State Operating Permits Manual

Virginia Department of Environmental Quality

Division of Air Programs Coordination

Office of Air Permitting Programs

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Introduction

Original Concepts

State operating permits had their origin in a 1991 regulation intended to anticipate the operating permits program mandated by Title V of the Clean Air Act Amendments of 1990. The old regulation, found in the Virginia Regulations for the Control and Abatement of Air Pollution at section 120-08-04, contemplated an operating permit applicable to all sources, major and minor, which gave the Department and its permitted sources more flexibility than that available in new source review rules. In addition to applicable emissions limitations and air pollution control requirements, permits could now include operating restrictions intended to meet the applicable requirements. The state operating permit rule also allowed the Department to set a future deadline for the evaluation of toxic pollutant emissions in the operating permit, so that new operating permits could be issued swiftly. And the new rule set a maximum five-year permit duration for state operating permits, anticipating the five-year permit duration under Title V.

State operating permits were also used to set allowable emissions below the Title V major source potential-to-emit thresholds. As we know from the definitions of potential to emit (PTE) in the different permit rules in the Regulations, an enforceable emission limit reduces a source=s PTE, for the pollutant so limited, to a maximum of that limit. Or, as the Title V regulation puts it:

> APotential to emit≅ means the maximum capacity of a stationary source to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or on the type or amount of material combusted, stored, or processed, shall be treated as part of its design if the limitation is state and federally enforceable.
> (9 VAC 5-80-60 C.)

The original state operating permit rule received federal State Implementation Plan (SIP) approval in February 1993. However, state operating permits were not used extensively until early 1995. At that time, they became popular with sources wanting to become synthetic minor sources. A Asynthetic minor≅ source is one eligible to be a Title V major source which accepts either emission limits or operating restrictions in its permit such that its potential to emit is brought below the major source threshold.

The New State Operating Permits Rule

On the basis of several years= experience with the state operating permit rule, the Department developed a new rule which was adopted by the State Air Pollution Control Board and took effect in April 1998. This rule, 9 VAC 5-80-800 et seq., is different from its predecessor in several important respects:

X There is no expiration date, and thus no renewal requirement. A new state operating permit, once issued, is permanent unless revised or revoked.

X Applicability and use are limited. A source owner may request a state operating permit to become a synthetic minor, to combine requirements from multiple permits, or to implement emissions trading, all with respect to one or more pollutants or units or to the whole facility (9 VAC 5-80-800 C.1.). The Department may require a state operating permit to deal with violations of standards or to establish source-specific requirements which implement the Clean Air Act or the Virginia Air Pollution Control Law (9 VAC 5-80-800 C.2.).

X The new SOP may be revised, using procedures and concepts that are roughly comparable to those for Title V permits. (Compare 9 VAC 5-80-860 through -990 with 9 VAC 5-80-190 through -230 in the Regulations. There is no counterpart provision in old section 120-08-04.) These concepts enhance the flexibility of the State Operating Permit and ensure that it may be kept up to date notwith-standing the absence of an expiration date.

In preparing the new rule, the Department was cognizant of the fact that sometimes a source is subject to Title V because of a single emissions unit or its emissions of a single pollutant. The state operating permit may now address those limited aspects of the facility, accomplishing the synthetic minor purpose of the source, without delving into all other aspects of the facility or trying to import all the applicable requirements from pre-existing new source permits the source may have. The lack of an expiration date means that once these features are employed and the unit or pollutant controlled, there is no need to periodically revisit the matter.

While there are several reasons why the Department might want to require a state operating permit, most of the initiative lies with the source. The source may want to become a Asynthetic minor≅ with a state operating permit to enable it to avoid Title V or other permitting programs such as the PSD program or permitting related to Maximum Achievable Control Technology requirements under section 112 of the Clean Air Act; the Asynthetic minor≅ definition in the Regulations (at 9 VAC 5-80-810 C.) allows this varied use of the synthetic minor status.

