

Highlights:
History Of Maricopa County's New Source Review (NSR) Pre-Construction Permitting Program
1963 - 2016

1963: Maricopa County Board of Supervisors adopted regulations drawn-up by the Maricopa County Health Department. These regulations prohibited open burning, prohibited the use of incinerators other than multi-chamber incinerators, and required the control of contaminants from industries and land movement operations.

1970: The Clean Air Act was established. Authorized the development of comprehensive federal and state regulations to limit emissions from stationary and mobile sources. Major programs for stationary sources included: National Ambient Air Quality Standards (NAAQS), State Implementation Plans (SIPs), New Source Performance Standards (NSPS), and National Emission Standards for Hazardous Air Pollutants (NESHAPs).

NSPS apply to new, modified, or reconstructed affected facilities in specific source categories, e.g., manufacturers of glass, cement, rubber tires, and wool fiberglass. In 2014, there were 87 delegable NSPS. Sources subject to NSPS must perform an initial performance test, must demonstrate continuous compliance, and must monitor control device operating parameters. Some NSPS require sources to utilize continuous emission monitors (CEMs).

Rule 370 (Federal Hazardous Air Pollutant Program) incorporates the NESHAP. NESHAP establish emission standards for federal hazardous air pollutants (HAPs). The standards established in the federally listed HAPs and the NESHAP are applied by the Maricopa County Air Quality Department Control Officer and must be complied with by an owner and/or operator of a source subject to them.

1972: Arizona submitted its first State Implementation Plan (SIP) to the EPA. EPA adopted these rules into the SIP: Rule 20 (Permits Required) and Rule 23 (Permit Classes).

1975: Maricopa County rules included: *Rule 20 (Permits Required), Rule 21 (Permit Conditions), Rule 22 (Permit Denial: Action), and *Rule 23 (Permit Classes). *EPA adopted into the SIP in 1972.

1977: New Source Review (NSR) Pre-Construction Permitting Program established as part of Clean Air Act amendments – Title I. Established permit review requirements to ensure attainment of the NAAQS. Must undergo EPA pre-construction review for environmental controls if a source proposed either building a new facility or making any modifications to existing facilities that would create a “significant increase” of a regulated pollutant.

1980: Maricopa County revised these rules: *Rule 20 (Permits Required), Rule 21 (Reserved), Rule 22 (Operating Permits), Rule 23 (Permit Conditions) (text of *Rule 23 (Permit Classes) was moved to Rule 20 (Permits Required), Rule 24 (Permit Denial: Action) *EPA adopted into the SIP in 1972.

1983: Maricopa County submitted Rule 21 (Procedures For Obtaining An Installation Permit) to EPA for adoption in the SIP and to comply with NSR Pre-Construction Permitting Program. Incorporated by reference the state's rule R9-3-101 which included the definition of “major source”: “Any physical change that would occur at a stationary source – that would not otherwise qualify for the major source thresholds for nonattainment and attainment or unclassifiable areas – if the change would constitute a major stationary source by itself...”

1984: Maricopa County revised Rule 21. Incorporated by reference the state's R9-3-101 which included the definition of “major source”: “Any change to a minor source which would increase its emissions to the major source thresholds for nonattainment and attainment or unclassifiable areas...” This was called the “one molecule rule”. Maricopa County submitted revised Rule 21 to EPA for adoption in the SIP and to comply with NSR Pre-Construction Permitting Program.

1986: EPA reviewed SIP revision re: NSR Pre-Construction Permitting Program. Revisions were needed to installation permit requirements for sources located in nonattainment and attainment or unclassifiable areas.

1988:

The applicable SIP New Source Review (NSR) Pre-Construction Permitting Program for Maricopa County was approved by EPA. See 53 FR 30220, August 10, 1988. The approved rules apply to major and minor NSR. However, the applicable SIP NSR Program incorporates by reference specific articles from the State of Arizona, Air Pollution Control Administrative Rules and Regulations, including definitions used and articles referenced in the rules and regulations, as of April 30, 1984, and as modified as specified in Maricopa County Air Pollution Control Rules and Regulations, Rule 21 (Procedures For Obtaining An Installation Permit).

EPA adopted Rule 21 as revised in 1984 into the SIP. Maricopa County revised rules in response to SIP-calls for carbon monoxide and ozone and in response to the promulgation of the PM₁₀ standard: *Rule 20 became Rule 200 (General Permit Requirements), Rule 21 became Rule 210 (Installation Permits), Rule 22 became Rule 220 (Permits To Operate), and Rule 24 became Rule 200. *EPA adopted into the SIP in 1972 Rule 20 and Rule 23 which was moved into Rule 20 in 1980.

1990: Title V Operating Permit Program established as part of Clean Air Act amendments. All sources subject to these regulations (aka Title V sources) were required to have a permit to operate that assured compliance with all applicable requirements. Title V Operating Permit Program established new regulatory programs for the issuance of stationary source operating permits. Established emissions trading, added provisions addressing acid rain, ozone depletion and toxic air pollution. Established new auto gasoline reformulation requirements. Set Reid vapor pressure standards for gasoline. Mandated that new gasoline reformulations be sold May to September.

