

Office of Research and Development



Diesel Exhaust

National Center For Environmental Assessment



Health Assessment Document for Diesel Exhaust PDF Version (70K) EPA/600/8-90/057E, July 2000, SAB Review Draft

ABSTRACT:

This revised draft assessment of the possible health hazards from human exposure to diesel exhaust emissions updates three earlier drafts (1999, 1998 and 1994) that were reviewed by the Clean Air Scientific Advisory Committee (CASAC) of the Agency's Science Advisory Board (SAB). The current draft assessment characterizes the possible human health hazards and related exposure-response aspects of those hazards related to environmental exposure to diesel exhaust. This draft assessment incorporates peer review comments provided by the CASAC in February 2000. The document will undergo another peer review by the CASAC in the Fall of 2000 and EPA will accept public comments. The details of the CASAC review and the public review and comment period will be announced in the Federal Register on approximately August 11.

Chapter 1 PDF Version (31K)	Chapter 2 PDF Version (1030K)
Chapter 3 PDF Version (329K)	Chapter 4 PDF Version (56K)
Chapter 5 PDF Version (441K)	Chapter 6 PDF Version (121K)
Chapter 7 PDF Version (926K)	Chapter 8 PDF Version (71K)
Chapter 9 PDF Version (137K)	
Appendix A PDF Version (268K)	Appendix B PDF Version (49K)
Appendix C PDF Version (268K)	Appendix D PDF Version (268K)

For further information, please contact the Technical Information Staff, National Center for Environmental Assessment-Washington Office, by phone (202-564-3261), fax (202-565-0050) or email (nceadc.comment@epa.gov)



Comments









ORD Home Page Home Page Home Page

ncea.webmaster@ epamail.epa.gov

Send Comments | Search | NCEA Home Page | ORD Home Page | EPA Home Page

1. EXECUTIVE SUMMARY

1.1. INTRODUCTION

The Health Assessment Document for Diesel Exhaust (DE) represents the Agency's first comprehensive review of the potential health effects from ambient exposure to exhaust from diesel engines. This assessment identifies and characterizes the potential human health hazards of DE (i.e., hazard assessment) and characterizes the related dose-response associated with the key health effects (i.e., dose-response assessment). This is part of the information needed for a complete risk assessment of DE in support of EPA's Clean Air Act regulatory programs. A full exposure assessment and risk characterization, the other two components of a complete risk assessment, are beyond the scope of this document.

The report has nine chapters (including this chapter) and four appendices. Chapter 2 provides a characterization of diesel emissions, atmospheric transformation, and human exposures to DE to provide a context for the hazard evaluation of DE. Chapters 3, 4, 5, and 7 provide a review of relevant information for the evaluation of potential health hazards of DE, including dosimetry (Chapter 3), mutagenicity (Chapter 4), other noncancer health effects (Chapter 5), and carcinogenicity (Chapter 7). Chapters 6 and 8 contain dose-response analyses to provide insight about the significance of the potential noncancer and cancer hazards, respectively. Chapter 9 characterizes the overall nature of the potential health hazard and risk from environmental exposure to DE and discusses the overall confidence and uncertainties of the assessment. Major conclusions of the health assessment for DE are provided below.

1.2. COMPOSITION OF DIESEL EXHAUST

DE is a complex mixture of hundreds of constituents in either a gas or particle phase. Gaseous components of DE include carbon dioxide, oxygen, nitrogen, water vapor, carbon monoxide, nitrogen compounds, sulfur compounds, and low-molecular-weight hydrocarbons. Among the gaseous components of DE that are of toxicologic relevance are the aldehydes (e.g., formaldehyde, acetaldehyde, acrolein), benzene, 1,3-butadiene, and polycyclic aromatic hydrocarbons (PAHs) and nitro-PAHs.

The particles present in DE (i.e., diesel particulate matter or DPM) are composed of elemental carbon, adsorbed organic compounds, and small amounts of sulfate, nitrate, metals, and other trace elements. DPM consists of fine and ultrafine particles. These particles are highly respirable and have a very large surface area, which make them an excellent carrier for adsorbed inorganic and organic compounds. The most toxicologically relevant organic compounds that are adsorbed onto the particles include PAHs, nitro-PAHs, and oxidized PAH derivatives. PAHs and

their derivatives comprise about 1% or less of the DPM mass. Many of the organic compounds present on the particle and in the gases are known to have mutagenic and carcinogenic properties.

1.3. DIESEL EMISSIONS

DE is emitted from "on-road" diesel engines (vehicle engines) or "nonroad" diesel engines (e.g., locomotives, marine vessels, heavy-duty equipment, etc). Nationwide, data in 1998 indicate that DE as measured by DPM made up about 6% of the total ambient PM_{2.5} inventory (i.e., particles with aerodynamic diameter of 2.5 microns or less) and about 23% of the inventory excluding natural and miscellaneous sources. Estimates of the DPM percentage of the total inventory in urban centers can be higher. For example, estimates range from 10% to 36% in some areas in California, Colorado, and Arizona. Available data indicate that over the years, there have been significant reductions in DPM emissions from the exhaust of on-road diesel engines, whereas very limited data suggest that exhaust emissions from nonroad engines have increased.

DE emissions vary significantly in chemical composition and particle sizes with different engine types (heavy-duty, light-duty), engine operating conditions (idle, accelerate, decelerate), and fuel formulations. The mass of particles emitted and the organics on the particles from onroad diesel engines have been reduced over the years. Available data indicate that toxicologically relevant organic components of DE (e.g., PAHs, nitro-PAHs) were present in DPM and DE emitted from older vehicle engines and are still present in emissions from newer engines. There is insufficient information, however, to characterize the changes in the composition of DPM from nonroad diesel engines over time.

1.4. ATMOSPHERIC TRANSFORMATION OF DIESEL EXHAUST

After emission from the tailpipe, DE undergoes dilution and chemical and physical transformations in the atmosphere, as well as dispersion and transport in the atmosphere. The atmospheric lifetime for some compounds present in DE ranges from hours to days. DPM is either directly emitted from diesel-powered engines (primary particulate matter) or is formed from the gaseous compounds emitted by diesel engines (secondary particulate matter). Limited information is available about the physical and chemical transformation of DE in the atmosphere. It is not clear what the overall toxicological consequence of DE aging is, because some compounds in the DE mixture are altered during aging to more toxic forms while others are made less toxic.

1.5. EXPOSURE TO DIESEL EXHAUST

DPM mass (expressed as µg/m³ of DPM) has historically been measured as a surrogate for whole DE. Although considerable uncertainty exists as to whether DPM is the most appropriate dosimeter for human health effects, it is considered a reasonable choice until more definitive information about the mechanisms or mode(s) of action of DE becomes available. In the ambient environment, exposure to DE comes from both on-road and nonroad engine exhaust. A large percentage of the U.S. population is exposed to ambient PM_{2.5}, of which DE is a part. Estimates suggest that nonroad sources of DE contribute as much to the nationwide PM inventory as do on-road DE sources. With limited information from actual measurements of DE, various types of models and assumptions are used to estimate human exposure to on-road generated DE as measured by DPM. Exposure information is useful to provide a context for the health effects information, and estimates for the early to mid-1990s suggest that annual average DE exposure from on-road engines alone was in the range of about 0.5 to close to 1.0 µg DPM/m³ of inhaled air in many rural and urban areas, respectively. For urban areas where people spend a large portion of their time outdoors, the exposures may range up to 4.0 µg DPM/m³ of inhaled air. Exposure estimates are adjusted to account for time spent outdoors. Exposures could be higher still, if there is a nonroad DE source that adds to the on-road-generated exposure.

18 19 20

21

22

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

1.6. HEALTH EFFECTS

Available evidence indicates that adverse human health effects may result from current-day environmental inhalation exposure to DE. DE exposure may cause acute and chronic noncancer respiratory effects and has the potential to cause lung cancer in humans.

232425

26

27

28

29

30

31

32

1.6.1. Acute Effects

Available information for characterizing potential health effects associated with acute or short-term exposure is limited. On the basis of available human and animal evidence, it is concluded that DE can cause acute irritation (e.g., eye, throat, bronchial irritation), neurophysiological symptoms (e.g., lightheadedness, nausea), and respiratory symptoms (cough and phlegm). There is also evidence for possible immunologic effects and/or exacerbation of allergenic responses to known allergens. The lack of exposure-response information precludes the development of recommendations about levels of exposure that would be protective for these effects.

33 34

1.6.2. Chronic Noncancer Respiratory Effects

The information in available human studies is inadequate for a definitive evaluation of possible noncancer health effects from chronic exposure to DE. However, on the basis of extensive animal evidence, DE may pose a chronic respiratory hazard to humans. Chronic animal inhalation studies show a spectrum of dose-dependent chronic inflammation and histopathological changes in the lung in several animal species including rats, mice, hamsters, and monkeys.

This assessment provides an estimate of an air-level exposure of DE (as measured by DPM) to which humans may be exposed throughout their lifetime without experiencing any untoward or adverse noncancer health effects. This exposure level, known as the reference concentration (RfC), for DE of $14 \,\mu\text{g/m}^3$ of DPM was derived on the basis of dose-response data from four chronic rat inhalation studies. This value is almost the same as the long-term PM_{2.5} NAAQS (National Ambient Air Quality Standard) of $15 \,\mu\text{g/m}^3$.

1.6.3. Carcinogenic Effects

1

2

3

4

5

6

7

8

9

10

11

12 13 14

15

16

17

18

19

20

21

22

23

24

25

26

27

28

29 30

31

32

33

34

35

36

This assessment concludes that DE is likely to be carcinogenic to humans by inhalation at any exposure condition. This characterization is based on the totality of evidence from human, animal, and other supporting studies. There is considerable evidence demonstrating an association between DE exposure and increased lung cancer risk among workers in different occupations. The human evidence is considered strong but less than sufficient to definitively conclude that DE exposure is causally associated with lung cancer, because of the possible confounding effects of smoking and the lack of actual DE exposure data for the workers. In addition to the human evidence, there is extensive evidence for the induction of lung cancer in the rat from chronic inhalation exposure to high concentrations of DE, and supporting evidence of carcinogenicity of DPM and associated organic compounds in rats and mice by noninhalation routes of exposure. Other supporting evidence includes the demonstrated mutagenic and chromosomal effects of DE and its organic constituents. There is also suggestive evidence for the bioavailability of the organics from DE in humans and animals. The precise role of DPM with its organic component in DE-induced carcinogenicity is unclear, although in high-exposure animal test systems, DPM and its elemental carbon core are shown to be the most important fraction of DE.

Although the available human evidence shows the hazard to be present at exposures generally higher than ambient levels, it is reasonable to presume that the hazard extends to ambient environmental exposure levels. Because of an incomplete understanding of the mode of action for DE-induced lung cancer in humans, and some evidence for a mutagenic mode of action, it is a prudent public health policy to presume a cancer hazard for DE at any exposure condition. This presumption pertains only to the carcinogenic hazard and does not inform about the

magnitude of the risk at ambient levels. Overall, the evidence for a potential cancer hazard to humans resulting from chronic inhalation exposure to DE is persuasive, even though assumptions and thus uncertainties are involved.

Given a carcinogenicity hazard, EPA typically performs a dose-response assessment of human or animal data to develop a cancer unit risk estimate that can be used with exposure information to characterize the potential cancer disease impact on an exposed population. For DE, the exposure-response data in rat studies are not deemed appropriate for the estimation of human risk. Exposure-response data in available human studies are considered too uncertain to derive a confident quantitative estimate of cancer unit risk. Therefore, EPA has chosen not to derive a quantitative estimate of cancer unit risk.

In the absence of a unit risk to assess environmental cancer risk, simple analyses are performed to provide a perspective of the range of the possible lung cancer risk from environmental exposure to DE. The analyses make use of epidemiologic findings of lung cancer risks from occupational exposures to DE, and consider the exposure margins between occupational and environmental exposures to DE. The magnitude of the possible lifetime cancer risk, based on the simple analyses, indicates the significance of the potential lung cancer hazard from ambient exposure to DE. These analyses, however, are subject to considerable uncertainties, and should not be viewed as a definitive quantitative characterization of risk.

1.7. SOURCES OF UNCERTAINTIES

Even though the overall evidence for potential human health effects of DE is persuasive, many uncertainties exist because of the use of assumptions to bridge data and knowledge gaps about human exposures to DE, and the underlying mechanisms by which DE causes observed toxicities in humans and animals. A major uncertainty of this assessment is how the physical and chemical nature of the past exposures to DE compares with present-day exposures, and how representative the DE exposure-response data are from occupational and toxicological studies for the characterization of possible hazard and risk from present-day environmental exposures. Available data are not sufficient to provide definitive answers to these questions, as changes in DE composition over time cannot be confidently quantified and the modes of action for DE toxicity and carcinogenicity are unknown in humans. Despite these uncertainties, this assessment assumes that prior-year toxicologic and epidemiologic findings can be applied to more current exposures, both of which use $\mu g/m^3$ of DPM mass as the dosimeter.

Other uncertainties include the assumptions that health effects observed at high dose may be applicable to low dose, and that toxicologic findings in laboratory animals are predictive of human responses. In the absence of more complete understanding of how DE may cause adverse health effects in humans and laboratory animals, the assumptions used in this assessment (i.e., a

biological threshold for chronic respiratory effects) and absence of a threshold for lung cancer are considered prudent and reasonable.

There is no DE-specific information that provides direct insight to the question of variable susceptibility within the general human population and vulnerable subgroups, including infants and children, and people with preexisting health conditions, particularly respiratory conditions. Despite these uncertainties, the default approach of using an uncertainty factor of 10 to account for possible interindividual variation to DE in the derivation of the RfC is appropriate and reasonable given the lack of DE-specific data.

In providing a perspective on the significance of the environmental cancer hazard of DE, this assessment considers the differences in the magnitude of DE exposures between the occupational and environmental settings. Variation in DE exposure is a source of uncertainty. Because of variation in activity patterns, different population subgroups could potentially receive higher or lower exposure to DE depending on their proximity to DE sources. Accordingly, DE exposure estimates used in this assessment have included possible high-end exposures.

Lastly, this assessment considers only potential heath effects from exposures to DE alone. DE exposure could be additive or synergistic to concurrent exposures to many other air pollutants. However, in the absence of more definitive data demonstrating interactive effects (e.g., potentiation of allergenicity effects, potentiation of DPM toxicity by ambient ozone and oxides of nitrogen) from combined exposures to DE and other pollutants, it is not possible to address this issue at this time. Further research is needed to improve the knowledge and database on DE exposures and potential human health effects, and thereby reduce uncertainties of future risk assessments of DE.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY WASHINGTON, D.C. 20460

JAN 4 1979

OFFICE OF AIR AND WASTE MANAGEMENT

SUBJECT: Guidance for Determining BACT Under PSD

FROM: David G. Hawkins, Assistant Administrator for Air, Noise, and Radiation

TO: Regional Administrators, I-X

The 1977 Clean Air Act amendments pertaining to the Prevention of Significant Deterioration (PSD) require that the determination of best available control technology (BACT) be performed on a case-by-case basis considering energy, environmental, and economic impacts and other costs. The enclosed document provides guidance to assist you in determining BACT in the PSD review. This document has been circulated in draft form and reviewed by your staff.

The purpose of the guideline is to provide the framework for a consistent approach in determining BACT. The guidance is rather general, focusing on the parameters which should be considered in the analysis supporting the proposed control system. Unfortunately, no specific criteria can be developed a priori, nor can quantitative factors relating to the weighting and evaluation of energy, environmental, and economic consideration be prescribed. However, consideration of the same set of parameters should contribute to more consistent decisions among the Regions.

I recognize that the case-by-case BACT determination is a difficult task and one which may be resource intensive. To minimize the resource requirements, the primary responsibility for defending the proposed control system must be placed on the source. The guidelines suggest a significant effort by the source to provide data and analysis to support a permit application. My office will continue to provide assistance for the engineering aspects of control technology selection through operation of the OAQPS new source review clearinghouse.

Enclosure

cc: Assistant Administrators and Office Directors
Director, Air and Hazardous Materials Division, Regions I - X
Director, Facilities Technology Division, Region II
Director, Enforcement Division, Regions I-X

The 2000 Florida Statutes

Title XXIX
PUBLIC HEALTH

Chapter 403
Environmental Control

View Entire Chapter

403.182 Local pollution control programs.--

- (1) Each county and municipality or any combination thereof may establish and administer a local pollution control program if it complies with this act. Local pollution control programs in existence on the effective date of this act shall not be ousted of jurisdiction if such local program complies with this act. All local pollution control programs, whether established before or after the effective date of this act, must:
- (a) Be approved by the department as adequate to meet the requirements of this act and any applicable rules and regulations pursuant thereto.
- (b) Provide by ordinance, regulation, or local law for requirements compatible with, or stricter or more extensive than those imposed by this act and regulations issued thereunder.
- (c) Provide for the enforcement of such requirements by appropriate administrative and judicial process.
- (d) Provide for administrative organization, staff, financial and other resources necessary to effectively and efficiently carry out its program.
- (2) The department shall have the exclusive authority and power to require and issue permits; provided, however, that the department may delegate its power and authority to local pollution control organizations if the department finds it necessary or desirable to do so.
- (3) If the department finds that the location, character or extent of particular concentrations of population, contaminant sources, the geographic, topographic or meteorological considerations, or any combinations thereof, are such as to make impracticable the maintenance of appropriate levels of air and water quality without an areawide pollution control program, the department may determine the boundaries within which such program is necessary and require it as the only acceptable alternative to direct state administration.
- (4)(a) If the department has reason to believe that a pollution control program in force pursuant to this section is inadequate to prevent and control pollution in the jurisdiction to which such program relates, or that such program is being administered in a manner inconsistent with the requirements of this act, it shall proceed to determine the matter.
- (b) If the department determines that such program is inadequate to prevent and control pollution in the municipality or county or municipalities or counties to which such program relates, or that such program is not accomplishing the purposes of this act, it shall require that necessary corrective measures be taken within a reasonable period of time, not to exceed 90 days.
- (c) If the municipality, county, or municipalities or counties fail to take such necessary corrective action within the time required, the department shall administer within such municipality, county, or municipalities or counties all of the regulatory provisions of this act. Such pollution control program shall supersede all municipal or county pollution laws, regulations, ordinances and requirements in the affected jurisdiction.
- (d) If the department finds that the control of a particular class of contaminant source because of http://www.leg.state.fl.us/statutes/index.cfm?App_mode=Display_Statute&Search_String=&URL=Ch0403/S 7/2/2001

(a) "National Ambient Air Quality Standard" means an ambient standard established by EPA and specified at 40 C.F.R. Part 50, adopted and incorporated by reference in Rule 62-204.800, F.A.C.

(b) "Primary Standard" means an ambient standard established to protect public health.

(c) "Secondary Standard" means an ambient standard established to protect the public welfare including the protection of animal and plant life, property, visibility and atmospheric clarity, and the enjoyment of life and property.

(d) "State Ambient Air Quality Standard" means an ambient standard established or adopted by the Department.

- (6) "Baseline Area" The area (and every part thereof) designated as a prevention of significant deterioration (PSD) area under Rule 62-204.360, F.A.C., in which the facility or modification establishing the minor source baseline date would construct or in which the emissions of the facility (or the significant net increase in emissions for a modification) would have a predicted air quality impact equal to or greater than one microgram per cubic meter (annual average) of the pollutant for which the minor source baseline date is established.
- (7) "Baseline Concentration" The ambient concentration level, or set of levels, that is predicted to occur at each point within a baseline area for conditions existing at the time of the applicable minor source baseline date. The concentration is comprised of the predicted impact of the baseline emissions using an appropriate air quality model and meteorological data that are generally representative of the baseline area, plus a representative background concentration. A baseline concentration is determined for each pollutant for which a minor source baseline date is established and for each averaging time for which a maximum allowable increase is established in Rule 62-204.260, F.A.C.

(a) For the annual average, the baseline concentration is the average concentration that is predicted to occur at each point within the area for each calendar year modeled.

(b) For shorter term averages, the baseline concentration is the set of all such short-term concentrations predicted to occur at each point within the area for each calendar year modeled.

(8) "Cause or Contribute" – With respect to a violation of an ambient air quality standard, to have a significant impact on the ambient air concentration of a pollutant at any locality that does not or would not meet the applicable standard.

(9) "Clean Air Act (CAA)" or "Act" - The Federal Clean Air Act (42 U.S.C. s. 7401 et seq.)

- (10) "Construction" The act of performing on-site fabrication, erection, installation or modification of an emissions unit or facility of a permanent nature, including installation of foundations or building supports; laying of underground pipe work or electrical conduit; and fabrication or installation of permanent storage structures, component parts of an emissions unit or facility, associated support equipment, or utility connections. Land clearing and other site preparation activities are not a part of the construction activities.
 - (11) "Department" The State of Florida Department of Environmental Protection.

(12) "Emission" - The discharge or release into the atmosphere of one or more air pollutants.

