

essential to statewide planning, and in the case of an interstate agency, such agency's jurisdiction-wide planning, for proper and effective solid-waste disposal consistent with the protection of the public health, including such factors as:

- (1) population growth,
- (2) urban and metropolitan development,
- (3) land-use planning,
- (4) water pollution control,
- (5) air pollution control, and
- (6) the feasibility of regional solid-waste disposal programs:

(b) That in the conduct of the survey the applicant shall give consideration to, and coordinate the project with other related State, interstate, regional and local planning activities, including those financed in whole or in part with funds pursuant to section 701 of the Housing Act of 1954 (40 U.S.C. 461).

PART 475—SMOKE INSPECTION GUIDES

Sec.

- 475.1 Design and test specifications for the smoke inspection guide.
- 475.2 Instructions for the application of the smoke inspection guide.
- 475.3 Conditions for using name of U.S. Public Health Service in connection with smoke inspection guides.

AUTHORITY: The provisions of this Part 475 issued under sec. 215, 58 Stat. 690, as amended; Reorg. Plan 3 of 1970; 42 U.S.C. 216. Sec. 2(b), 69 Stat. 322, as amended; 42 U.S.C. 1857a(b); 3 CFR 1970 Comp.

SOURCE: The provisions of this Part 475 appear at 25 F.R. 1911, Mar. 4, 1960, unless otherwise noted. Redesignated at 35 F.R. 18972, Dec. 15, 1970.

§ 475.1 Design and test specifications for the smoke inspection guide.

(a) It must consist of a single piece of photographic film as described in paragraph (c) of this section which has been exposed and developed to give four adjacent rectangular areas, each a different intensity of neutral gray and a fifth area of clear unexposed film. The neutrality of the gray shades shall be verified by equal absorption values over the visual range of light wave lengths as measured in a spectrophotometer.

(b) The guide shall be 1" wide, $4\frac{3}{8}$ " long, and have a total thickness of 0.009" (± 0.001). The four corners of the guide

shall be rounded with a $\frac{1}{8}$ " radius of curvature. The rectangular areas of gray shall be 1" wide and $1\frac{3}{16}$ " high. The unexposed area shall be 1" wide and $1\frac{1}{8}$ " high. Tolerances on dimensions unless otherwise specified shall be $\pm\frac{1}{16}$ ". The gray areas shall be arranged in an increasing order of gray intensity from top to bottom along the length of the film with the clear unexposed area at the bottom. The guide shall be provided with a protective case as a precaution against scratching and soiling when not in use.

(c) The undeveloped photograph film shall consist of blue-sensitivity, negative-type emulsion coated on clear, cellulose acetate butyrate support. It shall have a clear gel backing for curl control and a clear, unhardened gel overcoat which will give considerable protection against normal handling abrasion. The film shall have an exposure index of 6 to tungsten light, a contrast of about 2 when processed for 5 minutes at a temperature of 68° F. in Armed Forces Developer No. 2 (MIL-D-4825). The exposure index of 6 to tungsten light is an index suitable for use with photoelectric meters calibrated according to ASA exposure meter standards.

(d) The four intensities of gray proceeding from light to dark shall be designated in terms of percentage light transmission having the values of 80, 60, 40, and 20 percent ± 5 percent. These values of percentage transmission shall be determined using a transmissometer with specifications described in paragraph (e) of this section as the primary standard of reference. A sensitive densitometer capable of measurement of differences in optical densities within ± 0.005 and calibrated with reference to the primary standard shall be acceptable as a secondary standard of reference. The transmission values of 80, 60, 40, and 20 percent shall also be referred to as nominal Ringlemann Nos. 1, 2, 3, and 4, respectively.

(e) The transmissometer used for measurement of the transmission values of the gray areas shall have collimating tubes with 0.25" diameter apertures and viewing angles within 5° attached to the detector and lamp. The spectral response of the transmissometer shall be restricted to the visual range and comparable to

the human eye. A schematic of a transmissometer for calibration of smoke guides is shown in Figure 1.

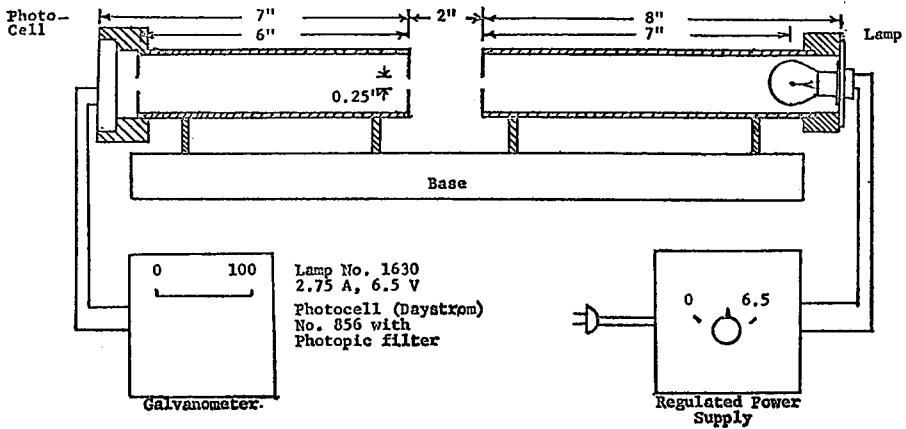


Figure 1. Schematic of transmissometer for calibration of smoke guides.

