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# Air Pollution Regulations in State Implementation Plans: Colorado

Abcor Inc, Wilmington, MA Walden Div

Prepared for

Environmental Protection Agency, Research Triangle Park, NC

Aug 78

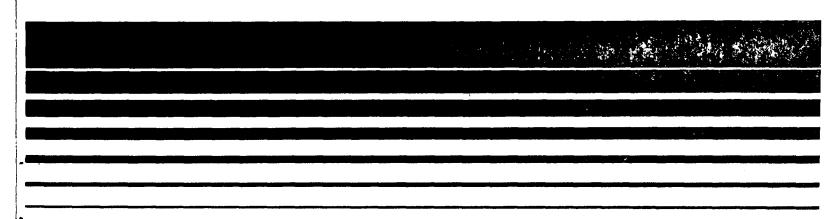
United States Environmental Protection Agency Office of Air Quality Planning and Standards Research Triangle Park NC 27711 EPA-450/3-78-055 August 1978

Air

**SEPA** 

# Air Pollution Regulations in State Implementation Plans:

Colorado



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# Air Pollution Regulations in State Implementation Plans:

# Colorado

by

Walden Division of Abcor, Inc. Wilmington, Massachusetts

Contract No. 68-02-2890

**EPA Project Officer: Bob Schell** 

Prepared for

 U.S. ENVIRONMENTAL PROTECTION AGENCY Office of Air, Noise, and Radiation
 Office of Air Quality Planning and Standards
 Research Triangle Park, North Carolina 27711

August 1978

This report is issued by the Environmental Protection Agency to report air pollution regulations of interest to a limited number of readers. Copies are available, for a fee, from the National Technical Information Service, 5285 Port Royal Road, Springfield, VA 22161.

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#### INTRODUCTION

This document has been produced in compliance with Section 110(h)(1) of the Clean Air Act Amendments of 1977. The Federally enforceable regulations contained in the State Implementation Plans (SIPs) have been compiled for all 56 States and territories (with the exception of the Northern Mariana Islands). They consist of both the Federally approved State and/or local air quality regulations as indicated in the Federal Register and the Federally promulgated regulations for the State, as indicated in the Federal Register. Regulations which fall into one of the above categories as of January 1, 1978, have been incorporated. As mandated by Congress, this document will be updated annually. State and/or local air quality regulations which have not been Federally approved as of January 1, 1978, are not included here; omission of these regulations from this document in no way affects the ability of the respective Federal, State, or local agencies to enforce such regulations.

There have been recent changes in the Federal enforceability of parking management regulations and indirect source regulations. The October, 1977, appropriation bill for EPA prohibited Federal enforcement of parking management regulations in the absence of specific Federal authorizing legislation. Federally promulgated parking management regulations have, therefore, been suspended indefinitely. Pursuant to the 1977 Clean Air Act Amendments, indirect source regulations may not be required for the approval of a given SIP. Consequently, any State adopted indirect source regulations may be suspended or revoked; State adopted indirect source regulations contained in an applicable SIP are Federally enforceable. More importantly, EPA may only promulgate indirect source review regulations which are specific to Federally funded, operated, or owned facilities or projects. Therefore, the Federally promulgated indirect source regulations appearing in this document are not enforceable by EPA except as they relate to Federal facilities.

Since State air quality regulations vary widely in their organization, content, and language, a standardized subject index is utilized in this document. Index listings consist of both contaminant and activity oriented categories to facilitate usage. For example, for regulations which apply to copper smelters, one might look under sulfur compounds (50.2), particulate matter process weight (50.1.1), or copper smelters (51.15). Federal regulations pertaining to a given State immediately follow the approved State and local regulations.

Additionally, a summary sheet of the information included in each comprehensive document is presented prior to the regulatory text to allow one to quickly assess the contents of the document. Specifically, the summary sheets contain the date of submittal to EPA of each revision

to the SIP and the date of the <u>Federal Register</u> in which the revision was either approved or disapproved by <u>EPA</u>. Finally, a brief description or reference of the regulation which was submitted is also included.

This document is not intended to provide a tool for determining the enforceability of any given regulation. As stated above, it is intended to provide a comprehensive compilation of those regulations which are incorporated directly or by reference into Title 40, Part 52, of the <u>Code of Federal Regulations</u>. Consequently, the exclusion of a Federally approved regulation from this document does not diminish the enforceability of the regulation. Similarly, the inclusion of a given regulation (for example, regulations governing pollutants, such as odors, for which there is no national ambient air quality standards) in this document does not, in itself, render the regulation enforceable.

#### SUMMARY SHEET

#### EPA-APPROVED REGULATION CHANGES

#### COLORADO

Submittal Date	Approval Date	<u>Description</u>
11/21/73	10/18/74	Delete Sec. III of Reg. No. 1, only as relates to existing sources.  Note: still applies to new sources.
	FEDERAL REGULATIONS	
Section Number	Description	
52.326	Transportation and lan	d-use controls
52.331	Control of dry cleaning	g solvent evaporation
52.332	Degreasing operations	
52.333	Organic solvent usage	
52.334	Storage of petroleum p	products
52.335	Organic liquid loading	I
52.336	Gasoline transfer vapo	or control
52.337	Control of evaporative of vehicular tanks	e losses from the filling
52.338	Federal compliance sch	nedules
52.339	Monitoring transportat	cion controls
52.340 (52.22)	Review of new or modif	fied indirect sources

Prevention of significant deterioration

52.343 (52.21)

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- 2.0 GENERAL PROVISIONS AND ADMINISTRATIVE PROCEDURES
- 3.0 REGISTRATION CERTIFICATES, OPERATING PERMITS AND APPLICATIONS
- 4.0 AIR QUALITY STANDARDS (PRIMARY AND SECONDARY)
  - 4.1 PARTICULATES
  - 4.2 SULFUR DIOXIDE
  - 4.3 NITRIC OXIDES
  - 4.4 HYDROCARBONS
  - 4.5 CARBON MONOXIDE
  - 4.6 OXIDANTS
  - 4.7 OTHERS
- 5.0 VARIANCES
- 6.0 COMPLIANCE SCHEDULES
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- 18.0 AIR QUALITY MAINTENANCE AREA
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- 50.2 SULFUR COMPOUNDS
- 50.3 NITRIC OXIDES
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- 50.5 CARBON MONOXIDE
- 50.6 ODOROUS POLLUTANTS
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- 51.2 COAL OPERATIONS (includes Cleaning, Preparation, Coal Refuse Disposal Areas, Coke Ovens, Charcoal Kilns, Related Topics)
- 51.3 CONSTRUCTION (includes Cement Plants, Materials Handling, Topics Related to Construction Industry)
- 51.4 FERROUS FOUNDRIES (includes Blast Furnaces, Related Topics)
- 51.5 FUEL BURNING EQUIPMENT (coal, natural gas, oil) Particulates (includes Fuel Content and Other Related Topics)
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#### COMMON PROVISIONS REGULATION

Definitions, Statement of Intent and General Provisions applicable to all emission control regulations adopted by the Colorado Air Pollution Control Commission

Colorado Air Pollution Control Commission

Adopted :December 9, 1971 Effective Date:February 1, 1972

#### COMMON PROVISIONS REGULATION

Definitions, Statement of Intent and General Provisions applicable to all emission control regulations adopted by the Colorado Air Pollution Control Commission.

#### (2.0) APPLICABILITY:

Emission Control regulations adopted by the Commission apply throughout Colorado unless otherwise stipulated. The statement of intent, definitions, and general provisions of this regulation apply to all emission control regulations adopted by the Commission unless otherwise stipulated.

#### (15.0) AUTHORITY:

Section 66-31-8 of the Colorado Air Pollution Control Act of 1970 provides: "As promptly as possible, the Commission shall adopt and promulgate emission control regulations which require the use of effective practical air pollution controls for each and every significant source, potential source, and type of source of air contamination throughout the entire State and thereafter may modify such regulations from time to time." Sections 66-31-4, 66-31-6 and 66-31-8 of the Act are the general statutory authority for adoption by the Air Pollution Control Commission of standards and the specific section of the Act is cited in each instance.

(2.0) STATE OF COLORADO AIR POLLUTION CONTROL ACT (1970) LEGISLATIVE DECLARATION (66-31-2)

In order to foster the health, welfare, convenience, and comfort of the inhabitants of the State of Colorado, and to facilitate the enjoyment of nature, scenery, and other resources of the State, it is hereby declared to be the policy of the State to achieve the maximum practical degree of air purity in every portion of the State. To that end, it is the purpose of this article to require the use of all available practical methods to reduce, prevent, and control air pollution throughout the entire State of Colorado, and to maintain a cooperative program between the State and local units of government. It is further declared that the prevention, abatement, and control of air pollution in each portion of the entire State are matters of statewide concern and are effected with a public interest and that the provisions of this article are enacted in the exercise of the police powers of this State for the purpose of protecting the health, peace, safety, and general welfare of the people of this State.

#### (2.0) INTENT:

To implement the legislative declaration and other sections of the Act, the Commission declares that it is the intent and purpose of these regulations:

1. To achieve and maintain levels of air quality which will protect human health and safety, prevent injury to plant and animal life, prevent damage to property, prevent unreasonable interference with

the public welfare, preserve visibility and protect scenic, aesthetic and historic values of Colorado,

- 2. To require the use of all available practical methods to reduce, prevent, and control air pollution or the protection of the health, safety, and general welfare of the people of the state of Colorado. In order to achieve air purity consistent with this intent it is necessary, ultimately to control air contaminant emissions to such a degree of opacity so that the emissions are no longer visible,
- 3. To prevent significant degradation of Colorado's air resource,
- 4. To prevent odors and other air pollution problems which interfere with the comfortable enjoyment of life, and
- 5. To apply the major resources of the Colorado air pollution control programs toward solving priority air pollution problems.

The Commission recognized that the growth in the amount and complexity of air pollution in Colorado is brought about by and incident to population growth, mobility, increased affluence, industrial development and changing social values in said State. The Commission believes that the air pollution problem is likely to be aggravated and compounded by additional population growth, mobility, affluence, industrial development, and changing social values in the future, which are likely to result in serious potential danger to the public and the environment. Therefore, the Commission intends to pursue solutions, in conjunction with other appropriate agencies and interests, which have a direct interest and capability in solving a growing air pollution problem in relation to the broader environmental degradation problem. It is the intent of the Commission to coordinate with industrial, commercial, agricultural and transportation planning organizations, land use and other environmental organizations, the public, the legislature, educational organizations, and other major interests in such a manner as to prevent air pollution in Colorado.

#### (1.0) I. DEFINITIONS:

The following words and phrases have the following meanings unless the context in which they are used requires otherwise:

ACT

the Colorado Air Pollution Control Act of 1970, Chapter 64, Colorado Session laws 1970.

AIR CONTAMINANT

/ any fume, smoke, particulate matter, vapor, gas, or any combination thereof, but not including water vapor or steam condensate.

AIR CONTAMINATION SOURCE

any source whatsoever at, from, or by reason of which there is emitted or discharged into the atmosphere any air contaminant.

AIR CONTAMINATION SOURCE (existing)

any air contamination source, which has been constructed or for which there is a binding agreement or contract providing for its construction or modification to be completed within a reasonable time after the effective date of the regulation in question.

AIR CONTAMINATION SOURCE (new)

any air contamination source which is to be constructed or modified and which is other than an existing air contamination source.

AIR POLLUTION

any concentration of one or more air contaminants in the outdoor atmosphere as has caused, is causing, or if unabated may cause injury to human, plant, or animal life, or injury to property, or which unreasonably interferes with the comfortable enjoyment of life or property or with the conduct of business.

AIR POLLUTION CONTROL AUTHORITY

the Division, or any person or agency given authority by the Division, or a local governmental unit duly authorized with respect to air pollution control.

AMBIENT AIR

is the surrounding outside air.

#### **ATMOSPHERE**

means the air that envelops or surrounds the earth. For the purpose of this regulation emissions of air contaminants from a building or structure not specifically designed to control air pollution originating from an air contamination source or sources within such building or structure shall constitute an emission to the atmosphere.

**COMMISSION** 

the Colorado Air Pollution Control Commission created by Section 66-31-4 of the Act.

DEPARTMENT

The Colorado Department of Health.

DIVISION

the Division of Air Pollution Control, Colorado Department of Health.

**DUSTS** 

minute solid particles released into the air by natural forces or by mechanical processes such as crushing, grinding, milling, drilling, demolishing, shoveling, conveying, covering, bagging, sweeping, etc.

**EMISSION** 

the discharge or release into the atmosphere of one or more air contaminants.

EMISSION CONTROL REGULATION

any standard promulgated by regulation which is applicable to all air contamination sources within a specified area and which prohibits or established permissible limits for specific types of emissions in such area, and also any regulation which by its terms is applicable to a specified type of facility, process, or activity, and also any regulation adopted for the purpose of preventing or minimizing emission of any air contaminant in potentially dangerous quantities.

FUEL BURNING EQUIPMENT

any furnace, boiler apparatus, stack, or appurtenances thereto used in the process of burning fuel for the primary purpose of producing heat or power by indirect heat transfer.

FUGITIVE DUST

solid airborne particulate matter emitted from any source other than an opening.

#### **INCINERATOR**

#### **MODIFICATIONS**

#### MULTIPLE CHAMBER INCINERATOR

#### OPACITY

#### OPEN BURNING

#### **OPENING**

#### PARTICULATE MATTER

any equipment, device, or contrivance used for the destruction of garbage, rubbish, or other wastes by burning, but not wood wastes burned in devices commonly called tepee burners, silos, truncated cones, wigwam burners, and other such burners used commonly by the wood products industry.

- 1. The construction or installation on the premises of new equipment;
- The replacement or alteration of equipment in such a manner as to either increase or decrease the production or control of air contamination excluding routine adjustments or maintenance; and
- 3. The moving of equipment to another premise.

any article, machine, equipment, contrivance, structure, or part of a structure used to dispose of combustible refuse by burning, consisting of three or more refractory-lined combustion furnaces in series, physically separated by refractory walls, inter-connected by gas passage ports or ducts, and employing adequate design parameters necessary for maximum combustion of the material to be burned.

the degree to which an air contaminant emission obscures the view of an observer, expressed in percentage of the obstruction, or in the degree (percent) to which transmittance of light is reduced by an air contaminant emission.

fire, where any material is burned in the open or in a receptacle other than a furnace, incinerator, or other equipment connected to a stack or chimney.

any single chimney, conduit, duct, smokestack, flue or other contrivance from which air contaminants are exhausted into the atmosphere.

any material, except uncombined water, that exists in a finely divided form as a liquid or solid.