Exclusionary General Permits

No discussion of Title V avoidance would be complete without mentioning the exclusionary general permits (EGP) rule added to the Regulations in August 1997 (see 9 VAC 5-500-10 et seq.. Its purpose was to make permanent the Atransition policy≅ which EPA articulated while the Title V program was undergoing review, approval, and early implementation. Under the transition policy, first enunciated by EPA in January 1995 and extended until December 31, 1999, a source eligible for Title V on the basis of its major PTE could take a pass on applying for a Title V permit for a period of time pending state rule development, if it could demonstrate that its actual emissions were less than half of the Title V PTE threshold, and had been for two years, and were likely to stay that way. Once the EGP applies, most of its requirements pertain to record-keeping.

Virginia=s EGP rule allows sources with low actual emissions to avoid Title V and state operating permits if they are eligible for, and obtain, coverage under the exclusionary general permit rule. Procedures and requirements for this rule, as an escape hatch from more rigorous case-by-case permitting, are discussed briefly in Chapter 5 of this Manual.

Organization of this Manual

The chapters in this Manual are:

(1) Chapter 1, Application Processing. This chapter describes several important concepts associated with application processing for state operating permits.

(2) Chapter 2, Drafting the Permit. This chapter tackles some major challenges that must be addressed, or kept in mind, during the drafting of the permit.

(3) Chapter 3, Public Participation. This chapter explains public notice and participation requirements associated with the issuance of SOPs.

(4) Chapter 4, Permit Revisions. This chapter describes the permit revisions mentioned above, and recommends procedures for handling them.

(5) Chapter 5, General Permits and Exclusionary General Permits. As mentioned, this chapter describes Exclusionary General Permits requirements and procedures. First, however, it gives brief overviews of the SOP rules governing the development of general permits; the procedures mandated by these rules apply mainly to the Central Office.

(6) Appendices. The Appendices provide samples of format and content for a

number of commonly used letters and notifications associated with the state operating permit process. They also include other items such as portions of permits used to illustrate concepts covered in the chapters. As noted on the cover page of the Appendices, three are kept in separate files from this Manual document.

Where to Find the Manual

This State Operating Permits Manual may be found in K:\Agency files. The text and appendices appear in K:\AGENCY\DTE\SOPMAN99\SEPFINAL.WPD.

Chapter 1

Application Review

Introduction

The state operating permit rules (Regulations, 9 VAC 5-80-800 through 5-80-1040) contemplate that state operating permits (SOPs) will be applied for by sources which want them. Alternatively, the Department will issue SOPs when such action is needed to (1) correct an air quality standard violation, or (2) impose a source-specific emission standard in order to accomplish other purposes of the federal Clean Air Act (see 9 VAC 5-80-800 C.). The application process and form are used when the permit is applied for but are not required when the Department decides to issue a permit (9 VAC 5-80-840 B. And -840 D.). Typically, a source will seek a state operating permit in order to become a Asynthetic minor≅ and stay out of Title V or other permit program applicability (see section **C.**(2)). This chapter of the Manual focuses on use of the state operating permit process by a source or applicant.

A. Using DEQ Form 7 for State Operating Permits

(1) Introduction to Form 7. Form 7, last revised in the spring of 1999, has a key on the cover page which tells what pages to use depending on the nature of the source. In addition, in order to meet the application content requirements of the Regulations, Table 2-1 of this Manual (page II-7) suggests how the Form pages relate to the stated requirements. (See Appendix A for the K:\Agency citation of the Form.) Permit writers are encouraged to provide the Department=s APollution Prevention Fact Sheet≅ to sources along with the Form; see Appendix B for a copy of the Fact Sheet.

(2) Review of Form 7 pages. The following discussion provides tips on the uses of various pages of Form 7, beyond the instructions on the back of each page and the introductory material mentioned above. Where a page is not mentioned here, it is assumed that its instructions and appearance are self-explanatory.

(A) *Page ix, local governing body certification form* - for SOP purposes, there is no need to use this page, unless the state operating permit is being applied for in conjunction with a new source review permit (as allowed by 9 VAC 5-80-820 B.).

