Mr. RYAN. Also, a copy of the atmospheric air regions that you have already designated?

Dr. MIDDLETON. Pleased to supply them.

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DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE—OFFICE OF THE SECRETARY

AIR POLLUTION PREVENTION AND CONTROL—DEFINITION OF ATMOSPHEREIC AREAS

Notice is hereby given that, pursuant to section 107(a)(1) of the Clean Air Act, as amended by the Air Quality Act of 1967 (Public Law 90–148), the Atmospheric areas of the Nation are defined as set out below on the basis of those conditions which affect the interchange and diffusion of pollutants in the atmosphere.

Important meteorological parameters that affect the interchange and diffusion of airborne pollutants are the frequently, persistence, and height variation of stable (inversion) layers of air and speed and direction of wind. Accordingly, the boundaries of the Atmospheric areas are based on annual averages of (a) low-level inversion frequency, (b) maximum depths of vertical mixing, and (c) the frequency of light winds.

Collectively, an assessment of these parameters provides a measure of the dilution climatology of an area, that is, a history of the experience of air movements as it relates to the dilution of pollutants. This conceput of dilution climatology is embodied in the High Air Pollution Potential (HAPP) Advisory System, initiated by the National Center for Air Pollution Control (NCAPC) in the eastern United States in 1960 and the western United States in 1963, and now administered by the Environmental Science Services Administration (ESSA). The HAPP Advisory System provides a forecase of weather conditions conducive to the accumulation of air pollutants over large areas, a factor which was considered in the definition of these Atmospheric areas.

Because of the direct relationship of the area boundaries to the average meteorological conditions of large-scale areas, these bounaries do not necessarily reflect the actual meteorology in the immediate vicinity of the boundaries. In other words, there will always be special "boundary conditions" characterized by the movement of air, together with airborne pollutants, across the boundary. The boundaries are shown as zones on the map in order to reflect this boundary condition.

Furthermore, since the boundary between any two areas is defined by average annual conditions it is transitory on the basis of shorter period (e.g., seasonal or diurnal) variations in meterological conditons, with the result that Pittsburgh, for example, is under the influence of the average dilution climatology of the Appalachian Atmospheric area during certain times of the year and under the influence of the Great Lakes-Northeast Atmospheric areat at other times during the year. Similarly, Portland, Oreg., New York City, or any other place in the near vicinity of an Atmospheric area boundary could be under the influence of a neighboring Atmospheric area during certain periods.

Major topographical features are also reflected in the delineation of Atmospheric areas. The eastern boundary of the two Atmospheric areas on the West Coast lies for the most part at the 2,000- to 3,000-foot elevation contour interval on the western sdope of the first major mountain chain, and it marks in general the inland extent of the major influence of maritime air. The boundary between the Rocky Mountain Area and the Great Plains Area is essentially located at the 3,000- to 4,000-foot elevation contour interval. The effects of the Great Lakes and the Appalachian Mountains are apparent in the location of boundaries between Atmospheric areas in the eastern United States.

A brief description of each Atmospheric area is given in the attached table, including the geographical extent of each area and the major characteristics of the dilution climate. Definition of Atmospheric areas outside of the continguous United States has been deferred.

The existence of Atmospheric areas, as defined herein, does not in any way limit the designation of Air Quality Control regions pursuant to section 107(a)(2) of the Clean Air Act, as amended.

Dated: January 9, 1968.

[SEAL]

JOHN W. GARDNER, *Secretary.*