#### **PERSON**

PROCESS OR PROCESS EQUIPMENT

PROCESS UNIT

PROCESS WEIGHT

PROCESS WEIGHT RATE

any individual, public or private corporation, partnership, association, firm, trust, estate, the State or any department, institution, or agency thereof, any municipal corporation, county, city, and county, or other political subdivision of the State, or any other legal entity whatsoever which is recognized by law as the subject of rights and duties.

any action, operation, or treatment, involving chemical, industrial, or manufacturing factors, such as heat-treating furnaces, by-product coke plants, cokebaking ovens, mixing kettles, cupulas, blast furnaces, open hearth furnaces, puddling furnaces, sintering plants, Bessemer converters, electric steel furnaces, ferrous and nonferrous foundries, kilns, stills, dryers, roasters, and equipment used in connection therewith, and all other methods or forms of manufacturing or processing that may emit air contamination.

any single process or process equipment

the total of all materials introduced into a source operation, which source causes any discharge of air contaminants into the atmosphere. Solid fuels introduced into any specific source will be considered as part of the process weight, but liquid and gaseous fuels and combustion air will not.

a rate established as follows:

- (a) for continuous source operations, the total process weight for the entire period of continuous operation or for a typical portion thereof, divided by the number of hours of such period, or portion thereof, or
- (b) for cyclical or batch unit operations, or unit processes, the total process weight for a period that covers a complete operation or an integral number of cycles, divided by the hours of actual process operation during such a period, or

(c) for operations, not specified above, determine the process weight that results in a minimum value for allowable emissions.

SMOKE

small gas-borne particles resulting from incomplete combustion, consisting predominantly, but not exclusively of carbon, and other combustible material.

STACK OR CHIMNEY

any vertical flue, conduit, or duct arranged to conduct an effluent to the open air.

STANDARD CONDITIONS

a gas temperature of 68 degrees Fahrenheit and a gas pressure of 29.92 inches of mercury.

**UPSET CONDITIONS** 

an unpredictable equipment failure or other malfunction which results in the violation of emission control regulation, and which is not due to improper or careless operation.

#### (2.0) II. GENERAL:

#### A. TO CONTROL EMISSIONS LEAVING COLORADO:

"When emissions generated from sources in Colorado cross the state boundary line, such emissions shall not cause the air quality standards of the receiving state to be exceeded provided reciprocal action is taken by the receiving state." (66-31-21(3)).

#### B. EMISSION MONITORING REQUIREMENTS:

The Division may require owners or operators of stationary air contamination sources to install, maintain, and use instrumentation to monitor and record emission data as a basis for periodic reports to the Division. (66-31-6, 66-31-10(2)(c)) and (d).

#### C. PERFORMANCE TESTING:

In order to determine compliance with emission control regulations, the Division may require the owner or operator of any source to conduct performance tests in accordance with methods approved by the Division with the tests being made at the expense of the owner or operator. The Division may monitor such required performance tests conducted by the owner or operator and may also conduct performance tests. (66-31-6, 66-31-10(2)(c)) and (d).

#### D. UPSET CONDITIONS AND BREAKDOWNS:

Upset conditions, as defined, shall not be deemed to be in violation of these Regulations provided that the Air Pollution Control Division is notified as soon as possible, but no later than 2 hours after the start of the next working day, followed by written notice to the Division explaining the cause of the occurrence, and that proper action has been or is being taken to correct the conditions causing said violation and to prevent such excess emissions in the future. (66-31-8(4)).

#### E. EFFECTIVE DATE:

The effective date of this "common provisions regulation" is February 1, 1972.

#### F. REVOCATION OF TEMPORARY EMISSION CONTROL REGULATIONS:

The temporary emission control regulations, identical to provisions set forth in sections 66-29-5(2) through (6), Colorado revised statutes 1963, as amended, are revoked. (66-31-24(1).

#### G. CONFLICTS:

Nothing in these Regulations is intended to permit any practice which is a violation of any statute, ordinance, or regulation. (66-31-6).

#### H. SEVERABILITY CLAUSE:

If any Regulation, Section, clause, phrase, or standard contained in these Regulations shall for any reason be held to be inoperative, unconstitutional, void or invalid, the validity of the remaining portions thereof shall not be affected thereby and the Commission does hereby declare that it severally passed and adopted the provisions contained therein separately and apart from the other provisions thereof. (66-31-6).

#### I. CIRCUMVENTION CLAUSE:

A person shall not build, erect, install, or use any article, machine, equipment, condition, or contrivance, the use of which, without resulting in a reduction in the total release of air contaminants to the atmosphere, reduces or conceals an emission which would otherwise constitute a violation of this Regulation. No person shall circumvent this Regulation by using more openings than is considered normal practice by the industry or activity in question. (Sections 66-31-8(1)(a) and (b), and 66-31-8(3)(a)).

# REGULATION NO. 1 (Amended)

Emission Control Regulations for Particulates, Smokes, and Sulfur Oxides for the State of Colorado

Colorado Air Pollution Control Commission

Adopted :December 9, 1971 Effective Date:February 1, 1972

## REGULATION NO. 1 (Amended)

Emission Control Regulations for Particulates, Smokes, and Sulfur Oxides for the State of Colorado

#### (50.1.2) I. SMOKE EMISSIONS AND OPACITY REGULATIONS:

#### A. Stationary Air Contamination Sources:

1. No person shall emit or cause to be emitted into the atmosphere, from any air contamination source of emission whatsoever, any air contaminant which is of such a shade or density as to obscure an observer's vision to a degree in excess of 20% opacity. Instrumentation which results in equivalent readings may be used in specific installations if approved in advance by the Air Pollution Control Division. (66-31-8(2)(a) and (b).

#### 2. Exceptions:

- a. No person shall emit or cause to be emitted into the atmosphere from any alfalfa dehydrating mill, any air contaminant for a period or periods aggregating more than three minutes in any 60 consecutive minutes which is of such a shade or density as to obscure an observer's vision to a degree in excess of 40% opacity. This emission standard for alfalfa dehydrating mills shall be in effect up to and including one year from the effective date of the Smoke Emissions and Opacity Regulations (Part I, Section A); thereafter, the 20% opacity limitation provided in Part I Section A shall apply to emissions from alfalfa dehydrating mills. (66-31-8(3)(a) and (f)).
- b. No person shall emit or cause to be emitted into the atmosphere from any pilot plant and experimental operation any air contaminant for a period or periods aggregating more than three minutes in any 60 consecutive minutes which is of such a shade or density as to obscure an observer's vision to a degree in excess of 40% opacity. This emission standard for pilot plants and experimental operations shall be in effect for a period not to exceed 180 operating days, cumulative total, from the date such operations commence; thereafter, the 20% opacity limitation provided in Part I Section A of these regulations shall apply to emissions from pilot plants and experimental operations. (66-31-8(1) (a)(e) and (f).

- c. Emissions from fireplaces used for non-commercial or recreational purposes shall be exempt from Part I Section A.1 of these regulations. (66-31-8(1)(a)(d)(e) and (f)).
- d. Provisions of I.A.1 shall not apply to emissions during the building of a new fire, cleaning of fires, soot blowing, start-up, any process modification or adjustment, or occasional cleaning of control equipment, the shade or appearance of which is not darker than an equivalent opacity as to obscure an observer's view to a degree not greater than 40%, for a period or periods aggregating no more than 3 minutes in any one hour.

#### B. Transportation Sources:

1. Four-cycle gasoline-powered vehicles:

No person shall emit or cause to be emitted into the atmosphere for a period greater than 5 consecutive seconds from any four-cycle gasoline-powered vehicle whatsoever any visible air contaminant.

2. Two-cycle gasoline-powered vehicles:

No person shall emit or cause to be emitted from any two-cycle gasoline-powered vehicle into the atmosphere any visible air contaminant which is of such a shade or density as to obscure an observer's vision to a degree equal to or greater than 20% opacity, except for a period not exceeding 10 consecutive seconds.

- Diesel-powered vehicles:
  - a. No person shall emit or cause to be emitted into the atmosphere from any diesel-powered vehicle operating below 8,000 feet (mean sea level) any air contaminant, for a period greater than 10 consecutive seconds, which is of such a shade or density as to obscure an observer's vision to a degree of 30% opacity. (66-31-8(2)(a) and (b), 66-31-8(3)(a) and (b)).
  - b. No person shall emit or cause to be emitted into the atmosphere from any diesel-powered vehicle operating above 8,000 feet (mean sea level) any air contaminant, for a period greater than 10 consecutive seconds, which is of such a shade or density as to obscure an observer's vision to a degree in excess of 40% opacity. (66-31-8(2) (a) and (b) and 66-31-8(3)(a) and (b)).

#### c. Exceptions:

- c-1. No person shall emit or cause to be emitted into the atmosphere from any diesel-powered locomotive for switching and railroad yard use any air contaminant for a period greater than 10 consecutive seconds duration which is of such a shade or density as to obscure an observer's vision to a degree in excess of 40% opacity. (66-31-8(4)).
- c-2. Emissions from diesel-powered locomotives exceeding Part B, Section 3 (a) and (b) of these regulations shall be exempt if the emissions are a direct result of a cold engine start-up. (66-31-8(4)).

#### C. Open Burning:

 No person shall burn or permit to be burned on any open premises owned or controlled by him, or on any public street, alley, or other land adjacent to such premises, rubbish, waste, paper, wood, or other flammable material unless a permit therefor shall first have been obtained from the appropriate authority enforcing air pollution control standards or the designee of the Air Pollution Control Division. In granting or denying the issuance of any such permit, said authority shall base its action on the location and proximity of such burning to any building or other structure, the potential contribution of such burning to air pollution in the area, climactic conditions on the day or days of such burning, and compliance by the applicant for the permit with applicable fire protection and safety requirements of the local authority or area, and the pollution control authority is satisfied that there is no practical alternative method for the disposal of the material to be burned or to conduct the desired activity. (66-31-8(2)(a), (b), (f), and 66-31-20)).

#### 2. Exceptions:

- a. The provisions of Part I Section C of these Regulations shall not apply to private non-commercial burning of domestic trash outside such air pollution control areas as have been or shall be designated by the Air Pollution Control Commission (See Exhibit 1) and outside a 2-mile boundary from the corporate limits of any city or town with a population of over 500 as determined by the latest Federal census. (66-31-8(4)).
- b. Fires used for non-commercial cooking of food for human beings or for instructional or recreational purposes shall be exempt from Part I, Section C of these regulations. (66-31-8(4)).

- c. Smokeless flares or safety flares for the combustion of waste gases shall be exempt from Part I, Section C of these regulations. (66-31-8(4)).
- d. Flares used to indicate some danger to the public shall be exempt from Part I, Section C of these regulations. (66-31-8(4)).

#### 3. Effective Date:

This Part I, Section C, "Open Burning" shall become effective July 1, 1971, at which time it will supersede the temporary emission control regulation upon the same subject matter provided in Section 66-31-24 of the "Air Pollution Control Act of 1970."

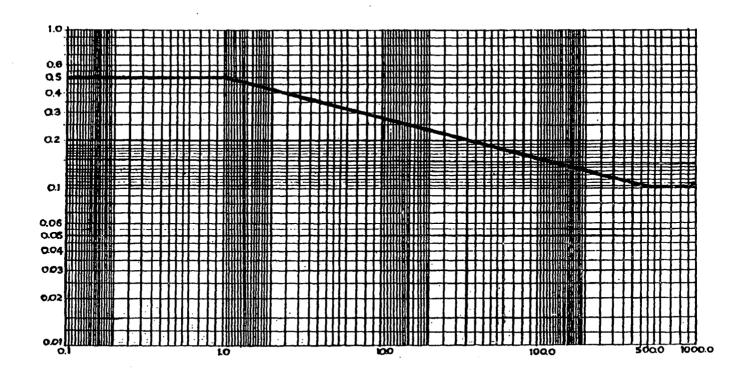
#### (50.1) II. PARTICULATE EMISSION REGULATIONS

#### A. Fuel-Burning Equipment:

1. No person shall cause or permit to be emitted into the atmosphere from any fuel-burning equipment, or to pass a convenient measuring point near any opening, particulate matter in the flue gases which exceed 0.5 pounds per 1,000,000 BTU heat input for fuel-burning units generating not more than 1,000,000 BTU per hour total input. For single units generating 1,000,000 BTU per hour or more total input, Figure 1 on the following page will be used to determine the allowable particulate emission limitation. For fuel-burning equipment generating 500 million BTU input per hour or more, particulate matter in the flue gases cannot exceed 0.1 pounds per million BTU heat input. If two or more units connect to any opening, each unit shall, for the purpose of computing the maximum allowable emission rate, be considered a separate entity with the allowable emission rate for the opening the sum of the individual computations. (66-31-8(2) and (c), and 66-31-8(3) (a)).

Typical Values from Figure 1 are shown in TABLE I.

Figure 1
FUEL BURNING EQUIPMENT



TOTAL INPUT millions of BTU's/hour

#### II. A (continued)

#### TABLE I

Fuel Input Particulate Emissions		Fuel Input	Particulate Emissions	
10 <sup>6</sup> BTU/hr.	1bs./10 <sup>6</sup> BTU	10 <sup>6</sup> BTU/hr.	1bs./10 <sup>6</sup> BTU	
0.1	0.50	100	0.15	
1.0 ,	0.50	500	0.10	
10.0	0.27	1000	0.10	

Interpolation of the data in TABLE I for fuel-burning equipment shall be by use of the following equations;

PE = 0.5 FI 
$$\leq$$
 1.0  
PE = 0.5 (FI)<sup>-0.26</sup> 1.0  $\leq$  FI  $\leq$ 500.0  
PE = 0.1 500.0  $\leq$  FI

Where: PE = Particulate Emission in pounds per million BTU FI - Fuel Input in million BTU per hour

Less than or equal to (if "FI" is to the left of the symbol). Greater than or equal to (if "FI" is to the right of the symbol)

#### 2. Method of Measurement:

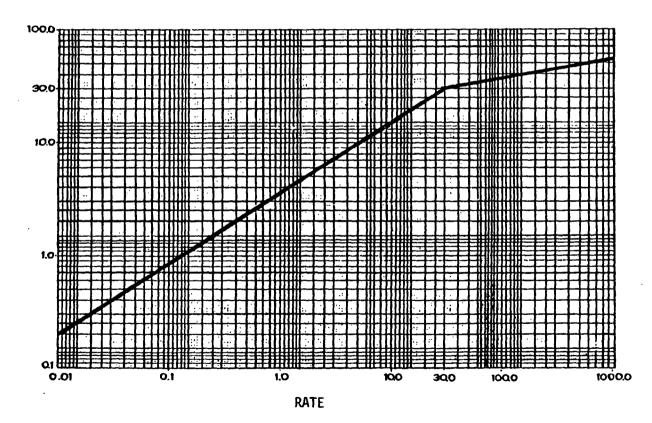
a. Emission rates shall be measured according to the American Society of Mechanical Engineer's Power Test Codes - PTC-27 dated 1957 and entitled, "Determining Dust Concentrations in a Gas Stream" or any equivalent method which has been approved by the Air Pollution Control Division in advance of such measurement. (66-31-8(2)(a) and (c) and 66-31-8(3)(a)).