1992: Arizona State Senate Bill 1430 mandated changes to Maricopa County's air quality program. Had to meet program requirements of Title V Operating Permit Program. Had to have permit process for Title V sources (aka major sources) identical to the state's permit process. A single permit (aka a unitary permit) could cover installation and operation.

1993: Maricopa County was delegated authority by EPA for NSR Pre-Construction Permitting Program – Prevention Of Significant Deterioration (PSD). PSD permits required for new major sources and for major sources making a major modification in an attainment area.

Maricopa County's Title V Operating Permit Program adopted. Rules included: Rule 100 (General Provisions And Definitions), Rule 110 (Violations), Rule 120 (Conditional Orders), *Rule 200 (Permit Requirements), *Rule 210 (Title V Permit Provisions), Rule 220 (Non-Title V Permit Provisions), Rule 230 (General Permits), *Rule 240 (Permits For New Major Sources And Major Modifications to Existing Major Sources), Rule 241 (Permits For New Sources And Modifications To Existing Sources), Rule 245 (Continuous Source Emission Monitoring), Rule 270 (Performance Tests), Rule 280 (Fees), Rule 370 (Federal Hazardous Air Pollutant Program), Rule 400 (Procedure Before The Hearing Board), Rule 500 (Attainment Area Classification), Appendix B (Standard Permit Application Form And Filing Instructions). Maricopa County submitted these rules to the EPA as the Maricopa County Title V Operating Permit Program. *From Rule 21 which became Rule 210 (Installation Permits).

1994: Maricopa County submitted a State Implementation Plan (SIP) revision re: NSR Pre-Construction Permitting Program. Rules included: Rule 100 (General Provisions And Definitions), Rule 200 (Permit Requirements), Rule 210 (Title V Permit Provisions), Rule 220 (Non-Title V Permit Provisions), Rule 240 (Permits For New Major Sources And Major Modifications To Existing Major Sources), Rule 241 (Permits For New Sources And Modifications To Existing Sources), Rule 245 (Continuous Source Emission Monitoring), Rule 270 (Performance Tests), Rule 500 (Attainment Area Classification), Appendix B (Standard Permit Application Form And Filing Instructions). References in these rules to the Title V Operating Permit Program were not included in this SIP revision submittal.

1995: EPA reviewed SIP revision re: NSR Pre-Construction Permitting Program. Concerns included: Permit requirements for sources in attainment and unclassifiable areas – related to Rule 240 and the Title V Operating Permit Program and ability of EPA to review permits under NSR Pre-Construction Permitting Program and Title V Operating Permit Program – particularly PSD permits.

1996: Maricopa County and the Arizona Association Of Industries (AAI) completed the Air Permit Process Improvement Project. Arizona State House Bill 2546 passed – changed Arizona Revised Statute § 49-480.01 – allowed sources to make certain changes without requiring a permit revision: change does not constitute modification under NSR Pre-Construction Permitting Program, changes does not result in emission that is greater than emission allowed in permit, and source provides written notification before making change.

EPA provided guidance re: acceptable levels of a minor source (Non-Title V source) permitting program. EPA required pre-construction review and permitting for a subset of sources and modifications with potential emissions less than the significance levels but did allow for de-minimis thresholds at which a minor source would be exempt from pre-construction review and permitting.

EPA granted final interim approval of Maricopa County's Title V Operating Permit Program. Needed to revise: definition of "major source", records retention for Title V sources, Title V permit elements available to the public, activities not subject to a Non-Title V permit, criteria for permit modifications.

1998: EPA determined that changes needed to be made to Rules 100, 240, and 500 in order to meet requirements under NSR Pre-Construction Permitting Program. Maricopa County and the state (ADEQ) began a rulemaking process to change major and minor NSR Pre-Construction Permitting Program.

1999: ADEQ revised rules for Class I sources (aka major sources) and for Class II sources (aka minor sources). More precisely described all facility changes with regulatory consequences and expanded the list of facility changes that do not require permit revisions. Rule revisions addressed NSR Pre-Construction Permitting Program and Title V Operating Permit Program.

2000: Maricopa County adopted revisions to Rules 100, 220, and 500 and adopted new Rules 130 (Emergency Provisions), 140 (Excess Emissions), 201 (Emissions Caps), Appendix D (List Of Insignificant Activities), and Appendix E (List Of Trivial Activities) to address EPA's concerns in 1998 re: NSR Pre-Construction Permitting Program and to match ADEQ's rule revisions in 1999.