(B) *Page 1, contents list and document certification* - the SOP rules (9 VAC 5-80-830 B.) refer to new certification rules elsewhere in the Regulations (see 9 VAC 5-20-230) that support the requirements on this page. For state operating permits, irrespective of the extent of their coverage of the source, the rules continue to apply. Therefore, this page must be signed and submitted with every state operating permit application.

(C) *Page 6, inks, coatings, stains, and adhesives* - The applicant should first analyze each coating, ink, stain, or adhesive and identify its constituent HAPs and associated CAS numbers. Each listed HAP must be evaluated against applicable requirements to determine whether it is exempt, what emission limits will enable it to stay below significant ambient air concentrations, and any other matters dictated by applicable requirements.

(D) In general, the pages of Form 7 will be selected by the applicant for use to characterize the facility, describe emission units and air pollution controls, and commit to emission and operating restrictions necessary to satisfy SOP requirements and create a synthetic minor source. Where the applicant identifies a page of Form 7 as applicable to the facility, the page must be filled out fully, to enable the applicant to apply for permit restrictions enabling it to become a Asynthetic minor≅ or to accomplish other purposes of the SOP program as suggested above. In short, the applicant may choose the applicable pages of Form 7 (subject to DEQ permit review), but may not leave the pages that are chosen incomplete.

B. Application Completeness: Additional Requirements

The Regulations require that applications for state operating permits be complete, and they specify minimum content requirements (9 VAC 5-80-830 and -840) as mentioned in section **A.** Beyond these elements, the Regulations require that compliance with all the standards and conditions for granting permits be demonstrated through review of the application (9 VAC 5-80-870; the standards are in 9 VAC 5-80-850). Because of the flexible nature of the state operating permit program, these requirements for completeness vary according to circumstances. Some of these are worth mentioning in this Manual.

(1) ACompleteness≅ definition and requirement. While a complete application is required (9 VAC 5-80-830 A.), the definition allows flexibility as to the information which

must be developed and submitted by the source.

(A) AComplete≅ means that the application Acontains all the information necessary for processing the application.≅ (9 VAC 5-80-810 C., definition of Acomplete application≅).

(B) The certification of accuracy and completeness required on Form 7, page 1 (see above, section **A.** (2) (B)) is an element of completeness that is specifically required in an application for a state operating permit (see 9 VAC 5-80-830 B.). If this certification is not present on the Form 7, the certification page should be returned so the source may certify its accuracy and completeness.

(C) Completeness of other application information is dependent on the scope of the SOP. See section **C.**, below.

C. Defining the Scope of the State Operating Permit

(1) General remarks. As indicated in the Regulations, a state operating permit may be applied for by the source or imposed by the DEQ for specified purposes, or for others not enumerated (9 VAC 5-80-800 C.). An SOP may cover one unit and one pollutant, or it may cover an entire facility with many units, processes, and pollutants; or it may cover anything in between. A state operating permit, like any other permit, may be revised or re-opened in order to correct errors. (See 9 VAC 5-80-970 A.1. on administrative permit amendments for minor errors; and 9 VAC 5-80-1000 A. on re-opening permits for material mistakes or other major change requirements.)

(2) An example of a synthetic minor covering most of the facility and pollutants, but not all.

Example 1-A: A source has nine emission units emitting three criteria pollutants. Its actual emissions are 80 TPY of VOC, 40 TPY of NO_x, and 60 tons of SO_2. Its PTE is 140 TPY of VOC, 70 TPY of NO_x, and 105 TPY of SO_2.

Analysis of permit applicability: The source is major for VOC and SO_2, making it a Title V source. However, its actual emissions, all being below 100 TPY, make it eligible to become a synthetic minor source through a state operating permit. Because the VOC and SO_2 emissions are above 50 TPY, the source is not eligible for EGP coverage. The NO_x PTE would not, by itself, make the source a Title V source, although the actual emissions of NO_x, by itself, would allow the source to

take an EGP if it were otherwise eligible for one.

Analysis of the scope of the operating permit: If the different pollutants come from different emission units, the source could apply for a state operating permit governing the emission units for VOC and SO_2, setting those limits at 90 TPY and 80 TPY, respectively. The SOP could apply to these two pollutants and the emission units emitting them, and nothing else. Completeness of the application would depend on the information and analysis provided for the emission units in question and for these two pollutants. The limits set depend on the circumstances of each case.