#### B. Refuse-Burning Equipment:

- 1. Incinerators of not more than 200 pounds per hour capacity:
  - a. No person shall cause or permit an emission of more than 0.15 grain of particulate matter per standard cubic foot (dry flue gas corrected to 12% carbon dioxide) into the atmosphere from any incinerator rated not more than 200 pounds per hour. (66-31-8(2)(a) and (c), 66-31-8(3)(a) and (b)).

Figure 2

#### PROCESS WEIGHT RATE



tons/hour

#### II. B (continued)

- 2. Incinerators of over 200 pounds per hour capacity:
  - a. No person shall cause or permit an emission of more than 0.10 grain of particulate matter per standard cubic foot (dry flue gas corrected to 12% carbon dioxide) into the atmosphere from any incinerator rated more than 200 pounds per hour. (66-31-8(2), (a) and (c), and 66-31-8(3) (a) and (b)).
- 3. No person shall burn any refuse in any multiple chamber incinerator or other equipment of equal effectiveness unless the Division has approved in advance the use of such type incinerator or other equipment for the purpose of air pollution control. (66-31-8(2), (a) and (c), and 66-31-8(3), (a) and (b)).

#### 4. Method of Measurement:

Emission rates shall be measured according to the American Society of Mechanical Engineer's Power Test Codes - PTC 27 dated 1957 and entitled, "Determining Dust Concentrations in a Gas Stream" or any equivalent method which has been approved by the Air Pollution Control Division in advance of such measurement. The test data shall reflect particulate gas stream concentrations consistent with the rated capacity of the incinerator, and corrections for carbon dioxide will be made without the contribution of carbon dioxide from auxiliary fuel. (66-31-8(3), (a) and (b)).

#### C. Manufacturing Processes:

1. No person shall cause or permit any emission into the atmosphere in any 60 consecutive minutes from any opening whatsoever, particulate matter in quantities in excess of the emission rates as shown in Figure 2. If two or more process units connect to an opening each process unit shall, for the purpose of computing the maximum allowable emission rate, be considered a separate entity with the allowable emission rate for the opening the sum of the individual computations. (66-31-8(2), (a) and (c), and 66-31-8(3) (a) (f) and (q)).

Typical Values from Figure 2 are shown in TABLE II.

#### II. C (continued)

TABLE II

Process Weight Rate	Emission Rate	Process Weight Rate	Emission Rate
lbs./hr.	lbs./hr.	lbs./hr.	lbs./hr.
50	0.03	5,000	6.34
100	0.55	10,000	9.73
500	1.53	20,000	14.99
10,000	2.25	60,000	29.60
Process Weight Rate	Emission Rate	Process Weight Rate	Emission Rate
40	31.19	100	36.11
60	33.28	200	40.35
80	34.85	500	46.72

Interpolation of the data in Table II for the process weight rates up to 60,000 lbs./hr. shall be by use of the equation:

$$E = 3.59 P^{0.62}$$
  $P \le 30 tons/hr$ .

and interpolation and extrapolation of the data for process weight rates in excess of 60,000 lbs. hr. shall be by use of the equation:

$$E = 17.31 \text{ p}^{0.16}$$
 30 tons/hr.  $\leq P$ 

Where: E = Emissions in pounds per hour.

P = Process weight rate in tons per hour.

Less than or equal to (if "P" is to the left of the symbol).

Greater than or equal to (if "P" is to the right of the symbol.

#### 2. Method of Measurement:

Emission rates shall be measured according to the American Society of Mechanical Engineer's Power Test Codes - PTC-27 dates 1957 and entitled, "Determining Dust Concentrations in a Gas Stream" or any equivalent method which has been approved by the Air Pollution Control Division in advance of such measurement. (66-31-8(2) and (c), and 66-31-8(3)(a), (f) and (g)).

#### II. (continued)

#### D. Fugitive Dust:

- 1. Fugitive dust is particulate matter which is airborne from unenclosed operations, such as site preparation, quarrying, transport of finely divided material, open storage, storage yards, construction sites, demolition sites, roadways and streets, feed lots, camparounds and fairgrounds, but shall not incldue particulate matter controlled pursuant to Part II Section A relating to fuel-burning equipment, Part II Section B relating to refuse-burning equipment, and Part II Section C relating to manufacturing processes. If fugitive dust leaves the property on which it originates in sufficient quantity to be deemed objectionable, as defined in Part'II Section D and Subsection 2, the person or persons, responsible for the operation of the site, shall be required to adopt the best practical method to control or to prevent the escape of such fugitive dust. Agricultural and other operations shall be deemed in compliance with this regulation if such operations are in compliance with the provisions of 1963 C.R.S. 128-3-1 through 128-3-8, and with the provisions for the stabilization of disturbed surface areas of Chapter 92 Article 3, Sections 1, 3, and 4, Chapter 92, Article 13 and Chapter 92, Article 32, Section 5, 1963 C.R.S. as amended. ((1969 Perm.Cum.Supp. 66-31-8 (2)(a) and (c), and 66-31-8(3)(a) and (d)).
- 2. For the purpose of this Regulation, fugitive dust shall be deemed to be objectionable when:
  - a. among a sample of persons exposed to it, at least 20% of said sample, but in no case fewer than 5 persons, determine that it is offensive and that is obstructs or interferes with the reasonable and comfortable use and enjoyment of property, or
  - b. sampling or other reasonably definitive observation demonstrates that an amount of fugitive dust is being or has been transported off of the property of the operations onto another's property so as to obstruct or interfere with the reasonable and comfortable use and enjoyment of property.
- 3. When not fewer than five complaints of objectionable fugitive dust are registered with the Division, and earlier at the option of the Division, it shall be the responsibility of the Division to investigate the complaints to determine if a violation of this regulation has occurred and to identify the source or sources of the fugitive dust and the circumstances surrounding its emission.

#### (50.2) III. SULFUR DIOXIDE EMISSION REGULATIONS:

#### A. Ground Level Concentrations:

No person shall cause or permit any emission of sulfur dioxide which causes a 5-minute average ground level concentration greater than 0.25 parts per million (by volume) more frequently than once in any 8 hours; or a 1-hour average ground level concentration greater than 0.1 parts per million (by volume) more frequently than once in any 4 days; or a 24-hour average ground level concentration greater than 0.05 parts per million (by volume) more frequently than once in any 90 days. Such limitations shall not apply to ground level concentrations occurring on the property from which the emission occurs, provided such property, from the emission point to the point of any such concentration, is controlled by the person responsible for the emission. (66-31-8(2)(a) and (d)).

#### B. Source Emission Concentrations:

- 1. No person shall emit or cause to be emitted sulfur dioxide emissions in excess of 500 ppm from any process unit.
- 2. Effective January 1, 1978, no person shall emit or cause to be emitted sulfur dioxide emissions from a process unit.
  - a. in excess of 500 ppm from any opening and,
  - b. greater than 5 tons SO<sub>2</sub> per day from any process unit.
- 3. The limitations of Section III. B. 2 shall not apply to emissions of sulfur dioxide of less than 150 ppm.
- 4. New air contamination sources to be constructed or contracted for construction after January 1, 1975, shall meet the 1978 emission standard provided herein even if operation commences prior to 1978.

#### C. Method of Measurement

- For the purposes of Section A of this Regulation, measurements of sulfur dioxide shall be made by the most recent published method of the Intersociety Committee for a Manual of Methods for Ambient Air Sampling and Analysis ((See e.g., Health Laboratory Science 7 (1) 4-12 (1970)) or any equivalent method which has been approved by the Air Pollution Control Division in advance of such measurement.
- For the purposes of Section B of this regulation, measurements of sulfur dioxide shall be made by "An Absorption-Titration Method" ((e.g., J.S. Fritz and S.S. Yamamura, <u>Analytical Chemistry</u> 27 (9) 1461 (1955) and E.B. Seidman, <u>Analytical Chemistry</u> 30 (10) 1680 (1959) or any equivalent method which has been approved by the Air Pollution Control Division in advance of such measurement.

- D. Related Compounds containing sulfur in oxidized states:
  - For the purposes of this Regulation, all oxidized forms of sulfur (including, but not restricted to, SO<sub>3</sub>, SOCl<sub>2</sub>, H<sub>2</sub>SO<sub>4</sub> mist) shall be considered as sulfur dioxide.
  - 2. Quantities of such oxidized sulfur compounds, as measured by procedures established in Section C above, shall be converted on a molar basis to an equivalent quantity of sulfur dioxide. The total of all such quantities, parts per million by volume sulfur dioxide plus parts per million by volume sulfur-dioxide-equivalents of other oxidized forms, shall be interpreted as "parts per million by volume sulfur dioxide" as used in Sections A and B above.

#### (2.0) IV. EFFECTIVE DATE:

These Regulations as adopted amend and supersede Commission Regulation No. 1 upon the effective date hereof, to wit:

February 1	, 1972	
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Note: Regulation 1, Section III does not apply to existing Source. It applies only to New Sources.

**REGULATION 2** 

Adopted

:March 11, 1971 Effective Date: April 20, 1971

(50.6)

#### ODOR EMISSION REGULATIONS

Pursuant to Section 66-31-8(2) (e) of the Colorado Air Pollution Control Act of 1970, the following Emission Regulations are issued:

- No person, wherever located, shall cause or allow the emission of odorous air contaminants from any single source such as to result in detectable odors which are measured in excess of the following limits:
  - (1) For areas used predominantly for residential or commercial purposes it is a violation if odors are detected after the odorous air has been diluted with seven (7) or more volumes of odor free air.
  - (2) In all other land use areas, it is a violation if odors are detected after the odorous air has been diluted with fifteen (15) or more volumes of odor free air.
  - (3) (a) When the source is a manufacturing process or agricultural operation, no violation of Subsections (1) and (2) shall be cited by the Division, provided that the best practical treatment, maintenance, and control currently available shall be utilized in order to maintain the lowest possible emission of odorous gases and, where applicable, provided there is compliance with Item 4r of the Colorado Department of Health Pasteurized Fluid Milk and Milk Products Regulation adopted 18 April 1967. In determining the best practical control methods, the Division shall not require any method which would result in an arbitrary and unreasonable taking of property or in the practical closing of any lawful business or activity, if such would be without corresponding public benefit.
    - (b) For all areas it is a violation when odors are detected after the odorous air has been diluted with one hundred twenty-seven (127) or more volumes of odor free air in which case provisions of Paragraph A(3)(a) shall not be applicable.
- B. For the purposes of this Regulation, two odor measurements shall be made within a period of one hour, these measurements being separated by at least fifteen (15) minutes. These measurements shall be made outside the property line of the property from which the emission originates.
- For the purposes of this Regulation, personnel for evaluating odors shall be selected using an "intensity rating test" as outlined in "Selection and Training of Judges for Sensory Evaluation of the Intensity and Character of Diesel Exhaust Odors." USPHS Pub. #999-AP-32.

- D. The Barnebey Cheney Scentometer, suitably calibrated, or any other instrument, device, or technique designated by the Colorado Air Pollution Control Division, may be used in the determination of the intensity of an odor and may be used as a guide in the enforcement of this Regulation.
- E. The provisions of this Regulation shall apply throughout the State of Colorado.

### (New) REGULATION NO. 3

Regulation Governing Authority to Construct and Permit to Operate

Colorado Air Pollution Control Commission

Adopted :December 9, 1971 Effective Date:February 1, 1972

#### REGULATION NO. 3

## Regulation Governing Authority to Construct and Permit to Operate

### (2.0) I. INSTRUCTIONS, PROCEDURAL GUIDELINES, AND SAMPLE FORMS FOR FILING AN AIR CONTAMINANT EMISSION NOTICE:

The Act requires an "air contaminant emission notice" be filed with the Department prior to the emission of an air contaminant from any facility, process, or activity. The Commission has defined insignificant sources exempted from filing a notice as listed in IV.A of Regulation No. 3. Any facility, process, or activity which must also file an "air contaminant emission notice" with the Department with respect to such proposed emission. A revised emission notice is required and shall be filed whenever a significant change in emissions shall have occurred. (See instructions)

Effective July 10, 1970, no person shall discharge, or cause to be discharged, into the atmosphere any air contaminant if an "air contaminant emission notice" has not been filed. Failure to comply with this provision of the Act is a misdemeanor and upon conviction thereof punishable by a fine of not more than one hundred dollars (\$100).

The Air Contaminant Emission Notice may be obtained from the Colorado Department of Health (see below) or from any local air pollution control agency in Colorado.

The Air Contaminant Emission Notice is to be completed in triplicate and all copies mailed to:

COLORADO DEPARTMENT OF HEALTH AIR POLLUTION CONTROL DIVISION 4210 East 11th Avenue Denver, Colorado, 80220

#### AIR CONTAMINANT EMISSION NOTICE

#### 2.0) I. INSTRUCTIONS:

#### A. GENERAL SOURCE INFORMATION:

To be completed in detail by all persons that are required to file the "Air Contaminant Emission Notice."

#### **B. PROCEDURES:**

1. The Air Contaminant Emission Notice shall be prepared in accordance with the requirements of Section 66-31-12(2) of the Act.

"Each notice shall specify the location at which the proposed emission will occur, the name and address of the person operating or owning such facility, process, or activity, and the nature of such facility, process, or activity, and an estimate of the quantity and composition of the expected emission. The Division shall make available at all air pollution control authority offices appropriate forms on which the information required by this section shall be furnished."

- 2. The person filing the Notice shall use forms provided by the Division in supplying the necessary information. The person must make a reasonable effort to answer all applicable questions and to supply any pertinent information even though the forms and questions do not specifically request the information.
- 3. If the Division finds the Emission Notice to be incomplete or not filed with information as required in Section 66-31-12 of the Act, the Division may require in writing the required information.
- 4. The Division may require chemical analysis of a sample of any raw materials, fuels, or emissions which may help determine the identity and quantity of significant air contaminants.

#### C. FUEL COMBUSTION INFORMATION:

- 1. List the fuel used in the appropriate space provided and the percent used for space heating and for process heat.
- 2. List the type of fuel-burning equipment, collection equipment, or control equipment used and the expected efficiency of collection or control equipment; for example, boiler, boiler cyclone, 80% collecting efficiency.
- 3. Give rated BTU input.
- 4. Stack height information must be submitted.

5. Check your fuel bills for meter readings to determine natural gas usage.

#### D. BASIC PROCESS OR EQUIPMENT USED:

- 1. For basic process equipment, only that equipment which is a source of air contaminant (controlled or uncontrolled) should be listed; for example, dryer solvent extractor, grinder, etc.
- 2. Under this section, list only that equipment which is associated with, or a part of, the listed basic process equipment in Section D.l above; for example, boiler, kiln, scrubber, grinder, baghouse, dryer, cyclone, solvent extractor, afterburner, etc.
- 3. The amount of air contaminants should be tabulated. Where precise data is not available, an estimate subject to later verification may be made.