- (13) "Emission Limiting Standard" or "Emission Standard" or "Emission Limitation" or "Performance Standard" Any restriction established in or pursuant to a regulation adopted by the Department which limits the quantity, rate, concentration or opacity of any pollutant released, allowed to escape or emitted, whether intentionally or unintentionally, into the atmosphere, including any restriction which prescribes equipment, sets fuel specifications, or prescribes operation or maintenance procedures for an emissions unit to assure emission reduction or control.
 - (14) "Emissions Unit" Any part or activity of a facility that emits or has the potential to emit any air pollutant.

(15) "Environmental Protection Agency" or "EPA" - The United States Environmental Protection Agency.

- (16) "Facility" All of the emissions units which are located on one or more contiguous or adjacent properties and which are under the control of the same person (or persons under common control).
- (17) "Federal Land Manager" With respect to any lands in the United States, the Secretary of the department with authority over such lands.
- (18) "Indian Governing Body" 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.
- (19) "Indian Reservation" Any federally recognized reservation established by Treaty, Agreement, Executive Order, or Act of Congress.
- (20) "Major Source Baseline Date" Pursuant to 40 C.F.R. 51.166(b)(14)(i), adopted and incorporated by reference in Rule 62-204.800, F.A.C.;

(a) In the case of particulate matter and sulfur dioxide, January 6, 1975; and

(b) In the case of nitrogen dioxide, February 8, 1988.

(21) "Marginal Nonattainment Area for Ozone" – The lowest category of five classifications of nonattainment for the air pollutant ozone as defined in the Clean Air Act (42 U.S.C. s. 7511).

(22) "Minor Source Baseline Date" – Pursuant to 40 C.F.R. 51.166(b)(14)(ii), adopted and incorporated by reference in Rule 62-204.800, F.A.C., the minor source baseline date for each pollutant for which maximum allowable increases have been established under Rule 62-204.260, F.A.C., is the earliest date after August 7, 1977, for particulate matter and sulfur dioxide, and February 8, 1988, for nitrogen dioxide, that a facility or a modification subject to preconstruction review under 40 C.F.R. 52.21, Rule 17-2.500, F.A.C. (transferred), or Rule 62-212.400, F.A.C., submits a complete application for permit under such regulations provided that:

- (a) On the date the complete application is filed, the area in which the facility or modification would be constructed is designated as attainment or unclassifiable for the applicable pollutant under 42 U.S.C. Section 7407(d)(1) of the Clean Air Act (if the application is filed under 40 C.F.R. 52.21), or as a PSD area under Rule 17-2.450 (transferred), 62-275.700 (repealed) or 62-204.360, F.A.C., (if the application is filed under Rule 17-2.500 (transferred) or 62-212.400, F.A.C.); and
- (b) In the case of a facility, the emissions of the applicable pollutant would be equal to or greater than the significant emission rate in Chapter 62-212, F.A.C., Table 212.400-2, or, in the case of modification, there would be a significant net emissions increase of the pollutant.
- (23) "Moderate Nonattainment Area for Ozone" The second-lowest category of five classifications of nonattainment for the air pollutant ozone as defined in the Clean Air Act (42 U.S.C. s. 7511).

(24) "Modification" – Either (a) or (b), as follows:

- (a) Any physical change in, change in the method of operation of, or addition to a facility which would result in an increase in the actual emissions of any air pollutant subject to regulation under the Act, including any not previously emitted, from any emissions unit or facility.
 - 1. A physical change or change in the method of operation shall not include:
 - a. Routine maintenance, repair, or replacement of component parts of an emissions unit; or

b. A change in ownership of an emissions unit or facility.

- 2. For any pollutant that is specifically regulated by the EPA under the Clean Air Act, a change in the method of operation shall not include an increase in the hours of operation or in the production rate, unless such change would be prohibited under any federally enforceable permit condition which was established after January 6, 1975.
- 3. For any pollutant that is not specifically regulated by the EPA under the Clean Air Act, a change in the method of operation shall not include an increase in the hours of operation or in the production rate, unless such change would exceed any restriction on hours of operation or production rate included in any applicable Department air construction or air operation permit.

(b) Any change which would be defined as a modification under;

- 1, 40 C.F.R. 60.2;
- 2. 40 C.F.R. 61.15;
- 3, 40 C.F.R. 52.01; or
- 4. 42 U.S.C. s. 7412(a).
- (25) "Nonattainment Area" Any area not meeting ambient air quality standards and designated as a nonattainment area under Rule 62-204.340, F.A.C. Such an area may be designated as a particulate, sulfur dioxide, nitrogen dioxide, carbon monoxide, lead or ozone nonattainment area, depending on which ambient standard has been violated. An area may be designated as nonattainment for more than one air pollutant. Ozone nonattainment areas may be transitional, marginal, moderate, serious, severe, or extreme as classified in Rule 62-204.340, F.A.C.
 - (26) "Particulate Matter"
- (a) With respect to concentrations in the atmosphere, particulate matter means any airborne finely divided solid or liquid material.
- (b) With respect to emissions, particulate matter means all finely divided solid or liquid material, other than uncombined water, emitted to the atmosphere as measured by applicable reference methods, or an equivalent or alternative method, specified in 40 C.F.R. Part 60, Appendix A, adopted and incorporated by reference in Rule 62-204.800, F.A.C.
 - (27) "PM₁₀"
- (a) With respect to concentrations in the atmosphere, PM₁₀ means particulate matter with an aerodynamic diameter less than or equal to a nominal 10 micrometers as measured by a reference method based on 40 C.F.R. Part 50, Appendix J, adopted and incorporated by reference in Rule 62-204.800, F.A.C., and designated in accordance with 40 C.F.R. Part 53 or by an equivalent method designated in accordance with 40 C.F.R. Part 53, adopted and incorporated by reference in Rule 62-204.800, F.A.C.
- (b) With respect to emissions, PM₁₀ means finely divided solid or liquid material, with an aerodynamic diameter less than or equal to a nominal 10 micrometers emitted to the atmosphere as measured by an applicable reference method or by an equivalent or alternative method specified in 40 C.F.R. Part 60, adopted and incorporated by reference in Rule 62-204.800, F.A.C.
- (28) "Redesignation of an Area" A change in the designation or a redefinition of the boundaries of an area for any of the designations listed under Rule 62-204.340 or 62-204.360, F.A.C.
- (29) "Significant Impact" An impact of emissions on ambient air quality in excess of any of the following pollutant-specific concentration values:
 - (a) Sulfur Dioxide.
 - 1. Maximum three-hour concentration not to be exceeded more than once per year 25.0 micrograms per cubic meter.
- 2. Maximum 24-hour concentration not to be exceeded more than once per year 1.0 microgram per cubic meter for Class I areas; 5.0 micrograms per cubic meter for all other areas.
 - 3. Annual arithmetic mean 1.0 microgram per cubic meter.
 - (b) PM₁₀.
- 1. Maximum 24-hour concentration not to be exceeded more than once per year -- 1.0 microgram per cubic meter for Class I areas; 5.0 micrograms per cubic meter for all other areas.

- 2. Annual arithmetic mean 1.0 microgram per cubic meter.
- (c) Nitrogen Dioxide. Annual arithmetic mean 1.0 microgram per cubic meter.
- (d) Carbon Monoxide.
- 1. Maximum one-hour concentration not to be exceeded more than once per year 2.0 milligrams per cubic meter.
- 2. Maximum eight-hour concentration not to be exceeded more than once per year 0.5 milligram per cubic meter.
- (e) Lead. Maximum quarterly arithmetic mean 0.03 microgram per cubic meter.
- (30) "State Implementation Plan (SIP)" or "Implementation Plan" The EPA approved plan which Section 110 of the Clean Air Act requires a state to submit to the Administrator. The State Implementation Plan for the State of Florida, as approved by the U.S. Environmental Protection Agency, is identified in 40 C.F.R. Part 52, Subpart K, adopted and incorporated by reference in Rule 62-204.800, F.A.C.

Specific Authority 403.061, 403.8055 FS. Law Implemented 403.021, 403.031, 403.061, 403.8055 FS. History-New 11-30-94, Amended 3-13-96.

62-204.220 Ambient Air Quality Protection.

- (1) Except as provided in Rule 62-212.500, F.A.C., Preconstruction Review for Nonattainment Areas, or in the Reasonably Available Control Technology rules of Chapter 62-296, F.A.C., the Department shall not issue an air permit authorizing a person to build, erect, construct, or implant any new emissions unit; operate, modify, or rebuild any existing emissions unit; or by any other means release or take action which would result in the release of an air pollutant into the atmosphere which would cause or contribute to a violation of an ambient air quality standard established under Rule 62-204.240, F.A.C.
- (2) Except as provided in Rule 62-212.400, F.A.C., Prevention of Significant Deterioration (PSD), the Department shall not issue an air permit authorizing the construction or modification of any emissions unit or facility that would cause or contribute to an ambient concentration at any point within a baseline area that exceeds either the appropriate baseline concentration for the point plus the appropriate maximum allowable increase or the appropriate ambient air quality standard, whichever is less.
- (3) Ambient air quality monitors used to establish a violation of an ambient air quality standard shall meet the requirements of 40 C.F.R. Part 58, adopted and incorporated by reference in Rule 62-204.800, F.A.C.
- (4) For any provision of the air pollution rules of the Department which requires that an estimate of concentrations of pollutants in the ambient air be made, the estimates shall be based on the applicable air quality models, data bases, and other requirements approved by the Department and specified in 40 C.F.R. Part 51, Appendix W Guideline on Air Quality Models (Revised), adopted and incorporated by reference in Rule 62-204.800, F.A.C.

Specific Authority 403.061 FS. Law Implemented 403.021, 403.031, 403.061, 403.087 FS. History-New 3-13-96.

62-204.240 Ambient Air Quality Standards.

- (1) Sulfur Dioxide.
- (a) Maximum three hour concentration not to be exceeded more than once per year 1300 micrograms per cubic meter (0.5 ppm).
 - (b) Maximum 24-hour concentration not to be exceeded more than once per year 260 micrograms per cubic meter (0.1 ppm).
 - (c) Annual arithmetic mean 60 micrograms per cubic meter (0.02 ppm).
 - (2) PM₁₀.
- (a) 24-hour average concentration not to be exceeded more than once per year, as determined in accordance with 40 C.F.R. Part 50, Appendix K, adopted and incorporated by reference in Rule 62-204.800, F.A.C. 150 micrograms per cubic meter.
- (b) Expected annual arithmetic mean concentration as determined in accordance with 40 C.F.R. Part 50 Appendix K 50 micrograms per cubic meter.
 - (3) Carbon Monoxide.
- (a) Maximum one hour concentration not to be exceeded more than once per year 35 parts per million (40 milligrams per cubic meter).
- (b) Maximum eight hour concentration not to be exceeded more than once per year 9 parts per million (10 milligrams per cubic meter).
- (4) Ozone. Daily maximum one hour concentration, not to be exceeded an average of more than one day per year 0.12 parts per million (235 micrograms per cubic meter).
- (a) Exceedances. An exceedance will occur for any calendar day when the maximum hourly average concentration for that day exceeds the standard. A day with more than one hourly value exceeding the standard shall count as a single exceedance.
- (b) Determination of Compliance with Standard. At the end of each calendar year, the number of days with maximum hourly concentrations above 0.12 ppm shall be determined as specified in subparagraph 62-204.220(4)(a)3., F.A.C., below, and that number averaged with the results of the immediately preceding two year's data. As long as this average remains less than or equal to 1.0, the site is in compliance.
- (c) Estimating the Number of Exceedances per Year. When a valid daily maximum hourly average value is not available for each day of the year, the following method shall be used to account for those missing values when determining the number of exceedances for a particular calendar year. If a site has two or more observed exceedances each year, the standard is not met and no requirement exists to account for the missing values in accordance with this paragraph. The term "missing values" means all days

that do not have an associated ozone measurement. A daily maximum ozone value is the highest hourly ozone value recorded for that day. This daily maximum is considered to be valid if 75 percent of the hours from 9:01 A.M. to 9:00 P.M. (LST) were measured or if the highest hourly value is greater than the level of the standard. A missing daily maximum ozone value may be assumed to be less than the level of the standard if the valid daily maxima on both the preceding day and the following day do not exceed 75 percent of the level of the standard (0.09 ppm in this case). No assumption can be made if more than one consecutive day's data are missing. The following equation shall be used to estimate the number of exceedances for the year:

e = v + (v/n) (N - n - z); where:

e = the estimated number of exceedances for the year;

v = the number of daily values above the standard;

n = the number of valid daily maxima;

N = the number of days in the year; and

z = the number of days assumed to be less than the standard level.

This estimated number of exceedances shall be rounded to one decimal place (fractional part equal to or greater than 0.05 rounds up).

(5) Nitrogen Dioxide. Annual arithmetic mean - 100 micrograms per cubic meter (0.05 ppm).

(6) Lead. Maximum quarterly arithmetic - 1.5 Micrograms per cubic meter.

Specific Authority 403.061 FS. Law Implemented 403.021, 403.031, 403.061, 403.087 FS. History-New 3-13-96.

62-204.260 Prevention of Significant Deterioration Increments.

At each point within the baseline area, any increase in pollutant concentration over the baseline concentration shall be limited to the applicable amount, pursuant to 40 C.F.R. 51.166(c), adopted and incorporated by reference in Rule 62-214.800, F.A.C., and as set forth below. For any averaging period other than the annual period, the increase in pollutant concentration over the baseline concentration shall be determined for each period comprising the set of baseline concentrations for each point within the area for each calendar year modeled; furthermore, the applicable maximum allowable increase may be exceeded during one such period per year at each point.

- (1) Class I Area Increments.
- (a) Particulate Matter.
- 1. PM₁₀, Annual arithmetic mean 4 micrograms per cubic meter.
- 2. PM₁₈, Twenty-four hour maximum 8 micrograms per cubic meter.
- (b) Sulfur Dioxide.
- 1. Annual arithmetic mean 2 micrograms per cubic meter.
- 2. Twenty-four hour maximum 5 micrograms per cubic meter.
- 3. Three hour maximum 25 micrograms per cubic meter.
- (c) Nitrogen Dioxide. Annual arithmetic mean 2.5 micrograms per cubic meter.
- (2) Class II Area Increments.
- (a) Particulate Matter.
- 1. PM₁₀, Annual arithmetic mean 17 micrograms per cubic meter.
- 2. PM₁₀, Twenty-four hour maximum 30 micrograms per cubic meter.
- (b) Sulfur Dioxide.
- 1. Annual arithmetic mean 20 micrograms per cubic meter.
- 2. Twenty-four hour maximum 91 micrograms per cubic meter.
- 3. Three-hour maximum 512 micrograms per cubic meter.
- (c) Nitrogen Dioxide. Annual arithmetic mean 25 micrograms per cubic meter.
- (3) Class III Area Increments.
- (a) Particulate Matter.
- 1. PM₁₀, Annual arithmetic mean 34 micrograms per cubic meter.
- 2. PM₁₀, Twenty-four hour maximum 60 micrograms per cubic meter.
- (b) Sulfur Dioxide.
- 1. Annual arithmetic mean 40 micrograms per cubic meter.
- 2. Twenty-four hour maximum 182 micrograms per cubic meter.
- 3. Three hour maximum 700 micrograms per cubic meter.
- (c) Nitrogen Dioxide. Annual arithmetic mean 50 micrograms per cubic meter.

Specific Authority 403.061 FS. Law Implemented 403.021, 403.031, 403.061, 403.087 FS. History-New 3-13-96.

62-204.320 Procedures for Designation and Redesignation of Areas.

(1) General.

- 4. The Southwest corner of Pasco County.
- (c) All of the state except those areas designated as nonattainment under Rule 62-204.340, F.A.C., is designated as unclassifiable for the air pollutant lead.
 - (4) Designation of Air Quality Maintenance Areas.
 - (a) Each of the following areas is designated as an air quality maintenance area for the air pollutant ozone:
 - 1. Orange County.
 - 2. Duval County.
 - 3. The area consisting of Broward, Dade, and Palm Beach Counties.
 - 4. The area consisting of Hillsborough and Pinellas Counties.
 - (b) Each of the following areas is designated as an air quality maintenance area for the air pollutant, particulate matter:
- 1. That portion of Hillsborough County which falls within the area of the circle having a centerpoint at the intersection of U. S. 41 South and State Road 60 and a radius of 12 kilometers.
- 2. The downtown Jacksonville area in Duval County located within the following boundary lines: south and then west along the St. Johns River from its confluence with Long Branch Creek, to Main Street; north along Main Street to Eighth Street; east along Eighth Street to Evergreen Avenue; north along Evergreen Avenue to Long Branch Creek; and east along Long Branch Creek to the St. Johns River.
- (c) Effective January 1, 1996, the area encompassed within a radius of five kilometers centered at UTM coordinates: 364.0 kilometers East, 3093.5 kilometers North, zone 17, in Hillsborough County, is designated as an air quality maintenance area for the air pollutant lead.
- (d) As soon as practicable after notice of redesignation is published by the U. S. Environmental Protection Agency in the Federal Register, the Department shall publish notice of the effective date of redesignation in the Florida Administrative Weekly and a newspaper of general circulation in each county affected by the redesignation.

Specific Authority 403.061 FS. Law Implemented 403.021, 403.031, 403.061, 403.087 FS. History-New 3-13-96.

62-204.360 Designation of Prevention of Significant Deterioration Areas.

- (1) The following areas are designated as PSD areas for the air pollutant particulate matter:
- (a) All of the state except those areas designated under paragraph 62-204.360(1)(b), F.A.C., below. The particulate matter minor source baseline date established for this area is December 27, 1977.
 - (b) No other areas of the state.
 - (2) The following areas are designated as PSD areas for the air pollutant sulfur dioxide:
- (a) All of the state except those areas designated nonattainment under paragraph 62-204.340(2), F.A.C., and those areas designated under paragraph 62-204.360(2)(b), F.A.C., below. The sulfur dioxide minor source baseline date established for this area is December 27, 1977.
 - (b) No other areas of the state.
 - (3) The following areas are designated as PSD areas for the air pollutant nitrogen dioxide:
- (a) All of the state except those areas designated under paragraph 62-204.360(3)(b), F.A.C., below. The nitrogen dioxide minor source baseline date established for this area is March 28, 1988.
 - (b) No other areas of the state.
 - (4) All areas of the state shall be classified as Class I, Class II, or Class III.
- (a) Class II Areas. All areas of the state are designated Class II except for those areas specified in paragraph 62-204.360(4)(b), F.A.C., below.
 - (b) Class I Areas. The following areas are designated as Class I areas and shall not be reclassified.
 - 1. Everglades National Park.
 - 2. Chassahowitzka National Wilderness Area.
 - 3. St. Marks National Wilderness Area.
 - 4. Bradwell Bay National Wilderness Area.
 - (5) Federally designated Class I Areas outside of Florida but within 100 kilometers of the state are as follows:
 - (a) Okefenokee National Wilderness Area.
 - (b) Wolf Island National Wilderness Area.

Specific Authority 403.061 FS. Law Implemented 403.021, 403.031, 403.061, 403.087 FS. History-New 3-13-96.

62-204.400 Public Notice and Hearing Requirements for State Implementation Plan Revisions.

- (1) The Department shall hold a public hearing prior to adoption of any proposed revision to the Florida State Implementation Plan (SIP).
- (a) In addition to the notice required by Section 120.54, F.S., for rulemaking, the Department shall publish notice of the hearing by prominent advertisement in a newspaper of general circulation in each air quality control region affected at least 30 days prior to the hearing. The notice shall specify the date, time, and place of the hearing and state that a copy of the proposed SIP revision is available for public inspection in each affected region.

