

EMISSION INVENTORY

CATEGORY #314

BURNING OF WASTE MATERIAL INCINERATION

1999 EMISSIONS

Introduction

Emissions for this category were obtained as the sum of emission estimates from both point sources (as developed from information in the District's data bank) and area sources. Emissions are due to waste combustion at dwellings (e.g., in fireplaces and apartment house incinerators), commercial firms (e.g., in crematories and pathological incinerators), and industrial plants (e.g., in incinerators for waste disposal, reduction or preparation for recycling operations).

This category does not include emissions from the combustion of any "auxiliary fuel" (e.g. natural gas or fuel oil) used to maintain the elevated temperatures needed to promote combustion of the waste material being incinerated. (Emissions from such "auxiliary fuels" would be covered in categories #307, and #309.) This category also does not include emissions from solid fuel combustion for heating, cooking, or recreational purposes, which is covered in category #289.

Methodology

Point source emissions (permitted to several institutional/commercial sites) for 1999 represented a low percentage of the total category emissions. The point source emissions were prepared, on a source-by-source basis, by using as input, [1] process material throughputs, [2] applicable emission factors [source-specific or general], and [3] emission control factors [device-specific or general].

Area source emissions were calculated based on an estimated household waste throughput in the Bay Area. The throughput was developed by multiplying the Bay Area population by an average waste production per resident. The residential daily waste production (1.6 lbs/person/day) data was obtained from the California Integrated Waste Management Board. Most of the household waste in the Bay Area is collected and disposed of at the waste landfills. Approximately 2 percent of the total waste is assumed to be burnt through illegal fires.

Emission factors were developed based on type of materials commonly disposed of in this manner. EPA's AP-42, section 2 contains waste combustion emission information.

TRENDS

History

Emission data prior to 1990 were developed using base year 1987 trend values.

Growth

It was felt that annual emissions for waste burning would follow population growth. The population growth data was obtained from the Association of Bay Area Government (ABAG).

Control

District Regulation 9 controls emissions of NOx and SOx from combustion.