#### E. MANUFACTURING ACTIVITIES INFORMATION:

If the reporting of raw material or product data reveals confidential information, indicate so on the form and submit under separate cover appropriately identified as confidential information. Only report products manufactured if the product results directly in the emission of an air contaminant.

- Principal raw materials should be listed; for example, units of rock crushed, chemicals consumed, materials processed, etc., per year.
- 2. Principal products manufactured might include number of bricks, cubic yards of concrete, barrels of fuel, etc., produced per year.

#### F. REFUSE DISPOSAL INFORMATION:

Indicate the method of disposal and the amounts per year for each method.

#### G. PROCESS FLOW DIAGRAM, ETC.:

May be a simple line drawing showing those points in the process involved with the emission of air contaminant. Indicate volumes, temperatures, and estimated quantities of the expected emission on the diagram as well as any supplemental information. Where space is limited submit a key to diagram on a separate form.

#### H. SOLVENT EVAPORATION AND LOSSES:

List the types of solvents used and the estimated quantities of solvents lost to the air because of evaporation.

### III. SULFUR DIOXIDE EMISSION REGULATIONS

## B Illustration of ${\rm SO}_2$ Source Emission Concentration Requirements

EFFECTIVE DATE	NEW SOURCES			
Regulation Adoption	500 ppm maximum			
Date	concentration			
January 1, 1975	Source to be constructed or contracted must be designed for:			
	500 ppm <u>and</u>	150 ppm		
	5 Tons/day	Maximum		
	Maximum Emission	Emission		
July 1, 1975				
Mark Control				
January 1, 1978				
		•		
		· :		
		•		

COLORADO DEPARTMENT OF HEALTH AIR POLLUTION CONTROL DIVISION 4210 East 11th Avenue, Denver 388-6111 Ext. 241

### SAMPLE FORM DO NOT WRITE IN THIS SPACE

761	x	ordinate Grid No.:				
	•	C Code:				
Α.	AIR CONTAMINANT EMISSI  General Source Information (Leave box o					
	Name of Firm:	,				
	Plant Address:					
	Mailing Address:	<del>, , , , , , , , , , , , , , , , , , , </del>				
٠.						
	County: (Source location)	<del>,</del>				
	Type of Business Activity:	<del>, , , , , , , , , , , , , , , , , , , </del>				
	Person to Contact					
	Telephone:	Date:				
•	1. New Plant					
	2. Existing Plant	Ain- An Cuistine Dlast				
	3. Addition or Alteration to Existing Plant  Average Number of Employees:  Land Area at Plant Location in Acres: (circle)  A = (less than 1) B = (1-10) C = (10-50) D = (50 or more)					
	th	Operationason:  fall Spring  certify to the best of my knowledge at all information submitted is cor-				
	_	thorized Signature				

- 8. FUEL COMBUSTION INFORMATION
- 1. Fuel consumption for heating, power, steam and electrical generation

					% Use by Season				
Fuel*	Fuel Type   or Grade	Sulfur Content	Quantity Per Year	Units of Measure		Mar- May	June- Aug.	Sept-	BTU Rated Cap & BTU of Fuel
Coal				Short Tons					
Fuel Oil				1,000 Gallons					
Natural Gas or L P Gas				1,000,000 **cu. ft.					
Process Gas				1,000,000 **cu. ft.					
Other (Describe)									

*Percent	used	for	space heating	
*Percent	used	for	process heat	

Form 2002

<sup>\*\*</sup>All cu. ft. shall be at standard conditons (dry gas at 68° F, 29.92 inches Hg.)

2. Type and control of fuel burning equipment

	Type of Unit*	BTU Rated Capacity	Collection Equipment	Efficiency of Collection Equip.(%)
-	· · · · · · · · · · · · · · · · · · ·			
		ļ		

\*Boiler, roaster, oven, ect.

3. Amount and type of air contaminants being emitted

Type of Material Emitted	Amount Emitted (Tons/Year)

(List specific contaminant, e.g.  $50_2$ , fly ash, etc.)

4. Stack Information

		Exhaust Gas Da	ta at Exit
Height (ft.)	Exit Diameter (ft.)	Temp. Velocity (°F) (ft./sec.)	Moisture (%)
<del></del>		<del>  </del>	<del></del>
	Height (ft.)	Height (ft.) Exit Diameter (ft.)	Height (ft.) Exit Diameter (ft.) Temp. Velocity (°F) (ft./sec.)

\*Boiler, roaster, oven, etc.

Cl. Basic process or equipment used

Equipment Description	Capacity (Tons/hr., etc.)
<u> </u>	<u> </u>
<del></del>	

2. Air contaminant controls being used on above basic process equipment

Equipment Description	Efficiency (%)

Form 200A

#### AIR CONTAMINANT EMISSION NOTICE - Continued

3. Amount and type of air contaminants being emitted

Type of Material Emitted	Amount Emitted (Tons/year)
() let english control of SO Cons	A duck one N

(List specific contaminants, e.g. SO<sub>2</sub>, Cement dust, etc.)

4. Stack Information

			Exhaust Gas Data at Exit		
Stack Use*	Height (ft)	Exit Diameter (ft)	Temp. Velocity (°F) (ft./sec.)	Moisture (%)	
rver kiln orindi	ng buffing e	tr (process related			

- D. MANUFACTURING ACTIVITIES INFORMATION
- 1. Principal raw materials used in the process or manufacturing activity

Raw Materials	Amount per year	Units of Production (Tons, Gallons, Etc)
	<u> </u>	
<u> </u>		

Principal products manufactured

Product	Amount per year	Units of Production

#### E. REFUSE DISPOSAL INFORMATION

Principal methods of waste disposal

Type of Waste <sup>a</sup>	Method of Disposal <sup>b</sup>	Amount (Tons/Year)

a. Indicate process and non-process waste
b. If incinerator, give capacity in pounds per hour

F. PROCESS FLOW DIAGRAMS AND ANY RELATED INFORMATION OF THE PLANT OPERATIONS

#### (2.0) II. AUTHORITY TO CONSTRUCT:

#### A. GENERAL

No person shall construct or modify any new air contamination source mentioned in II.B without receiving written authorization from the Division.

- B. Classes of machines, equipment, articles, or contrivances for which authority is required are the following:
  - 1. Basic equipment.

This class includes any machine, equipment, article or other contrivance associated with operations except as exempted in IV.A, the use of which may cause the emission of air contaminants.

2. Air pollution control equipment:

This class includes any machine, equipment, article, or other contrivance associated with operations or processes except as exempted in IV.A, the use of which may eliminate or reduce or control the emission of air contaminants.

#### C. Applications:

Applications for authority to construct shall be prepared on appropriate application forms supplied by the Division and filed as outlined in IV.B.

- D. Standards and Procedures for Granting or Denying Applications:
  - No authority to construct or modify shall be granted to the applicant unless the Division determines to its satisfaction that:
    - a. The new air contamination source is so designed and will be constructed or modified to operate without causing a violation of the emission control regulations of the Commission, and any applicable national or local air pollution emission control ordinances and regulations.
    - b. The new air contamination source is designed, built, and equipped in accordance with the best available practical methods to reduce, prevent, and control air pollution.
    - c. The new air contamination source, as designed or modified does not significantly endanger maintenance or attainment as determined by criteria set forth in IV.C.2, of any ambient air quality standards of the Commission, and any more stringent national or local ambient air quality standards.

#### E. Conditional Approval of Applications:

- 1. An authority to construct or modify may be issued to an applicant owning or operating any new air contamination source subject to conditions which will make the equipment operate within the emission control regulations and ambient air quality standards of the Commission or applicable national or local air pollution control ordinances and regulations, and ambient air quality standards, in which case the conditions will be specified in writing. Commencing work under such an authority to construct shall be deemed acceptance by the applicant of all conditions specified.
- 2. The Division may impose conditions upon the applicant in the authority to construct or modify which require owners or operators of air contamination sources to install, maintain, and use instrumentation to monitor and record emission data as a basis for periodic reports to the Division.

#### F. Expiration of Authority to Construct:

The Division may cancel an authority to construct or modify if the construction or modification is not begun within six (6) months from the date construction is to be started as stated in the application, or if the work involved in the construction or modification is suspended for six (6) months or more. An applicant may secure an extension of the expiration date by written request to the Division stating the reasons for the request. Extensions may be granted for a period of not more than six (6) months.

#### (3.0) III. PERMIT TO OPERATE:

- A. No person shall begin operation of any new air contamination source mentioned in II.B of this Regulation without notifying the Division at least thirty (30) days prior to operation.
- B. No person shall cause or permit the operation of any new air contamination source mentioned in II.B of this Regulation without applying for a permit to operate from the Division.
- C. After January 1, 1975 no person shall cause or permit the use or operation of any existing air contamination sources mentioned in II.B of this regulation without first having been granted a permit to operate from the Division.
- D. The requirement for a permit to operate shall be waived during the term of a variance.
- E. No owner or operator shall cause or permit the operation of a new or existing air contamination source if the Division denies or revokes a permit to operate.

#### F. Applications:

Applications for permit to operate shall be prepared on appropriate application forms supplied by the Division and files as outlined in IV.B.

- G. Standards and Procedures for granting or denying Permit to Operate:
  - No permit to operate shall be granted unless the applicant shows to the satisfaction of the Division that the emissions of the air contamination source will satisfy the requirements of the emission control regulations of the Commission or any applicable national or local air pollution control ordinances and regulations and has been constructed, installed, or modified in accordance with the requirements and conditions contained in the authority to construct or modify.
  - 2. After January 1, 1975, no existing air contamination source shall be granted a permit to operate unless the Division has determined to its satisfaction that said air contamination source will operate in such a manner so as not to significantly endanger maintenance or attainment as determined by the criteria set forth in IV.C.2 of any ambient air quality standards of the Commission, and any more stringent national or local ambient air quality standards.
  - 3. Before a permit to operate is granted, the applicant, if required by the Division, shall conduct performance tests in accordance with methods approved by the Division with the tests being made at the expense of the applicant. The Division may monitor such required performance tests conducted by the applicant and may also conduct performance test.
  - 4. The Division may impose conditions upon the applicant in the permit to operate which require the owners or operators of air contamination sources to install, maintain, and use instrumentation to monitor and record emission data as a basis for periodic reports to the Division.
  - 5. Prior to meeting the requirements of III.B and III.C. the Division may grant a temporary permit to operate to new or existing air contamination sources not to exceed six (6) months for the purpose of developing operational procedures, modifying equipment or facilities or to assess the impact of emissions to meet emission control regulations, ordinances and ambient air quality standards as determined by criteria set forth in IV.C.2.

#### H. Suspension or Revocation of Permit:

1. The Division may suspend or revoke a permit to operate if the requirements of Sections III and IV and any conditions specified in the permit to operate are not met on a continuous basis. Any order of the Division denying, suspending or revoking a permit to operate shall become final within ten (10) days from the receipt of the notice, unless the permittee shall have made a written ap-

plication to the Commission for a hearing. The Commission may elect to refer the matter to the Variance Board for a decision as to whether the permit shall be granted, denied, or reinstated, or the operation be continued under the terms and conditions of a variance.

- 2. Whenever an air pollution emergency has been declared the permittee shall cease operating at such time after notice as shall have been stated in the permit to operate. Injunctive procedures may be instituted for failure to halt or curtail operation within the time specified in the permit. (66-31-11(1).
- 3. A permit to operate which has been revoked pursuant to these regulations shall be surrendered forthwith to the Division.

#### I. Renewal:

A permit to operate will be issued for a two-year period subject to renewal.

### (3.0) IV. COMMON PROVISIONS APPLICABLE TO BOTH AUTHORITY TO CONSTRUCT AND PERMIT TO OPERATE:

#### A. Exemptions:

An Air Contaminant Emission Notice, Authority to Construct, and Permit to Operate shall not be required for:

- Structures used solely as residential dwellings and which do not exceed seven family units;
- 2. Retail and wholesale establishments where no processing or incineration occurs and where solid or liquid fuel is not burned:
- 3. Air conditioning or ventilating systems not designed to remove air contaminants generated by or released from equipment;
- 4. Fuel-burning equipment, other than smokehouse generators, which use gas as a fuel having a BTU input of not more than 500,000 BTU per hour;
- 5. Fireplaces used for inside or outside recreational purposes;
- 6. Fires used for non-commercial cooking of food for human beings:
- 7. The installation or alteration of an air contaminant detector, or air contaminant recorder.
- 8. Laboratory equipment used exclusively for chemical or physical analyses;
- 9. Flares used to indicate some danger to the public;
- 10. Normal agricultural cultivation operations.
- 11. Internal combustion engines are exempt except that emission notices and permit to operate are required for engines of greater than 1,000 horsepower.
- 12. Commercial laundries are only required to submit an air contaminant emission notice.
- 13. Other sources of minor significance as specified by the Commission.

- B. Preparing and filing an application:
  - 1. Separate applications are required for authority to construct or modify and permit to operate.
  - 2. Applications shall be signed by the individual legally reasonable and authorized to do so, and he thereby covenants that the applicant will either construct or modify the emission source in accordance with the requirements for granting applications as outlined in this regulation.
  - 3. Prior to granting an authority to construct or permit to operate by the Division the applicant must submit, in triplicate, Form 200A entitled. "Air Contaminant Emission Notice."
  - 4. Each application for authority to construct shall be accompanied by two copies of the complete data, siting (location) information, plans, descriptions, specifications and drawings sufficient in scope to allow an engineering evaluation to be made to determine whether appropriate air pollution control regulations, and ordinances and ambient air quality control standards will be met. For certain classes of equipment, special instruction forms are available which detail the information required. These forms can be identified as the Form 200B series.
  - 5. Each application for permit to operate shall be accompanied by such performance tests results, information and records as may be required by the Division to determine whether the requirements of this regulation are met. Such information may also be required by the Division at any time when the source is being operated to determine compliance with applicable emission control regulations and ambient air quality standards.

- C. Standards and Procedures for granting or denying applications:
  - 1. Upon receipt and review of the application, but in no case later than twenty (20) days, the Division shall grant or deny, or request specific information from the applicant. Upon receipt of an application acceptable to the Division, within (2) days the Division shall either grant or deny permission to the applicant to construct, modify, or operate the new source.
  - 2. If an authority to construct or permit to operate is granted the Division shall state, in writing, to the applicant and maintain a record of the maximum allowable emission levels the new or existing air contamination source must meet to comply with II.D. 1. (c), if II.D.1. (c) requires a more stringent degree of emission control than II.D.1. (a).
  - 3. In the event of a denial of an application the Division shall not accept a further application unless the applicant has compiled with the objections specified as reasons for denial.
  - 4. Prior to the applicant being notified, in writing, of denial a conference between the Division and the applicant may be held to discuss the reasons for denial.
  - 5. No authority to construct or permit to operate shall be granted to an applicant until the Division has determined to its satisfaction that acceptable halt or curtailment procedures which conform with the requirements of Section 66-31-11 of the Act have been submitted by the applicant. Such procedures shall state the times in which the applicant shall halt or curtail activities upon being notified of the declaration of an air pollution emergency.