- 7. 40 CFR 50 Appendix G, Reference Method for the Determination of Lead in Suspended Particulate Matter Collected from Ambient Air.
 - 8. 40 CFR 50 Appendix H, Interpretation of the National Ambient Air Quality Standards for Ozone.
 - 9. (Reserved).
 - 10. 40 CFR 50 Appendix J, Reference Method for the Determination of Particulate Matter as PM₁₀ in the Atmosphere.
 - 11. 40 CFR 50 Appendix K, Interpretation of the National Ambient Air Quality Standards for Particulate Matter.
- (2) Chapter 40, Code of Federal Regulations, Part 51, Requirements for Preparation, Adoption, and Submittal of Implementation Plans.
- (a) The following subparts of 40 CFR Part 51, revised as of July 1, 1996, or later as specifically indicated, are adopted and incorporated by reference:
 - 1. 40 CFR 51, Subpart 1, Review of New Sources and Modifications.
 - 2. 40 CFR 51, Subpart P, Protection of Visibility.
- 3. 40 CFR 51, Subpart T, Conformity to State or Federal Implementation Plans of Transportation Plans, Programs, and Projects Developed, Funded, or Approved Under Title 23 U.S.C. or the Federal Transit Laws, amended August 15, 1997, 62 FR 43780.
 - 4. 40 CFR 51, Subpart W, Determining Conformity of General Federal Actions to State or Federal Implementation Plans.
- (b) The following appendices of 40 CFR Part 51, revised as of July 1, 1996, or later as specifically indicated, are adopted and incorporated by reference:
- 1. 40 CFR 51, Appendix M, Recommended Test Methods for State Implementation Plans, amended June 16, 1997, 62 FR 32500.
 - 2. 40 CFR 51, Appendix P, Minimum Emission Monitoring Requirements.
 - 3. 40 CFR 51, Appendix W, Guideline on Air Quality Models (Revised), amended August 12, 1996, 61 FR 41838.
- (3) Chapter 40, Code of Federal Regulations, Part 52, Approval and Promulgation of Implementation Plans. The provisions of 40 CFR Part 52, Subpart K, revised as of July 1, 1996, are adopted and incorporated by reference.
 - (4) Chapter 40, Code of Federal Regulations, Part 53, Ambient Air Monitoring Reference and Equivalent Methods.
 - (a) The following subparts of 40 CFR Part 53, revised as of July 1, 1996, are adopted and incorporated by reference:
 - 1. 40 CFR 53, Subpart A, General Provisions.
- 2. 40 CFR 53, Subpart B, Procedures for Testing Performance Characteristics of Automated Methods for SO₂, CO, O₃, and NO₂.
 - 3. 40 CFR 53, Subpart C, Procedures for Determining Comparability Between Candidate Methods and Reference Methods.
 - 4. 40 CFR 53, Subpart D, Procedures for Testing Performance Characteristics of Methods for PM10.
- (5) Chapter 40, Code of Federal Regulations, Part 55, Outer Continental Shelf Air Regulations. The provisions of 40 CFR Part 55, Sections 55.1 through 55.15, revised as of July 1, 1996, are adopted and incorporated by reference.
 - (6) Chapter 40, Code of Federal Regulations, Part 58, Ambient Air Quality Surveillance.
 - (a) The following subparts of 40 CFR Part 58, revised as of July 1, 1996, are adopted and incorporated by reference:
 - 1. 40 CFR 58, Subpart A, General Provisions.
 - 2. 40 CFR 58, Subpart B, Monitoring Criteria.
 - 3. 40 CFR 58, Subpart C, State and Local Air Monitoring Stations (SLAMS).
 - 4. 40 CFR 58, Subpart D, National Air Monitoring Stations (NAMS).
 - 5. 40 CFR 58, Subpart E, Photochemical Assessment Monitoring Stations (PAMS).
 - 6. 40 CFR 58, Subpart F, Air Quality Index Reporting.
- (b) The following appendices of 40 CFR Part 58, revised as of July 1, 1996, or later as specifically indicated, are adopted and incorporated by reference;
 - 1. 40 CFR 58, Appendix A, Quality Assurance Requirements for State and Local Air Monitoring Stations (SLAMS).
- 2. 40 CFR 58, Appendix B, Quality Assurance Requirements for Prevention of Significant Deterioration (PSD) Air Monitoring.
 - 3. 40 CFR 58, Appendix C, Ambient Air Quality Monitoring Methodology.
- 4. 40 CFR 58, Appendix D, Network Design for State and Local Air Monitoring Stations (SLAMS), National Air Monitoring Stations (NAMS), and Photochemical Assessment Monitoring Stations (PAMS).
 - 5. 40 CFR 58, Appendix E, Probe Siting Criteria for Ambient Air Quality Monitoring.
 - 6. 40 CFR 58, Appendix F, Annual SLAMS Air Quality Information.
 - 7. 40 CFR 58, Appendix G, Uniform Air Quality Index and Daily Reporting.
 - (7) Chapter 40, Code of Federal Regulations, Part 60, Standards of Performance for New Stationary Sources.
- (a) Definitions. For the purposes of subsection 62-204.800(7), F.A.C., the definitions contained in the various provisions of 40 CFR Part 60 adopted herein shall apply, except that the term "Administrator," when used in any provision of 40 CFR Part 60 that is delegated to the Department by the U.S. Environmental Protection Agency, shall mean the Secretary or the Secretary's designee.
- (b) Standards Adopted. The following Standards of Performance for New Stationary Sources contained in 40 CFR Part 60, revised as of July 1, 1996, or later as specifically indicated, are adopted and incorporated by reference:

1. 40 CFR 60, Subpart D, Fossil-Fuel-Fired Steam Generators for Which Construction is Commenced After August 17, 1971; amended February 12, 1999, 64 FR 7458 (effective July 1, 1999); amended October 17, 2000, at 65 FR 61744.

2. 40 CFR 60, Subpart Da, Electric Utility Steam Generators for Which Construction is Commenced After September 18, 1978; amended September 16, 1998, 63 FR 49442 (effective April 1, 1999); amended February 12, 1999, 64 FR 7458 (effective July 1, 1999); amended October 17, 2000, at 65 FR 61744; amended April 10, 2001, at 66 FR 18546; amended June 11, 2001, at 66 FR 31177; except that the Secretary is not the Administrator for purposes of 40 CFR 60.45a.

3. 40 CFR 60, Subpart Db, Industrial-Commercial-Institutional Steam Generating Units; amended September 16, 1998, 63 FR 49442 (effective April 1, 1999); amended February 12, 1999, 64 FR 7458 (effective July 1, 1999); amended March 13, 2000, 65 FR 13242 (effective October 1, 2000); amended October 17, 2000, at 65 FR 61744; amended April 10, 2001, at 66 FR 18546; except

that the Secretary is not the Administrator for purposes of 40 CFR 60.44b(f) and (g) and 40 CFR 60.49b(a)(4).

4. 40 CFR 60, Subpart Dc, Small Industrial-Commercial-Institutional Steam Generating Units; amended February 12, 1999, 64 FR 7458 (effective July 1, 1999); amended October 17, 2000, at 65 FR 61744; except that the Secretary is not the Administrator for the purposes of 40 CFR 60.48c(a)(4).

5. 40 CFR 60, Subpart E, Incinerators; amended October 17, 2000, at 65 FR 61744.

- 6. 40 CFR 60, Subpart Ea, Municipal Waste Combustors for Which Construction is Commenced After December 20, 1989, and on or Before September 20, 1994; amended February 12, 1999, 64 FR 7458 (effective July 1, 1999); amended October 17, 2000, at 65 FR 61744.
- 7. 40 CFR 60, Subpart Eb, Large Municipal Waste Combustors for Which Construction is Commenced After September 20, 1994, or for Which Modification or Reconstruction is Commenced After June 19, 1996; amended August 25, 1997, 62 FR 45116 and 62 FR 45124; amended October 17, 2000, at 65 FR 61744. Any municipal waste combustor plant which contains a municipal waste combustor unit subject to 40 CFR 60, Subpart Eb, is subject to the permitting requirements of Chapter 62-213, F.A.C. Any municipal waste combustor plant subject to the permitting requirements of Chapter 62-213, F.A.C., solely because it is subject to 40 CFR 60, Subpart Eb, shall file an application for an operation permit under the requirements of Chapter 62-213, F.A.C., ninety days before expiration of the source's construction permit, but no later than 180 days after commencing operation.

8. 40 CFR 60, Subpart Ec, Hospital/Medical/Infectious Waste Incinerators for Which Construction is Commenced After June 20, 1996; promulgated September 15, 1997, 62 FR 48348; amended October 17, 2000, at 65 FR 61744; except that the Secretary is

not the Administrator for purposes of 40 CFR 60.56 (c)(i).

9. 40 CFR 60, Subpart F, Portland Cement Plants; amended October 17, 2000, at 65 FR 61744.

10. 40 CFR 60, Subpart G, Nitric Acid Plants; amended October 17, 2000, at 65 FR 61744.

11. 40 CFR 60, Subpart H, Sulfuric Acid Plants; amended October 17, 2000, at 65 FR 61744.

12. 40 CFR 60, Subpart I, Hot Mix Asphalt Facilities.

- 13. 40 CFR 60, Subpart J, Petroleum Refineries; amended February 12, 1999, 64 FR 7458 (effective July 1, 1999); amended October 17, 2000, at 65 FR 61744.
- 14. 40 CFR 60, Subpart K, Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced After June 11, 1973, and Prior to May 19, 1978; amended October 17, 2000, at 65 FR 61744;
- 15. 40 CFR 60, Subpart Ka, Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced After May 18, 1978, and Prior to July 23, 1984; amended October 17, 2000, at 65 FR 61744; amended December 14, 2000, at 65 FR 78268; except that the Secretary is not the Administrator for purposes of 40 CFR 60.114a.
- 16. 40 CFR 60, Subpart Kb, Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced After July 23, 1984; amended October 17, 2000, at 65 FR 61744; amended December 14, 2000, at 65 FR 78268.
 - 17. 40 CFR 60, Subpart L, Secondary Lead Smelters; amended October 17, 2000, at 65 FR 61744.

18. 40 CFR 60, Subpart M, Secondary Brass & Bronze Production Plants.

- 19. 40 CFR 60, Subpart N, Primary Emissions from Basic Oxygen Process Furnaces for Which Construction is Commenced After June 11, 1973; amended October 17, 2000, at 65 FR 61744.
- 20. 40 CFR 60, Subpart Na, Secondary Emissions from Basic Oxygen Process Steelmaking Facilities for Which Construction is Commenced After January 20, 1983; amended October 17, 2000, at 65 FR 61744.
 - 21. 40 CFR 60, Subpart O, Sewage Treatment Plants; amended October 17, 2000, at 65 FR 61744.
 - 22. 40 CFR 60, Subpart P, Primary Copper Smelters; amended October 17, 2000, at 65 FR 61744.
 - 23. 40 CFR 60, Subpart Q, Primary Zinc Smelters.
 - 24. 40 CFR 60, Subpart R, Primary Lead Smelters.
 - 25, 40 CFR 60, Subpart S, Primary Aluminum Reduction Plants; amended October 17, 2000, at 65 FR 61744.
- 26. 40 CFR 60, Subpart T, Phosphate Fertilizer Industry: Wet Process Phosphoric Acid Plants; amended October 17, 2000, at 65 FR 61744.
- 27. 40 CFR 60, Subpart U, Phosphate Fertilizer Industry: Superphosphoric Acid Plants; amended October 17, 2000, at 65 FR 61744.
- 28. 40 CFR 60, Subpart V, Phosphate Fertilizer Industry: Diammonium Phosphate Plants; amended October 17, 2000, at 65 FR 61744.

(a) Definitions. For purposes of subsection 62-204.800(9), F.A.C., the definitions contained in the various provisions of 40 CFR Part 61 adopted herein shall apply, except that the term "Administrator," when used in any provision of 40 CFR Part 61 that is delegated to the Department by the U.S. Environmental Protection Agency, shall mean the Secretary or the Secretary's designee.

(b) Standards Adopted. The following National Emission Standards for Hazardous Air Pollutants contained in 40 CFR Part 61,

revised as of July 1, 1996, or later as specifically indicated, are adopted and incorporated by reference.

1. 40 CFR 61, Subpart C, Beryllium; amended October 17, 2000, at 65 FR 61744.

2. 40 CFR 61, Subpart D, Beryllium Rocket Motor Firing; amended October 17, 2000, at 65 FR 61744.

3. 40 CFR 61, Subpart E, Mercury; amended October 17, 2000, at 65 FR 61744.

4. 40 CFR 61, Subpart F, Vinyl Chloride; amended October 17, 2000, at 65 FR 61744; except that the Secretary is not the Administrator for the purposes of 40 CFR 61.66.

5. 40 CFR 61, Subpart J, Equipment Leaks (Fugitive Emission Sources) of Benzene; amended October 17, 2000, at 65 FR 61744; amended December 14, 2000, at 65 FR 78268, except that the Secretary is not the Administrator for the purposes of 40 CFR 61.112(c).

6. 40 CFR 61, Subpart K, Radionuclide Emissions From Elemental Phosphorous Plants; amended October 17, 2000, at 65 FR

7. 40 CFR 61, Subpart L, Benzene Emissions from Coke By-Product Recovery Plants; amended February 12, 1999, 64 FR 7458 (effective July 1, 1999); amended October 17, 2000, at 65 FR 61744; except that the Secretary is not the Administrator for the purposes of 40 CFR 61.136(d).

8. 40 CFR 61, Subpart M, Asbestos; amended February 12, 1999, 64 FR 7458 (effective July 1, 1999); amended October 17, 2000, at 65 FR 61744; except that the Secretary is not the Administrator for the purposes of 40 CFR 61.149(c)(2), 40 CFR 61.150(a)(4), 40 CFR 61.151(c), 40 CFR 61.152(b)(3), 40 CFR 61.154(d), and 40 CFR 61.155(a); and except that DEP Form Number 62-257.900(1) shall be used in lieu of the form identified as Figure 3 in 40 CFR 61.145.

9. 40 CFR 61, Subpart N, Inorganic Arsenic Emission From Glass Manufacturing Plants; amended February 12, 1999, 64 FR

7458 (effective July 1, 1999); amended October 17, 2000, at 65 FR 61744.

10. 40 CFR 61, Subpart O, Inorganic Arsenic Emissions From Primary Copper Smelters; amended October 17, 2000, at 65 FR 61744.

11. 40 CFR 61, Subpart P, Inorganic Arsenic Emissions From Arsenic Trioxide and Metallic Arsenic Production Facilities.

12. 40 CFR 61, Subpart V, Equipment Leaks (Fugitive Emissions Sources); amended October 17, 2000, at 65 FR 61744; amended December 14, 2000, at 65 FR 78268.

13. 40 CFR 61, Subpart Y, Benzene Emissions From Benzene Storage Vessels; amended October 17, 2000, at 65 FR 61744; amended December 14, 2000, at 65 FR 78268; except that the Secretary is not the Administrator for the purposes of 40 CFR 61 273

14. 40 CFR 61, Subpart BB, Benzene Emissions From Benzene Transfer Operations; amended October 17, 2000, at 65 FR 61744; amended December 14, 2000, at 65 FR 78268; except that the Secretary is not the Administrator for the purposes of 40 CFR 61.353.

15. 40 CFR 61, Subpart FF, Benzene Waste Operations; amended October 17, 2000, at 65 FR 61744.

(c) The National Emission Standards for Hazardous Air Pollutants adopted by reference in this rule shall be controlling over other standards in the air pollution rules of the Department, except that any emissions limiting standard contained in or determined pursuant to the air pollution rules of the Department which is more stringent than one contained in a National Emission Standard, or which regulates pollutants or emissions units not regulated by an applicable National Emission Standard, shall apply.

(d) General Provisions Adopted. The general provisions of 40 CFR Part 61, Subpart A, revised as of July 1, 1996, and amended February 24, 1997, 62 FR 8314; and January 6, 1998, 63 FR 414; amended February 12, 1999, 64 FR 7458 (effective July 1, 1999); amended Ocotober 17, 2000, at 65 FR 62150; amended December 14, 2000, at 65 FR 78268; are adopted and incorporated by reference except that the Secretary is not the Administrator for the purposes of 40 CFR 61.04, 40 CFR 61.08, 40 CFR 61.11, and 40 CFR 61.18.

(e) Appendices Adopted. The following appendices of 40 CFR Part 61, revised as of July 1, 1996, or later as specifically indicated, are adopted and incorporated by reference:

1. 40 CFR 61 Appendix A, National Emission Standards for Hazardous Air Pollutants Compliance Status Information, amended February 12, 1999, 64 FR 7458 (effective August 1, 1999).

2. 40 CFR 61, Appendix B, Test Methods, except Method 111 for Polonium 210, Method 114 for Radionuclides and Method 115 for Radon-222, amended February 9, 1998, 63 FR 6493; and February 12, 1998, 63 FR 7199.

3. 40 CFR 61 Appendix C, Quality Assurance Procedures.

(10) Chapter 40, Code of Federal Regulations, Part 63, National Emission Standards for Hazardous Air Pollutants for Source

Categories.

(a) Definitions. For the purposes of subsection 62-204.800(10), F.A.C., the definitions contained in the various provisions of 40 CFR Part 63 adopted herein shall apply, except that the term, "Administrator," when used in any provisions of 40 CFR Part 63 that is delegated to the Department by the U.S. Environmental Protection Agency, shall mean the Secretary or the Secretary's designee.

- (b) Standards Adopted. The following National Emission Standards for Hazardous Air Pollutants contained in 40 CFR Part 63, revised as of July 1, 1996, or later as specifically indicated, are adopted and incorporated by reference:
- 1. 40 CFR 63, Subpart F, Organic Hazardous Air Pollutants From the Synthetic Organic Chemical Manufacturing Industry; amended December 5, 1996, 61 FR 64572; January 17, 1997, 62 FR 2722; and May 12, 1998, 63 FR 26078; amended April 26, 1999, 64 FR 20189 (effective October 1, 1999); amended May 8, 2000, 65 FR 26491 (effective October 1, 2000); amended January 22, 2001, at 66 FR 6922.
- 2. 40 CFR 63, Subpart G, Organic Hazardous Air Pollutants From the Synthetic Organic Manufacturing Industry for Process Vents, Storage Vessels, Transfer Operations, and Wastewater; amended December 5, 1996, 61 FR 64572; January 17, 1997, 62 FR 2722; and December 9, 1998, 63 FR 67787 (effective April 1, 1999); amended April 26, 1999, 64 FR 20189 (effective October 1, 1999); amended October 17, 2000, at 65 FR 61744; amended December 14, 2000, at 65 FR 78268; amended January 22, 2001, at 66 FR 6922.
- 3. 40 CFR 63, Subpart H, Organic Hazardous Air Pollutants for Equipment Leaks; amended January 17, 1997, 62 FR 2722; amended April 26, 1999, 64 FR 20189 (effective October 1, 1999); amended December 14, 2000, at 65 FR 78268; amended January 22, 2001, at 66 FR 6922.
- 4. 40 CFR 63, Subpart I, Organic Hazardous Air Pollutants for Certain Processes Subject to the Negotiated Regulation for Equipment Leaks, amended January 17, 1997, 62 FR 2722.
 - 5. 40 CFR 63, Subpart L, Coke Oven Batteries; amended October 17, 2000, at 65 FR 61744.
 - 6. 40 CFR 63, Subpart M, Perchloroethylene Dry Cleaning Facilities, amended September 19, 1996, 61 FR 49263.
- 7. 40 CFR 63, Subpart N, Chromium Emissions From Hard and Decorative Chromium Electroplating and Chromium Anodizing Tanks, amended January 30, 1997, 62 FR 4463; and August 11, 1997, 62 FR 42918.
- 8. 40 CFR 63, Subpart O, Ethylene Oxide Emissions Standards for Sterilization Facilities, amended December 9, 1997, 62 FR 64736, December 4, 1998, 63 FR 66990 (effective April 1, 1999); and December 3, 1999, 64 FR 67789 (effective April 1, 2000).
 - 9. 40 CFR 63, Subpart Q, Industrial Process Cooling Towers, amended July 23, 1998, 63 FR 39516 (effective April 1, 1999).
- 10. 40 CFR 63, Subpart R, Gasoline Distribution Facilities (Bulk Gasoline Terminals and Pipeline Breakout Stations), amended February 28, 1997, 62 FR 9087.
- 11. 40 CFR 63, Subpart S, Pulp and Paper Industry; promulgated April 15, 1998, 63 FR 18504; amended August 7, 1998, 63 FR 42238; September 16, 1998, 63 FR 49455; and December 28, 1998, 63 FR 71385 (effective April 1, 1999); amended April 12, 1999, 64 FR 17555 (effective October 1, 1999); amended December 22, 2000, at 65 FR 80755; amended May 14, 2001, 66 FR 24270; except that the Secretary is not the Administrator for the purposes of 40 CFR 63.453(m), 40 CFR 63.457(b)(5)(iii), and 40 CFR 63.457(c)(3)(ii).
- 12. 40 CFR 63, Subpart T, Halogenated Solvent Cleaning; amended May 5, 1998, 63 FR 24749; December 11, 1998, 63 FR 68397 (effective April 1, 1999); August 19, 1999, 64 FR 45187; and December 3, 1999, 64 FR 67793 (effective April 1, 2000); amended September 8, 2000, at 65 FR 54419.
- 13. 40 CFR 63, Subpart U, Group I Polymers and Resins, amended January 14, 1997, 62 FR 1835; and July 15, 1997, 62 FR 37720; amended March 9, 1999, 64 FR 11536 (effective July 1, 1999); amended May 7, 1999, 64 FR 24511, and June 30, 1999, 64 FR 35023 (effective October 1, 1999); amended June 19, 2000, 65 FR 38029 (effective October 1, 2000).
- 14, 40 CFR 63, Subpart W, Epoxy Resins Production and Non-Nylon Polyamides Production, amended May 8, 2000, 65 FR 26491 (effective October 1, 2000).
- 15. 40 CFR 63, Subpart X, Secondary Lead Smelters, amended December 12, 1996, 61 FR 65334; June 13, 1997, 62 FR 32209; and August 24, 1998, 63 FR 45007 (effective April 1, 1999), amended January 29, 1999, 64 FR 4570 (effective July 1, 1999).
 - 16. 40 CFR 63, Subpart Y, Marine Tank Vessel Loading Operations.
- 17. 40 CFR 63, Subpart AA, Phosphoric Acid Manufacturing Plants, promulgated June 10, 1999, 64 FR 31358 (effective October 1, 1999).
- 18. 40 CFR 63, Subpart BB, Phosphate Fertilizers Production Plants, promulgated June 10, 1999, 64 FR 31358 (effective October 1, 1999).
- 19. 40 CFR 63, Subpart CC, Petroleum Refineries; amended February 21, 1997, 62 FR 7937; March 20, 1998, 63 FR 13533; May 18, 1998, 63 FR 27212; June 9, 1998, 63 FR 31358; and August 18, 1998, 63 FR 44135 (effective April 1, 1999); amended May 8, 2000, 65 FR 26491 (effective October 1, 2000); amended May 25, 2001, at 66 FR 28840.
- 20. 40 CFR 63, Subpart DD, Off-Site Waste and Recovery Operations; promulgated July 1, 1996, 61 FR 34140; amended July 20, 1999, 64 FR 38950 (effective April 1, 2000); amended January 8, 2001, at 66 FR 1263.
- 21. 40 CFR 63, Subpart EE, Magnetic Tape Manufacturing Operations, amended April 9, 1999, 64 FR 17460 (effective October 1, 1999).
- 22. 40 CFR 63, Subpart GG, Aerospace Manufacturing and Rework Facilities; amended December 17, 1996, 61 FR 66226; March 27, 1998, 63 FR 15006; April 10, 1998, 63 FR 17930; and September 1, 1998, 63 FR 46525 (effective April 1, 1999); amended October 17, 2000, at 65 FR 61744.
- 23. 40 CFR 63, Subpart HH, Oil and Natural Gas Production Facilities; promulgated June 17, 1999, 64 FR 32610 (effective October 1, 1999); amended June 29, 2001, at 66 FR 34548.