If, on the other hand, the pollutants could not be so neatly separated -- if the emission units were all the same kind, and each emitted a combination of the pollutants involved, it might still be possible to address some, but not all, of the emission units in a separate SOP, in which case the application should indicate the emission units at issue. In such a case, the source should indicate why the emission units not addressed do not need to be permitted in the SOP. They may be covered by other pre-existing permits in a way that, in combination with a new SOP, keeps the source out of Title V or free of other requirements it might otherwise face.

D. Application Processing

(1) Time frames. The Regulations state the time frames for permit processing, once completeness of the application is determined, in terms of normal processing times. (These time requirements do not apply when DEQ is imposing the SOP.) Allowance is made for DEQ to extend the processing time (but not the time for completeness review) if more information is required (9 VAC 5-80-860 A. and -860 B.). Additional allowance is made for permit processing by having the permit processing time follow receipt of a Acomplete application.≅ If an application is not complete, the time frame for permit processing does not begin. The time frames for processing an application are as follows:

(A) Completeness determinations must be made within 30 days after receipt of the application or of additional information (9 VAC 5-80-860 A.).

(B) Processing of the application and issuance of the SOP should normally take no more than 90 days from receipt of the complete application if no public notice is required, or 180 days from receipt of the complete application, if public participation is required. (9 VAC 5-

80-860 B.)

(C) As mentioned, there is no processing time frame if DEQ is imposing the SOP.

(2) Public participation requirement. If a state operating permit will have provisions that are necessary for it to be federally enforceable, a public comment period is required (9 VAC 5-80-1020 A.) Most of the time, this will be the case. However, if a state operating permit is used to regulate state toxic air pollutants or odor under state-only-enforceable rules, there would be no need for federal enforceability and so no requirement for public participation. See **Chapter 3** of this Manual for further detail.

(3) Completeness review. The permit writer must make a completeness determination in writing to the source, within the 30 days of application receipt mentioned above in sub-section (1) (A). Deficiencies in the information provided will depend on the purpose and scope of the state operating permit, which will in turn determine how much of the Form 7 is filled out and what it says. See the discussions in section **B.** above. The written response to the source will take one of two approaches:

(A) For an application determined to be complete, a written response must be sent to the source indicating that the application is complete. It will also indicate whether public participation is required. See Appendix C for a sample completeness letter.

(i) Alternative: if the permit is drafted within the 30 days, it may be sent to the source in lieu of the completeness letter.

(B) For an application determined to be incomplete, a written response must be sent to the source, stating the incompleteness determination and explaining what is desired by the Department to make the application complete. The response will also indicate that the Department=s obligations with respect to processing the permit do not arise until the application is determined to be complete. See Appendix D for a sample letter declaring the application incomplete.

(I) Note: The Regulations do not call upon the permit writer to proceed with the information in hand if is it sufficient to allow the commencement of review, as is the case in the Title V rules (see 9 VAC 5-80-80 D.3.). However, they do not prohibit processing of the application before it is complete, either; and the permit writer should always consider proceeding in the absence of completeness, in the

interests of efficiency.

(C) There is no Aapplication shield≅ concept in the SOP rules as there is in Title V (see 9 VAC 5-80-90 F.) because a source is not required to apply for, or to have, a state operating permit (other than in the circumstances mentioned above in the **Introduction** chapter and in the **Introduction** section of this chapter).

(4) Other attributes of application. Depending on the nature and scope of the permit sought, as well as on matters beyond the discretion of the source, the application and supporting materials may need to include, or take account of, any of the following:

(A) Information to ensure that the existing control technology is adequate to comply with applicable emission limits, if not already provided as part of the application (see sections **A.** and **B.** and Table 1-1 below, and 9 VAC 5-80-840 B.). This is required for all SOPs according to 9 VAC 5-80-870 A.1., but it does not call for a new Best Available Control Technology (BACT) review.