Adopted :December 9, 1971 Effective:February 1, 1972

# FEDERALLY PROMULGATED REGULATIONS

#### 52.326 TRANSPORTATION AND LAND-USE CONTROLS

- (a) To complete the requirements of 51.11(b) of this part, the Governor of Colorado must submit to the Administrator:
  - (1) No later than July 1, 1974, the legislative authority necessary for carrying out control measures for which full authority does not yet exist, namely inspection/maintenance air bleed retrofit, and highaltitude modification, specified on pages 7-13 and 7-14 of the plan submitted June 4, 1973, and in the supplemental submission of July 16, 1973.
  - (2) No later than January 31, 1974, the adopted regulations and administrative policies necessary for carrying out the control measures for which the State now has legal authority, namely the designation of bus/carpool lanes, the limitation of constructing parking facilities, and the restriction of on-street parking, specified in the supplemental submission of July 16, 1973.
  - (3) No later than September 1, 1974, the adopted regulations and administrative policies necessary for carrying out any control measure for which the State must submit legal authority in accordance with paragraph (a)(1) of this section.

November 7, 1973 38 F.R. 30818 at 30820

(12.0)

#### (50.4) 52.331 CONTROL OF DRY CLEANING SOLVENT EVAPORATION

- (a) "Drycleaning operation" means that process by which an organic solvent, as defined in 52.333(k), is used in the commercial cleaning of garments and other fabric materials.
- (b) This section is applicable in the Metropolitan Denver Intrastate Air Quality Control Region.
- (c) No person shall operate a dry cleaning operation using other than perchloroethylene, 1,1,1-trichloroethane, or saturated halogenated hydrocarbons unless the uncontrolled organic emissions from such operation are reduced at least 85 percent, except that dry cleaning operations emitting less than 3 pounds per hour and less than 15 pounds per day of uncontrolled organic materials are exempt from the requirements of this section.
- (d) If incineration is used as a control technique, 90 percent or more of the carbon in the organic compounds being incinerated must be oxidized to carbon dioxide. Compliance with this requirement shall be in accordance with the provisions of 52.338.
- (e) Any owner or operator of a source subject to this section shall achieve compliance with the requirements of paragraph (c) of this section by discontinuing the use of photochemically reactive solvents as defined by 52.333(1) no later than January 31, 1974, or by controlling emission as required by paragraphs (c) and (d) of this section in accordance with the requirements of 52.338.

November 7, 1973 38 F.R. 30818 at 30821

#### (51.16) 52.332

#### **DEGREASING OPERATIONS**

- (a) "Degreasing" means the operation of using an organic solvent as a surface cleaning agent.
- (b) This section is applicable in the Metropolitan Denver Intrastate Air Quality Control Region.
- (c) No person shall use for degreasing any organic solvent other than 1,1,1trichloroethane, perchloroethylene, or saturated halogenated hydrocarbons after January 31, 1974, unless the uncontrolled organic emissions from such operation have been reduced at least 85 percent overall.
- (d) Degreasing operations emitting less than 3 pounds per hour and less than 15 pounds per day of uncontrolled organic materials are exempt from the requirement of this section.
- (e) If incineration is used as a control technique, 90 percent or more of the carbon in the organic compounds being incinerated must be oxidized to carbon dioxide. Compliance with this paragraph shall be in accordance with the provisions of 52.338.
- (f) Any owner or operator of a stationary source subject to this section shall achieve compliance with the requirements of paragraph (c) of this section by discontinuing the use of any organic solvent other than 1,1,1-trichloroethane, perchloroethylene, or saturated halogenated hydrocarbons no later than January 31, 1974, or by controlling emissions as required by paragraphs (c) and (e) of this section in accordance with the requirements of 52.338.

November 7, 1973 38 F.R. 30818 at 30821

#### (50.4) $52^{1}.333$

#### ORGANIC SOLVENT USAGE

- (a) This section is applicable in the Metropolitan Denver Intrastate Air Quality Control Region. Compliance with the requirements of paragraphs (b) through (i) of this section shall be in accordance with the provisions of 52.338.
- (b) No person shall discharge more than 15 pounds of organic materials into the atmosphere in any one day nor more than 3 pounds in any one hour from any article, machine, equipment or other contrivance in which any organic solvent or any material containing organic solvent comes into contact with flame or is baked, heat-cured, or heat polymerized, in the presence of oxygen, unless all organic materials discharged from such article, machine, equipment, or other contrivance have been reduced by at least 85 percent overall.
- (c) No person shall discharge more than 40 pounds of organic material into the atmosphere in any one day or more than 3 pounds in any one hour from any article, machine, equipment, or other contrivance used under conditions other than described in paragraph (b) of this section for employing, applying, evaporating, or drying any photochemically reactive solvent, as defined in paragraph (1) of this section, or material containing such solvent, unless all organic materials discharged from such article, machine, equipment, or other contrivance have been reduced by at least 85 percent overall.
- (d) Any series of articles, machines, equipment, or other contrivances designed for processing a continuously moving sheet, web, strip, or wire which is subjected to any combination of operations described in paragraphs (b) and (c) of this section involving any photochemically reactive solvent, as defined in paragraph (l) of this section, or material containing such solvent, shall be subject to compliance with paragraph (c) of this section. Where only non-photochemically reactive solvents or materials containing only non-photochemically reactive solvents are employed or applied, and where any portion or portions of said series of articles, machines, equipment, or other contrivances involves operations described in paragraph (b) of this section, said portions shall be collectively subject to compliance with paragraph (b) of this section.
- (e) Emissions of organic materials to the atmosphere from the cleanup with photochemically reactive solvent, as defined in paragraph (1) of this section, of any article, machine, equipment, or other contrivance described in paragraphs (b), (c), or (d) of this section shall be included with the other emissions of organic materials from that article, machine, equipment, or other contrivance for determining compliance with this section.

- (f) Emissions of organic materials into the atmosphere as a result of continuous drying of products during the first 12 hours after their removal from any article, machine, equipment, or other contrivance described in paragraphs (b), (c), or (d) of this section shall be included with other emissions of organic materials from that article, machine, equipment or other contrivance for determining compliance with this section.
- (g) Emissions of organic materials into the atmosphere required to be controlled by paragraphs (b), (c), or (d) of this section shall be controlled by:
  - (1) Incineration: Provided, That 90 percent or more of the carbon in the organic material being incinerated is oxidized to carbon dioxide.
  - (2) Adsorption, or
  - (3) Processing in a manner determined by the Administrator to be not less effective than the methods described in paragraphs (g) (1) or (2) of this section.
- (h) A person incinerating, adsorbing, or otherwise processing organic materials pursuant to this section shall provide, properly install and maintain in calibration, in good working order and in operation, devices as specified in the authority to construct or the permit to operate, or as specified by the Administrator, for indicating temperatures, pressures, rates of flow or other operating conditions necessary to determine the degree and effectiveness of air pollution control.
- (i) Any person using organic solvents or any materials containing organic solvents shall supply the Administrator, upon request and in the manner and form prescribed by him written evidence of the chemical composition, physical properties and amount consumed for each organic solvent used.
- (j) The provisions of this section shall apply to:
  - (1) The manufacture, transport, or storage of organic solvents or materials containing organic solvents.
  - (2) The spraying or other employment of insecticides, pesticides, or herbicides.
  - (3) The employment, application, evaporation, or drying of saturated halogenated hydrocarbons, 1,1,1-trichloroethane, or perchloroethylene.
  - (4) The use of any material in any article, machine, equipment, or other contrivance described in paragraphs (b), (c), (d), or (e) of this section if:

- (i) The volatile content of such material consists only of water and organic solvents.
- (11) The organic solvents comprise not more than 20 percent by volume of said volatile content.
- (iii) The volatile content is not photochemically reactive as defined in paragraph (1) of this section, and
- (iv) The organic solvent or any material containing organic solvent does not come into contact with flame.
- (5) The use of any material in any article, machine, equipment, or other contrivance described in paragraphs (b), (c), (d), or (e) of this section, if:
  - (i) The organic solvent content of such material does not exceed 20 percent by volume of said material.
  - (ii) The volatile content is not photochemically reactive as defined in paragraph (1) of this section.
  - (iii) More than 50 percent by volume of such volatile material is evaporated before entering a chamber heated above ambient application temperature, and
  - (iv) The organic solvent or any material containing organic solvent does not come into contact with flame.
- (6) The use of any material, in any article, machine, equipment, or other contrivance described in paragraphs (b), (c), (d), or (e) of this section, if:
  - (i) The organic solvent content of such material does not exceed 5 percent by volume of said material.
  - (ii) The volatile content is not photochemically reactive as defined in paragraph (1) of this section, and
  - (iii) The organic solvent or any material containing organic solvent does not come into contact with flame.
- (k) For the purposes of this section, organic solvents include diluents and thinners and are defined as organic materials which are liquids at standard conditions and which are used as dissolvers, viscosity reducers, or cleaning agents.
  - (1) For the purposes of this section, a photochemically reactive solvent is any solvent with an aggregate of more than 20 percent of its total

volume composed of the chemical compounds classified below or which exceeds any of the following individual percentage composition limitations, referred to the total volume of solvent:

- (1) A combination of hydrocarbons, alcohols, aldehydes, esters, ethers, or ketones having an olefinic or cyclo-olefinic type of unsaturation: 5 percent;
- (2) A combination of aromatic compounds with eight or more carbon atoms to the molecule except ethylbenzene: 5 percent.
- (3) A combination of ethylbenzene or ketones having branched hydrocarbon structures, trichloroethylene or toluene: 20 percent.
- (m) Whenever any organic solvent or any constituent of an organic solvent may be classified from its chemical structure into more than one of the above groups of organic compounds, it shall be considered as a member of the most reactive chemical group, that is, that group having the least allowable percent of the total volume of solvents.
- (n) For the purpose of this section, organic materials are defined as chemical compounds of carbon excluding carbon monoxide, carbon dioxide, carbonic acid, metallic carbides, metallic carbonates, and ammonium carbonate.
- (o) This section shall be effective on the date of its adoption for any article, machine, equipment, or other contrivance not then completed and put into service. As for all other articles, machines, equipment, or other contrivances compliance shall be required in accordance with 52.338.
- (p) A person shall not, after May 31, 1975, discharge into the atmosphere more than 3,000 pounds of organic materials in any one day nor more than 450 pounds in any one hour from any article, machine, equipment, or other contrivance in which any non-photochemically reactive solvent or any material containing such solvent is employed or applied, unless said discharge has been reduced by at least 85 percent. Emissions of organic materials into the atmosphere resulting from air or heated drying of products for the first 12 hours after their removal from any article, machine, equipment, or other contrivance described in this section shall be included in determining compliance with this section. Emissions resulting from baking, heat-curing or heat-polymerizing shall be excluded from determination of compliance with this section. Those portions of any series of articles, machines, equipment, or other contrivances designed for processing a continuous web, strip, or wire which emit organic materials and using operations described in this section shall be collectively subject to compliance with this section.

#### (51.16) 52.334

- (a) This section is applicable in the Metropolitan Denver Intrastate Air Quality Control Region. Compliance with the requirements of paragraph (b) of this section shall be in accordance with the provisions of 52.338.
- (b) No person shall place, store or hold in any stationary tank, reservoir, or other container of more than 40,000 gallons capacity any gasoline or any petroleum distillate having a vapor pressure of 1.5 pounds per square inch absolute (psia) or greater under actual storage conditions, unless such tank, reservoir or other container is a pressure tank maintaining working pressures sufficient at all times to prevent hydrocarbon vapor or gas to the atmosphere, or is designed and equipped with one of the following vapor loss control devices, properly installed, in good working order, and in operation:
  - (1) A floating roof, consisting of a pontoon type or double deck type roof, resting on the surface of the liquid contents and equipped with a closure seal, or seals, to close the space between the roof edge and tank wall. The control equipment provided for in this paragraph shall not be used if the gasoline or petroleum distillate has a vapor pressure of 11.0 pounds per square inch absolute or greater under actual storage conditions. All tank gauging and sampling devices shall be gas-tight except when gauging or sampling is taking place.
  - (2) A vapor recovery system, consisting of a vapor gathering system capable of collecting the hydrocarbon vapors and gases discharged and a vapor disposal system capable of processing such hydrocarbon vapors and gases so as to prevent their emission to the atmosphere, with all tank gauging and sampling devices gas-tight, except when gauging or sampling is taking place.
  - (3) Other equipment of equal efficiency, provided such equipment is approved by the Administrator.

November 7, 1973 38 F.R. 30818 at 30822

#### ORGANIC LIQUID LOADING

#### (51.16) 52.335

- (a) "Loading facility" means any aggregation or combination of organic liquid loading equipment which is both possessed by one person and located outlets for such aggregation or combination of loading equipment can be encompassed within any circle of 300 feet in diameter.
  - (b) This section is applicable in the Metropolitan Denver Intrastate Air Quality Control Region. Compliance with the requirements of paragraphs (b) through (d) of this section shall be in accordance with the provisions of 52.338.
  - (c) No person shall load organic liquids having a vapor pressure of 1.5 psia or greater under actual loading conditions into any tank truck, trailer, or railroad tank car from any loading facility unless the loading facility is equipped with a vapor collection and disposal system, or its equivalent, approved by the Administrator.
  - (d) Loading shall be accomplished in such a manner that all displaced vapor and air will be vented only to the vapor collection system. Measures shall be taken to prevent liquid drainage from the loading device when it is not in use or to accomplish complete drainage before the loading device is disconnected.
  - (e) The vapor disposal portion of the vapor collection and disposal system shall consist of one of the following:
    - (1) An absorber system or condensation system which processes all vapors and recovers at least 90 percent by weight of the organic vapors and gases from the equipment being controlled.
    - (2) A vapor handling system which directs all vapors to a fuel gas system.
    - (3) Other equipment of equal efficiency provided such equipment is approved by the Administrator.
  - (f) This section shall apply only to the loading of organic liquids having a vapor pressure of 1.5 psia or greater under actual loading conditions at a facility from which at least 20,000 gallons of such organic liquids are loaded in any one day.

