CHAPTER 2

APPLICABILITY DETERMINATION

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Introduction

Title V applies only to facilities that meet specific criteria. This chapter explains:

- The criteria that are used to determine whether a facility is subject to Title
 V; and
- How to determine whether a facility meets these criteria.

As a matter of courtesy, the AQMD identifies and notifies facility owners/operators that they are subject to Title V wherever possible. However, each owner/operator is still responsible for determining whether Title V applies to their facility.

The AQMD maintains a list of facilities that have been issued Title V permits. This list is updated periodically. The most current list of issued Title V permits may be viewed at http://www.aqmd.gov/titlev/finalperm.html.

What Criteria Determine If A Facility Is Subject To Title V?

The criteria that determine whether a facility is subject to Title V are described in Rule 3001 - Applicability. According to Rule 3001, if a facility meets any of the following criteria, it is subject to Title V:

- The facility is a major stationary source;
- The facility is subject to the federal Title IV acid rain program;
- The facility is subject to solid waste incineration unit requirements pursuant to Section 129 (e) of the federal Clean Air Act;
- The facility is subject to a New Source Performance Standard (NSPS) that specifically requires obtaining a Title V permit; or
- The facility is subject to a National Emission Standard for Hazardous Air Pollutants (NESHAP) that specifically requires obtaining a Title V permit.

These criteria are explained in the following sections.

What Classifies A Facility As A Major Stationary Source?

What Is A Major Stationary Source?

Title V permits are required for major stationary sources of air pollution. A *major stationary source* is a facility that emits, or has the potential to emit (PTE), any criteria pollutant, or hazardous air pollutant (HAP) at levels equal to or greater than specific emission thresholds defined by EPA. AQMD uses EPA's definition of major source (40 CFR Part 70, Section 70.2) which is based on PTE. PTE is defined in part as "the maximum capacity of a facility to emit any air pollutant under its physical and operational design." In AQMD, the criteria pollutants are oxides of nitrogen (NOx), oxides of sulfur (SOx), volatile organic compounds (VOC), carbon monoxide (CO), and particulate matter equal to or less than 10 microns in diameter (PM-10). The PTE thresholds are listed in Table 2-1 and a list of HAPs is provided in Appendix B, Table B-2.

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Table 2-1: Title V Potential To Emit (PTE) Emission Threshold Levels

	PTE Levels For the Three Air Basins Within the Jurisdiction of the South Coast Air Quality Management District			
Pollutant	South Coast Air Basin (tpy) (Area 1)	Riverside County Portion of Salton Sea Air Basin (tpy) (Area 2)	Riverside County Portion of Mojave Desert Air Basin (tpy) (Area 3)	
VOC	10	25	100	
NOx	10	25	100	
SOx	100	100	100	
СО	50	100	100	
PM-10	70	70	100	
Single HAP ²	10	10	10	
Combination of HAPs	25	25	25	

What Is A Non-Major Stationary Source?

A non-major stationary source, for purposes of the Title V permitting program, is a facility with **actual** emissions that are less than 50 percent of the major source **potential** to emit thresholds in Table 2-1. Those facilities classified as non-major sources are generally not required to submit a Title V permit application³. Facilities that have not determined their PTE may refer to the limits set forth in Rule 3008(d)(1) and (2) in order to establish a provisional PTE. Facilities that file annual emission reports (AER)⁴ may rely on the total reported emissions from both permitted and non-permitted equipment on the reports to determine if they qualify as a non-major or minor source. The operator of the facility must maintain adequate records to demonstrate that the facility's actual emissions are less than the thresholds in Table 2-2.

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² EPA may establish a lower threshold for particular HAPs. However, at this time, the PTE threshold for each individual HAP is 10 tpy.

³ In some situations, non-major sources may be required to submit a Title V permit application if the facility is subject to a federal NSPS or NESHAP that specifically requires obtaining a Title V permit, or solid waste incineration unit requirements.

⁴ AQMD sends Annual Emission Report (AER) forms to facilities every year. Facility owners/operators are required to report actual emissions from all permitted and un-permitted equipment located at their facility on the AER forms.