- (35) "Baseline Concentration" The ambient concentration level, or set of levels, that is predicted to occur at each point within a baseline area for conditions existing at the time of the applicable minor source baseline date. The concentration is comprised of the predicted impact of the baseline emissions using an appropriate air quality model and meteorological data that are generally representative of the baseline area, plus a representative background concentration. A baseline concentration is determined for each pollutant for which a minor source baseline date is established and for each averaging time for which a maximum allowable increase is established in Rule 62-204.260, F.A.C.
- (a) For the annual average, the baseline concentration is the average concentration that is predicted to occur at each point within the area for each calendar year modeled.
- (b) For shorter term averages, the baseline concentration is the set of all such short-term concentrations predicted to occur at each point within the area for each calendar year modeled.
- (36) "Baseline Emissions" The emissions of each pollutant for which maximum allowable increases have been established under Rule 62-204.260, F.A.C., that are used to predict a baseline concentration. Baseline emissions are quantified as specified in Rule 62-212.400(4), F.A.C.
- (37) "Batch Process" A process which takes in the basic raw materials at the beginning of a cycle and processes them in accordance with a predetermined scheme during which no more basic raw materials are added to the process. Two variations include:
- (a) Processes where some of the reactants (materials) are added at the beginning with the remainder added as the reaction progresses.
- (b) Processes where once the materials are added, one or more products are continuously removed as the reaction progresses. Such processes include production of super phosphate, basic oxygen furnaces, and cement batch plants.
- (38) "Best Available Control Technology" or "BACT" An emission limitation, including a visible emissions standard, based on the maximum degree of reduction of each pollutant emitted which the Department, on a case by case basis, taking into account energy, environmental and economic impacts, and other costs, determines is achievable through application of production processes and available methods, systems and techniques (including fuel cleaning or treatment or innovative fuel combustion techniques) for control of each such pollutant.
- (a) If the Department determines that technological or economic limitations on the application of measurement methodology to a particular part of an emissions unit or facility would make the imposition of an emission standard infeasible, a design, equipment, work practice, operational standard or combination thereof, may be prescribed instead to satisfy the requirement for the application of BACT. Such standard shall, to the degree possible, set forth the emissions reductions achievable by implementation of such design, equipment, work practice or operation.
- (b) Each BACT determination shall include applicable test methods or shall provide for determining compliance with the standard(s) by means which achieve equivalent results.
- (39) "Biological Waste" Solid waste that causes or has the capability of causing disease or infection and which includes biomedical waste, diseased or dead animals, and other wastes capable of transmitting pathogens to humans or animals.
- (40) "Biological Waste Incineration Facility" One or more incinerators located on one or more contiguous or adjacent properties which is/are operated or utilized for the disposal or treatment of biological waste and is/are owned or operated by the same person or by persons under common control.
- (41) "Biomedical Waste" Any solid or liquid waste which may present a threat of infection to humans, including nonliquid tissue, body parts, blood, blood products, and body fluids from humans and other primates; laboratory and veterinary wastes which contain human disease-causing agents; and discarded sharps. The following are also included:
- (a) Used absorbent materials saturated with blood, blood products, body fluids, or excretions or secretions contaminated with visible blood; and absorbent materials saturated with blood or blood products that have dried.
- (b) Non-absorbent, disposable devices that have been contaminated with blood, body fluids, or secretions or excretions visibly contaminated with blood, but have not been treated by a method listed in Section 381.0098, F.S., or a method approved pursuant to Rule 64E-16, F.A.C.
- (42) "Black Liquor Oxidation System" The vessels used to oxidize, with air or oxygen, the black liquor, and associated storage tank(s).
 - (43) "Black Liquor Solids" The dry weight of the solids which enter the kraft recovery furnace in the black liquor.
- (44) "Brown Stock Washer System" Brown stock washers and associated knotters, vacuum pumps, and filtrate tanks used to wash the pulp following the digester system.
- (45) "Bubble Baseline Emissions" or "Bubble Baseline" For purposes of establishing an air emissions bubble, the sum of emissions of each pollutant from the emissions units included within the bubble, expressed both on a short-term and long-term basis.
- (a) On a short-term basis, the bubble baseline shall be calculated by summing the allowable emissions of each unit after converting the allowable emissions to the equivalent pounds per hour.
- (b) On a long-term basis the bubble baseline shall be calculated in tons per year by multiplying the allowable emissions times the actual capacity of each unit, actual capacity being determined as the average of the highest two out of the last five calendar years prior to the permit application for the bubble. For steam generating units, the actual capacity shall be expressed as million British Thermal Units per year.

- (114) "Federally Enforceable" Pertaining to limitations and conditions which are enforceable by the Administrator, including any requirements developed pursuant to Title 40 of the Code of Federal Regulations, any requirements within the State Implementation Plan, and any requirements established pursuant to permits issued under:
 - (a) The state's Title V operation permit program, consistent with 40 C.F.R. Part 70.
 - (b) Rule 62-210.300(2)(b), F.A.C.;
 - (c) 40 C.F.R. 52.21; or
- (d) Rule 62-204.800(10)(d)2., F.A.C.; Rule 62-212.300, F.A.C. (formerly 17-212.300, formerly 17-2.520); Rule 62-212.400, F.A.C. (formerly 17-212.400, formerly 17-2.500); Rule 62-212.500, F.A.C. (formerly 17-212.500, formerly 17-2.510); Rule 17-2.17, F.A.C. (repealed); or Rule 62-4.210, F.A.C. (formerly 17-4.210, formerly 17-4.21).
- (115) "Final Permit" The version of a Title V source permit issued by the Department for which all review procedures required by Rule 62-213.450, F.A.C., have been completed.
- (116) "Firebox" The chamber or compartment of a boiler or furnace in which materials are burned but does not mean the combustion chamber of an incinerator.
 - (117) "Flashoff Area" The space between the application area and the oven.
- (118) "Flexographic Printing" The application of words, designs and pictures to a substrate by means of a roll printing technique in which the pattern to be applied is raised above the printing roll and the image carrier is made of rubber or other elastomeric materials.
 - (119) "Fossil Fuel" Natural gas, petrolcum, coal, or any form of solid, liquid, or gaseous fuel derived from such material.
- (120) "Fossil Fuel Steam Generators" A furnace or boiler which produces steam by combustion of oil, coal, or gas of fossil origin.
 - (121) "Freeboard Height" -
 - (a) For heated vapor degreasers is the distance from the top of the vapor zone to the top of the degreaser tank.
 - (b) For cold cleaning degreasers is the distance from the solvent to the top edge of the cold cleaner.
 - (122) "Freeboard Ratio" The freeboard height divided by the width of the degreaser.
- (123) "Fugitive Emissions" Those emissions which could not reasonably pass through a stack, chimney, vent or other functionally equivalent opening.
- (124) "Gas/Gas Method" Either of two EPA methods for determining capture efficiency which rely only on gas phase measurements. One method, prescribed in Rule 62-297.450(2)(a), F.A.C., requires construction of a temporary total enclosure to assure all otherwise unconfined air pollutant emissions are measured. The other method, prescribed in Rule 62-297.450(2)(c), F.A.C., uses the room or building which houses the emissions activity, process, or source as an enclosure.
 - (125) "Gasoline" Any petroleum distillate having a Reid vapor pressure of 4 psia (27.6 kilopascals) or greater.
- (126) "Gasoline Dispensing Facility" Any site where gasoline is dispensed to motor vehicle gasoline tanks from stationary storage tanks.
 - (127) "Green Liquor Sulfidity" The sulfidity of the liquor which leaves the smelt dissolving tank.
- (128) "Hardboard" A panel manufactured primarily from inter-felted lignocellulosic fibers which are consolidated under heat and pressure in a hot press.
 - (129) "Hardwood Plywood" Plywood whose surface layer is a veneer or hardwood.
 - (130) "Hazardous Air Pollutant (HAP)" An air pollutant:
 - (a) Identified by the CAS number or chemical name from the following list:

(4)	a. a. i	Observation 1 Manuals
	CAS Number	Chemical Name
1.	75070	Acetaldehyde
2.	60355	Acetamide
3.	75058	Acetonitrile
4.	98862	Acetophenone
5.	53963	2-Acetylaminofluorene
6.	107028	Acrolein
7.	7 906 1	Acrylamide
8.	79107	Acrylic acid
9.	107131	Acrylonitrile
10.	107051	Allyl chloride
11.	92671	4-Aminobiphenyl
12.	62533	Aniline
13.	90040	o-Anisidine
14.	. 0	Antimony Compounds
15.	. 0	Arsenic Compounds (inorganic including arsine)
16	. 1332214	Asbestos
17.	71432	Benzene (including benzene from gasoline)
18	. 92875	Benzidine
19.	. 98077	Benzotrichloride

- (149) "Lease Custody Transfer" The transfer of produced crude oil and/or condensate, after processing and/or treating in the producing operations, from storage tanks or automatic transfer facilities to pipelines or any other forms of transportation.
- (150) "Lime Kiln" An inclined rotary drum device used to calcine lime mud, which consists primarily of calcium carbonate, into quicklime, which is calcium oxide.
- (151) "Liquid/Gas Method" Either of two EPA methods for determining capture efficiency which require both gas phase and liquid phase measurements and analysis. One liquid/gas method, prescribed in Rule 62-297.450(2)(b), F.A.C., requires construction of a temporary enclosure. The other, prescribed in Rule 62-297.450(2)(d), F.A.C., uses the room or building which houses the emissions activity, process, or source as an enclosure.
- (152) "Liquid Mounted Seal" A primary seal mounted in continuous contact with the liquid between the tank wall and the floating roof around the circumference of the tank.
- (153) "Loading Rack" An aggregation or combination of loading equipment arranged so that all loading outlets in the combination can be connected to a tank truck or trailer.
- (154) "Low Solvent Coating" Coatings which contain less organic solvent than the conventional coatings used by the industry. Low solvent coatings include water-borne, higher solids, electrodeposition and powder coatings.
- (155) "Lowest Achievable Emission Rate" or "LAER" An allowable emission rate determined in accordance with the provisions of Rule 62-212.500, F.A.C. This term applied to a modification means the lowest achievable emission rate for that portion of the facility which is modified.
- (156) "Magnet Wire Coating" The process of applying a coating of electrically insulating varnish or enamel to aluminum or copper wire for use in electrical machinery.
 - (157) "Major Facility" Any facility which emits, or has the potential to emit:
 - (a) 5 tons per year or more of lead or lead compounds, measured as elemental lead;
 - (b) 30 tons per year or more of acrylonitrile; or
 - (c) 100 tons per year or more of any other air pollutant subject to regulation under Chapter 403, Florida Statutes.
- (158) "Major Source Baseline Date" Pursuant to 40 C.F.R. 51.166(b)(14)(i), adopted and incorporated by reference in Rule 62-204.800, F.A.C.:
 - (a) In the case of particulate matter and sulfur dioxide, January 6, 1975; and
 - (b) In the case of nitrogen dioxide, February 8, 1988.
- (159) "Major Source of Air Pollution" or "Title V Source" A facility containing an emissions unit, or any group of emissions units, which is or includes any of the following:
- (a) For pollutants other than radionuclides, any emissions unit or group of emissions units that emits or has the potential to emit, in the aggregate, 10 tons per year or more of any one hazardous air pollutant (HAP), 25 tons per year or more of any combination of HAPs, or any lesser quantity of a HAP as established through EPA rulemaking. Notwithstanding the preceding sentence, HAP emissions from any oil or gas exploration or production well (with its associated equipment) and HAP emissions from any pipeline compressor or pump station shall not be aggregated with HAP emissions from other similar units, whether or not such units are in a contiguous area or under common control, to determine whether such units or stations are Title V sources.
- (b) An emissions unit or group of emissions units, all belonging to the same two-digit Major Group as described in the Standard Industrial Classification Manual, 1987, that directly emits or has the potential to emit, 100 tons per year or more of any regulated air pollutant. The fugitive emissions of an emissions unit or group of emissions units shall not be considered in determining whether it is a Title V source for purposes of this paragraph unless the emissions unit or group of emissions units belongs to one of the following categories:
 - 1. Coal cleaning plants (with thermal dryers).
 - 2. Kraft pulp mills.
 - 3. Portland cement plants.
 - 4. Primary zinc smelters.
 - 5. Iron and steel mills.
 - 6. Primary aluminum ore reduction plants.
 - 7. Primary copper smelters.
 - 8. Municipal incinerators capable of charging more than 250 tons of refuse per day.
 - 9. Hydrofluoric, sulfuric, or nitric acid plants.
 - 10. Petroleum refineries.
 - 11. Lime plants.
 - 12. Phosphate rock processing plants.
 - 13. Coke oven batteries.
 - 14. Sulfur recovery plants.
 - 15. Carbon black plants (furnace process).
 - 16. Primary lead smelters.
 - 17. Fuel conversion plant.
 - 18. Sintering plants.
 - 19. Secondary metal production plants.

(ss) Methyl acetate.

(281) "Waste-to-Energy Facility" – A facility that uses an enclosed device using controlled combustion to thermally break down solid, liquid or gaseous combustible solid waste to an ash residue that contains little or no combustible material, and that produces electricity, steam, or other energy as a result. The term does not include facilities that primarily burn fuels other than solid waste, even if the facilities also burn some solid waste as a fuel supplement. The term also does not include facilities that burn vegetative, agricultural, or silvicultural wastes, bagasse, clean dry wood, methane or other landfill gas, wood fuel derived from construction or demolition debris, or waste tires, alone or in combination with fossil fuel. For the purposes of Rule 62-296.416, F.A.C., the term does not include facilities that primarily burn biohazardous or hazardous waste and industrial boilers that burn pelletized paper waste as a supplemental fuel.

(282) "Waxy, Heavy Pour Crude Oil" – A crude oil with a pour point of 50 degrees or higher as determined by the American Society for Testing and Materials Standard D97-66, "Test for Pour Point of Petroleum Oils." A copy of the above referenced document is available from the American Society for Testing and Materials, 1916 Race Street, Philadelphia, PA 19103, and may be

examined at the Department's Tallahassee office.

(283) "Yard Trash" – Vegetative matter resulting from landscaping and yard maintenance operations which includes materials such as tree and shrub trimmings, grass clippings, palm fronds, trees and tree stumps.

Specific Authority 403.061 FS. Law Implemented 403.031, 403.061, 403.087 FS. History—Formerly 17-2.100, Amended 2-9-93, 11-28-93, Formerly 17-210.200, Amended 11-23-94, 4-18-95, 1-2-96, 3-13-96, 3-21-96, 8-15-96, 10-7-96, 10-15-96, 5-20-97, 11-13-97, 2-5-98, 2-11-99, 4-16-01.

62-210.220 Small Business Assistance Program.

A "Small Business Stationary Source Technical and Environmental Compliance Assistance Program," or "Small Business Assistance Program," is established as an organizational unit of the Department's Division of Air Resources Management. The purpose of this rule is to establish procedures for notifying small business stationary sources of their rights and to assure an opportunity for public comment on any petition filed by any facility seeking inclusion on the list of small business stationary sources maintained by the Small Business Assistance Program.

(1) Notification of Rights. The Department shall provide, at a minimum, notice to small business stationary sources as identified pursuant to Rule 62-210.220(2), F.A.C., of state requirements.

(a) The Small Business Assistance Program shall provide notice of those rules related to air pollution which have been proposed by the Department and published in the Florida Administrative Weekly. Each notice shall contain:

1. The subject matter of the rule;

2. The publication date;

3. Any published effective date;

4. The Florida Administrative Weekly location, by volume and page number; and

5. The Small Business Assistance Program Hotline telephone number.

(b) The Department shall provide those small business stationary sources identified pursuant to Rule 62-210.220(2), F.A.C., which are also Title V sources with notice of any requirements of Chapter 62-213, F.A.C., in accordance with the provisions of Chapter 62-213, F.A.C.

(2) Public Notice and Comment. The Small Business Assistance Program shall create and maintain a list of interested entities to receive the notices identified in Rule 62-210.220(1), F.A.C.

(a) The Small Business Assistance Program shall create a list of small business stationary sources as follows:

1. The program shall identify, using existing Department air pollutant emitting facility computerized records, all permitted facilities that have the potential to emit not more than 100 tons per year of all regulated air pollutants. The program shall request of each such facility:

a. The total number of full-time and part-time employees, including temporary employees, employed by the person, corporation or partnership which owns or operates the facility;

b. The type of business in which the facility is engaged; and

c. The total amount of annual receipts for the most recently completed fiscal year.

2. Each facility desiring consideration as a small business stationary source shall provide the information listed in Rule 62-210.220(2)(a)1., F.A.C. The Small Business Assistance Program shall review the information and determine, based upon the information submitted by the facility and upon the air pollutant emission information contained in the Department's computerized air facility records, whether the facility is a "small business stationary source" as defined in Rule 62-210.200, F.A.C.

(b) Any facility may petition for inclusion on the list described at Rule 62-210.220(2)(a), F.A.C. Each petitioning facility must publish notice of such petition in a newspaper of general circulation in each county in which the facility operates. No less than 30 days after receipt of both the notice of publication and a petition meeting the requirements of this paragraph, the Small Business Assistance Program shall add to the list the name and address of any such facility which conforms to the requirements of paragraph (b) of the definition of "small business stationary source" at Rule 62-210.200, F.A.C. Each petition for inclusion must provide factual data showing:

1. Name;

- 2. Mail address;
- 3. Facility address;
- 4. County;
- 5. Standard Industrial Classification (SIC) code;
- 6. Description of operation;
- 7. Data showing the facility is owned or operated by an individual person, a corporate entity or a partnership entity employing no more than 100 employees including full and part-time employees and permanent and temporary employees during any pay period of the past 12 calendar months preceding application;
- 8. Data showing the facility does not exceed the size standards, as expressed in dollars, established in 13 C.F.R. 121.601, hereby adopted and incorporated by reference; and
 - 9. Data showing the facility does not emit more than 100 tons per year, in the aggregate, of all regulated air pollutants.
- (c) The Small Business Assistance Program shall notify each facility responding pursuant to Rule 62-210.220(2)(a)2., F.A.C., or petitioning pursuant to Rule 62-210.220(2)(b), F.A.C., that the responding facility does or does not conform to the definition of "small business stationary source" at Rule 62-210.200, F.A.C., or that the petitioning facility does or does not conform to the requirements of paragraph (b) of the definition of "small business stationary source" at Rule 62-210.200, F.A.C. The determination shall constitute agency action for purposes of Chapter 28-106, F.A.C. Any person who has provided comments to the Small Business Assistance Program in response to the published notice described at Rule 62-210.220(2)(b), F.A.C., shall be provided written notice of the determination. The facility shall be considered an applicant for purposes of Chapter 28-106, F.A.C.
- (d) The Department shall include on the list described at Rule 62-210.220(1)(a), F.A.C., each facility that has submitted a petition pursuant to Rule 62-210.220(2)(b), F.A.C., and which the Department has determined conforms to the definition of "small business stationary source" at Rule 62-210.200, F.A.C.
- (e) The Department shall maintain the list described at Rule 62-210.220(1)(a), F.A.C., annually. The Department shall delete from the list the name and address of any facility which has requested deletion or from which the Department's notice has been returned as not deliverable.