#### (51.16) 52.336

#### GASOLINE TRANSFER VAPOR CONTROL

- (a) "Gasoline" means any petroleum distillate having a Reid vapor pressure of 4 pounds or greater.
- (b) This section is applicable in the Metropolitan Denver Intrastate Air Quality Control Region.
- (c) No person shall transfer gasoline from any delivery vessel into any stationary storage container with a capacity greater than 250 gallons unless such container is equipped with a submerged fill pipe and unless the displaced vapors from the storage container are processed by a system that prevents release to the atmosphere of no less than 90 percent by weight of organic compounds in said vapors displaced from the stationary container location.
  - (1) The vapor recovery portion of the system shall include one or more of the following:
    - (i) A vapor-tight return line from the storage container to the delivery vessel and a system that will ensure that the vapor return line is connected before gasoline can be transferred into the container.
    - (ii) Refrigeration-condensation system or equivalent designed to recover no less than 90 percent by weight of the organic compounds in the displaced vapor.
  - (2) If a "vapor-tight vapor return" system is used to meet the requirements of this section, the system shall be so constructed as to be readily added on to retrofit with an adsorption system, refrigeration-condensation system, or equivalent vapor removal system, and so constructed as to anticipate compliance with 52.337.
  - (3) The vapor-laden delivery vessel shall be subject to the following conditions:
    - (i) The delivery vessel must be so designed and maintained as to be vapor-tight at all times.
    - (ii) The vapor-laden delivery vessel may be refilled only at facilities equipped with a vapor recovery system or the equivalent, which can recover at least 90 percent by weight of the organic compounds in the vapors displaced from the delivery vessel during refilling.
    - (iii) Gasoline storage compartments of 1,000 gallons or less in gasoline delivery vehicles presently in use on the promulgation date of this regulation will not be required to be retrofitted with a vapor return system until January 1, 1977.
    - (iv) Facilities which have a daily throughput of 20,000 gallons of gasoline or less are required to have a vapor recovery system in

operation no later than May 31, 1977. Delivery vessels and storage containers served exclusively by facilities required to have a vapor recovery system in operation no later than May 31, 1977, also will be required to meet the provisions of this section no later than May 31, 1977.

- (d) The provisions of this paragraph (c) shall not apply to the following:
  - (1) Stationary containers having a capacity less than 550 gallons used exclusively for the fueling of implements of husbandry.
  - (2) Any container having a capacity less than 2,000 gallons installed prior to promulgation of this paragraph.
  - (3) Transfer made to storage tanks equipped with floating roofs or their equivalent.

#### (e) Compliance schedule:

- June 1, 1974. Submit to the Administrator a final control plan, which describes at a minimum the steps which will be taken by the source to achieve compliance with the provisions of paragraph (c) of this section.
- (2) March 1, 1975. Negotiate and sign all necessary contracts for emission control systems, or issue orders for the purchase of component parts to accomplish emission control.
- (3) May 1, 1975. Initiate on-site construction or installation of emission control equipment.
- (4) February 1, 1976. Complete on-site construction or installation of emission control equipment.
- (5) March 1, 1976. Assure final compliance with the provisions of paragraph (c) of this section.
- (6) Any owner or operator of sources subject to the compliance schedule in this paragraph shall certify to the Administrator, within 5 days after the deadline for each increment of progress, whether or not the required increment of progress has been met.

- (f) Paragraph (e) of this section shall not apply:
  - (1) To a source which is presently in compliance with the provisions of paragraph (c) of this section and which has certified such compliance to the Administrator by June 1, 1974. The Administrator may request whatever supporting information he considers necessary for proper certification.
  - (2) To a source for which a compliance schedule is adopted by the State and approved by the Administrator.
  - (3) To a source whose owner or operator submits to the Administrator, by June 1, 1974, a proposed alternative schedule. No such schedule may provide for compliance after March 1, 1976. If promulgated by the Administrator, such schedule shall satisfy the requirements of this paragraph for the affected source.
- (g) Nothing in this paragraph shall preclude the Administrator from promulgating a separate schedule for any source to which the application of the compliance schedule in paragraph (e) of this section fails to satisfy the requirements of 51.15 (b) and (c) of this chapter.
- (h) Any gasoline dispensing facility subject to this regulation which installs a storage tank after the effective date of this regulation shall comply with the requirements of paragraph (c) of this section by March 1, 1976. Any facility subject to this regulation which installs a storage tank after March 1, 1976, shall comply with the requirements of paragraph (c) at the time of installation.

#### (51.16) 52.337

### CONTROL OF EVAPORATIVE LOSSES FROM THE FILLING OF VEHICULAR TANKS

- (a) "Gasoline" means any petroleum distillate having a Reid vapor pressure of 4 pounds or greater.
- (b) This section is applicable in the Metropolitan Denver Intrastate Air Quality Control Region.
- (c) A person shall not transfer gasoline to an automotive fuel tank from gasoline dispensing system unless the transfer is made through a fill nozzle designed to:
  - (1) Prevent discharge of hydrocarbon vapors to the atmosphere from either the vehicle filler neck or dispensing nozzle;
  - (2) Direct vapor displaced from the automotive fuel tank to a system wherein at least 90 percent by weight of the organic compounds in displaced vapors are recovered; and
  - (3) Prevent automotive fuel tank overfills or spillage on fill nozzle disconnect.
- (d) The system referred to in paragraph (c) of this section can consist of a vapor-tight return line from the fill nozzle-filler neck interface to the dispensing tank, to an adsorption, absorption, incineration, refrigeration-condensation system or equivalent.
- (e) Components of the systems required by 52.336(c) can be used for compliance with paragraph (c) of this section.
- (f) If it is demonstrated to the satisfaction of the Administrator that it is impractical to comply with the provisions of paragraph (c) of this section as a result of vehicle fill neck configuration, location, or other design features, the provisions of this paragraph shall not apply to such vehicles. However, in no case shall such configuration exempt any gasoline dispensing facility from installing a system required by paragraph (c).
- (g) Compliance schedule:
  - (1) January 1, 1975. Submit to the Administrator a final control plan, which describes at a minimum the steps which will be taken by the source to achieve compliance with the provisions of paragraph (c) of this section.
  - (2) March 1, 1975. Negotiate and sign all necessary contracts for emission control systems, or issue orders for the purchase of component parts to accomplish emission control.

- (3) May 1, 1975. Initiate on site construction or installation of emission control equipment.
- (4) May 1, 1977. Complete on-site construction or installation of emission control equipment or process modification.
- (5) May 31, 1977. Assure final compliance with the provisions of paragraph (c) of this section.
- (6) Any owner or operator of sources subject to the compliance schedule in this paragraph shall certify to the Administrator, within 5 days after the deadline for each increment of progress, whether or not the required increment of progress has been met.
- (h) Paragraph (g) of this section shall not apply:
  - (1) To a source which is presently in compliance with the provisions of paragraph (c) of this section and which has certified such compliance to the Administrator by January 1, 1975. The Administrator may request whatever supporting information he considers necessary for proper certification.
  - (2) To a source for which a compliance schedule is adopted by the State and approved by the Administrator.
  - (3) To a source whose owner or operator submits to the Administrator, by June 1, 1974, a proposed alternative schedule. No such schedule may provide for compliance after May 31, 1977. If promulgated by the Administrator, such schedule shall satisfy the requirements of this paragraph for the affected source.
- (i) Nothing in this paragraph shall preclude the Administrator from promulgating a separate schedule for any source to which the application of the compliance schedule in paragraph (g) of this section fails to satisfy the requirements of 51.15 (b) and (c) of this chapter.
- (j) Any gasoline dispensing facility subject to this regulation which installs a gasoline dispensing system after the effective data of this regulation shall comply with the requirements of paragraph (c) of this section by May 31, 1977. Any facility subject to this regulation which installs a gasoline dispensing system after May 31, 1977, shall comply with the requirements of paragraph (c) of this section at the time of installation.
- NOTE: The compliance dates given in paragraphs (g)(1)-(3) were deferred indefinitely at 40 FR 1127, Jan. 6, 1975.

#### FEDERAL COMPLIANCE SCHEDULES

- (a) Except as provided in paragraph (c) of this section, the owner or operator of any stationary source subject to the requirements of 52.331, 52.332, 52.333, 52.334, and 52.335 shall comply with the compliance schedule in paragraph (b) of this section.
- (b) Compliance schedule:

52.338

(6.0)

- (1) December 17, 1973. Submit to the Administrator a final control plan, which describes, at a minimum, the steps which will be taken by the source to achieve compliance with the sections cited in paragraph (a) of this section.
- (2) February 16, 1974. Negotiate and sign all necessary contracts for emission control systems or process modifications, or issue orders for the purchase of component parts to accomplish emission control or process modification.
- (3) July 1, 1974. Initiate on-site construction or installation of emission control equipment or process modification.
  - (4) May 1, 1975. Complete on-site construction or installation of emission control equipment or process modification.
- (5) May 31, 1975. Assure final compliance with the sections cited in paragraph (a) of this section.
- (6) Any owner or operator of stationary sources subject to the compliance schedule in this paragraph shall certify to the Administrator, within 5 days after the deadline for each increment of progress, whether or not the required increment of progress has been met.
- (c) Paragraph (b) of this section shall not apply:
  - (1) To a source which is presently in compliance with the regulations cited in paragraph (a) of this section and which has certified such compliance to the Administrator by December 15, 1973. The Administrator may request whatever supporting information he considers necessary for proper certification.
  - (2) To a source for which a compliance schedule is adopted by the State and approved by the Administrator.
  - (3) To a source whose owners or operator submits to the Administrator, by December 15, 1973, a proposed alternative schedule. No such schedule may provide for compliance after May 31, 1975. If promulgated by the Administrator such schedule shall satisfy the requirements of this paragraph for the affected source.

(d) Nothing in this paragraph shall preclude the Administrator from promulgating a separate schedule for any source to which the application of the compliance schedule in paragraph (b) of this section fails to satisfy the requirements of 51.15 (b) and (c) of this chapter.

November 7, 1973 38 F.R. 30818 at 30824

#### MONITORING TRANSPORTATION CONTROLS

- (a) This section is applicable to the Metropolitan Denver Intrastate Region.
- (b) The State of Colorado, or a designated agency approved by the Administrator, shall monitor the transportation control measures approved for the State's implementation plan as follows:
  - (1) The actual per vehicle emission reductions occurring as a result of:
    - (i) Inspection/maintenance

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- (ii) Airbleed (pre-1968 light-duty vehicles); and
- (iii) High altitude modification (1968-1974 light duty vehicles).
- (2) The observed changes in vehicle miles traveled (VMT) and average vehicle speeds as a result of:
  - (i) Bus/carpool lanes;
  - (ii) Parking lot construction limitation;
  - (iii) Limitation on-street parking and;
  - (iv) Mass transit improvements.
- (c) No later than January 15, 1974, the State shall submit to the Administrator a detailed program demonstrating compliance with paragraph (b) of this section and in accordance with 51.19(d) of this chapter. The program description shall include the following:
  - (1) The agency or agencies responsible for conducting, overseeing, and maintaining the monitory program.
  - (2) The administrative process to be used.
  - (3) A description of the methods to be used to collect the vehicle emission reductions, and changes in VMT and average vehicle speed, including a description of any modeling techniques to be employed.
  - (4) The funding requirements, including a signed statement from the Governor or the State Treasurer or their respective designees identifying the source and amount of funds for the program.
- (d) No later than February 15, 1974, the Administrator will approve or disthe proposed monitoring program.
- (e) All data collected as a result of the monitoring program shall be submitted to the Administrator on a semiannual basis beginning August 15, 1974. The data shall be submitted in a format similar to that presented in Appendix M to Part 51 of this chapter.

### (b) Regulation for Review of New or Modified Indirect Sources

- (1) All terms used in this paragraph but not specifically defined below shall have the meaning given them in 52.01 of this chapter.
  - (i) The term "indirect source" means a facility, building, structure, or installation which attracts or may attract mobile source activity that results in emissions of a pollutant for which there is a national standard. Such indirect sources include, but are not limited to:
    - (a) Highways and roads.
    - (b) Parking facilities.
    - (c) Retail. commercial and industrial facilities.
    - (d) Recreation, amusement, sports and entertainment facilities.
    - (e) Airports.
    - (f) Office and Government buildings.
    - (g) Apartment and condominium buildings.
    - (h) Education facilities.
    - (ii) The term "Administrator" means the Administrator of the Environmental Protection Agency or his designated agent.
    - (iii) The term "associated parking area" means a parking facility or facilities owned and/or operated in conjunction with an indirect source.
  - (iv) The term "aircraft operation" means an aircraft take-off or landing.
    - (v) The phrase "to commence construction" means to engage in a continuous program of on-site construction including site clearance, grading, dredging, or land filling specifically designed for an indirect source in preparation for the fabrication, erection, or installation of the building components of the indirect source. For the purpose of this paragraph, interruptions resulting from acts of God, strikes, litigation, or other matters beyond the control of the owner shall be disregarded in determining whether a construction or modification program is continuous.

- (vi) The phrase "to commence modification" means to engage in a continuous program of on-site modification, including site clearance, grading, dredging, or land filling in preparation for specific modification of the indirect source.
- (vii) The term "highway section" means the development proposal of a highway of substantial length between logical termini (major crossroads, population centers, major traffic generators, or similar major highway control elements) as normally included in a single location study or multi-year highway improvement program as set forth in 23 CFR 770.201 (38 FR 31677).
- (viii) The term "highway project" means all or a portion of a highway section which would result in a specific construction contract.
- (ix) The term "Standard Metropolitan Statistical Area (SMSA)" means such areas as designated by the U.S. Bureau of the Budget in the following publication: "Standard Metropolitan Statistical Area," issued in 1967, with subsequent amendments.
- (2) The requirements of this paragraph are applicable to the following:
  - (i) In an SMSA:
    - (a) Any new parking facility or other new indirect source with an associated parking area, which has a new parking capacity of 1,000 cars or more; or
    - (b) Any modified parking facility, or any modification of an associated parking area, which increases parking capacity by 500 cars or more; or
    - (c) Any new highway project with an anticipated average annual daily traffic volume of 20,000 or more vehicles per day within ten years of construction; or
    - (d) Any modified highway project which will increase average annual daily traffic volume by 10,000 or more vehicles per day within ten years after modification.
  - (ii) Outside an SMSA:
    - (a) Any new parking facility, or other new indirect source with an associated parking area, which has a parking capacity of 2,000 cars or more; or

- (b) Any modified parking facility, or any modification of an associated parking area, which increases parking capacity by 1,000 cars or more.
- (iii) Any airport, the construction or general modification program of which is expected to result in the following activity within ten years of construction or modification:
  - (a) New airport: 50,000 or more operations per year by regularly scheduled air carriers, or use by 1,600,000 or more passengers per year.
  - (b) Modified airport: Increase of 50,000 or more operations per year by regularly scheduled air carriers over the existing volume of operations, or increase of 1,600,000 or more passengers per year.
- (iv) Where an indirect source is constructed or modified in increments which individually are not subject to review under this paragraph, and which are not part of a program of construction or modification in planned incremental phases approved by the Administrator, all such increments commenced after December 31, 1974, or after the latest approval hereunder, whichever date is most recent, shall be added together for determining the applicability of this paragraph.
- (3) No owner or operator of an indirect source subject to this paragraph shall commence construction or modification of such source after December 31, 1974, without first obtaining approval from the Administrator. Application for approval to construct or modify shall be by means prescribed by the Administrator, and shall include a copy of any draft or final environmental impact statement which has been prepared pursuant to the National Environmental Policy Act (42 U.S.C. 4321). If not included in such environmental impact statement, the Administrator may request the following information:
  - (i) For all indirect sources subject to this paragraph, other than highway projects:
    - (a) The name and address of the applicant.
    - (b) A map showing the location of the site of indirect source and the topography of the area.
    - (c) A description of the proposed use of the site, including the normal hours of operation of the facility, and the general types of activities to be operated therein.

