, including San Diego County, are then required to implement and enforce the ATCM.

In July 1986, dioxins were identified as a toxic air contaminant because of their potential as human carcinogens. Any exposure to dioxins, even in limited amounts, could cause adverse health effects including cancer. The U.S. EPA suggested in a 2001 report that the burning of residential waste is one of the largest uncontrolled sources of dioxin emissions in the environment.

9. WORKSHOP COMMENT

Since the ATCM only applies to burning residential waste outdoors, aren't residents allowed to burn trash in a fireplace? What is the value of the ATCM if it can be circumvented through a loophole?

DISTRICT RESPONSE

While the ATCM does not regulate the burning of residential waste indoors, residents are not encouraged to do this because of the exposure to themselves, family members, and neighbors to toxic air contaminants. The value of the ATCM is the reduced exposure to nearby residents to a source of dioxins, one of the most potent carcinogens identified to date, and other air toxics from residential waste burning. Under Rule 51 - Nuisance, the District does have the authority to regulate indoor waste burning if it creates a public nuisance.

10. WORKSHOP COMMENT

Is this just a “feel good” regulation that was passed to appease bureaucratic pressures and has nothing to do with eliminating dioxins?

DISTRICT RESPONSE

Prohibition of residential waste burning is one way to eliminate dioxin formation and protect public health. See the response to Comment No. 8.

11. WORKSHOP COMMENT

Why are residents being penalized by the requirements of the ATCM if the air in which they live is clear compared to the brown air over the city?

DISTRICT RESPONSE

The toxic control measure is intended to protect residents from one type of air pollution – toxic air contaminants, particularly dioxin. The brown color of the city air is primarily due to the presence of another type of air pollution nitrogen dioxide (NO₂), which is formed as a result of burning of fossil fuels such as natural gas, gasoline, or oil. While NO₂ has adverse health impacts at high concentrations, its concentration in San Diego County air is within the federal and state ambient air quality standards. Oxides of nitrogen are being controlled through regulation of emissions from cars, trucks, buses, power plants, factories, boilers, engines, and gas turbines. Reducing these emissions has significantly improved ozone (smog) levels throughout San Diego County.

Residential waste burning had been allowed in the past only in the less populated areas in eastern San Diego County in order to minimize adverse health effects to nearby residents. The state Air Resources Board has since determined that the burning of residential waste is a source of dioxins. As previously mentioned, dioxins are very potent carcinogens that can present a significant health risk even in sparsely populated areas. Therefore, this toxic control measure protects public health by further limiting a practice that results in the emission of dioxins into the environment. See also the responses to Comment Nos. 3, 12, and 13.

12. WORKSHOP COMMENT

What is the lifespan of the dioxins if they get into the atmosphere, land, or water?

DISTRICT RESPONSE

According to information compiled by the state Air Resources Board, dioxins emitted into the atmosphere have a half-life of several days. Long distance transport of dioxins in the atmosphere has been documented. The half-life in the soil surface has been estimated at 9 to 15 years, and in the soil subsurface at 25 to 100 years. The approximate half-life in the

human body is 6 to 10 years. The half-life is the time it takes for dioxin concentrations to be reduced by one-half its initial level with no further exposure to emissions.

13. WORKSHOP COMMENT

What is the scientific basis of the ATCM? Since there is no agriculture near Potrero, what is the health risk to residents if the toxins are not being ingested?

DISTRICT RESPONSE

According to information compiled by the state Air Resources Board, ingestion results in about 90% of the average persons exposure to dioxins. Due to the long half-life of dioxins in the environment, dioxins can travel through the atmosphere either as a vapor or on windblown dust and deposit on vegetation, waterways, and the soil. They can then accumulate in the fat of fish and animals and become concentrated as they travel through the food chain. Reducing emissions of dioxins, especially air emissions, reduces community exposure to dioxins. This is beneficial to public health considering that there is no quantifiable safe exposure limit to dioxins. See also the response to Comment No. 3.

14. WORKSHOP COMMENT

If consumer products contain substances that are harmful to public health, why are those substances used anyway? Why are the end users penalized if manufacturers should be more accountable?

DISTRICT RESPONSE

The substances used in the manufacture of consumer products, such as paper and plastic, are regulated separately. Dioxins, which are the focus of this toxic control measure, are formed during the burning of waste. See the responses to Comment Nos. 3 and 7.