2001:

EPA granted full approval to portions of Maricopa County's Title V Operating Permit Program:

Rule 100

Definitions: insignificant activity, major source, trivial activity

Section 402 (Confidentiality Of Information)

Section 500 (Monitoring And Recordkeeping)

Rule 130

Rule 200

Section 308 (Standards For Applications)

Section 312 (Transition From Installation And Operating Permit Program To Unitary Permit Program)

Rule 210

Section 301.4(h) (Permit Application Processing Procedures)

Sections 302.1(j) and (n) (Permit Contents)

Section 404 (Administrative Permit Amendments)

Section 405.1 (Minor Permit Revisions)

Section 408 (Public Participation)

Appendix D

Appendix E

Maricopa County adopted revisions to Rules 210 and 240 to address EPA's concerns in 1998 re: NSR Pre-Construction Permitting Program and to match ADEQ's rule revisions in 1999.

Rule 210 revisions addressed Title V Operating Permit Program – Title V permit application (aka major source permit application) must include insignificant activities.

Rule 240 revisions addressed NSR Pre-Construction Permitting Program – any change at a Non-Title V source (aka minor source) that resulted in a significant net emissions increase of NO_x or VOC would be subject to NSR Pre-Construction Permitting Program.

2002: EPA promulgated comprehensive amendments to NSR Pre-Construction Permitting Program – “NSR Reform”. Changed the regulatory methods for determining whether a major modification had occurred. EPA began a comprehensive evaluation of Title V Operating Permit Programs throughout the country.

2003: EPA began evaluating Maricopa County's Title V Operating Permit Program.

2005:

United States Court of Appeals for the D.C. Circuit vacated some of EPA's amendments to NSR Pre-Construction Permitting Program, e.g., exemption for modifications to certain “clean units”. Remaining rules remained in effect, e.g., changes to the method of calculating emissions increase from a modification to an existing emissions unit.

EPA issued a Notice Of Deficiency to Maricopa County's Title V Operating Permit Program. Deficiencies included: Maricopa County, at times, implemented Rule 210 without proper consideration of the requirements of Rule 20, i.e., the submittal to EPA of Title V permits that did not contain all applicable requirements.

2006: EPA issued a Notice Of Resolution of all the issues identified in the 2005 Notice Of Deficiency. Maricopa County committed to revise rules to correct the deficiency re: implementing Rule 210 without proper consideration of the requirements of Rule 20.

2008: ADEQ began an extensive stakeholder review process of the state's NSR Pre-Construction Permitting Program. The process included stakeholder meetings during which ADEQ received comments on concept papers and then proposed rule language for both major and minor sources. The appropriate scope and elements of the program for minor sources was still being worked-out.

2012: ADEQ submitted the "State Implementation Plan – New Source Review" to EPA. Rule revisions addressed NSR Pre-Construction Permitting Program.

2013: Maricopa County began the rulemaking process to revise the NSR Pre-Construction Permitting Program. The purpose of the rulemaking was to update Maricopa County's NSR Pre-Construction Permitting Program in order to secure the rules' approval as part of the state implementation plan (SIP) under the federal Clean Air Act. The update was to be consistent with revisions ADEQ and the EPA made to the NSR Pre-Construction Permitting Program required by the federal Clean Air Act (CAA).

2016:

On February 3, 2016, the Maricopa County Board of Supervisors adopted revisions to Maricopa County's NSR Pre-Construction Permitting Program. Rules include:

- Rule 100 (General Provisions And Definitions)
- Rule 200 (Permit Requirements)
- Rule 210 (Title V Permit Provisions)
- Rule 220 (Non-Title V Permit Provisions)
- Rule 230 (General Permits)
- Rule 240 (Permit Requirements For New Major Sources And Major Modifications To Existing Major Sources)
- Rule 241 (Permits For New Sources And Modifications To Existing Sources)
- Rule 500 (Attainment Area Classification)
- Rule 510 (Air Quality Standards)
- Rule 600 (Emergency Episodes)
- Appendix D (List Of Insignificant Activities)
- Appendix E (List Of Trivial Activities)

Significant NSR rule changes re: Major NSR include:

- Incorporation by reference most of the federal rules in Rule 240
- Inclusion in Rule 240 of the determination of whether a modification to an existing unit will result in a significant emissions increase
- Allowance in Rule 240 of the use of an existing unit's "projected actual emissions" and plantwide applicability limitations

Significant NSR rule changes re: Minor NSR include:

- Addition of the definitions of "permit threshold", "permitting exemption threshold", and "minor NSR modification"
- Revision of the public participation thresholds based on tons per year of emissions not type of facility in fee table in Rule 280
- Use of emission-based thresholds for minor NSR modification threshold
- Requirement of an air quality impact assessment if there is reason to believe emissions resulting from a new or modified source undergoing Minor NSR might cause or contribute to an exceedance of the national ambient air quality standards (NAAQS).

Maricopa County's NSR Pre-Construction Permitting Program, as revised on February 3, 2016, will be submitted to the EPA as a SIP revision. This SIP revision will bring Maricopa County's NSR Pre-Construction Permitting Program in-line with requirements of the CAA as interpreted through federal regulations and by the courts. The revisions will replace existing SIP rules with requirements that are either as stringent as or more stringent than existing SIP rules.