(B) Air quality analysis, or modeling information, if needed. Modeling must be based on the requirements specified in Appendix W to 40 CFR Part 51 unless these are inappropriate to the situation (9 VAC 5-80-870 A.2., -870 B., -870 C.)

(C) Testing information for compliance determination (9 VAC 5-80-880).

In addition, the Regulations authorize the DEQ to require monitoring, record-keeping, and reporting for state operating permits (9 VAC 5-80-890 and -900), but these provisions do not presuppose significant effort in the application process, other than describing monitoring devices (see Table 1-1, next page). In this way, these provisions stand apart from those cited above, since they might be needed to make an application package complete.

(5) Note on information required for permit amendments. Information requirements for minor and significant permit amendments differ from, and are easier to meet, than the requirements for applications for an initial permit. See **Chapter 4**, sections **B.**(3) and **C.**(3) in particular.

E. Renewal of Previously Issued State Operating Permits

(1) Expiration dates. The current rules do not require an expiration date for state operating permits. A source with an existing SOP containing an expiration date should, as that date approaches, notify DEQ of its interest in obtaining a new SOP or amending the existing one to remove the expiration provision. The application for the new SOP will, in any case, be evaluated under current rules (i.e., 9 VAC 5-80-800 et seq., effective April 1, 1998.) The source may:

(A) Apply for a new SOP, taking account of changes made or proposed at the facility since the issuance of the earlier SOP; or

(B) Apply for a new SOP, limited to particular emission units or pollutants, but not taking account of changes made or proposed.

(C) Ask for an amendment to the existing SOP, as suggested.

The only limitation on this action by the source is the possibility that the Department may have grounds for imposing the SOP requirement on the source, i.e., addressing violations of standards or establishing source-specific requirements as mentioned in the **Introduction** chapter of this Manual (9 VAC 5-80-800 C.2.).

(2) Existing State Operating Permits covering hazardous air pollutants (HAPs). The earlier SOP rule required that permits issued to sources emitting HAPs either (1) set limitations on the HAP emissions, pursuant to Rule 4-3 or Rule 5-3 as the case may be, or (2) establish a schedule for their evaluation, to take place not later than during the permit renewal process. Accordingly, existing state operating permits for HAP sources either have HAP limits or a schedule for HAP evaluation at renewal time. Because the new SOP rule does not require HAP evaluation for an applicant, other than in the circumstances where the Department must impose a SOP on a source (see section (1) above), the requirement for HAP evaluation is no longer applicable and should be stricken during either renewal or amendment (as in section (1) above).

Table 1-1. Relating the Application Content Requirements to DEQ Form 7 Pages

Regulatory citation, 9 VAC 5-80-840 ___	**Subject of provision**	**Form 7 page(s)**
B.1.	name, address, owner, plant manager, phones	2
B.2.	processes and products, SIC Code	3
B.3.	emissions of regulated air pollutants, calculated as required, including quantifiable fugitives	14, 15
B.4.	emission rates, in tons per year or in terms necessary to establish compliance	14, 15
B.5.	information to determine emissions: fuel use, fuels, raw materials, production rates, loading rates, operating schedules	4, 5, 11, 16
B.6.	air pollution control equipment and compliance monitoring devices or activities	12, 13
B.7.	limits on source operation, including work practice standards, for regulated pollutants	4, 5, 6, 7, 8, 9, 11, 16
B.8.	calculations on which foregoing is based	separate sheets
B.9.	additional information the Department requires	separate sheets; as required

Chapter 2

Drafting the State Operating Permit

A. The Concept of Supersession

Sources, and new permit writers, may want to know whether a state operating permit, including all applicable requirements relative to a particular source, unit, or pollutant, can be said to supersede the earlier permit to construct and operate from which it may have taken all of those applicable requirements. This question has particular force in cases where the source asks for a state operating permit to combine its applicable requirements from several other permits (see 9 VAC 5-80-800 C.1.a.). It may also apply in cases of parallel processing of a state operating permit and a Title V permit.