Specific Authority 403.8052 FS. Law Implemented 403.8052 FS. History-New 10-15-96, Amended 2-11-99.

62-210.300 Permits Required.

The owner or operator of any emissions unit which emits or can reasonably be expected to emit any air pollutant shall obtain an appropriate permit from the Department prior to beginning construction, modification, or initial or continued operation of the emissions unit unless exempted pursuant to Department rule or statute. All emissions limitations, controls, and other requirements imposed by such permits shall be at least as stringent as any applicable limitations and requirements contained in or enforceable under the State Implementation Plan (SIP) or that are otherwise federally enforceable. Issuance of a permit does not relieve the owner or operator of an emissions unit from complying with any applicable requirements, any emission limiting standards or other requirements of the air pollution rules of the Department or any other such requirements under federal, state, or local law.

- (1) Air Construction Permits.
- (a) Unless exempt from permitting pursuant to Rule 62-210.300(3)(a) or (b), F.A.C., or Rule 62-4.040, F.A.C., an air construction permit shall be obtained by the owner or operator of any proposed new or modified facility or emissions unit prior to the beginning of construction or modification, in accordance with all applicable provisions of this chapter, Chapter 62-212, F.A.C., and Chapter 62-4, F.A.C. Except as provided under Rule 62-213.415, F.A.C., the owner or operator of any facility seeking to create or change an air emissions bubble shall obtain an air construction permit in accordance with all the applicable provisions of this chapter, Chapter 62-212, F.A.C., and Chapter 62-4, F.A.C. The construction permit shall be issued for a period of time sufficient to allow construction or modification of the facility or emissions unit and operation while the new or modified facility or emissions unit is conducting tests or otherwise demonstrating initial compliance with the conditions of the construction permit.
- (b) Notwithstanding the expiration of an air construction permit, all limitations and requirements of such permit that are applicable to the design and operation of the permitted facility or emissions unit shall remain in effect until the facility or emissions unit is permanently shut down, except for any such limitation or requirement that is obsolete by its nature (such as a requirement for initial compliance testing) or any such limitation or requirement that is changed in accordance with the provisions of Rule 62-210.300(1)(b)1., F.A.C. Either the applicant or the Department can propose that certain conditions be considered obsolete. Any conditions or language in an air construction permit that are included for informational purposes only, if they are transferred to the air operation permit, shall be transferred for informational purposes only and shall not become enforceable conditions unless voluntarily agreed to by the permittee or otherwise required under Department rules.
- 1. Except for those limitations or requirements that are obsolete, all limitations and requirements of an air construction permit shall be included and identified in any air operation permit for the facility or emissions unit. The limitations and requirements included in the air operation permit can be changed, and thereby superseded, through the issuance of an air construction permit, federally enforceable state air operation permit, federally enforceable air general permit, or Title V air operation permit; provided, however, that:
 - a. Any change that would constitute an administrative correction may be made pursuant to Rule 62-210.360, F.A.C.;

- b. Any change that would constitute a modification, as defined at Rule 62-210.200, F.A.C., shall be accomplished only through the issuance of an air construction permit; and
- c. Any change in a permit limitation or requirement that originates from a permit issued pursuant to 40 C.F.R. 52.21, Rule 62-204.800(10)(d)2., F.A.C., Rule 62-212.400, F.A.C., Rule 62-212.500, F.A.C., or any former codification of Rule 62-212.400 or 62-212.500, F.A.C., shall be accomplished only through the issuance of a new or revised air construction permit under Rule 62-204.800(10)(d)2., F.A.C., 62-212.400 or 62-212.500, F.A.C., as appropriate.
- 2. The force and effect of any change in a permit limitation or requirement made in accordance with the provisions of Rule 62-210.300(1)(b)1., F.A.C., shall be the same as if such change were made to the original air construction permit.
- 3. Nothing in Rule 62-210.300(1)(b), F.A.C., shall be construed as to allow operation of a facility or emissions unit without a valid air operation permit.
- (2) Air Operation Permits. Upon expiration of the air operation permit for any existing facility or emissions unit, subsequent to construction or modification, or subsequent to the creation of or change to a bubble, and demonstration of compliance with the conditions of the construction permit for any new or modified facility or emissions unit, any air emissions bubble, or as otherwise provided in this chapter or Chapter 62-213, F.A.C., the owner or operator of such facility or emissions unit shall obtain a renewal air operation permit, an initial air operation permit or air general permit, or an administrative correction or revision of an existing air operation permit, whichever is appropriate, in accordance with all applicable provisions of this chapter, Chapter 62-213 (if the facility is a Title V source), and Chapter 62-4, F.A.C.
 - (a) Minimum Requirements for All Air Operation Permits. At a minimum, a permit issued pursuant to this subsection shall:
- 1. Specify the manner, nature, volume and frequency of the emissions permitted, and the applicable emission limiting standards or performance standards, if any;
- 2. Require proper operation and maintenance of any pollution control equipment by qualified personnel, where applicable in accordance with the provisions of any operation and maintenance plan required by the air pollution rules of the Department.
- 3. Contain an effective date stated in the permit which shall not be earlier than the date final action is taken on the application and be issued for a period, beginning on the effective date, as provided below.
- a. The operation permit for an emissions unit which is in compliance with all applicable rules and in operational condition, and which the owner or operator intends to continue operating, shall be issued or renewed for a five-year period, except that, for Title V sources subject to Rule 62-213.420(1)(a)1., F.A.C., operation permits shall be extended until 60 days after the due date for submittal of the facility's Title V permit application as specified in Rule 62-213.420(1)(a)1., F.A.C.
- b. Except as provided in Rule 62-210.300(2)(a)3.d., F.A.C., the operation permit for an emissions unit which has been shut down for six months or more prior to the expiration date of the current operation permit, shall be renewed for a period not to exceed five years from the date of shutdown, even if the emissions unit is not maintained in operational condition, provided:

the owner or operator of the emissions unit demonstrates to the Department that the emissions unit may need to be reactivated and used, or that it is the owner's or operator's intent to apply to the Department for a permit to construct a new emissions unit at the facility before the end of the extension period; and

the owner or operator of the emissions unit agrees to and is legally prohibited from providing the allowable emission permitted by the renewed permit as an emissions offset to any other person under Rule 62-212.500, F.A.C.; and

the emissions unit was operating in compliance with all applicable rules as of the time the source was shut down.

- c. Except as provided in Rule 62-210.300(2)(a)3.d., F.A.C., the operation permit for an emissions unit which has been shut down for five years or more prior to the expiration date of the current operation permit shall be renewed for a maximum period not to exceed ten years from the date of shutdown, even if the emissions unit is not maintained in operational condition, provided the conditions given in Rules 62-210.300(2)(a)3.b., F.A.C., are met and the owner or operator demonstrates to the Department that failure to renew the permit would constitute a hardship, which may include economic hardship.
- d. The operation permit for an electric utility generating unit on cold standby or long-term reserve shutdown shall be renewed for a five-year period, and additional five-year periods, even if the unit is not maintained in operational condition, provided the conditions given in Rules 62-210.300(2)(a)3.b.i. through iii., F.A.C., are met.
- 4. In the case of an emissions unit permitted pursuant to Rules 62-210.300(2)(a)3.b., c., and d., F.A.C., include reasonable notification and compliance testing requirements for reactivation of such emissions unit and provide that the owner or operator demonstrate to the Department prior to reactivation that such reactivation would not constitute reconstruction pursuant to Rule 62-204.800(7), F.A.C.
 - (b) Additional Requirements for Federally Enforceable State Operation Permits (FESOPs) for Non-Title V Sources.
- 1. An operation permit for a non-Title V source, including a synthetic non-Title V source, shall be considered federally enforceable only if it is issued, renewed, or revised in accordance with the following provisions:
 - a. At the time of initial application for the permit, the applicant requests that the permit be made federally enforceable.
- b. A notice of proposed agency action on the initial application, any renewal application involving material changes from the existing permit, and any application for permit revision is published in accordance with the provisions of Rules 62-210.350(1) and (4), F.A.C., except as provided in Rule 62-210.300(2)(b)3., F.A.C.
 - c. The permit is a facility-wide permit.
- d. The permit is conditioned such that the owner or operator is legally obligated to adhere to the terms and limitations of such permit, including any condition or limitation assumed by the owner or operator upon acceptance of such permit.

- e. The permit is conditioned such that any emissions limitation, control requirement, or other requirement assumed by the owner or operator upon acceptance of such permit shall be quantifiable and enforceable as a practical matter.
- 2. Once a synthetic non-Title V source has been issued a federally enforceable state operation permit (FESOP), it shall remain subject to the requirements of Rule 62-210.300(2)(b), F.A.C., unless:
 - a. The owner or operator accepts a higher limit and the facility becomes a Title V source; or
- b. The owner or operator demonstrates to the Department that it no longer needs a federally enforceable operation permit to be classified as a non-Title V source (i.e., the facility is naturally "minor" without any federally enforceable limits) and specifically requests exemption from these requirements.
- 3. If all of the permitted emissions units within a facility have been issued one or more air construction permits which have undergone public notice in accordance with procedures at least as stringent as those provided in Rule 62-210.350(4), F.A.C., and the applicant requests that the conditions of such construction permit(s) be transferred without material change to a federally enforceable state operation permit (FESOP), the Department shall waive the requirements of Rules 62-210.300(2)(b)1.b. and 62-210.350(4)(a)3., F.A.C., for publication of a notice of proposed agency action; provided, however, that the remaining provisions of Rule 62-210.350(4), F.A.C., shall apply, including the requirement that notice be given to the U.S. Environmental Protection Agency and any local air pollution control program.
- 4. If an applicant requests that existing, multiple air operation permits for a facility be consolidated into a single federally enforceable state operation permit (FESOP), the Department shall reduce the permit processing fee required pursuant to Rule 62-4.050, F.A.C., by an amount equal to the sum of the processing fees paid for the existing permits prorated by the number of years remaining until expiration of each such permit.
- (3) Exemptions. A facility, emissions unit or pollutant-emitting activity shall be exempt from the permitting requirements of this chapter, Chapter 62-212, F.A.C., and Chapter 62-4, F.A.C., if it satisfies the applicable criteria of Rule 62-210.300(3)(a) or (b), F.A.C., or if it has been exempted from permitting pursuant to Rule 62-4.040, F.A.C. Failure of a facility, emissions unit or activity to satisfy the exemption criteria of Rule 62-210.300(3)(a) or (b), F.A.C., does not preclude such facility, unit or activity from being considered for exemption pursuant to Rule 62-4.040, F.A.C. Emissions units and pollutant-emitting activities exempt from permitting under this rule shall not be exempt from the permitting requirements of Chapter 62-213, F.A.C., if they are contained within a Title V source; however, such emissions units and activities shall be considered insignificant for Title V purposes provided they also meet the criteria of Rule 62-213.300(2)(a)1. or 62-213.430(6)(b), F.A.C. Any proposed new emissions unit or activity that would be exempt from permitting under this rule shall not be required to obtain an air construction permit pursuant to this chapter, Chapter 62-212, F.A.C., or Chapter 62-4, F.A.C., even if such unit or activity would be contained within a Title V source. No emissions unit shall be entitled to an exemption from permitting under this rule if its emissions, in combination with the emissions of other units and activities at the facility, would cause the facility to emit or have the potential to emit any pollutant in such amount as to make the facility a Title V source. Neither shall any emissions unit be entitled to an exemption from permitting under this rule if it would be subject to any unit-specific applicable requirement. Notwithstanding its exemption from air permitting, an exempt emissions unit or activity shall be subject to any general, facility-level applicable requirements, and its emissions shall be considered in determining the applicability of permitting requirements to other emissions units at the facility or to the facility as a whole.

(a) Categorical Exemptions.

- 1. One or more fossil fuel steam generators and hot water generating units located within a single facility; collectively having a total rated heat input equaling 100 million BTU per hour or less; and collectively burning annually no more than 145,000 gallons of fuel oil containing no more than 1.0 percent sulfur, or no more than 290,000 gallons of fuel oil containing no more than 0.5 percent sulfur, or an equivalent prorated amount of fuel oil if multiple fuels are used, provided none of the generators or hot water generating units is subject to the Federal Acid Rain Program or any standard or requirement under 42 U.S.C. section 7411 or 7412.
- 2. Any individual fossil fuel steam generator and hot water generating unit with a rated heat input equaling 100 million BTU per hour or less and burning annually no more than 150 million standard cubic feet of natural gas or no more than one million gallons of propane or no more than one million gallons of fuel oil containing no more than 0.05 percent sulfur, or an equivalent prorated amount if multiple fuels are used, provided:
- a. The total annual fuel consumption for all units exempted by Rules 62-210.300(3)(a)2. and 3., F.A.C., at a facility does not exceed 375 million standard cubic feet of natural gas or 2.5 million gallons of propane or 2.5 million gallons of fuel oil containing no more than 0.05 percent sulfur, or an equivalent prorated amount if multiple fuels are used and;
- b. The unit is not subject to the Federal Acid Rain Program or any standard or requirement under 42 U.S.C. section 7411 or 7412.
- 3. One or more fossil fuel steam generators and hot water generating units located within a single facility, collectively having a total rated heat input equaling 10 million BTU per hour or less, and fired exclusively by natural gas or propane, provided:
 - a. During periods of natural gas curtailment, only propane or fuel oil containing no more than 1.0 percent sulfur is fired; and,
- b. None of the generators or hot water heating units is subject to the Federal Acid Rain Program or any standard or requirement under 42 U.S.C. section 7411 or 7412.
 - 4. Home heating and comfort heating with a gross maximum heat output of less than one million Btu per hour.
 - 5. Internal combustion engines in boats, aircraft and vehicles used for transportation of passengers or freight.

- 6. Incinerators in one or two family dwellings or in multi-family dwellings containing four or less family units, one of which is owner-occupied.
 - 7. Noncommercial and nonindustrial vacuum cleaning systems used exclusively for residential housekeeping purposes.
- 8. Cold storage refrigeration equipment, except for any such equipment located at a Title V source using an ozone-depleting substance regulated under 40 C.F.R. Part 82.
 - 9. Vacuum pumps in laboratory operations.
 - 10. Equipment used for steam cleaning.
- 11. Belt or drum sanders having a total sanding surface of five square feet or less and other equipment used exclusively on wood or plastics or their products having a density of 20 pounds per cubic foot or more.
 - 12. Equipment used exclusively for space heating, other than boilers.
 - 13. Noncommercial smoke houses used exclusively for smoking food products.
- 14. Bakery ovens located at any retail bakery facility which derives at least fifty percent of its revenues from retail sales on premises. Also, bakery ovens located at any commercial bakery facility utilizing only non-conveyor belt ovens operating on a single baking cycle in which a determinate amount of product is cooked at one baking (i.e., batch ovens).
 - 15. Laboratory equipment used exclusively for chemical or physical analyses.
 - 16. Brazing, soldering or welding equipment.
 - 17. Laundry dryers, extractors, or tumblers for fabrics cleaned with only water solutions of bleach or detergents.
 - 18. Petroleum dry cleaning facilities with a solvent consumption of less than 3,250 gallons per year.
- 19. Portable air curtain incinerators except any air curtain incinerator intended to be continuously operated at one site for more than six months or at any Department-permitted landfill for any length of time; provided:
 - a. Only land clearing debris or clean dry wood is burned;
- b. Pit width, length, and side walls are properly maintained so that combustion of the waste within the pit is maintained at an adequate temperature and with sufficient air recirculation to provide enough residence time and mixing for complete combustion and control of emissions. Pit width shall not exceed twelve (12) feet, and vertical side walls shall be maintained;
 - c. No waste is positioned to be burned above the level of the air curtain in the pit;
 - d. Visible emissions do not exceed 40 percent opacity except for up to 30 minutes during periods of startup and shutdown;
- e. The air curtain incinerator is located at least 300 feet away from any occupied building if it has refractory-lined walls and forced underdraft air or otherwise at least 1,000 feet away from any occupied building; and
- f. The burning is ignited after 9:00 a.m. and extinguished at least one hour before sunset, except that, in the case of an air curtain incinerator with refractory-lined walls and forced underdraft air which is located at least 1,000 feet away from any off-site occupied building, the burning may commence at sunrise, and the air curtain incinerator may be charged until sunset provided it does not create a nuisance.
 - 20. One or more emergency generators located within a single facility provided:
 - a. None of the emergency generators is subject to the Federal Acid Rain Program; and
- b. Total fuel consumption by all such emergency generators within the facility is limited to 32,000 gallons per year of diesel fuel, 4,000 gallons per year of gasoline, 4.4 million standard cubic feet per year of natural gas or propane, or an equivalent prorated amount if multiple fuels are used.
- 21. One or more heating units, general purpose internal combustion engines, or other combustion devices, all of which are located within a single facility, are not listed elsewhere in Rule 62-210.300(3)(a), F.A.C., and are not pollution control devices, provided:
- a. None of the heating units, general purpose internal combustion engines, or other combustion devices that would be exempted is subject to the Federal Acid Rain Program;
- b. Total fuel consumption by all such heating units, general purpose internal combustion engines, and other combustion devices that would be exempted is limited to 32,000 gallons per year of diesel fuel, 4,000 gallons per year of gasoline, 4.4 million standard cubic feet per year of natural gas or propane, or an equivalent prorated amount if multiple fuels are used; and
- c. Fuel for the heating units, general purpose internal combustion engines, and other combustion devices that would be exempted is limited to natural gas, diesel fuel, gasoline and propane.
 - 22. Fire and safety equipment.
- 23. Surface coating operations within a single facility if the total quantity of coatings containing greater than 5.0 percent VOCs, by volume, used is 6.0 gallons per day or less, averaged monthly, provided:
- a. Such operations are not subject to a volatile organic compound Reasonably Available Control Technology (RACT) requirement of Chapter 62-296, F.A.C.; and
 - b. The amount of coatings used shall include any solvents and thinners used in the process including those used for cleanup.
 - 24. Surface coating operations utilizing only coatings containing 5.0 percent or less VOCs, by volume.
- 25. Phosphogypsum cooling ponds and inactive phosphogypsum stacks which have demonstrated compliance with the requirements of 40 C.F.R. Part 61, Subpart R, hereby adopted and incorporated by reference.
- 26. Degreasing units using heavier-than-air vapors exclusively, except any such unit using or emitting any substance classified as a hazardous air pollutant.

- 27. Volume reduction processes as defined in Rule 62-296.417, F.A.C., wherein the owner or operator manages only spent mercury-containing lamps removed from the facility where the volume reduction process is located.
- 28. Mercury recovery processes as defined in Rule 62-296.417, F.A.C., wherein the owner or operator manages only mercury-containing devices temporarily or permanently removed from service from the owner or operator's own facilities or installations.

29. Bulk gasoline plants, provided:

- a. Such operations are not conducted at a facility that is subject to the permitting requirements of Chapter 62-213, F.A.C., and the emissions from such operations would not contribute to total emissions that would make the facility subject to those requirements:
 - b. The facility receives and distributes only petroleum-based lubricants, gasoline, diesel fuel, mineral spirits and kerosene;

c. The total storage capacity for gasoline at the facility does not exceed 100,000 gallons;

- d. The facility does not exceed a throughput rate (receive and distribute) of 1.3 million gallons of gasoline in any consecutive twelve-month period;
- e. The facility is not subject to any Standard of Performance for New Stationary Sources (NSPS) requirement adopted by reference in Rule 62-204.800, F.A.C.; and
- f. The facility is not subject to any volatile organic compound Reasonably Available Control Technology (RACT) requirement of Chapter 62-296, F.A.C.

30. Petroleum lubrication systems.

- 31. Application of fungicide, herbicide, or pesticide.
- 32. Asbestos renovation and demolition activities.
- 33. Non-halogenated solvent storage and cleaning operations, provided the solvents contain none of the hazardous air pollutants listed at Rule 62-210.200, F.A.C.
 - 34. Vehicle refueling operations and associated fuel storage.
 - 35. Restaurants.
 - 36. Burning of drugs seized by law enforcement agencies in boilers with a heat input of 250 million BTU per hour or more.

37. Relocatable screening-only operations, provided:

a. The screening operation is not connected to a nonmetallic mineral processing plant subject to 40 CFR Part 60, Subpart OOO, adopted and incorporated by reference at Rule 62-204.800, F.A.C.;

b. No dry material is processed; and

c. No hazardous waste or toxic waste, as defined in Department rules, is processed.

38. Brownfield site remediation, as described at Rule 62-785.700, F.A.C., provided that the total volatile organic compounds in the air emissions from all onsite remediation equipment does not exceed 13.7 pounds per day.

(b) Generic and Temporary Exemptions.

- 1. Generic Emissions Unit Exemption. An emissions unit or pollutant-emitting activity that is not entitled to a categorical exemption pursuant to Rule 62-210.300(3)(a), F.A.C., shall be exempt from the permitting requirements of this chapter, Chapter 62-212, F.A.C., and Chapter 62-4, F.A.C., if it meets all of the following criteria:
 - a. It would be subject to no unit-specific applicable requirement.
 - b. It would neither emit nor have the potential to emit:
 - (i) 500 pounds per year or more of lead and lead compounds expressed as lead;
 - (ii) 1,000 pounds per year or more of any hazardous air pollutant;
 - (iii) 2,500 pounds per year or more of total hazardous air pollutants; or

(iv) 5.0 tons per year or more of any other regulated pollutant.

