

atmospheric contamination below the maximum allowable, provided adequate uncontaminated make-up air is supplied. For plants utilizing solvents with more than 3% benzene content, local exhaust ventilation should be relied upon for control of the solvent vapors. Ventilation specifications have been included for the control of solvent vapors resulting from the churning, saturating, and coating operations. -- Public Health Eng. Absta.

COMMUNITY AIR HYGIENE

486 A Study of Air Pollution by Analysis of Particulate Material Collected from Air Filtration Plants. II. Determination of Polycyclic Aromatic Hydrocarbons in Total Air Solids.

A. J. Lindsay and J. R. Stanbury.

Intern. J. Air and Water Poll. 6, 387-390 (Sept.-Oct. 1962).

The polycyclic aromatic hydrocarbons, pyrene, fluoranthene, 1,2-benzpyrene, 3,4-benzpyrene, perylene, 1,2-benzperylene, anthanthrene have been determined in air solids collected at 2-week intervals throughout the year from an air filtration plant. The methods employed were extraction with cyclohexane followed by alumina column chromatography and ultraviolet spectrophotometry. The amounts varied in the well-known yearly cycle for combustion pollution. The yearly average figures expressed as percentage of the total air solids were 0.012 for the 7 hydrocarbons and 0.0014 for 3,4-benzpyrene and these were contained in soluble organic matter amounting to 4 - 5%. The nature of this material is as yet unknown. In the large amount of almost entirely uninvestigated material there may be quantities of other compounds with biological activities. -- APCA Absta.

487 Problems in Smoke Control Areas, P. D. Coates.

Smokeless Air (London) 32, 260-263 (1962).

One of the problems in smoke control areas is that the majority of spontaneous objections from individual house-holders who feel that other local forms of air pollution, such as railway smoke, diesel smoke, or industrial emissions should be taken care of before the domestic chimney. The Beaver Committee emphasized the importance of the domestic chimney as a source of smoke. Use of coke has been recommended in black areas because the present production of premium fuels is not sufficient to meet the demand for open fire fuel. Education of the public is needed to show that coke can give satisfactory results and there are no supply difficulties. There are minor problems and difficulties in setting up smoke control areas. -- APCA Absta.

488 A New Wet Process for Precipitating Fine Dust. J. Pallinger.

Staub 22, 270-275 (July 1, 1962). German.

Dust-laden gas is drawn into a venturi; a water spray is directed axially against the contracting inlet of the venturi so that the water droplets strike the curved walls and bounce off into the throat. The velocity of the gas and dust particles exceeds that of the water droplets in the contracting inlet but is less in the slowly expanding outlet tube. Graphs are given for pressure loss as a function of water flow but data on dust removal as a function of particle size are lacking. The system is in use in steel works using oxygen-lancing. -- Bull. Hyg.

489 Diesel Smoke and Its Causes. J. M. Dickson-Simpson.

Smokeless Air (London) 32, 305-308 (1962).

Black smoke occurs when carbon particles are suspended in the exhaust from a diesel engine, and carbon results when there has been a shortage of oxygen in the combustion process. Exhaust usually classed as just visible contains only 4 mg. of carbon per cubic foot of gas. A