[25 FR. 1911, Mar. 4, 1960, as amended at 33 FR. 4804, Mar. 21, 1968]

§ 475.2 Instructions for the application of the smoke inspection guide.

(a) *Introduction.* The design and development of the smoke inspection guide is the result of an evaluation of both the transmission and the reflection type guides. The percent blackness values were chosen to correspond to the nominal Ringelmann Chart values for two reasons: First, this will permit the use of the guide without extensive revision of legislation; second, the nominal Ringelmann values have been shown to occur during certain periods of the day under specific conditions of atmospheric illumination.

(b) *Reading the guide.* (1) The guide is held at reading distance from the eye and positioned between thumb and forefinger such that nominal transmission values of 80, 60, 40, and 20 percent are in a vertical column in an increasing order of blackness from top to bottom corresponding to Ringelmann Nos. 1, 2, 3, and 4.

(2) The smoke under observation is sighted alongside the guide and a film

shade of blackness is noted, which most closely matches the smoke. It is necessary whenever possible that the reading be made against the same type background for both the smoke and the film guide. A reading will be subject to error if, for example, the sky is the background for the smoke and a building for the guide or vice versa.

(3) At all times of reading the guide should be shaded from direct sunlight. Errors will be introduced if the chart is read with sunlight directed from other than the background of the observer. There is no preferred direction of sunlight coming from the background. Care should be taken to prevent interfering reflections on the guide.

(c) *Maintenance of guide.* The guide should be kept in a holder at all times except when in use. It should not be held in any manner other than as specified under reading instructions. Any dust which collects on it as a result of electrostatic charge build-up should be brushed off, using a soft brush. Fingerprints as a result of inadvertent handling

should be wiped off using a lint-free lens cleaner type paper.

§ 475.3 Conditions for using name of U.S. Public Health Service in connection with smoke inspection guides.

(a) Guides meeting the design and test specifications set out under § 475.1 and the conditions of paragraph (b) of this section may be identified with the following statement:

The manufacturer certifies that this smoke inspection guide has been produced in compliance with the design and test specifications for smoke inspection guides developed by the U.S. Public Health Service (42 CFR Part 475).

In each case the name of the manufacturer must also be shown immediately following such identification.

(b) The instructions for use set out in this part must be supplied with the guide by the manufacturer in such form as to be readily available when the guide is to be used.

PART 476—PREVENTION, CONTROL, AND ABATEMENT OF AIR POLLUTION FROM FEDERAL GOVERNMENT ACTIVITIES: PERFORMANCE STANDARDS AND TECHNIQUES OF MEASUREMENT

Sec.

- 476.1 Definitions.
- 476.2 Intent.
- 476.3 Applicability.
- 476.4 Combustion of fuel.
- 476.5 Sulfur oxides.
- 476.6 Stacks.
- 476.7 Storage and handling of fuels and ash.
- 476.8 Disposal of waste.
- 476.9 Other pollution producing processes.

AUTHORITY: The provisions of this Part 476 issued under section 5 of Executive Order 11282; 3 CFR, 1966 Comp.; Reorg. Plan 3 of 1970; 3 CFR, 1970 Comp.

SOURCE: The provision of this Part 476 appear at 31 F.R. 7902, June 3, 1966, unless otherwise noted. Redesignated at 35 F.R. 18972, Dec. 15, 1970.

§ 476.I Definitions.

As used in this part:

(a) "Executive Order" means Executive Order No. 11282.

(b) "Nonurban areas" means all areas other than urban areas.

(c) "Ringelmann Scale" means the Ringelmann Scale as published in the latest U.S. Bureau of Mines Information Circular entitled "Ringelmann Smoke Chart".

(d) "Secretary" means the Secretary of Health, Education, and Welfare.

(e) "Smoke Inspection Guide" means the U.S. Public Health Service Smoke Inspection Guide described in Part 475 of this title.

(f) "Urban areas" means those areas classified as urban in the latest available Federal census, or as Standard Metropolitan Statistical Areas by the Bureau of the Budget.

(g) "Unit" means all indirect heat exchangers connected to a single stack.

(h) "Particulate matter" means any material, except uncombined water, that exists as a solid or liquid at standard conditions.

(i) "Standard conditions" means a temperature of 70° Fahrenheit and a pressure of 14.7 pounds per square inch, absolute.

(j) "Waste" means any solid, liquid, or gaseous substance, the disposal of which may create an air pollution problem.

[31 F.R. 7902, June 3, 1966, as amended at 34 F.R. 11419, July 10, 1969]

§ 476.2 Intent.

It is the intent of these standards that emissions to the atmosphere from Federal facilities and buildings shall not be permitted if such emissions endanger health or welfare and that emissions which are likely to be injurious or hazardous to people, animals, vegetation, or property shall be minimized.

§ 476.3 Applicability.

(a) Unless otherwise indicated, the standards in this part apply to both new and existing Federal facilities and buildings. These standards are effective upon publication in the FEDERAL REGISTER, except for those facilities and buildings which are likely to require installation of improvements under the plan to be submitted in accordance with section 3 of the Executive Order.