- c. Its emissions, in combination with the emissions of other units and activities at the facility, would not cause the facility to emit or have the potential to emit any pollutant in such amount as to make the facility a Title V source.
- d. In the case of a proposed new emissions unit at an existing facility, the emissions of such unit, in combination with the emissions of any other proposed new or modified units and activities at the facility, would not result in a modification subject to the preconstruction review requirements of Rule 62-204.800(10)(d)2., 62-212.400 or 62-212.500, F.A.C.

e. In the case of a proposed new pollutant-emitting activity, such activity would not constitute a modification of any existing non-exempt emissions unit at a non-Title V source or any existing non-insignificant emissions unit at a Title V source.

- 2. Generic Facility Exemption. A facility that is not entitled to a categorical exemption pursuant to Rule 62-210.300(3)(a), F.A.C., shall be exempt from the permitting requirements of this chapter, Chapters 62-212 and 62-213, F.A.C., and Chapter 62-4, F.A.C., if all of the emissions units and activities within the facility, including any proposed new emissions units and activities, meet the exemption criteria of Rule 62-210.300(3)(a), F.A.C., or Rule 62-210.300(3)(b)1., F.A.C., or if the facility meets all of the following criteria:
- a. No emissions unit or pollutant-emitting activity within the facility would be subject to any unit-specific applicable requirement.

b. The facility would neither emit nor have the potential to emit:

(i) 1,000 pounds per year or more of lead and lead compounds expressed as lead;

(ii) 1.0 ton per year or more of any hazardous air pollutant;

CHAPTER 62-212 STATIONARY SOURCES - PRECONSTRUCTION REVIEW (Effective 8/17/00)

62-212.100	Purpose and Scope.
62-212.200	Definitions. (Repealed)
62-212.300	General Preconstruction Review Requirements.
62-212.400	Prevention of Significant Deterioration (PSD).
62-212.410	Best Available Control Technology (BACT). (Repealed)
62-212.500	Preconstruction Review for Nonattainment Areas.
62-212.510	Lowest Achievable Emission Rate (LAER). (Repealed)
62-212.600	Sulfur Storage and Handling Facilities.
62-212.700	Emissions Unit Reclassification. (Repealed)
62-212.710	Air Emissions Bubble.

62-212.100 Purpose and Scope.

The Department of Environmental Protection adopts this chapter to establish the preconstruction review requirements for proposed new emissions units or facilities, and proposed modifications. The requirements of this chapter apply to those proposed activities for which an air construction permit is required pursuant to Chapter 62-210, F.A.C. This chapter includes general preconstruction review requirements and specific requirements for emissions units subject to prevention of significant deterioration (PSD) and nonattainment-area preconstruction review. It also includes preconstruction review requirements applicable to specific emissions unit types and provisions for authorizing the creation of or change to any air emissions bubble. Words and phrases used in this chapter, unless clearly indicated otherwise, are defined at Rule 62-210.200, F.A.C.

Specific Authority 403.061 FS. Law Implemented 403.021, 403.031, 403.061, 403.087, 403.0875 FS. History-New 2-2-93, Formerly 17-212.100, Amended 11-23-94, 3-13-96, 5-20-97.

62-212.300 General Preconstruction Review Requirements.

This rule shall apply to the proposed construction or modification of all emissions units and facilities for which an air construction permit is required pursuant to Rule 62-210.300(1), F.A.C.

- (1) General Prohibitions.
- (a) No emissions unit or facility subject to this rule shall be constructed or modified without obtaining an air construction permit from the Department in accordance with the requirements of Rule 62-212.300(3), F.A.C.
- (b) Except as provided in Rule 62-212.500, F.A.C., the Department shall not permit the construction or modification of any emissions unit or facility that would cause or contribute to a violation of any ambient air quality standard. The Department shall not permit the construction or modification of any emissions unit which would be located in a nonattainment area or area of influence if the proposed construction or modification would interfere with reasonable further progress toward attaining the ambient air quality standards.
- (c) Except as provided in Rule 62-212.400(3)(f) and (g), F.A.C., the Department shall not permit the construction or modification of any emissions unit or facility that would cause or contribute to an ambient concentration at any point within a baseline area that exceeds either the appropriate baseline concentration for the point plus the appropriate maximum allowable increase or the appropriate ambient air quality standard, whichever is less.
 - (d) The Department shall include conditions in each permit issued to insure that the provisions of this rule are not violated.
 - (2) Applicability.
- (a) Relationship of General Preconstruction Review Requirements to Other Preconstruction Review Requirements. The requirements of Rule 62-212.300, F.A.C., shall apply in addition to any other preconstruction review requirements under Rules 62-204.800(10)(d)2., 62-212.400, 62-212.500, and 62-212.600, F.A.C.
- (b) Pollutants Subject to General Preconstruction Review. Pollutants subject to the general preconstruction review requirements of this rule are those pollutants not subject to preconstruction review under Rule 62-204.800(10)(d)2., 62-212.400, or 62-212.500, F.A.C. In determining applicability and implementing the provisions of Rule 62-204.800(10)(d)2., F.A.C., the Department shall rely on the definitions of terms contained in the applicable sections of 40 C.F.R. Part 63, adopted and incorporated by reference in Rule 62-204.800, F.A.C., wherever a difference in definitions or terminology exists between 40 C.F.R. Part 63 and Rule 62-210.200, F.A.C.
 - (3) Permitting Requirements.
- (a) Each applicant for an air construction permit for an emissions unit subject to this rule shall provide the Department, at a minimum, the following information:
 - 1. The nature and amounts of emissions from the emissions unit.
- 2. The location, design, construction, and operation of the emissions unit to the extent necessary to allow the Department to determine whether construction or modification of the emissions unit would result in violations of any applicable provisions of Chapter 403, Florida Statutes, or Department air pollution rules, or whether the construction or modification would interfere with the attainment and maintenance of any state or national ambient air quality standard.

(b) Each applicant for an air construction permit for an emissions unit subject to Rule 62-204.800(10)(d)2., F.A.C., shall provide the Department with the information required by 40 C.F.R. 63.43(e), adopted and incorporated by reference in Rule 62-204.800(10)(d)2., F.A.C.

Specific Authority 403.061 FS. Law Implemented 403.021, 403.031, 403.061, 403.087 FS. History-Formerly 17-2.520, 17-212.300, Amended 11-23-94, 1-1-96, 10-28-97.

62-212.400 Prevention of Significant Deterioration (PSD).

The provisions of this rule generally apply to the construction or modification of air pollutant emitting facilities in those parts of the state in which the state ambient air quality standards are being met.

The provisions of this rule also establish various requirements for existing emissions units and facilities in such areas, including specific construction/operation permit requirements.

- (1) General Prohibitions.
- (a) Except as provided in Rule 62-212.500, F.A.C., the Department shall not permit the construction or modification of any emissions unit or facility that would cause or contribute to a violation of any ambient air quality standard.
- (b) Except as provided in Rule 62-212.400(3)(f) and (g), F.A.C., the Department shall not permit the construction or modification of any emissions unit or facility that would cause or contribute to an ambient concentration at any point within a baseline area that exceeds either the appropriate baseline concentration for the point plus the appropriate maximum allowable increase or the appropriate ambient air quality standard, whichever is less.
 - (c) The Department shall include conditions in each permit issued to insure that the provisions of this rule are not violated.
- (2) Applicability. This subsection establishes the criteria for determining whether or not a proposed new facility or modification to a facility is subject to the preconstruction review requirements of this rule, either in whole or in part. The preconstruction review requirements of this rule include the applicable provisions of: Rules 62-212.400(4), F.A.C., General Provisions; 62-212.400(5), F.A.C., Preconstruction Review Requirements; 62-212.400(6), F.A.C., Best Available Control Technology (BACT); and 62-212.400(7), F.A.C., Construction/Operation Permit Requirements; all as modified by the applicable provisions of Rule 62-212.400(3), F.A.C., Exemptions and Exclusions. A proposed new facility or modification that is not subject to the preconstruction review requirements of this rule, either in whole or in part, may be subject to review requirements under other rules of this chapter.
 - (a) Facility and Project Exemptions.
- 1. Nonprofit Health and Educational Facilities Exemption. A proposed new facility or modification shall not be subject to the preconstruction review requirements of this rule if the new or modified facility would be a nonprofit health or nonprofit educational institution.
 - 2. Pollution Control Project Exemptions.
- a. A pollution control project that is being added, replaced, or used at an existing electric utility steam generating unit and that meets the requirements of 40 CFR 52.21(b)(2)(iii)(h), adopted and incorporated by reference at Rule 62-204.800, F.A.C., shall not be subject to the preconstruction review requirements of this rule.
- b. A significant net increase in the actual emissions of a collateral pollutant that would occur solely as a result of a project undertaken for the purpose of complying with the hazardous air pollutant emission reduction requirements of 40 CFR Part 63, Subpart S, adopted and incorporated by reference at Rule 62-204.800, F.A.C., shall not be subject to the preconstruction review requirements of this rule, provided the owner or operator demonstrates to the Department that such increase would not cause or contribute to a violation of any ambient air quality standard, maximum allowable increase, or visibility limitation.
- c. A significant net increase in the actual emissions of a collateral pollutant that would occur solely as a result of a project undertaken for the purpose of complying with the non-methane organic compound emission reduction requirements of 40 CFR Part 60, Subpart Cc or WWW, adopted and incorporated by reference at Rule 62-204.800, F.A.C., shall not be subject to the preconstruction review requirements of this rule, provided the owner or operator demonstrates to the Department that such increase would not cause or contribute to a violation of any ambient air quality standard, maximum allowable increase, or visibility limitation.
- 3. Temporary Clean Coal Technology Demonstration Project Exemption. The installation, operation, cessation, or removal of a temporary clean coal technology demonstration project that meets the requirements of 40 CFR 52.21(b)(2)(iii)(i), adopted and incorporated by reference at Rule 62-204.800, F.A.C., shall not be subject to the preconstruction review requirements of this rule. A temporary clean coal technology demonstration project shall have the meaning provided in 40 CFR 52.21(b)(36), adopted and incorporated by reference at Rule 62-204.800, F.A.C.
- 4. Permanent Clean Coal Technology Demonstration Project Exemption. The installation or operation of a permanent clean coal technology demonstration project that constitutes repowering shall not be subject to the preconstruction review requirements of this rule, provided that the project does not result in an increase in the potential to emit of any regulated pollutant emitted by the unit. This exemption shall apply on a pollutant-by-pollutant basis. A clean coal technology demonstration project shall have the meaning provided in 40 CFR 52.21(b)(35), adopted and incorporated by reference at Rule 62-204.800, F.A.C.

- 5. Very Clean-Coal Fired Electric Utility Steam Generating Unit Exemption. The reactivation of a very clean-coal fired electric utility steam generating unit, as defined under 40 CFR 52.21(b)(38), adopted and incorporated by reference at Rule 62-204.800, F.A.C., shall not be subject to the preconstruction review requirements of this rule.
- (b) Fugitive Emissions Exemption. A proposed new facility or modification shall not be subject to the preconstruction review requirements of this rule if:
- 1. The affected facility would not belong to any of the facility categories listed in Table 212.400-1, Major Facility Categories, or any other facility category which, as of August 7, 1980, is being regulated under 40 CFR 60 or 40 CFR 61; and
- 2. The facility or modification would be subject to the preconstruction review requirements of this rule only if fugitive emissions, to the extent quantifiable, are considered in determining whether the affected facility would be subject to preconstruction review requirements pursuant to Rule 62-212.400(2)(d)2., F.A.C., if it is or were itself a proposed new facility.
 - (c) Alternative Fuel or Raw Material Exemption.

A modification that is to occur for any of the following reasons shall not be subject to the preconstruction review requirements of this rule:

- 1. Use of an alternative fuel or raw material by reason of any order under Sections 2(a) and (b) of the Energy Supply and Environmental Coordination Act of 1974 or the Power Plant and Industrial Fuel Use Act of 1978, or by reason of a natural gas curtailment plan pursuant to the Federal Power Act;
 - 2. Use of an alternative fuel by reason of an order or rule under Section 125 of the Act;
 - 3. Use of an alternative fuel at a steam generating unit to the extent that the fuel is generated from municipal solid waste;
- 4. Use of an alternative fuel or raw material which the facility was capable of accommodating before January 6, 1975, unless such change would be prohibited under any federally enforceable permit condition which was established after January 6, 1975; or
- 5. Use of an alternative fuel or raw material which the facility is approved to use under any permit issued under 40 CFR 52.21 or Rule 17-2.500 (transferred) or 62-212.400, F.A.C.
 - (d) New and Modified Facilities.
 - New Minor Facilities.
- A proposed new minor facility shall not be subject to the preconstruction review requirements of this rule.
 - 2. New Major Facilities.

Unless exempted under Rule 62-212.400(2)(a) or (b), F.A.C., a proposed new major facility shall be subject to the preconstruction review requirements of this rule if:

- a. For any pollutant regulated under the Act, except for lead, the sum of the quantifiable fugitive emissions and the potential emissions of all emissions units at the facility which have the same "Major Group" Standard Industrial Classification (SIC) Code (as described in the Standard Industrial Classification Manual, 1972, as amended by the 1977 Supplement; U.S. Government Printing Office, stock numbers 4101-006 and 003-005-00176-01, respectively) would be equal to or greater than 250 tons per year; or
- b. For any pollutant regulated under the Act, except for lead, the sum of the quantifiable fugitive emissions and the potential emissions of all emissions units at the facility which have the same "Major Group" Standard Industrial Classification (SIC) Code would be equal to or greater than 100 tons per year; and the facility would belong to any of the facility categories listed in Table 212.400-1, Major Facility Categories; or
- c. For lead or lead compounds, measured as elemental lead, the sum of the quantifiable fugitive emissions and the potential emissions of all emissions units at the facility which have the same "Major Group" Standard Industrial Classification (SIC) Code would be equal to or greater than 5 tons per year.
 - 3. Modifications to Minor Facilities.

Unless exempted under Rule 62-212.400(2)(a), (b) or (c), F.A.C., a proposed modification to a minor facility shall be subject to the preconstruction review requirements of this rule only if the modification would be a physical change which, in and of itself, would constitute a new major facility subject to preconstruction review requirements pursuant to Rule 62-212.400(2)(d)2., F.A.C.

- 4. Modifications to Major Facilities.
- a. Unless exempted under Rule 62-212.400(2)(a), (b) or (c), F.A.C., a proposed modification to a major facility shall be subject to the preconstruction review requirements of this rule if:
- (i) The facility to be modified would be subject to preconstruction review requirements pursuant to Rule 62-212.400(2)(d)2., F.A.C., if it were itself a proposed new facility; and
- (ii) The modification would result in a significant net emissions increase (as set forth in Rule 62-212.400(2)(e)2., F.A.C.) of any pollutant regulated under the Act; or the facility to be modified is located within 10 kilometers of a Class I area and the modification would result in a net emissions increase (as set forth in Rule 62-212.400(2)(e)1., F.A.C.) of any pollutant regulated under the Act, which increase would have an impact on any Class I area equal to or greater than 1.0 microgram per cubic meter (24-hour average).
- b. A proposed modification to a major facility shall be subject to the provisions of Rule 62-212.400(2)(d)3., F.A.C., Modifications to Minor Facilities, if the facility to be modified would not be subject to preconstruction review requirements pursuant to Rule 62-212.400(2)(d)2., F.A.C., if it were itself a proposed new facility.
 - (e) Emissions Increases.
 - 1. Net Emissions Increase.

A modification to a facility results in a net emissions increase when, for a pollutant regulated under the Act, the sum of all of the contemporaneous creditable increases and decreases in the actual emissions of the facility, including the increase in emissions of the modification itself and any increases and decreases in quantifiable fugitive emissions, is greater than zero.

2. Significant Net Emissions Increase.

A significant net emissions increase of a pollutant regulated under the Act is a net emissions increase equal to or greater than the applicable significant emission rate listed in Table 212.400-2, Regulated Air Pollutants – Significant Emission Rates.

3. Contemporaneous Emissions Changes.

An increase or decrease in the actual emissions or in the quantifiable fugitive emissions of a facility is contemporaneous with a particular modification if it occurs within the period beginning five years prior to the date on which the owner or operator of the facility submits a complete application for a permit to modify the facility and ending on the date on which the owner or operator of the modified facility projects the new or modified emissions unit(s) to begin operation. The date on which any increase in the actual emissions or in the quantifiable fugitive emissions of the facility occurs is the date on which the owner or operator of the facility begins, or projects to begin, operation of the emissions unit(s) resulting in the increase. The date on which any decrease in the actual emissions or in the quantifiable fugitive emissions of the facility occurs is the date on which the owner or operator of the facility completes, or is committed to complete through a federally enforceable permit condition, a physical change in or change in the method of operation of the facility resulting in the decrease.

- 4. Creditable Emissions Changes.
- a. An increase or decrease in the actual emissions or in the quantifiable fugitive emissions of a facility is creditable if:
- (i) The Department has not relied on it in issuing a permit under the provisions of Rule 17-2.500 (transferred), or 62-212.400, FAC, or EPA has not relied on it in issuing a permit under the provisions of 40 CFR 52.21, which permit is in effect when the increase in emissions of the modification occurs; and
- (ii) The Department has not relied on it in demonstrating attainment, defining reasonable further progress, or issuing a permit under the provisions of Rule 17-2.17 (repealed), 17-2.510 (transferred), 17-2.650 (transferred), 62-212.500, or 62-296.500 through 62-296.516. FAC, which permit is in effect when the increase in emissions of the modification occurs.
- b. An increase or decrease in the actual emissions or in the quantifiable fugitive emissions of sulfur dioxide, nitrogen dioxide, or particulate matter which occurs before the applicable minor source baseline date is creditable only to the extent that it must be considered in calculating the amount of any maximum allowable increase in ambient concentration remaining available. With respect to particulate matter, only PM10 emissions shall be used to evaluate the net emissions increase of PM10.
 - c. A decrease in the actual emissions or in the quantifiable fugitive emissions of a facility is creditable only if:
- (i) The old level of actual emissions, the old level of federally enforceable allowable emissions, or the old level of allowable emissions under Rule 62-296.500 through 62-296.516, 62-296.570, 62-296.600 through 605, or 62-296.700 through 62-296.712, F.A.C., whichever is lowest, exceeds the new level of actual emissions;
- (ii) It is federally enforceable on and after the date that the owner or operator obtains from the Department a permit to construct the new or modified facility; and
- (iii) It has approximately the same qualitative significance for public health and welfare as that attributed to the increase in the emissions of the modification.
 - (f) Pollutants Subject to PSD Preconstruction Review.
- 1. Except as provided under Rule 62-212.400(2)(f)3., F.A.C., below, for a proposed new facility or modification subject to the preconstruction review requirements of this rule pursuant to Rule 62-212.400(2)(d)2. or 3., F.A.C., the preconstruction review requirements of this rule shall apply to all pollutants regulated under the Act for which the sum of the potential emissions and the quantifiable fugitive emissions of the facility or modification would be equal to or greater than the significant emission rates listed in Table 212.400-2, Regulated Air Pollutants Significant Emission Rates; or for which the sum of the potential emissions and the quantifiable fugitive emissions of the facility or modification would be greater than zero when the facility is located within 10 kilometers of a Class I area and the potential and quantifiable fugitive emissions would have an impact on the Class I area equal to or greater than 1.0 microgram per cubic meter (24-hour average).
- 2. Except as provided under Rule 62-212.400(2)(f)3., F.A.C., below, for a proposed modification subject to the preconstruction review requirements of this rule pursuant to Rule 62-212.400(2)(d)4., F.A.C., the preconstruction review requirements of this rule shall apply to all pollutants regulated under the Act for which the modification would result in: a significant net emissions increase (as set forth in Rule 62-212.400(2)(e)2., F.A.C.); or a net emissions increase (as set forth in Rule 62-212.400(2)(e)1., F.A.C.) when the facility to be modified is located within 10 kilometers of a Class I area and the net emissions increase would have an impact on the Class I area equal to or greater than 1.0 microgram per cubic meter (24-hour average).
- 3. For a proposed new facility or modification subject to the preconstruction review requirements of this rule which would construct in an area designated as nonattainment for any pollutant other than ozone under Rule 62-204.340, F.A.C., the preconstruction review requirements of this rule shall not apply to emissions of the affected pollutant. For a proposed new facility or modification subject to the preconstruction review requirements of this rule which would construct in an ozone nonattainment area, the preconstruction review requirements of this rule shall not apply to emissions of volatile organic compounds; however, in such case the preconstruction review requirements of this rule shall apply to emissions of nitrogen oxides, even if the proposed new facility or modification would also be subject to the preconstruction review requirements of Rule 62-212.500, F.A.C., for nitrogen oxides.