Table 2-2: Actual Reported Emission Levels During Phase One And Phase
Two That Trigger Title V Applicability

Based on actual reported emissions (tpy) per facility location

	Three Air Basins Within the AQMD Jurisdiction					
Pollutant	South Coast Air Basin (Area 1)		Riverside County Portion of Salton Sea Air Basin (Area 2)		Riverside County Portion of Mojave Desert Air Basin (Area 3)	
	Phase I	Phase II	Phase I	Phase II	Phase I	Phase II
VOC	8	5	20	12.5	80	50
NOx	8	5	20	12.5	80	50
SOx	80	50	80	50	80	50
СО	40	25	80	50	80	50
PM-10	56	35	56	35	80	50
Single HAP⁵	8	5	8	5	8	5
Combination of HAPs	20	12.5	20	12.5	20	12.5

AQMD decided to implement Title V permitting in two phases. In Phase One, facilities with actual emissions at levels greater than 80 percent of EPA's PTE thresholds were brought into the Title V permitting program. Facilities with actual emissions at levels 50 percent of the PTE thresholds are subject to Phase Two Title V permitting program requirements.

Phase One

Phase One began on March 31, 1997. The Phase One emission thresholds for Title V applicability were based on the **actual** emissions reported to the AQMD in 1992 or later years on the facility's AER, also called "reported emissions" in Rule 3001. If a facility's actual emissions exceeded the Phase One thresholds for any pollutant listed in Table 2-2, the facility was required to complete an AQMD questionnaire to determine if the facility would be subject to Title V permitting requirements based on PTE thresholds in Table 2-1.

In order to begin implementation of the Title V program, the AQMD developed an initial list of facilities that exceeded the Phase One thresholds. Facilities that participate in the AQMD's Regional Clean Air Incentives Market (RECLAIM) were subject to the same applicability thresholds as non-RECLAIM facilities.

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⁵ EPA may establish a lower threshold for particular HAPs. However, at this time, the threshold for each individual HAP is 5 tpy of actual emissions.

Facilities were provided the opportunity to request exemption from Title V if the AQMD incorrectly identified the facility as subject to Title V. Also, a facility that made a permanent change to reduce emissions and that reported emissions in recent years below the thresholds was eligible for a three-year deferral into Phase Two, after which time the AQMD would re-evaluate Title V applicability.

Phase Two

Phase Two began in the fourth year after EPA's interim approval. During Phase Two, the actual emission levels for determining Title V applicability were lowered from 80 to 50 percent of EPA's PTE thresholds (Table 2-1).

Regardless whether or not a notice requesting the facility to apply for a Title V permit was received from AQMD, facilities needed to submit an initial Title V application within 180 days of meeting applicability criteria defined in Rule 3001.

Ultimately, however, each facility is responsible for making their own determination of Title V applicability for their facility. They **should not** rely on the AQMD to provide notification.

Why Do The Emission Thresholds Differ By Area?

The PTE emission thresholds were established by EPA in the definition of a major source found in federal regulations governing the Title V permitting program (40 CFR Part 70, Section 70.2). For criteria pollutants, the thresholds differ according to the attainment status⁶ of the geographic area in which the facility is located.

The jurisdiction of the AQMD encompasses three air basins. The Title V threshold for a particular pollutant depends on the attainment status of the air basin for that pollutant. The three air basins are:

- The South Coast Air Basin (SOCAB), which covers all of Orange County and the non-desert portions of Los Angeles, Riverside and San Bernardino counties (Area 1 on the map);
- The portion of the Salton Sea Air Basin (SSAB) which is located in Riverside County (this area is non-attainment) (Area 2 on the map); and
- An unclassified portion of the Mojave Desert Air Basin (MDAB), which comprises Riverside County east of the SSAB (Area 3 on the map).

Table 2-3 provides the attainment status for criteria pollutants in the three AQMD air basins and Figure 2-1 shows a map of the air basins within the jurisdiction of the AQMD.