Example 2-A. ABC Electronics, a Virginia source, emits criteria pollutants and is subject to Title V because three units, Units XXX through ZZZ, have the potential to emit 120 TPY of NO_x. ABC operates pursuant to three previously issued NSR permits, one of which was for the addition of Units XXX through ZZZ. All three permits were issued pursuant to 9 VAC 5-80-10 (the minor new source review rule), which is SIP-approved. ABC seeks a state operating permit covering Units XXX through ZZZ so that it may avoid Title V. The source may ask whether the state operating permit, effectively duplicating its old modification permit, can supersede the old permit.

Analysis. The state operating permit may supersede the old modification permit covering Units XXX through ZZZ provided the SOP is federally enforceable, i.e., provided it is subject to adequate public participation (as per 9 VAC 5-80-1020) and is practically enforceable, among other requirements (see the definition of Afederally enforceable in 9 VAC 5-80-810 C.)

Accordingly, the state operating permit may include all the terms of the new source review permit governing the emissions from Units XXX through ZZZ covered by the source=s earlier modification. If the state operating permit is subjected to public participation and is otherwise federally enforceable, it can supersede the modification permit governing Units XXX through ZZZ.

B. Permit Fees

(1) Introduction and applicability. The permit fee rule (9 VAC 5 Chapter 80, Part II, Article 2, Rule 8-6, 9 VAC 5-80-310 et seq.) applies permit fee requirements to sources that would require a state operating permit in the absence of a Title V permit (9 VAC 5-80-310 A.6.), among others. The practice of the Department has been to levy fees against state operating permit holders at half the rate applied to Title V sources, by billing state operating permit holders once every two years for the then-current assessment per ton of regulated pollutant emissions. The sources subject to this billing scheme are holders of state operating permits as designated by regional offices; if a new source permit serves, secondarily, to make a source into a synthetic minor, no fees apply.

(2) Procedure. Upon issuance of a state operating permit that is subject to fee requirements, the regional office should flag the facility as a AFESOP≅ source in the air facility data system.

(A) In addition, the following information should be entered or verified in the system:

Source name and billing address
Fee contact
Regulated pollutant(s) and unit(s) under the permit
Flag any insignificant units to be excluded from fee calculation

Note: in this context, the data system, rather than the permit, indicates (or Aflags≅) any insignificant units. Also, Ainsignificant≅ means Ainsignificant so far as the permit is concerned,≅ i.e., units not covered by the permit. If, therefore, a SOP is issued that is not facility-wide, the data system should result in billing only for the emissions and units covered by the permit.

(B) The Department will bill the source for the emissions under the state operating permit every other year by August 1, starting with the first year of the permit fee program (1997). Facilities with a calculated fee of less than $300 are exempt from the fee.

(3) Fee as applicable requirement. The payment of permit fees is an applicable requirement under the permit. Failure to pay will result in appropriate enforcement action.

C. Making the Permit Enforceable: Some Rules

The Regulations require that emission standards in state operating permits be Aenforceable as a practical matter≅ and set out several criteria for emission standards= practical enforceability; see 9 VAC 5-80-850 C. Alternative emission standards are to be judged according to several factors which appear in 9 VAC 5-80-850 D. The rules also set out a number of elements intended to make the permit enforceable as a practical matter; see 9 VAC 5-80-850 F. Additional discussion of some of these matters is in order.

(1) Elements making the permit practically enforceable. If an SOP is not practically enforceable, its utility in keeping the source out of Title V may be impaired. The source should provide information in its application which will support permit conditions making the permit practically enforceable. A listing of such conditions, from which the permit writer and the source may choose, is found in 9 VAC 5-80-850 F. Some of these requirements, such as emission standards, specifications for permitted equipment, and specifications for air pollution control equipment, will appear in practically every state operating permit. Others will only be needed on occasion. The elements which are amenable to differing interpretations are the focus of this section.

(A) ASpecifications for permitted equipment≅ (9 VAC 5-80-850 F.3.) This section calls for thorough identification of permitted equipment, including but not limited to type, rated capacity, and size (e.g., one (1) eight-station W&H (Model Astraflex) wide web flexographic printing press with 2 outboard coating stations, a web width of 52 inches, and a maximum sustainable speed of 1000 feet per minute). The provision gives permit writers a mandate as well as the authority to identify equipment Athoroughly≅ in the permit.