- (d) A site plan showing the location of associated parking areas, points of motor vehicle ingress and egress to and from the site and its associated parking areas, and the location and height of buildings on the site.
- (e) An identification of the principal roads, highways, and intersections that will be used by motor vehicles moving to or from the indirect source.
- (f) An estimate, as of the first year after the date the indirect source will be substantially complete and operational, of the average daily traffic volumes, maximum traffic volumes for one-hour and eight-hour periods, and vehicle capacities of the principal roads, highways, and intersections identified pursuant to subdivision (i) (e) of this subparagraph located within one-fourth mile of all boundaries of the site.
- (g) Availability of existing and projected mass transit to service the site.
- (h) Where approval is sought for indirect sources to be constructed in incremental phases, the information required by this subparagraph (3) shall be submitted for each phase of the construction project.
- (i) Any additional information or documentation that the Administrator deems necessary to determine the air quality impact of the indirect source, including the submission of measured air quality data at the proposed site prior to construction or modification.

#### (ii) For airports:

- (a) An estimate of the average number and maximum number of aircraft operations per day by type of aircraft during the first, fifth and tenth years after the date of expected completion.
- (b) A description of the commercial, industrial, residential and other development that the applicant expects will occur within three miles of the perimeter of the airport within the first five and the first ten years after the date of expected completion.
- (c) Expected passenger loadings at the airport.
- (d) The information required under subdivisions (i) (a) through (i) of this subparagraph.

### (iii) For highway projects:

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- (a) A description of the average and maximum traffic volumes for one, eight, and 24-hour time periods expected within 10 years of date of expected completion.
- (b) An estimate of vehicle speeds for average and maximum traffic volume conditions and the vehicle capacity of the highway project.
- (c) A map showing the location of the highway project, including the location of buildings along the rightof-way.
- (d) A description of the general features of the highway project and associated right-of-way, including the approximate height of buildings adjacent to the highway.
- (e) Any additional information or documentation that the Administrator deems necessary to determine the air quality impact of the indirect source, including the submission of measured air quality data at the proposed site prior to construction or modification.
- (iv) For indirect sources other than airports and those highway projects subject to the provisions of paragraph (b) (6) (iii) of this section, the air quality monitoring requirements of paragraph (b) (3) (i) (i) of this section shall be limited to carbon monoxide, and shall be conducted for a period of not more than 14 days.
- (4) (i) For indirect sources other than highway projects and airports, the Administrator shall not approve an application to construct or modify if he determines that the indirect source will:
  - (a) Cause a violation of the control strategy of any applicable state implementation plan; or
  - (b) Cause or exacerbate a violation of the national standards for carbon monoxide in any region or portion thereof.
  - (ii) The Administrator shall make the determination pursuant to paragraph (b) (4) (i) (b) of this section by evaluating the anticipated concentration of carbon monoxide at reasonable receptor or exposure sites which will be affected by the mobile source activity expected to be attracted by the indirect source. Such determination may be made by using traffic flow characteristic quidelines

published by the Environmental Protection Agency which relate traffic demand and capacity considerations to ambient carbon monoxide impact, by use of appropriate atmospheric diffusion models (examples of which are referenced in Appendix O to Part 51 of this chapter), and/or by any other reliable analytic method. The applicant may (but need not) submit with his application, the results of an appropriate diffusion model and/or any other reliable analytic method, along with the technical data and information supporting such results. Any such results and supporting data submitted by the applicant shall be considered by the Administrator in making his determination pursuant to paragraph (b) (4) (i) (b) of this section.

- (5) (i) For airports subject to this paragraph, the Administrator shall base his decision on the approval or disapproval of an application on the considerations to be published as an Appendix to this Part.
  - (ii) For highway projects and parking facilities specified under paragraph (b) (2) of this section which are associated with airports, the requirements and procedures specified in paragraphs (b) (4) and (6) (i) and (ii) of this section shall be met.
- (6) (i) For all highway projects subject to this paragraph, the Administrator shall not approve an application to construct or modify if he determines that the indirect source will:
  - (a) Cause a violation of the control strategy of any applicable state implementation plan; or
  - (b) Cause or exacerbate a violation of the national standards for carbon monoxide in any region or portion thereof.
  - (ii) The determination pursuant to paragraph (b) (6) (i) (b) of this section shall be made by evaluating the anticipated concentration of carbon monoxide at reasonable receptor or exposure sites which will be affected by the mobile source activity expected on the highway for the ten year period following the expected date of completion according to the procedures specified in paragraph (b) (4) (ii) of this section.
  - (iii) For new highway projects subject to this paragraph with an anticipated average daily traffic volume of 50,000 or more vehicles within ten years of construction, or modifications to highway projects subject to this paragraph which will increase average daily traffic volume by 25,000

or more vehicles within ten years after modification, the Administrator's decision on the approval or disapproval of an application shall be based on the considerations to be published as an Appendix to this Part in addition to the requirements of paragraph (b) (6) (i) of this section.

- (7) The determination of the air quality impact of a proposed indirect source "at reasonable receptor or exposure sites", shall mean such locations where people might reasonably be exposed for time periods consistent with the national ambient air quality standards for the pollutants specified for analysis pursuant to this paragraph.
- (8) (i) Within 20 days after receipt of an application or addition thereto, the Administrator shall advise the owner or operator of any deficiency in the information submitted in support of the application. In the event of such a deficiency, the date of receipt of the application for the purpose of paragraph (b) (8) (ii) of this section shall be the date on which all required information is received by the Administrator.
  - (ii) Within 30 days after receipt of a complete application, the Administrator shall:
    - (a) Make a preliminary determination whether the indirect source should be approved, approved with conditions in accordance with paragraphs (b) (9) or (10) of this section, or disapproved.
    - (b) Make available in at least one location in each region in which the proposed indirect source would be constructed, a copy of all materials submitted by the owner or operator, a copy of the Administrator's preliminary determination, and a copy or summary of other materials, if any, considered by the Administrator in making his preliminary determination; and
    - (c) Notify the public, by prominent advertisement in a newspaper of general circulation in each region in which the proposed indirect source would be constructed, of the opportunity for written public comment on the information submitted by the owner or operator and the Administrator's preliminary determination on the approvability of the indirect source.
  - (iii) A copy of the notice required pursuant to this subparagraph shall be sent to the applicant and to officials and agencies having cognizance over the location where the indirect source will be situated, as follows: State and local air pollution control agencies, the chief executive of the city and county; any comprehensive regional

land use planning agency; and for highways, any local board or committee charged with responsibility for activities in the conduct of the urban transportation planning process (3-C process) pursuant to 23 U.S.C. 134.

- (iv) Public comments submitted in writing within 30 days after the date such information is made available shall be considered by the Administrator in making his final decision on the application. No later than 10 days after the close of the public comment period, the applicant may submit a written response to any comments submitted by the public. The Administrator shall consider the applicant's response in making his final decision. All comments shall be made available for public inspection in at least one location in the region in which the indirect source would be located.
- (v) The Administrator shall take final action on an application within 30 days after the close of the public comment period. The Administrator shall notify the applicant in writing of his approval, conditional approval, or denial of the application, and shall set forth his reasons for conditional approval or denial. Such notification shall be made available for public inspection in at least one location in the region in which the indirect source would be located.
- (vi) The Administrator may extend each of the time periods specified in paragraphs (b) (8) (ii), (iv), or (v) of this section by no more than 30 days, or such other period as agreed to by the applicant and the Administrator.
- (9) (i) Whenever an indirect source as proposed by an owner or operator's application would not be permitted to be constructed for failure to meet the tests set forth pursuant to paragraphs (b) (4) (i), (b) (5) (i), or (b) (6) (i) and (iii) of this section, the Administrator may impose reasonable conditions on an approval related to the air quality aspects of the proposed indirect source so that such source, if constructed or modified in accordance with such conditions, could meet the tests set forth pursuant to paragraphs (b) (4) (i), (b) (5) (i), or (b) (6) (i) and (iii) of this section. Such conditions may include, but not be limited to:
  - (a) Binding commitments to roadway improvements or additional mass transit facilities to serve the indirect source secured by the owner or operator from governmental agencies having jurisdiction thereof;
  - (b) Binding commitments by the owner or operator to specific programs for mass transit incentives for employees and patrons of the source; and

- (c) Binding commitments by the owner or operator to construct, modify, or operate the indirect source in such a manner as may be necessary to achieve the traffic flow characteristics published by the Environmental Protection Agency pursuant to paragraph (b) (4) (ii) of this section.
- (ii) The Administrator may specify that any items of information provided in an application for approval related to the operation of an indirect source which may affect the source's air quality impact shall be considered permit conditions.
- (10) Notwithstanding the provisions relating to modified indirect sources contained in paragraph (b) (2) of this section, the Administrator may condition any approval by reducing the extent to which the indirect source may be further modified without resubmission for approval under this paragraph.
- Any owner or operator who fails to construct an indirect source in accordance with the application as approved by the Administrator; any owner or operator who fails to construct and operate an indirect source in accordance with conditions imposed by the Administrator under paragraph (b) (9) of this section; any owner or operator who modifies an indirect source in violation of conditions imposed by the Administrator under paragraph (b) (10) of this section; or any owner or operator of an indirect source subject to this paragraph who commences construction or modification thereof after December 31, 1974, without applying for and receiving approval hereunder, shall be subject to the penalties specified under section 113 of the Act and shall be considered in violation of an emission standard or limitation under section 304 of the Act. Subsequent modification to an approved indirect source may be made without applying for permission pursuant to this paragraph only where such modification would not violate any condition imposed pursuant to paragraphs (b) (9) and (10) of this section and would not be subject to the modification criteria set forth in paragraph (b) (2) of this section.
- (12) Approval to construct or modify shall become invalid if construction or modification is not commenced within 24 months after receipt of such approval. The Administrator may extend such time period upon satisfactory showing that an extension is justified. The applicant may apply for such an extension at the time of initial application or at any time thereafter.
- (13) Approval to construct or modify shall not relieve any owner or operator of the responsibility to comply with the control strategy and all local, State and Federal regulations which are part of the applicable State implementation plan.

- (14) Where the Administrator delegates the responsibility for implementing the procedures for conducting indirect source review pursuant to this paragraph to any agency, other than a regional office of the Environmental Protection Agency, the following provisions shall apply:
  - (i) Where the agency designated is not an air pollution control agency, such agency shall consult the appropriate State or local air pollution control agency prior to making any determination required by paragraphs (b) (4), (5), or (6) of this section. Similarly, where the agency designated does not have continuing responsibilities for land use planning, such agency shall consult with the appropriate State or local land use and transportation planning agency prior to making any determination required by paragraph (b) (9) of this section.
  - (ii) The Administrator of the Environmental Protection Agency shall conduct the indirect source review pursuant to this paragraph for any indirect source owned or operated by the United States Government.
  - (iii) A copy of the notice required pursuant to paragraph (b)
     (8) (ii) (c) of this section shall be sent to the Administrator through the appropriate Regional Office.
- (15) In any area in which a "management of parking supply" regulation which has been promulgated by the Administrator is in effect, indirect sources which are subject to review under the terms of such a regulation shall not be required to seek review under this paragraph but instead shall be required to seek review pursuant to such management of parking supply regulation. For purposes of this paragraph, a "management of parking supply" regulation shall be any regulation promulgated by the Administrator as part of a transportation control plan pursuant to the Clean Air Act which requires that any new or modified facility containing a given number of parking spaces shall receive a permit or other prior approval, issuance of which is to be conditioned on air quality considerations.
- (16) Notwithstanding any of the foregoing provisions to the contrary, the operation of this paragraph is hereby suspended pending further notice. No facility which commences construction prior to the expiration of the sixth month after the operation of this paragraph is reinstated (as to that type of facility) shall be subject to this paragraph.
  - (37 FR 10846, May 31, 1972 as amended at 40 FR 28065, July 3, 1975; 40 FR 40160, Sept. 2, 1975)

## (17.0) 52.343 Prevention of Significant Deterioration

- (b) Definitions. For the purposes of this section:
  - (1) "Facility" means an identifiable piece of process equipment. A stationary source is composed of one or more pollutant-emitting facilities.
  - (2) The phrase "Administrator" means the Administrator of the Environmental Protection Agency or his designated representative.
  - (3) The phrase "Federal Land Manager" means the head, or his designated representative, of any Department or Agency of the Federal Government which administers federally-owned land, including public domain lands.
  - (4) The phrase "Indian Reservation" means any federally-recognized reservation established by Treaty, Agreement, Executive Order, or Act of Congress.
  - (5) The phrase "Indian Governing Body" means the governing body of any tribe, band, or group of Indians subject to the jurisdiction of the United States and recognized by the United States as possessing power of self-government.
  - (6) "Construction" means fabrication, erection or installation of a stationary source.
  - (7) "Commenced" means that an owner or operator has undertaken a continuous program of construction or modification or that an owner or operator has entered into a contractual obligation to undertake and complete, within a reasonable time, a continuous program of construction or modification.

### (c) Area designation and deterioration increment

(1) The provisions of this paragraph have been incorporated by reference into the applicable implementation plans for various States, as provided in Subparts B through DDD of this part. Where this paragraph is so incorporated, the provisions shall also be applicable to all lands owned by the Federal Government and Indian Reservations located in such State. The provisions of this paragraph do not apply in those counties or other functionally equivalent areas that pervasively exceeded any national ambient air quality standards during 1974 for sulfur dioxide or particulate matter and then only with respect to such pollutants. States may notify the Administrator at any time of those areas which exceeded the national standards during 1974 and therefore are exempt from the requirements of this paragraph.