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⁶ Depending on how much an area exceeds the National Ambient Air Quality Standards, the area's attainment status is classified as marginal, moderate, serious, severe, or extreme.

Table 2-3: Attainment Status of Regions

Pollutant	SOCAB (Area 1)	SSAB (Non-attainment areas) (Area 2)	MDAB (Unclassified area) (Area 3)
Ozone	Extreme Non-attainment	Severe Non-attainment	Unclassified
NO ₂	Extreme Non-attainment (based on ozone)	Attainment	Unclassified
SO ₂	Attainment	Attainment	Unclassified
PM-10	Serious Non-attainment	Serious Non-attainment	Unclassified
СО	Serious Non-attainment	Attainment	Unclassified

Figure 2-1: Air Basins Within The Jurisdiction Of The AQMD



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Facilities Subject To The Federal Title IV Acid Rain Program

The federal Title IV acid rain program applies to certain electricity generating units operated by public and private electric utilities, independent power producers, cogenerators, solid waste incinerators, and sources of SO₂ that opt into the acid rain program. The AQMD adopted the federal acid rain rules by reference in Regulation XXXI - Acid Rain Permit Program. All facilities identified by AQMD as subject to Title IV were issued Acid Rain Permits through the Title V permitting program in 1998.

Facilities Operating Solid Waste Incineration Units Permitted Under Federal Clean Air Act Section 129(e)

The federal Clean Air Act requires EPA to establish NSPS and existing source guidelines for solid waste incineration units. Specifically, Section 129 (e) of the federal Clean Air Act requires such sources to obtain a Title V permit.

The categories of solid waste incineration units subject to Section 129 standards are:

- Solid waste incineration units combusting municipal waste;
- Solid waste incineration units combusting hospital waste, medical waste and infectious waste incineration;
- Solid waste incineration units combusting commercial or industrial waste;
 and
- Other categories of solid waste incineration units identified by EPA.

If the facility has an incineration unit in one of these categories, it is subject to Title V and is required to obtain a Title V permit no later than 36 months after promulgation of the applicable performance standard, or one year from the effective date of the AQMD's Title V program (by March 31, 1998), whichever is later. If the facility has been identified by AQMD to be subject to Title V, an earlier permit application deadline may be given.

Large municipal solid waste incineration units - 40 CFR Part 60 Subpart Ea and Eb standards were promulgated on February 11, 1991 and December 19, 1995, respectively. Sources identified by the AQMD as subject to these standards were permitted in Phase One of the program.

Small municipal solid waste incineration units - 40 CFR Part 60 Subpart AAAA was promulgated on December 6, 2000. Sources subject to this standard were required to obtain Title V permits by December 6, 2003.

Hospital/medical/infectious waste incineration units - 40 CFR Part 60 Subpart Ec was promulgated on September 15, 1997. These facilities were required to have obtained Title V permits by September 15, 2000.

Commercial/industrial solid waste incineration units - 40 CFR Part 60 Subpart CCCC was promulgated on December 1, 2000. Sources subject to this standard were required to obtain Title V permits by December 1, 2003.

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AQMD will identify and notify other facilities that become subject to Section 129 standards wherever possible. However, facility owners/operators are responsible for determining whether federal Clean Air Act requirements (Section 129 standards) apply to their facilities and should consult the standards as they are proposed and promulgated to confirm applicability.

Facilities Subject To New Source Performance Standards (NSPS)

NSPS are minimum national standards for certain source categories that apply when the sources are constructed, modified, or reconstructed. NSPS generally affect facilities that propose to construct, modify, or reconstruct an emission source on or after the date that an applicable NSPS is proposed. NSPS are established by EPA and published in the Code of Federal Regulations (40 CFR Part 60). AQMD has also adopted NSPS by reference under AQMD Regulation IX - New Source Performance Standards.