(B) ASpecifications for air pollution control equipment ... and the circumstances under which ... operated.≅ (9 VAC 5-80-850 F.4.) This section invites permit writers to describe how, where, and when air pollution control equipment is operated as well as saying what it is and when it is to be installed (if it hasn=t been installed as of the permit issuance date). See the example permit in Appendix E, specifically conditions 1, 2, 3, 12, 13, 14, and 16.

(C) ASpecifications for air pollution control operating parameters... [which] may include, but not be limited to, the following... A (9 VAC 5-80-850 F.5.) This sub-section, as a follow-up to its predecessor, allows more specificity on control equipment operations, encouraging the permit writer to address a number of parameters in as open-ended an approach as necessary to Aensure that the required overall control efficiency is achieved.≅

(D) ARequirements for proper operation and maintenance of any pollution control equipment, and appropriate spare parts inventory≅ (9 VAC 5-80-850 F.6.) This sub-section enables permit writers to insist that air pollution control equipment, once installed and addressing appropriate parameters and circumstances, is maintained and operated so as to continue to meet applicable requirements. It takes account of the proposition that if there are no spare parts, or if maintenance is shoddy, the equipment will not accomplish the task of controlling emissions to the extent required by applicable requirements elsewhere in the permit.

(2) Federal enforceability. Apart from adhering to federally enforceable substantive requirements in writing a permit, the permit writer will need to provide for a 30-day public comment period for the terms which are to be federally enforceable. This is articulated in 9 VAC 5-80-1020 A.

D. Making the Permit Enforceable: Setting Emission Limits

As indicated in **Chapter 1**, a typical reason for state operating permits is to place enforceable limits on an otherwise major source so that its PTE falls below the Title V threshold and it may avoid Title V permitting. As discussed in EPA=s June 13, 1989 Guidance on Limiting Potential to Emit in New Source Permitting (K:\Agency citation is listed in Appendix A), there are many types of permit limitations that can legally restrict a facility=s potential to emit as long as they are federally enforceable and enforceable as a practical matter. This section discusses the importance of establishing correct emission limits. Appendix D contains an example of actual permit conditions governing emission limits and air pollution control equipment. This example illustrates some other considerations in making the emission limit enforceable as a practical matter.

(1) Determine whether fugitive emissions must be included. If a SOP is written to make a facility a synthetic minor for a particular pollutant, one must first determine whether fugitive emissions must be included. The fugitive emissions shall not be considered in determining whether it is a major stationary source, unless the source belongs to one of the source categories listed under the definition of Amajor source≅ in 9 VAC 5-80-60.C.

Example 2-B: An existing, non-NSPS 500 tons-per-day coal cleaning plant with crushing, screening, cleaning, transfer and loading operations as well as a thermal dryer has facility-wide potential-to-emit emissions of 150 tons per year of particulate matter (as PM_{10}). The facility owner is willing to accept throughput limitations and a 99 ton-per-year particulate matter (as PM_{10}) emission limit to become a synthetic minor.

The owner has estimated the annual PM_{10} emissions based on requested annual throughput and stack test results for the thermal dryer and the coal cleaning equipment, as well as estimating emissions (using emission factors) from the other processes.

Analysis: The definition of Amajor source≅ in 9 VAC 5-80-60 does list this facility type as one of the source categories for which fugitive emissions *must* be counted in determining major source status. Due to the inability to test for the fugitive emissions from the crushing, screening, transfer and loading operations, the permitted PM_{10} emission limit must be set at some value less than 99 tons per year providing for a safety margin as well as for practical means of compliance determination. If the fugitive PM_{10} emissions from these processes are estimated at 5 tons per year based on the requested plant-wide throughput limit, then the permitted annual PM_{10} emissions should be 94 tons. In this way, compliance determination can be made with the 94 tons per year using annual throughput and stack test results for the thermal dryer and coal cleaning equipment, while still providing a safety margin for the fugitive emissions which enables the source to qualify as a synthetic minor source.