(2) (i) For purposes of this paragraph, areas designated as Class I or II shall be limited to the following increases in pollutant concentration occurring since January 1, 1975:

Area	Des	ian	ati	ons
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Pollutant	Class I (ug/m <sup>3</sup> )	Class II (ug/m³)
Particulate matter: Annual geometric mean	5 10	10 30
Sulfur dioxide: Annual arithmetic mean	2 5 25	15 100 700

- (ii) For purposes of this paragraph, areas designated as Class III shall be limited to concentrations of particulate matter and sulfur dioxide no greater than the national ambient air quality standards.
- (iii) The air quality impact of sources granted approval to construct or modify prior to January 1, 1975 (pursuant to the approved new source review procedures in the plan) but not yet operating prior to January 1, 1975, shall not be counted against the air quality increments specified in paragraph (c) (2) (i) of this section.
- (3) (i) All areas are designated Class II as of the effective date of this paragraph. Redesignation may be proposed by the respective States, Federal Land Manager, or Indian Governing Bodies, as provided below, subject to approval by the Administrator.
  - (ii) The State may submit to the Administrator a proposal to redesignate areas of the State Class I, Class II, or Class III, provided that:
    - (a) At least one public hearing is held in or near the area affected and this public hearing is held in accordance with procedures established in 51.4 of this chapter, and
    - (b) Other States, Indian Governing Bodies, and Federal Land Managers whose lands may be affected by the proposed redesignation are notified at least 30 days prior to the public hearing, and

- (c) A discussion of the reasons for the proposed redesignation is available for public inspection at least 30 days prior to the hearing and the notice announcing the hearing contains appropriate notification of the availability of such discussion, and
- (d) The proposed redesignation is based on the record of the State's hearing, which must reflect the basis for the proposed redesignation, including consideration of (1) growth anticipated in the area, (2) the social, environmental, and economic effects of such redesignation upon the area being proposed for redesignation and upon other areas and States, and (3) any impacts of such proposed redesignation upon regional or national interests.
- (e) The redesignation is proposed after consultation with the elected leadership of local and other substate general purpose governments in the area covered by the proposed redesignation.
- (iii) Except as provided in paragraph (c) (3) (iv) of this section, a State in which lands owned by the Federal Government are located may submit to the Administrator a proposal to redesignate such lands Class I, Class II, or Class III in accordance with subdivision (ii) of this subparagraph provided that:
  - (a) The redesignation is consistent with adjacent State and privately owned land, and
  - (b) Such redesignation is proposed after consultation with the Federal Land Manager.
- (iv) Notwithstanding subdivision (iii) of this subparagraph, the Federal Land Manager may submit to the Administrator a proposal to redesignate any Federal lands to a more restrictive designation than would otherwise be applicable provided that:
  - (a) The Federal Land Manager follows procedures equivalent to those required of States under paragraph (c) (3) (ii) and,
  - (b) Such redesignation is proposed after consultation with the State(s) in which the Federal Land is located or which border the Federal Land.
- (v) Nothing in this section is intended to convey authority to the States over Indian Reservations where States have not assumed such authority under other laws nor is it intended to deny jurisdiction which States have assumed

under other laws. Where a State has not assumed jurisdiction over an Indian Reservation the appropriate Indian Governing Body may submit to the Administrator a proposal to redesignate areas Class I, Class II, or Class III, provided that:

- (a) The Indian Governing Body follows procedures equivalent to those required of States under paragraph
   (c) (3) (ii) and,
- (b) Such redesignation is proposed after consultation with the State(s) in which the Indian Reservation is located or which border the Indian Reservation and, for those lands held in trust, with the approval of the Secretary of the Interior.
- (vi) The Administrator shall approve, within 90 days, any redesignation proposed pursuant to this subparagraph as follows:
  - (a) Any redesignation proposed pursuant to subdivisions (ii) and (iii) of this subparagraph shall be approved unless the Administrator determines (1) that the requirements of subdivisions (ii) and (iii) of this subparagraph have not been complied with, (2) that the State has arbitrarily and capriciously disregarded relevant considerations set forth in subparagraph (3) (ii) (d) of this paragraph, or (3) that the State has not requested and received delegation of responsibility for carrying out the new source review requirements of paragraphs (d) and (e) of this section.
  - (b) Any redesignation proposed pursuant to subdivision (iv) of this subparagraph shall be approved unless he determines (1) that the requirements of subdivision (iv) of this subparagraph have not been complied with, or (2) that the Federal Land Manager has arbitrarily and capriciously disregarded relevant considerations set forth in subparagraph (3) (ii) (d) of this paragraph.
  - (c) Any redesignation submitted pursuant to subdivision (v) of this subparagraph shall be approved unless he determines (1) that the requirements of subdivision (v) of this subparagraph have not been complied with, or (2) that the Indian Governing Body has arbitrarily and capriciously disregarded relevant considerations set forth in subparagraph (3) (ii) (d) of this paragraph.

- (d) Any redesignation proposed pursuant to this paragraph shall be approved only after the Administrator has solicited written comments from affected Federal agencies and Indian Governing Bodies and from the public on the proposal.
- (e) Any proposed redesignation protested to the proposing State, Indian Governing Body, or Federal Land Manager and to the Administrator by another State or Indian Governing Body because of the effects upon such protesting State or Indian Reservation shall be approved by the Administrator only if he determines that in his judgment the redesignation appropriately balances considerations of growth anticipated in the area proposed to be redesignated; the social, environmental and economic effects of such redesignation upon the area being redesignated and upon other areas and States; and any impacts upon regional or national interests.
- (f) The requirements of paragraph (c) (3) (vi) (a) (3) that a State request and receive delegation of the new source review requirements of this section as a condition to approval of a proposed redesignation, shall include as a minimum receiving the administrative and technical functions of the new source review. The Administrator will carry out any required enforcement action in cases where the State does not have adequate legal authority to initiate such actions. The Administrator may waive the requirements of paragraph (c) (3) (vi) (a) (3) if the State Attorney-General has determined that the State cannot accept delegation of the administrative/technical functions.
- (vii) If the Administrator disapproves any proposed area designation under this subparagraph, the State, Federal Land Manager or Indian Governing Body, as appropriate, may resubmit the proposal after correcting the deficiencies noted by the Administrator or reconsidering any area designation determined by the Administrator to be arbitrary and capricious.

#### (d) Review of new sources

(1) The provisions of this paragraph have been incorporated by reference into the applicable implementation plans for various States, as provided in Subparts B through DDD of this part. Where this paragraph is so incorporated, the requirements of this paragraph apply to any new or modified stationary source of the type identified below which has not commenced construction or modification prior to June 1, 1975 except as specifically provided below. A

source which is modified, but does not increase the amount of sulfur oxides or particulate matter emitted, or is modified to utilize an alternative fuel, or higher sulfur content fuel, shall not be subject to this paragraph.

- (i) Fossil-Fuel Steam Electric Plants of more than 1000 million B.T.U. per hour heat input.
  - (ii) Coal Cleaning Plants.
  - (iii) Kraft Pulp Mills.
  - (iv) Portland Cement Plants.
  - (v) Primary Zinc Smelters.
  - (vi) Iron and Steel Mills.
  - (vii) Primary Aluminum Ore Reduction Plants.
  - (viii) Primary Copper Smelters.
  - (ix) Municipal Incinerators capable of charging more than 250 tons of refuse per 24 hour, day.
  - (x) Sulfuric Acid Plants.
  - ·(xi) Petroleum Refineries.
  - (xii) Lime Plants.
  - (xiii) Phosphate Rock Processing Plants.
  - (xiv) By-Product Coke Oven Batteries.
  - (xv) Sulfur Recovery Plants.
  - (xvi) Carbon Black Plants (furnace process).
  - (xvii) Primary Lead Smelters.
  - (xviii) Fuel Conversion Plants.
  - (xix) Ferroalloy production facilities commencing construction after October 5, 1975.
- (2) No owner or operator shall commence construction or modification of a source subject to this paragraph unless the Administrator determines that, on the basis of information submitted pursuant to subparagraph (3) of this paragraph:

- (i) The effect on air quality concentration of the source or modified source, in conjunction with the effects of growth and reduction in emissions after January 1, 1975, of other sources in the area affected by the proposed source, will not violate the air quality increments applicable in the area where the source will be located nor the air quality increments applicable in any other areas. The analysis of emissions growth and reduction after January 1, 1975, of other sources in the areas affected by the proposed source shall include all new and modified sources granted approval to construct pursuant to this paragraph; reduction in emissions from existing sources which contributed to air quality during all or part of 1974; and general commercial, residential, industrial, and other sources of emissions growth not exempted by paragraph (c) (2) (111) of this section which has occurred since January 1, 1975.
- (ii) The new or modified source will meet an emission limit, to be specified by the Administrator as a condition to approval, which represents that level of emission reduction which would be achieved by the application of best available control technology, as defined in 52.01 (f), for particulate matter and sulfur dioxide. If the Administrator determines that technological or economic limitations on the application of measurement methodology to a particular class of sources would make the imposition of an emission standard infeasible, he may instead prescribe a design or equipment standard requiring the application of best available control technology. Such standard shall to the degree possible set forth the emission reductions achievable by implementation of such design or equipment, and shall provide for compliance by means which achieve equivalent results.
- (iii) With respect to modified sources, the requirements of subparagraph (2) (ii) of this paragraph shall be applicable only to the facility or facilities from which emissions are increased.
- (3) In making the determinations required by paragraph (d) (2) of this section, the Administrator shall, as a minimum, require the owner or operator of the source subject to this paragraph to submit: site information, plans, description, specifications, and drawings showing the design of the source; information necessary to determine the impact that the construction or modification will have on sulfur dioxide and particulate matter air quality levels; and any other information necessary to determine that best available control technology will be applied. Upon request of the Administrator, the owner or operator of the source shall provide information on the nature and extent of general commercial, residential, industrial, and other growth which has occurred in the area affected by the source's emissions (such area to be specified by the

Administrator) since January 1, 1975.

- (4) (i) Where a new or modified source is located on Federal Lands, such source shall be subject to the procedures set forth in paragraphs (d) and (e) of this section. Such procedures shall be in addition to applicable procedures conducted by the Federal Land Manager for administration and protection of the affected Federal Lands. Where feasible, the Administrator will coordinate his review and hearings with the Federal Land Manager to avoid duplicate administrative procedures.
  - (ii) New or modified sources which are located on Indian Reservations shall be subject to procedures set forth in paragraphs (d) and (e) of this section. Such procedures shall be administered by the Administrator in cooperation with the Secretary of the Interior with respect to lands over which the State has not assumed jurisdiction under other laws.
  - (iii) Whenever any new or modified source is subject to action by a Federal Agency which might necessitate preparation of an environmental impact statement pursuant to the National Environmental Policy Act (42 U.S.C. 4321), review by the Administrator conducted pursuant to this paragraph shall be coordinated with the broad environmental reviews under that Act, to the maximum extent feasible and reasonable.
- (5) Where an owner or operator has applied for permission to construct or modify pursuant to this paragraph and the proposed source would be located in an area which has been proposed for redesignation to a more stringent class (or the State, Indian Governing Body, or Federal Land Manager has announced such consideration), approval shall not be granted until the Administrator has acted on the proposed redesignation.

# (e) Procedures for public participation

- (1) (i) Within 20 days after receipt of an application to construct, or any addition to such application, the Administrator shall advise the owner or operator of any deficiency in the information submitted in support of the application. In the event of such a deficiency, the date of receipt of the application for the purpose of paragraph (e) (1) (ii) of this section shall be the date on which all required information is received by the Administrator.
  - (ii) Within 30 days after receipt of a complete application, the Administrator shall:

- (a) Make a preliminary determination whether the source should be approved, approved with conditions, or disapproved.
- (b) Make available in at least one location in each region in which the proposed source would be constructed, a copy of all materials submitted by the owner or operator, a copy of the Administrator's preliminary determination and a copy or summary of other materials, if any, considered by the Administrator in making his preliminary determination; and
- (c) Notify the public, by prominent advertisement in newspaper of general circulation in each region in which the proposed source would be constructed, of the opportunity for written public comment on the information submitted by the owner or operator and the Administrator's preliminary determination on the approvability of the source.
- (iii) A copy of the notice required pursuant to this subparagraph shall be sent to the applicant and to officials and agencies having cognizance over the locations where the source will be situated as follows: State and local air pollution control agencies, the chief executive of the city and county; any comprehensive regional land use planning agency; and any State, Federal Land Manager or Indian Governing Body whose lands will be significantly affected by the source's emissions.
- (iv) Public comments submitted in writing within 30 days after the date such information is made available shall be considered by the Administrator in making his final decision on the application. No later than 10 days after the close of the public comment period, the applicant may submit a written response to any comments submitted by the public. The Administrator shall consider the applicant's response in making his final decision. All comments shall be made available for public inspection in at least one location in the region in which the source would be located.
- (v) The Administrator shall take final action on an application within 30 days after the close of the public comment period. The Administrator shall notify the applicant in writing of his approval, conditional approval, or denial of the application, and shall set forth his reasons for conditional approval or denial. Such notification shall be made available for public inspection in at least one location in the region in which the source would be located.

- (vi) The Administrator may extend each of the time periods specified in paragraph (e) (1) (ii), (iv), or (v) of this section by no more than 30 days or such other period as agreed to by the applicant and the Administrator.
- (2) Any owner or operator who constructs, modifies, or operates a stationary source not in accordance with the application, as approved and conditioned by the Administrator, or any owner or operator of a stationary source subject to this paragraph who commences construction or modification after June 1, 1975, without applying for and receiving approval hereunder, shall be subject to enforcement action under section 113 of the Act.
- (3) Approval to construct or modify shall become invalid if construction or expansion is not commenced within 18 months after receipt of such approval or if construction is discontinued for a period of 18 months or more. The Administrator may extend such time period upon a satisfactory showing that an extension is justified.
- (4) Approval to construct or modify shall not relieve any owner or operator of the responsibility to comply with the control strategy and all local, State, and Federal regulations which are part of the applicable State Implementation Plan.

## (f) Delegation of authority

- (1) The Administrator shall have the authority to delegate responsibility for implementing the procedures for conducting source review pursuant to paragraphs (d) and (e), in accordance with subparagraphs (2), (3), and (4) of this paragraph.
- (2) Where the Administrator delegates the responsibility for implementing the procedures for conducting source review pursuant to this section to any Agency, other than a regional office of the Environmental Protection Agency, the following provisions shall apply:
  - (i) Where the agency designated is not an air pollution control agency, such agency shall consult with the appropriate State and local air pollution control agency prior to making any determination required by paragraph (d) of this section. Similarly, where the agency designated does not have continuing responsibilities for managing land use, such agency shall consult with the appropriate State and local agency which is primarily responsible for managing land use prior to making any determination required by paragraph (d) of this section.
  - (ii) A copy of the notice pursuant to paragraph (e) (l) (ii)(c) of this section shall be sent to the Administrator through the appropriate regional office.

- (3) In accordance with Executive Order 11752, the Administrator's authority for implementing the procedures for conducting source review pursuant to this section shall not be delegated, other than to a regional office of the Environmental Protection Agency, for new or modified sources which are owned or operated by the Federal government or for new or modified sources located on Federal lands; except that, with respect to the latter category, where new or modified sources are constructed or operated on Federal lands pursuant to leasing or other Federal agreements, the Federal land Manager may at his discretion, to the extent permissible under applicable statutes and regulations, require the lessee or permittee to be subject to a designated State or local agency's procedures developed pursuant to paragraphs (d) and (e) of this section.
- (4) The Administrator's authority for implementing the procedures for conducting source review pursuant to this section shall not be redelegated, other than to a regional office of the Environmental Protection Agency, for new or modified sources which are located on Indian reservations except where the State has assumed jurisdiction over such land under other laws, in which case the Administrator may delegate his authority to the States in accordance with subparagraphs (2), (3), and (4) of this paragraph.

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