Provided the source does not require a Title V permit based on other criteria, all non-major NSPS sources subject to pre-July 21, 1992 NSPS are deferred from Title V permitting, except for solid waste incinerators (see previous section) and municipal solid waste landfills, until EPA adopts a regulation that would require a non-major NSPS source to obtain a Title V permit. Municipal solid waste landfills with a capacity equal to or greater than 2.5 million cubic meters who are subject to 40 CFR Part 60 Subpart WWW are required to obtain a Title V permit. All NSPS promulgated by EPA after July 21, 1992 specify Title V permitting requirements.

AQMD Regulation IX lists NSPS adopted by reference. Facility owner/operators may also wish to consult 40 CFR Part 60 for a complete listing of NSPS. Facility owners/operators are responsible for determining whether a NSPS applies to their facility and should consult the applicability sections of individual NSPS to confirm applicability.

Facilities Subject To National Emission Standard For Hazardous Air Pollutants (NESHAP)

NESHAPs are minimum national standards for certain source categories that emit HAPs. NESHAPs apply to both new and existing facilities within a source category. NESHAPs are established by EPA and published in federal regulations (40 CFR Parts 61, 63 and 68). AQMD may implement the federal regulation directly, adopt a NESHAP by reference under AQMD Regulation X - National Emission Standards for Hazardous Air Pollutants, or adopt an equivalent rule to implement the NESHAP.

Sources subject to NESHAPs are generally subject to Title V requirements. However, EPA regulations allow the AQMD to temporarily defer NESHAP sources located at non-major source facilities from the requirement to obtain Title V permits until EPA adopts definitive rulemaking. EPA allowed AQMD to defer the following NESHAP sources located at non-major facilities from Title V permitting requirements until December 9, 2004: perchloroethylene dry cleaners, ethylene oxide commercial sterilizers and fumigation operations, halogenated solvent cleaning machines, hard and decorative chromium electroplating and

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chromium anodizing tanks, and secondary lead smelters. Sources that receive a deferral from AQMD must apply for a Title V permit by December 9, 2005.

To date, EPA has permanently exempted from Title V the following NESHAP sources located at non-major source facilities: batch cold solvent cleaning machines; decorative chromium electroplating and chromium anodizing operations using fume suppressants as emission reduction technology; and decorative hexavalent chromium electroplating operations using a trivalent chromium bath that incorporates a wetting agent.

Appendix C contains a list of NESHAPs promulgated as of January 2004 (Table C-1) and the schedule for future NESHAPs (Table C-2). Facility owners/operators are responsible for determining whether a NESHAP applies to their facility and should consult the applicability sections of individual NESHAPs to confirm applicability.

Facilities With Actual Emissions That Exceed The Title V Thresholds

If it is discovered that the facility's actual emissions exceed the levels in Table 2-2, the facility must submit an initial Title V permit application package. See Chapter 3 – *The Permit Application Process For An Initial Title V Permit* for information on the necessary permit application forms and deadlines for submitting the application.

Is An Initial Title V Permit Application Required?

In general, a facility's actual emissions determine if a Title V permit application is required. Actual emissions are the sum of each criteria pollutant or HAP emissions from both permitted and un-permitted (AQMD Rule 219) equipment. Fugitive emissions, emissions from "trivial activities," and emissions from mobile equipment should be subtracted from the total. If it is determined that a facilities total emissions are above the thresholds for Title V applicability, submittal of a complete initial Title V permit application and appropriate fess are required within 180 days of the determination.

For a detailed explanation of how to determine a facility's actual emissions, see Appendix B - *Determining Facility Emissions for Title V Applicability*. Appendix B also explains how to determine a facility's PTE. As described in later sections, it will be necessary to determine PTE when making modifications at an existing facility or when constructing a new facility. The appendix may also be useful to facilities that wish to determine whether they might qualify to be exempt from Title V permitting requirements.

Whenever possible, the AQMD will notify facilities with reported emissions that exceed the emissions thresholds in Table 2-2 that they are required to submit an initial Title V permit application to the AQMD. However, it is always the source's responsibility to determine Title V applicability and to submit an initial Title V permit application within 180 days of meeting applicability criteria as defined in Rule 3001.