- (g) Relaxations of Restrictions on Pollutant Emitting Capacity.
- If a previously permitted facility or modification becomes a facility or modification which would be subject to the preconstruction review requirements of this rule if it were a proposed new facility or modification solely by virtue of a relaxation in any federally enforceable limitation on the capacity of the facility or modification to emit a pollutant (such as a restriction on hours of operation), which limitation was established after August 7, 1980, then at the time of such relaxation the preconstruction review requirements of this rule shall apply to the facility or modification as though construction had not yet commenced on it.
 - (3) Limited Exemptions and Special Provisions.

The provisions of this subsection establish exemptions and exclusions from certain of the General Provisions of Rule 62-212.400(4), F.A.C., and PSD Review Requirements of Rule 62-212.400(5), F.A.C.

(a) Relocatable Facilities.

A relocatable facility which has a valid Department operation permit and which has previously been reviewed and issued a construction permit pursuant to 40 CFR 52.21 or to the preconstruction review requirements of this rule shall obtain permission to relocate and operate such facility at a new location through an amendment to the facility's operation permit, provided the following conditions are met:

- 1. The duration of emissions of the facility at the new location would not exceed two years;
- 2. The federally enforceable allowable emissions would not be increased at the new location and the emissions of the facility would not have a significant impact on any Class I area or area where an applicable maximum allowable increase is known to be violated:
- 3. The owner or operator has provided the Department with reasonable assurance that the emissions of the facility at the new location would not cause or contribute to a violation of ambient air quality standards; and
- 4. The owner or operator of the facility would obtain an amendment to the operating permit prior to beginning operation at the new location identifying the new location and the duration of operation.
 - (b) Voluntary Fuel Conversions (Reserved).
 - (c) Temporary Emissions.

A proposed facility or modification subject to the preconstruction review requirements of this rule shall be exempt from the requirements of Rules 62-212.400(5)(d), (e), (f), and (g), F.A.C., for a particular pollutant, provided:

- 1. The duration of emissions of the facility or net emissions increase of the modification would not exceed two years;
- 2. The owner or operator of the facility or modification has provided the Department with reasonable assurance that the emissions of the facility or net emissions increase of the modification would not cause or contribute to a violation of any ambient air quality standard or have a significant impact on any Class I area or area where an applicable maximum allowable increase is known to be violated.
 - (d) Modifications Under Fifty Tons Per Year.

If a proposed modification subject to the preconstruction review requirements of this rule would be made to a facility that was in existence on March 1, 1978, and would result in a net emissions increase of each pollutant listed in Table 212.400-2, Regulated Air Pollutants – Significant Emission Rates, of less than 50 tons per year after the application of BACT, such modification shall be exempt from the requirements of Rule 62-212.400(5)(d), (e), (f), and (g), F.A.C., as they relate to any maximum allowable increase for a Class II area.

(e) General Ambient Monitoring Exemption.

A proposed facility or modification subject to the preconstruction review requirements of this rule shall be exempt from the monitoring requirements of Rule 62-212.400(5)(f) and (g), F.A.C., with respect to a specific pollutant if:

- 1. The emissions of the pollutant from the new facility or the net emissions increase of the pollutant from the modification would not have an impact on any area equal to or greater than that listed in Table 212.400-3. De Minimis Ambient Impacts; or
- 2. The ambient concentration of the pollutant in the area that the proposed facility or modification would affect is less than the appropriate de minimis concentration listed in Table 212.400-3; or
 - 3. The pollutant is not listed in Table 212.400-3.
 - (f) Temporary Exclusions From Increment Consumption.
 - 1. Construction Related Emissions.

Concentrations of particulate matter attributable to the increase in emissions from construction or other temporary emission-related activities of new or modified facilities shall be excluded in determining compliance with any maximum allowable increase.

2. Mandatory Fuel Conversions.

By an Order issued by the Secretary, the following ambient concentrations shall be excluded in determining compliance with any maximum allowable increase, provided the addition of such concentrations shall not cause or contribute to a violation of any ambient air quality standard. No exclusion of such concentrations shall apply more than five years after the effective date of the latest applicable plan or order as set forth in Rule 62-212.400(3)(f)2.a. or b., F.A.C., below.

a. Concentrations attributable to the increase in emissions from facilities which have converted from the use of petroleum products, natural gas, or both by reason of an order in effect under Sections 2(a) and (b) of the Energy Supply and Environmental Coordination Act of 1974 or the Power Plant and Industrial Fuel Use Act of 1978 over the emissions from such facilities before the effective date of such an order.

- b. Concentrations attributable to the increase in emissions from facilities which have converted from using natural gas by reason of a natural gas curtailment plan in effect pursuant to the Federal Power Act over the emissions from such facilities before the effective date of such plan.
 - 3. SIP Revision Related Temporary Emissions.

By an Order issued by the Secretary, concentrations attributable to the temporary increase in emissions of sulfur dioxide, nitrogen dioxide, or particulate matter from facilities which are affected by SIP revisions approved by the Administrator shall be excluded in determining compliance with any maximum allowable increase, provided such Order shall:

- a. Specify the time period over which the temporary emissions increase of sulfur dioxide, nitrogen dioxide, or particulate matter would occur (such time is not to exceed two years in duration unless a longer time is approved by the Administrator);
- b. Specify that the time period for excluding certain concentrations in accordance with Rule 62-212.400(3)(f)3.a., F.A.C., above, is not renewable;
- c. Allow no emissions increase from a facility which would:
- (i) Have a significant impact on a Class I area or area where an applicable maximum allowable increase is known to be violated; or
 - (ii) Cause or contribute to a violation of any ambient air quality standard.
- d. Require limitations to be in effect by the end of the time period specified in accordance with Rule 62-212.400(3)(f)3.a., F.A.C., above, which would ensure that the emissions levels from facilities affected by the SIP revision would not exceed those levels occurring from such facilities before the SIP revision was approved.
 - 4. Innovative Control Technology.

By an Order issued by the Secretary, concentrations attributable to any federally enforceable interim allowable emissions resulting from the use of innovative control technology that are in excess of the final allowable emissions based on the application of BACT, shall be excluded in determining compliance with any maximum allowable increase, provided such Order shall:

- a. Specify the time period over which the interim allowable emissions would occur (such time period shall not exceed four years, however such Order may be renewed for a period not to exceed an additional three years if the innovative control technology fails and the additional time period is needed to apply BACT through a demonstrated system of control).
 - b. Allow no emissions that would:
- (i) Have a significant impact on any Class I area or area where an applicable maximum allowable increase is known to be violated; or
 - (ii) Cause or contribute to a violation of any ambient air quality standard.
- c. Require limitations to be in effect by the end of the time period specified in Rule 62-212.400(3)(f)4.a., F.A.C., above, which would ensure that the emission levels from the emissions units using the innovative control technology would not exceed those that are equivalent to the application of BACT.
 - (g) Permanent Exclusions From Increment Consumption.

The increase in ambient concentrations attributable to new emissions units outside the United States over the concentrations attributable to emissions units which are included in the baseline emissions shall be excluded in determining compliance with any maximum allowable increase.

- (4) General Provisions.
- (a) Facilities or Modifications Affecting Class I Areas.
- 1. Additional Notification Requirements.
- a. The Department shall comply with the additional notification requirements of Rule 62-210.350(2)(h), FAC, for a proposed new facility or modification that would be located within 100 kilometers of, or whose emissions may affect, any Federal Class I area
 - 2. Federal Land Manager Participation.
- a. The Federal Land Manager of any lands contained in a Class I area which may be affected by emissions from a proposed facility or modification may demonstrate to the Department that the emissions from the proposed facility or modification would have an adverse impact on the air quality-related values (including visibility) of the Federal Class I area, notwithstanding that the change in air quality resulting from emissions from such facility or modification would not cause or contribute to concentrations which would exceed any maximum allowable increase for a Class I area.
- b. If this demonstration is received by the Department within thirty (30) days after the Department has mailed or transmitted to the Federal Land Manager a complete application pursuant to Rule 62-210.350(2)(b), FAC, it shall be considered in the Department's preliminary determination and proposed agency action on the permit application. If this demonstration is received within the public comment period on the Department's proposed agency action, it shall be considered in the Department's final determination and final agency action on the permit application.
- c. If the Department finds that the Federal Land Manager's analysis does not demonstrate to the Department's satisfaction that an adverse impact on the air quality related values (including visibility) of a Class I area would occur, a written explanation of the reasons for such finding shall be included in the Department's preliminary or final determination as provided in Rule 62-212.400(4)(a)2.b., FAC. If the Department is satisfied that the Federal Land Manager has demonstrated an adverse impact on the air quality related values (including visibility) of a Class I area, the Department shall not issue the permit.
 - 3. Variances from Class I Increments.

The owner or operator of the proposed facility or modification may demonstrate to the Federal Land Manager that the emissions from such facility or modification would have no adverse impact on the air quality related values of such lands (including visibility), notwithstanding that the change in air quality resulting from emissions from such facility or modification would cause or contribute to concentrations which would exceed a maximum allowable increase for a Class I area. If the Federal Land Manager concurs with such demonstration and so certifies to the Department, the Department may (provided that all applicable requirements are otherwise met) issue the permit with such emission limitations as may be necessary to assure that emissions of sulfur dioxide, nitrogen dioxide, and particulate matter would not exceed the following maximum allowable increases, pursuant to 40 CFR 51.166(p)(4), over baseline concentration for such pollutants:

	Maximum
	Allowable
	Increase
Pollutant and	(micrograms per
Period of Exposure	cubic meter)
Particulate matter (PM10):	,
Annual arithmetic mean	17.0
24-hr maximum	30.0
Sulfur dioxide:	
Annual arithmetic mean	20.0
24-hr maximum	91.0
3-hr maximum	325.0
Nitrogen dioxide:	
Annual arithmetic mean	25.0

- 4. Sulfur Dioxide Variance by Governor with Federal Land Manager's Concurrence.
- a. The owner or operator of a proposed facility or modification which cannot be approved under Rule 62-212.400(4)(a)3., F.A.C., above, may demonstrate to the Governor that the emissions unit or modification cannot be constructed by reason of any maximum allowable increase for sulfur dioxide for periods of twenty-four hours or less applicable to any Class I area and, in the case of Federal mandatory Class I areas, that a variance under this clause would not adversely affect the air quality related values of the area (including visibility);
- b. The Governor, after consideration of the Federal Land Manager's recommendation (if any) and subject to his concurrence, may grant, after notice and an opportunity for a public hearing, a variance from such maximum allowable increase; and
- c. If such a variance is granted, the Department may issue a permit in accordance with the provision of Rule 62-212.400(4)(a)6., F.A.C., below, provided that all applicable requirements are otherwise met.
 - 5. Sulfur Dioxide Variance by Governor with President's Concurrence.
- a. The recommendations of the Governor and the Federal Land Manager shall be transferred to the President in any case where the Governor recommends a variance pursuant to Rule 62-212.400(4)(a)4., F.A.C., above, in which the Federal Land Manager does not concur;
 - b. The President may approve the Governor's recommendation if he finds that such variance is in the national interest; and
- c. If such a variance is approved, the Department may issue a permit in accordance with provisions of Rule 62-212.400(4)(a)6., F.A.C., below, provided that all applicable requirements are otherwise met.
 - 6. Emission Limitations for Gubernatorial Variances.

In the case of a permit issued under the procedures of Rule 62-212.400(4)(a)4. or 5., F.A.C., the facility or modification shall comply with emission limitations as may be necessary to assure that emissions of sulfur dioxide from the emissions unit or modification would not (during any day on which the otherwise applicable maximum allowable increases are exceeded) cause or contribute to concentrations which would exceed the following maximum allowable increases over the baseline concentrations and to assure that such emissions would not cause or contribute to concentrations which exceed the otherwise applicable maximum allowable increases for periods of exposure of 24 hours or less for more than 18 days, not necessarily consecutive, during any annual period:

Maximum
Allowable
Increase
(micrograms per
cubic meter)
36.0
130.0

Period of Exposure 24-hr maximum 3-hr maximum (b) Baseline Related Provisions. 1. General. The establishment of a minor source baseline date for a pollutant establishes the baseline area for that pollutant based on the designations of individual prevention of significant deterioration (PSD) areas under Rule 62-204.360, F.A.C. The boundary of the baseline area may be changed only by redesignating the boundaries of the affected PSD areas in accordance with the redesignation provisions of Rule 62-204.320, F.A.C. The minor source baseline date for an area may be disestablished or changed as the result of such redesignation of PSD areas.

The establishment of a baseline area requires the determination of the baseline emissions that affect the baseline area. The baseline emissions are determined for each pollutant for which maximum allowable increases are established under Rule 62-204.260, F.A.C., and are used to compute the baseline concentration levels for each point within the baseline area. The baseline concentration is the ambient concentration value to which the applicable maximum allowable increase is added to determine the maximum allowable ambient concentration for each point within the area.

2. Baseline Dates.

Within one year of the establishment of a minor source baseline date for a PSD area designated under Rule 62-204.360, FAC, the Department shall publish such date in the Florida Administrative Weekly.

3. Determination of Baseline Emissions.

- a. Except as provided under Rules 62-212.400(4)(b)3.b. through d., F.A.C., the baseline emissions shall be the actual emissions representative of all facilities in existence on the applicable minor source baseline date which are located within the baseline area or have a significant impact on the baseline area.
- (i) On an annual basis, the actual emissions representative of a facility shall be the sum of the actual emissions of each emissions unit within the facility.
- (ii) On a short-term basis, the actual emissions representative of a facility shall be the sum of the normal maximum emissions of each emissions unit within the facility, where normal maximum emissions are the emissions that would occur for each applicable averaging time if an emissions unit were operated at the lesser of its maximum or federally enforceable permitted capacity, using the normal types and amounts of fuels or materials processed, and operated for the lesser of the normal or federally enforceable permitted number of hours per day.
- b. The baseline emissions of a facility on which construction commenced on or before the major source baseline date but which was not in operation by the applicable minor source baseline date, shall be the federally enforceable allowable emissions of the facility, provided such facility would be subject to the preconstruction review requirements of this rule if it were a proposed new facility.
- c. The following emissions shall not be included in the baseline emissions but shall be considered in calculating the amount of any maximum allowable increase remaining available:
- (i) The actual emissions representative of a facility on which construction commenced after the major source baseline date, provided such facility would be subject to the preconstruction review requirements of this rule if it were a proposed new facility;
- (ii) Any increase in the actual emissions representative of a facility resulting from a physical change in or change in the method of operation of the facility which occurred after the major source baseline date, but prior to the applicable minor source baseline date, provided such facility would be subject to the preconstruction review requirements of this rule if it were a proposed new facility and such increase would not qualify for an exemption from the preconstruction review requirements of this rule pursuant to Rule 62-212.400(2)(c), F.A.C.;
- (iii) Any decrease in the actual emissions representative of a facility resulting from a physical change in or change in the method of operation of the facility (including demolition or any otherwise permanent reduction in the productive capacity or the facility) which occurred after the major source baseline date, but prior to the applicable minor source baseline date, provided such facility would be subject to the preconstruction review requirements of this rule if it were a proposed new facility; and
- (iv) Any increase or decrease in the actual emissions representative of all facilities occurring after the applicable minor source baseline date.
- d. Notwithstanding the provisions of Rules 62-212.400(4)(b)3.a. through c., F.A.C., any decrease in the actual emissions representative of a facility on which the Department has relied in demonstrating attainment, defining reasonable further progress, or issuing a permit under the provisions of Rule 17-2.17 (repealed), 17-2.510 (transferred), 17-2.650 (transferred), 62-212.500, 62-296.500 through 62-296.516, or 62-296.700 through 62-296.712, F.A.C., shall be included in the baseline emissions and shall not be considered in calculating the amount of any maximum allowable increase remaining available.
- e. For purposes of Rules 62-212.400(4)(b)3.c.(ii) and (iii), F.A.C., a physical change in or change in the method of operation of a facility shall not include:

(i) Routine maintenance, repair, or replacement of component parts of an emissions unit;

(ii) An increase in the hours of operation or in the production rate, unless such change would be prohibited under any federally enforceable permit condition which was established after the major source baseline date, pursuant to 40 CFR 52.21, or this section, or under regulations approved pursuant to 40 CFR 51.18; or

(iii) A change in ownership of an emissions unit or facility.

f. The date on which any increase in the actual emissions representative of a facility occurs is the date on which the owner or operator of the facility begins, or projects to begin, operation of the emissions unit(s) resulting in the increase.

- g. The date on which any decrease in the actual emissions representative of a facility occurs is the date on which the owner or operator of the facility completes, or commits to complete through a federally enforceable permit condition, the physical change or change in the method of operation of the facility resulting in the decrease.
 - (c) Ambient Monitoring Quality Assurance Requirements.

The owner or operator of the proposed facility or modification shall meet the requirements of 40 CFR Part 58, Appendix B, during the operation of ambient air quality monitoring stations required pursuant to the provisions of Rule 62-212.400(5)(f) or (g), F.A.C. A copy of the above referenced document is available from the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C., and may be inspected at the Department's Tallahassee office.

- (5) Preconstruction Review Requirements.
- (a) General.
- 1. A proposed facility or modification subject to the preconstruction review requirements of this subsection shall be reviewed and permitted in accordance with the provisions of Rules 62-212.400(5)(b) through (h), F.A.C., below, unless specifically exempted from one or more of those requirements pursuant to Rule 62-212.400(3), F.A.C., Exemptions and Exclusions.
- 2. No owner or operator of a facility or modification subject to the preconstruction review requirements of this subsection shall begin construction prior to obtaining a permit to construct in accordance with all applicable provisions of this rule and Rule 62-210.300, F.A.C.
- 3. Within 60 days after receipt of a complete application for a permit to construct, as required in Rule 62-212.400(5)(a)2., F.A.C., above, the Department shall make a preliminary determination as to whether the application should be approved or denied.
 - (b) Technology Review.

The proposed facility or modification shall comply with all applicable emission limitations contained in Part VI of this chapter and 40 CFR Parts 60 and 61.

(c) Best Available Control Technology.

The proposed facility or modification shall apply Best Available Control Technology (BACT) for each pollutant subject to preconstruction review requirements as set forth in Rule 62-212.400(2)(f), F.A.C.

(d) Ambient Impact Analysis.

The owner or operator of the proposed facility or modification shall demonstrate to the Department that the increase in federally enforceable allowable emissions from the proposed facility or modification, together with all other applicable increases and decreases in emissions resulting from the construction or modification (including secondary emissions), will not cause or contribute to a violation of any ambient air quality standard or maximum allowable increase.

- (e) Additional Impact Analyses.
- 1. The owner or operator of the proposed facility or modification shall provide the Department with analyses of:
- a. The impairment to visibility and soils, and to vegetation having a significant commercial or recreational value, that would occur as a result of the facility or modification and associated commercial, residential, industrial and other growth;
- b. The air quality impact projected for the area as a result of general commercial, residential, industrial and other growth associated with the facility or modification; and
- c. The impairment to visibility, if any, which would occur in any Federal Class I area within 100 kilometers of the facility or modification, with the exception of the Bradwell Bay National Wilderness Area, as a result of emissions from the facility or modification. (Federal Class I areas are designated in Rule 62-204.360(3)(b), F.A.C.)
 - 2. The analyses required under Rule 62-212.400(5)(e)1., FAC, shall be carried out using EPA-approved methods, if available.
- 3. The Department may require the owner or operator of a proposed facility or modification subject to the provisions of Rule 62-212.400(5)(e)1.c., FAC, to include as part of the required analysis such visibility monitoring data as are available from Federal or State visibility monitoring programs in the affected Class I area. If such data are not available or are demonstrated to be inadequate for a visibility analysis, the Department may require the applicant to collect up to one year of preconstruction visibility monitoring data and such postconstruction visibility monitoring data as are necessary to analyze the effect that emissions from the facility or modification may have, or are having, on visibility in the affected Class I area.
 - (f) Preconstruction Air Quality Monitoring and Analysis.

The owner or operator of the proposed facility or modification shall provide the Department with an analysis of ambient air quality in the area that the facility or modification would affect for each pollutant subject to NSR requirements as set forth in Rule 62-212.400(2)(f), F.A.C.

- 1. The analysis shall include:
- a. For any pollutant for which no national or state ambient air quality standards have been established, such air quality monitoring data as the Department determines are necessary to assess ambient air quality for that pollutant in any area that the emissions of the pollutant would affect; and
- b. For any pollutant (other than nonmethane hydrocarbons) for which national or state ambient air quality standards have been established, continuous air quality monitoring data sufficient to determine whether emissions of that pollutant would cause or contribute to a violation of any ambient air quality standard or any applicable maximum allowable increase.