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Requesting To Be Exempted From The Title V Permitting Program

Facilities that have been identified as subject to Title V can request exemption from Title V requirements by submitting a completed initial Title V permit application package and fees, and submitting a completed Title V exemption request package, including forms Form 400-P and 500-E, and applicable fees per Rule 306 – *Plan Fees*. Requesting an exemption does not relieve the facility from the obligation of submitting an initial Title V permit application. If AQMD approves the exemption request, the initial Title V permit application will be cancelled.

A Title V exemption is **not** permanent. AQMD will evaluate AER reports each year to identify all facilities that report emissions above the Title V thresholds. See the discussion in the following section for exemption criteria.

Criteria To Determine Exemption From Title V

Federal Title V Exemption Criteria

EPA has permanently exempted three source categories from Title V requirements:

- Asbestos demolition and renovation operations;
- New residential wood heaters; and
- Non-road engines meeting the definition in 40 CFR Part 89, Section 89.2

State Of California Title V Exemption Criteria

California State law has exempted military tactical support equipment, as defined in Title 13 of the California Code of Regulations.

AQMD Title V Exemption Criteria

Facilities that can demonstrate to the AQMD that the facility's potential to emit has been permanently reduced, either through a facility modification or by accepting an enforceable AQMD facility permit condition to limit the facility's PTE to less than the levels in Table 2-1, can request to be exempt from Title V permit requirements. Some examples of acceptable facility modifications would be replacing equipment or surrendering a permit.

Occasionally a facility's AER reports may contain incorrect emissions data due to an error in calculations or reporting that results in emissions exceeding the levels in Table 2-2. If the amended AER reports show that actual emissions were below the levels in Table 2-2, the facility may request an exemption from Title V requirements. The amended AER reports and all necessary documentation must be submitted to the AER team. The Title V exemption request will be evaluated after the amended AER reports are approved by the AER team.

Rule 3008 also allows a facility to be exempted from the Title V permitting requirement provided that their actual emissions are below 50 percent of the MST (see Phase II limits in Table 2-2) or their throughput limitations are below

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the specified Alternative Operating Limits (AOL). The AOLs are based on easily measurable parameters such as hours of operation, throughput of materials, or quantity of product. Table 2-4 lists the throughput limits for each type of operation.

Alternatively, a facility may apply for a change of permit conditions to accept an enforceable facility permit condition to limit the facility's PTE to less than the amounts listed in Table 2-1. Facilities that have obtained an AQMD facility permit condition limiting the potential to emit may be required to report annually their emissions pursuant to Rule 301. If at any time a facility's emissions reach levels equal to or greater than the amounts in Table 2-1, the facility would be in violation of its permit condition and would no longer be exempt from Title V, unless the excess emissions were caused by the temporary failure of an air pollution control system.

Table 2-4: Alternative Operational Limits

Type of Operation	Usage Limit in Every 12-Month Period	
Printing, Publishing, and Packaging	In addition to the individual equipment usage limits listed, all Printing, Publishing, and Packaging operations have usage limits of 1,333 gallons of materials containing any one HAP, and 3,333 gallons of materials containing combination HAPs.	
Flexography and Rotogravure (using water-based or UV-cured inks, coatings, and adhesives)	40,000 pounds inks, coatings, adhesives, dilution solvents, & cleaning solvents	
Flexography and Rotogravure (using solvent-based inks)	10,000 pounds (before controls) of inks, coatings, adhesives, dilution solvents & cleaning solvents	
Heatset Offset Lithography	10,000 pounds (before controls) of ink, cleaning solvent, & fountain solution additives	
Non-Heatset Offset Lithography (web- or sheet-fed)	1,425 gallons of cleaning solvent & fountain solution additives	
Screen Printers	1,425 gallons of solvent-based inks, cleaning solvents, adhesives, & coatings	
Boilers (≤ 100,000,000 Btu/hr)	71,000,000 cubic feet of natural gas consumed	
Bulk Gasoline Plants (equipped with vapor-balance system)	20,000 gallons per day of gasoline loaded & unloaded	
Degreasers & Other Units if the solvents do not include: 1,1,1-trichloroethane, dichloromethane, tetrachloroethylene, or trichloroethylene	5,400 gallons of any combination of solvent- containing materials 2,200 gallons of any one solvent-containing material	