- 2. The continuous air quality monitoring data required under Rule 62-212.400(5)(f)1., F.A.C., shall have been gathered over the twelve month period immediately preceding the filing of the application for a permit under this rule unless the Department determines that monitoring data gathered over a period shorter than twelve months, but in no case shorter than four months, are acceptable for purposes of Rule 62-212.400(5)(f)1., F.A.C.
- 3. Any air quality monitoring data required under Rule 62-212.400(5)(f)1., F.A.C., shall be gathered in general accordance with the applicable procedures specified in the Ambient Monitoring Guidelines for Prevention of Significant Deterioration (EPA 450/4-87-007, U.S. Environmental Protection Agency, Office of Air Quality Planning and Standards, Research Triangle Park, N.C. 27711, May 1987). A copy of the above referenced document is available from the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C., and may be inspected at the Department's Tallahassee office.

(g) Postconstruction Monitoring.

The Department may require the owner or operator of the facility or modification to conduct postconstruction air quality monitoring and provide the data to the Department if the Department finds that such monitoring is necessary to determine the effect that emissions from the facility or modification may have, or are having, on air quality in any area.

(h) Permit Application Information Required.

At a minimum, the owner or operator of the facility or modification shall provide the following information to the Department:

- 1. A description of the nature, location, design capacity and typical operating schedule of the facility or modification, including specifications and drawings showing its design and plant layout;
 - 2. A detailed schedule for construction of the facility or modification;
- 3. A detailed description of the system of continuous emissions reduction proposed by the facility or modification as BACT, emissions estimates and any other information as necessary to determine that BACT would be applied to the facility or modification;
- 4. Information relating to the air quality impact of the facility or modification, including meteorological and topographical data necessary to estimate such impact; and
- 5. Information relating to the air quality impacts of, and the nature and extent of, all general commercial, residential, industrial and other growth which has occurred since August 7, 1977, in the area the facility or modification would affect.
- 6. A good-engineering-practice stack height, or other dispersion techniques, analysis to demonstrate compliance with Rule 62-210.550, FAC.
 - (6) Best Available Control Technology (BACT).
- (a) BACT Determination. Following receipt of a complete application for a permit to construct an emissions unit or facility which requires a determination of Best Available Control Technology (BACT), the Department shall make a determination of Best Available Control Technology during the permitting process. In making the BACT determination, the Department shall give consideration to:
- 1. Any Environmental Protection Agency determination of Best Available Control Technology pursuant to Section 169 of the Clean Air Act, and any emission limitation contained in 40 CFR Part 60 (Standards of Performance for New Stationary Sources) or 40 CFR Part 61 (National Emission Standards for Hazardous Air Pollutants).
 - 2. All scientific, engineering, and technical material and other information available to the Department.
 - 3. The emission limiting standards or BACT determinations of any other state.
 - 4. The social and economic impact of the application of such technology.
- (b) Phased Construction Projects For phased construction projects, the determination of BACT shall be reviewed and modified in accordance with 40 CFR 51.166(j)(4), adopted and incorporated by reference in Rule 62-204.800, F.A.C.
- (c) Use of Innovative Control Technology. With the consent of the Governor(s) of other affected state(s), the Department shall approve, through the permitting process, the use of a system of innovative control technology if the proposed system would comply with the requirements of 40 CFR 51.166(s)(2)(i) through (v).
- 1. The permit shall provide that the system of innovative control technology be discontinued under the conditions set forth in 40 CFR 51.166(s)(3)(i) through (iii).
- 2. If a system of innovative control technology must be discontinued, the facility's permit shall be amended to require the application of BACT through the use of a demonstrated system of control as expeditiously as practicable but no later than three years after amendment of the permit.
- (d) Test Methods and Procedures. All emissions tests performed pursuant to the requirements of this rule shall comply with the following requirements.
- 1. Pollutants for Which a Standard has Been Established Pursuant to 40 CFR Part 60, 40 CFR Part 61, or 40 CFR Part 63. The test methods shall be as specified in 40 CFR Part 60, Appendix A, 40 CFR Part 61, Appendix B, or 40 CFR Part 63, Appendix B, adopted and incorporated by reference in Rule 62-204.800(7), (8), (9), F.A.C.
- 2. Pollutants for Which No Standard has Been Established Pursuant to 40 CFR 60, 40 CFR 61, or 40 CFR 63. The test methods shall be as specified in the BACT determination.
 - (7) Construction/Operation Permit Requirements.
 - (a) Construction Permits.

Any construction permit issued pursuant to this rule shall contain all of the conditions and provisions necessary to insure that the construction and operation of the facility or modification shall be in accordance with the requirements of this rule.

(b) Operation Permits.

Any operation permit issued for a facility or modification shall include all operating conditions and provisions required under Rule 62-212.400(7)(a), F.A.C., above, and set forth in the original or amended construction permit.

(8) Future Statutory and Regulatory Changes.

Within 60 days following any substantive changes in the PSD provisions of the Clean Air Act (including Title 1, Part C) or EPA regulations contained in 40 CFR 51.24, the Department shall publish a notice in the Florida Administrative Weekly identifying the changes and any new substantive differences created thereby in the state regulations. At the next regularly scheduled meeting of the Environmental Regulation Commission, not sooner than 14 days after the notice required above, the Department shall notify the Commission of the changes.

(9) Effective Date.

The provisions of Rule 62-212.400, F.A.C., shall become effective on November 1, 1981.

TABLE 212.400-1 MAJOR FACILITY CATEGORIES (LIST OF 28)

Fossil fuel fired steam electric plants of more than 250 million Btu/hr heat input

Coal cleaning plants (with thermal dryers)

Kraft pulp mills

Portland cement plants

Primary zinc smelters

Iron and steel mill plants

Primary aluminum ore reduction plants

Primary copper smelters

Municipal incinerators capable of charging more than 250 tons of refuse per day

Hydrofluoric acid plants

Sulfuric acid plants

Nitric acid plants

Petroleum refineries

Lime plants

Phosphate rock processing plants

Coke oven batteries

Sulfur recovery plants

Carbon black plants (furnace process)

Primary lead smelters

Fuel conversion plants

Sintering plants

Secondary metal production plants

Chemical process plants

Fossil fuel boilers (or combinations thereof) totaling more than 250 million Btu/hr heat input

Petroleum storage and transfer units with total storage capacity exceeding 300,000 barrels

Taconite ore processing plants

Glass fiber processing plants

Charcoal production plants

TABLE 212.400-2 REGULATED AIR POLLUTANTS – SIGNIFICANT EMISSION RATES

•	CEGOETTED THE OCCUPANTS	SIGNII ICANT EMISSION KALES	
			Significant
			Emission Rate
Pollutant			(Tons Per Year)
Carbon monoxide			100
Nitrogen oxides			40
Sulfur dioxide			40
Ozone			40 VOC
Particulate matter			25
PM10			15
Total reduced sulfur (inclu	ding H2S)		10
Reduced sulfur compound			
(including H2S)			10
Sulfuric acid mist			7

Fluorides		(Pounds Per Year)
Lead Mercury Municipal waste combustor organics (measured as total tetra- through		1200 200
octa-chlorinated dibenzo-p-dioxins and dibenzofurans)		(Megagrams per Year) 3.2 x 10-6 (Tons per Year)
Municipal waste combustor metals		3.5 x 10-6
(measured as particulate matter)		(Megagrams per Year) 14
		(Tons per Year) 15
Municipal waste combustor acid gases (measured as sulfur dioxide and		
hydrogen chloride)		(Megagrams per Year)
		(Tons per Year)
Municipal solid waste landfill emissions		٠٠
(measured as nonmethane organic compounds)		(Megagrams per Year) 45
		(Tons per Year)
	TABLE 212.400-3	50
	DE MINIMIS AMBIENT IMPACTS	
	Concentration	
	(Micrograms Per	
Pollutant	Cubic Meter)	Averaging Period
Nitrogen dioxide	14	Annual
Lead Sulfur dioxide	0.1 13	Quarterly 24-hour
PM10	10	24-hour
Fluorides	0.25	24-hour
Mercury	0.25	24-hour
Carbon monoxide	575	8-hour
Hydrogen sulfide	0.2	l-hour
Ozone	No de minimis air	
	quality level is provided	
	for ozone. However, any net increase of 100 tons	
	per year or more of	
	volatile organic compounds	
	subject to preconstruction	
	review would be required	
	to perform an ambient	
	impact analysis, including	
	the gathering of ambient	

Specific Authority 403.061 FS. Law Implemented 403.031, 403.061, 403.087 FS. History-Formerly 17-2.500, Amended 2-2-93, Formerly 17-212.400, Amended 11-23-94, 1-1-96, 3-13-96, 2-5-98, 8-15-99.

air quality data.

62-212.500 Preconstruction Review for Nonattainment Areas.

(1) General Prohibitions.

62-212.400 Prevention of Significant Deterioration (PSD).

- (2)(a)2. Pollution Control Project Exemption. A pollution control project that is being added, replaced, or used at an existing electric utility steam generating unit and that meets the requirements of 40 CFR 52.21(b)(2)(iii)(h) shall not be subject to the preconstruction review requirements of this rule.
- (2)(d)4. Modifications to Major Facilities.

 a(ii) The modification would result in a significant net emissions increase (as set forth in Rule 62-212.400(2)(e)2., F.A.C.) of any pollutant regulated under the Act;
- (2)(e)1 Net Emissions Increase.

 A modification to a facility results in a net emissions increase when, for a pollutant regulated under the Act, the sum of all of the contemporaneous creditable increases and decreases in the actual emissions of the facility, including the increase in emissions of the modification itself and any increases and decreases in quantifiable fugitive emissions, is greater than zero.
- (2)(e)2. **Significant Net** Emissions Increase. A significant net emissions increase of a pollutant regulated under the Act is a net emissions increase equal to or greater than the applicable significant emission rate listed in **Table 212.400-2**, Regulated Air Pollutants Significant Emission Rates.
- (2)(e)3. Contemporaneous Emissions Changes. An increase or decrease in the actual emissions or in the quantifiable fugitive emissions of a facility is contemporaneous with a particular modification if it occurs within the period beginning five years prior to the date on which the owner or operator of the facility submits a complete application for a permit to modify the facility and ending on the date on which the owner or operator of the modified facility projects the new or modified emissions unit(s) to begin operation. The date on which any increase in the actual emissions or in the quantifiable fugitive emissions of the facility occurs is the date on which the owner or operator of the facility begins, or projects to begin, operation of the emissions unit(s) resulting in the increase. The date on which any decrease in the actual emissions or in the quantifiable fugitive emissions of the facility occurs is the date on which the owner or operator of the facility completes, or is committed to complete through a federally enforceable permit condition, a physical change in or change in the method of operation of the facility resulting in the decrease.
- (2)(e)4. Creditable Emissions Changes.
- à. An increase or decrease in the actual emissions or in the quantifiable fugitive emissions of a facility is creditable if:
- b. An increase or decrease in the actual emissions or in the quantifiable fugitive emissions of sulfur dioxide, nitrogen dioxide,

- or particulate matter which occurs before the applicable minor source baseline date is creditable only to the extent that it must be considered in calculating the amount of any maximum allowable increase in ambient concentration remaining available. With respect to particulate matter, only PM₁₀ emissions shall be used to evaluate the net emissions increase of PM10.
- (i) The Department has not relied on it in issuing a permit under the provisions of Rule 17-2.500 (transferred), or 62-212.400, F.A.C., or EPA has not relied on it in issuing a permit under the provisions of 40 CFR 52.21, which permit is in effect when the increase in emissions of the modification occurs; and
- (2)(f) Pollutants Subject to PSD Preconstruction Review.

 Except as provided under Rule 62-212.400(2)(f)3., F.A.C., below, for a proposed new facility or modification subject to the preconstruction review requirements of this rule pursuant to Rule 62-212.400(2)(d)2. or 3., F.A.C., the preconstruction review requirements of this rule shall apply to all pollutants regulated under the Act for which the sum of the potential emissions and the quantifiable fugitive emissions of the facility or modification would be equal to or greater than the significant emission rates listed in Table 212.400-2, Regulated Air Pollutants Significant Emission Rates;
- 2. Except as provided under Rule 62-212.400(2)(f)3., F.A.C., below, for a proposed modification subject to the preconstruction review requirements of this rule pursuant to Rule 62-212.400(2)(d)4., F.A.C., the preconstruction review requirements of this rule shall apply to all pollutants regulated under the Act for which the modification would result in: a significant net emissions increase (as set forth in Rule 62-212.400(2)(e)2., F.A.C.,
- (2)(g) Relaxations of Restrictions on Pollutant Emitting Capacity. If a previously permitted facility or modification becomes a facility or modification which would be subject to the preconstruction review requirements of this rule if it were a proposed new facility or modification solely by virtue of a relaxation in any federally enforceable limitation on the capacity of the facility or modification to emit a pollutant (such as a restriction on hours of operation), which limitation was established after August 7, 1980, then at the time of such relaxation the preconstruction review requirements of this rule shall apply to the facility or modification as though construction had not yet commenced on it.
- (3)(f)2. Mandatory Fuel Conversions.
 By an Order issued by the Secretary, the following ambient concentrations shall be excluded in determining compliance with any maximum allowable increase, provided the addition of such concentrations shall not cause or contribute to a violation of any ambient air quality standard. No exclusion of such concentrations shall apply more than five years after the effective date of the

- latest applicable plan or order as set forth in Rule 62-212.400(3)(f)2.a. or b., F.A.C., below.
- a. Concentrations attributable to the increase in emissions from facilities which have converted from the use of petroleum products, natural gas, or both by reason of an order in effect under Sections 2(a) and (b) of the Energy Supply and Environmental Coordination Act of 1974 or the Power Plant and Industrial Fuel Use Act of 1978 over the emissions from such facilities before the effective date of such an order.

(4)(a)2. Federal Land Manager Participation.

- a. The Federal Land Manager of any lands contained in a Class I area which may be affected by emissions from a proposed facility or modification may demonstrate to the Department that the emissions from the proposed facility or modification would have an adverse impact on the air quality-related values (including visibility) of the Federal Class I area, notwithstanding that the change in air quality resulting from emissions from such facility or modification would not cause or contribute to concentrations which would exceed any maximum allowable increase for a Class I area.
- b. If this demonstration is received by the Department within thirty (30) days after the Department has mailed or transmitted to the Federal Land Manager a complete application pursuant to Rule 62-210.350(2)(b), F.A.C., it shall be considered in the Department's preliminary determination and proposed agency action on the permit application. If this demonstration is received within the public comment period on the Department's proposed agency action, it shall be considered in the Department's final determination and final agency action on the permit application.
- c. If the Department finds that the Federal Land Manager's analysis does not demonstrate to the Department's satisfaction that an adverse impact on the air quality related values (including visibility) of a Class I area would occur, a written explanation of the reasons for such finding shall be included in the Department's preliminary or final determination as provided in Rule 62-212.400(4)(a)2.b., F.A.C. If the Department is satisfied that the Federal Land Manager has demonstrated an adverse impact on the air quality related values (including visibility) of a Class I area, the Department shall not issue the permit.
- (4)(a)3. Variances from Class I Increments. The owner or operator of the proposed facility or modification may demonstrate to the Federal Land Manager that the emissions from such facility or modification would have no adverse impact on the air quality related values of such lands (including visibility), notwithstanding that the change in air quality resulting from emissions from such facility or modification would cause or contribute to concentrations which would exceed a maximum allowable increase for a Class I area. If the Federal Land Manager concurs with such

demonstration and so certifies to the Department, the Department may (provided that all applicable requirements are otherwise met) issue the permit with such emission limitations as may be necessary to assure that emissions of sulfur dioxide, nitrogen dioxide, and particulate matter would not exceed the following maximum allowable increases, pursuant to 40 CFR 51.166(p)(4), over baseline concentration for such pollutants:

- (4)(b)3. Determination of Baseline Emissions.
- a. Except as provided under Rules 62-212.400(4)(b)3.b. through d., F.A.C., the baseline emissions shall be the actual emissions representative of all facilities in existence on the applicable minor source baseline date which are located within the baseline area or have a significant impact on the baseline area.
- (5)(a)3. Within 60 days after receipt of a complete application for a permit to construct, as required in Rule 62-212.400(5)(a)2., F.A.C., above, the **Department shall make a preliminary determination** as to whether the application should be approved or denied.
- (5)(c) **Best Available Control Technology**. The proposed facility or modification shall apply Best Available Control Technology (BACT) for each pollutant subject to preconstruction review requirements as set forth in Rule 62-212.400(2)(f), F.A.C.
- (5)(d) Ambient Impact Analysis.

 The owner or operator of the proposed facility or modification shall demonstrate to the Department that the increase in federally enforceable allowable emissions from the proposed facility or modification, together with all other applicable increases and decreases in emissions resulting from the construction or modification (including secondary emissions), will not cause or contribute to a violation of any ambient air quality standard or maximum allowable increase.
- (5)(h) Permit Application Information Required.
 At a minimum, the owner or operator of the facility or modification shall provide the following information to the Department:
- 1. A description of the nature, location, design capacity and typical operating schedule of the facility or modification, including specifications and drawings showing its design and plant layout;
- A detailed schedule for construction of the facility or modification;
- 3. A detailed description of the system of continuous emissions reduction proposed by the facility or modification as BACT, emissions estimates and any other information as necessary to determine that BACT would be applied to the facility or modification;
- (6)(a) **BACT Determination**. Following receipt of a complete application for a permit to construct an emissions unit or facility which

- requires a determination of Best Available Control Technology (BACT), the **Department shall make a determination of Best Available Control Technology during the permitting process.** In making the BACT determination, the Department shall give consideration to:
- 1. Any Environmental Protection Agency determination of Best Available Control Technology pursuant to Section 169 of the Clean Air Act, and any emission limitation contained in 40 CFR Part 60 (Standards of Performance for New Stationary Sources) or 40 CFR Part 61 (National Emission Standards for Hazardous Air Pollutants).
- 2. All scientific, engineering, and technical material and other information available to the Department.
- 3. The emission limiting standards or BACT determinations of any other state.
- 4. The social and economic impact of the application of such technology.
- (6)(b) Phased Construction Projects -- For phased construction projects, the determination of BACT shall be reviewed and modified in accordance with 40 CFR 51.166(j)(4), adopted and incorporated by reference in Rule 62-204.800, F.A.C.
- (7)(a) Construction Permits. Any construction permit issued pursuant to this rule shall contain all of the conditions and provisions necessary to insure that the construction and operation of the facility or modification shall be in accordance with the requirements of this rule.

TABLE 212.400-2 REGULATED AIR POLLUTANTS --SIGNIFICANT EMISSION RATES

	Significant
	Emission Rate
Pollutant	(Tons Per Year)
Carbon monoxide	100
Nitrogen oxides	40
Sulfur dioxide	40
Ozone	40 VOC
Particulate matter	25
PM ₁₀	15
Total reduced sulfur (including H ₂ S)	10
Reduced sulfur	10
compounds (including H ₂ S)	10
Sulfuric acid mist	7
Fluorides	3
1 Idonaes	(Pounds Per Year)
Lead	(Founds Fer Tear) 1200
	200
Mercury	200

62-212.400 Prevention of Significant Deterioration (PSD).

- (2) Applicability.
- **(b)** Fugitive Emissions Exemption. A proposed new facility or modification shall not be subject to the preconstruction review requirements of this rule if:
- 1. The affected facility would not belong to any of the facility categories listed in Table 212.400-1, Major Facility Categories, or any other facility category which, as of August 7, 1980, is being regulated under 40 CFR 60 or 40 CFR 61; and
- 2. The facility or modification would be subject to the preconstruction review requirements of this rule only if fugitive emissions, to the extent quantifiable, are considered in determining whether the affected facility would be subject to preconstruction review requirements pursuant to Rule 62-212.400(2)(d)2., F.A.C., if it is or were itself a proposed new facility.
 - (d) New and Modified Facilities.
- 2. New Major Facilities. Unless exempted under Rule 62-212.400(2)(a) or (b), F.A.C., a proposed new major facility shall be subject to the preconstruction review requirements of this rule if:
- a. For any pollutant regulated under the Act, except for lead, the sum of the quantifiable fugitive emissions and the potential emissions of all emissions units at the facility which have the same "Major Group" Standard Industrial Classification (SIC) Code (as described in the Standard Industrial Classification Manual, 1972, as amended by the 1977 Supplement; U. S. Government Printing Office, stock numbers 4101-006 and 003-005-00176-01, respectively) would be equal to or greater than 250 tons per year;
 - (f) Pollutants Subject to PSD Preconstruction Review.
- 1. Except as provided under Rule 62-212.400(2)(f)3., F.A.C., below, for a proposed new facility or modification subject to the preconstruction review requirements of this rule pursuant to Rule 62-212.400(2)(d)2. or 3., F.A.C., the preconstruction review requirements of this rule shall apply to all pollutants regulated under the Act for which the sum of the potential emissions and the quantifiable fugitive emissions of the facility or modification would be equal to or greater than the significant emission rates listed in Table 212.400-2, Regulated Air Pollutants Significant Emission Rates
- 3. For a proposed new facility or modification subject to the preconstruction review requirements of this rule which would construct in an area designated as nonattainment for any pollutant other than ozone under Rule 62-204.340, F.A.C., the preconstruction review requirements of this rule shall not apply to emissions of the affected pollutant.