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Type of Operation	Usage Limit in Every 12-Month Period
Degreasers & Other Units if the solvents include: 1,1,1-trichloroethane, dichloromethane, tetrachloroethylene, or trichloroethylene	2,900 gallons of any combination of VOC-containing materials 1,200 gallons of any one solvent-containing material
Emergency Standby Engines (< 1,000 brake horsepower)	< 200 hours of operation
Gasoline Dispensing Facilities (Equipped with Phase I and Phase II vapor recovery systems)	7,150,000 gallons of gasoline dispensed
Hot Mix Asphalt Plants	125,000 tons of hot mix asphalt produced
Spray Booths	1,100 gallons of all VOC-containing materials, with no more than 110 gallons of VOC- & HAP-containing materials and the VOC content ≤ 1000 gram/liter, less water and exempt compounds
Ultraviolet/Electron Beam Cured Operations	21,582 gallons of ultraviolet/electron beam materials not to exceed 50 grams/liter.

Facilities that Could Become Subject To Title V In The Future

Unless the facility has demonstrated to the satisfaction of AQMD that their PTE is below the emission thresholds listed in Table 2-1, or the facility has been granted an enforceable emission cap to limit their PTE, a facility not currently subject to Title V could become subject to Title V under the following circumstances. See Appendix B for an explanation on how to determine your facility's PTE.

- Emission Increases Above the Applicability Levels in Table 2-2 If emissions from the facility increase such that actual emissions for any pollutant exceed the thresholds in Table 2-2, the facility must submit an initial Title V application. The permit application package is due within 180 days after the facility becomes subject to Title V, that is, within 180 days from the deadline for filing an AER report that shows emissions above the emission levels in Table 2-2.
- Facilities Excluded in Phase One
 Facilities that were excluded in Phase One may still be subject to Title V permitting requirements if actual emissions are above the Phase Two applicability levels in Table 2-2.
- Modification/PTE Increase During Phase Two
 If construction, modification, or relocation of equipment at the facility
 results in the facility PTE exceeding the PTE thresholds in Table 2-1,
 then Title V permitting requirements will apply. For non-RECLAIM
 facilities and non-RECLAIM pollutants at RECLAIM facilities, the resulting

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facility PTE is the sum of the PTE of the proposed equipment and the PTE of the existing facility. For RECLAIM facilities, the PTE of a RECLAIM pollutant is the higher of the starting allocation plus non-tradable credits or RTCs held in the allocation account, not in the certificate account, after trading. In this case, the facility must file an initial Title V application prior to the construction, modification, or relocation of any equipment.

NSPS and NESHAP Non-Major Sources

EPA has deferred certain non-major NESHAP area source categories at a non-major source facility from having to apply for a Title V permit until December 9, 2004 (see the "Facilities Subject to a NESHAP" section above). Non-major sources that are subject to any of these source categories will be required to obtain a Title V permit when the deferral expires, unless EPA has promulgated a rule extending the deferral or exempting these sources from Title V. Provided the source does not require a Title V permit based on other criteria, non-major NSPS sources subject to pre-July 21, 1992 NSPS are deferred from Title V permitting, except for sources subject to Section 129(e) or 40 CFR Part 60 Subpart WWW.

Determining If A New Facility Will Be Subject To Title V

Determining Title V applicability for a new facility is dependent upon when the applications for Permits to Construct are deemed complete. For new facilities, AQMD will use the PTE thresholds in Table 2-1 to determine Title V applicability. That is, if the facility PTE is determined to equal or exceed the thresholds in Table 2-1 for any pollutant and the facility operator does not request to have a facility-wide emissions limit placed on the permit, then the facility is subject to Title V and must apply for and obtain a Title V permit **prior to construction**.

New facilities that are not subject to Title V will still be subject to non-Title V permitting requirements, unless specifically exempted under Rule 219 - Equipment Not Requiring a Written Permit Pursuant to Regulation II.

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