(2) Know the basis of the emission factor. Consider another example where, in setting the emission limit, it is very important to know the basis of the emission factor as well as prescribing the appropriate test method in demonstrating compliance with such emission limit.

Example 2-C: A facility has conducted stack tests (Method 25) on its only emission unit to arrive at a VOC (as carbon) emission factor of 25 lbs/ton of material processed. Based on this factor, the facility has agreed to accept a material throughput limitation of 7920 tons, such that the facility will become a synthetic minor source at 99 tons per year of VOCs. It is known that the emission unit=s gas stream consists primarily of ethyl alcohol emissions.

Analysis: Since the permit emission limit must be set for VOCs, the VOC-to-carbon ratio must be determined to accurately determine the annual VOC emissions (as VOC) from the processing of 7920 tons of material. Since ethyl alcohol has a molecular weight of 46 and has two carbon atoms per molecule, the VOC-to-carbon ratio is 46/24 or 1.92. Therefore, the VOC emissions from the processing of 7920 tons of material are:

7920 tons/year x 25 lbs/ton x 1.92 x 1 ton/2000 lbs = 190 tons/year.

Consequently, to make this facility a synthetic minor, a material throughput of about half that requested must be taken to keep the VOC (as VOC) emissions at less than 100 tons per year.

Thus, when setting emission limits to make this source a synthetic minor, special care should be exercised when specifying the test method or other methodology to be used in determining compliance.

E. State/Federal Enforceability of HAP requirements

[Material to be added to Manual after OAPP interpretive effort finished.]

Chapter 3

Public Participation Requirements

Introduction

9 VAC 5-80-1020 states that draft state operating permits shall be subject to a comment period of at least 30 days if they contain provisions necessary to make them federally enforceable. Regional offices have the principal responsibility for carrying out public participation requirements.

A. Pre-requisite: Provisions to Make SOPs Federally Enforceable

The SOP public participation provisions in the Regulations, 9 VAC 5-80-1020, state that a 30-day public comment period is required for any provisions in a state operating permit needed to make the permit federally enforceable. This is true for initial state operating permit issuance, and also for significant permit amendments (see 9 VAC 5-80-990 C.). If a state operating permit can be written without such provisions, there is no need for public participation.

(1) Federal enforceability and synthetic minor status. A state operating permit is customarily, though not always, used to create a "synthetic minor" source from a source that would otherwise be a Title V source (see 9 VAC 5-80-800 C.1.a.). If a state operating permit is sought for synthetic minor status, it will need to undergo public participation in any case to make it federally enforceable, and effective to keep the source out of Title V.

(2) Provisions needed to make permits federally enforceable. See **Chapter 2**, sections **C.** and **D.**

B. Preliminary Step: Showing the Draft Permit to the Source

Prior to public notification of the draft permit, the source should be given the opportunity to review it. A suggested review period is 10 working days; the source may request additional time, in writing, for this review. An example cover letter to the source is in Appendix F .

(1) The package sent to the source should include copies of the following:
   (A) The draft permit;

(B) any additional information which DEQ plans to make known to the public.

(2) Any changes requested by the source, and agreed to by the regional office, should be incorporated into the permit before the public notice is advertised in the newspaper.

C. Public Notification: Content and Procedure

Where public participation is required for a state operating permit (see section **A.** above), there must be a public comment period of at least 30 days. This involves notifying the public through an advertisement in a local newspaper of general circulation in the area where the source is located.

(1) The content of the public notice must include, but is not limited to, the following:

(A) The source name, address, and description of specific location (if needed);

(B) The name and address of the permittee;

(C) The name and address of the DEQ regional office processing the permit;

(D) The activity or activities for which the permit is sought;

(E) The emissions change, if any, that would result from permit issuance;

(F) A brief description of the permit decision;

(G) The name and telephone number of a department contact from whom interested persons may obtain additional information, including copies of the draft permit, the application, air quality impact information if an ambient air dispersion analysis was performed, and all relevant supporting materials;

(H) A brief description of the comment procedures required by 9 VAC 5-80-1020 C. through -1020 G.;

(I) Deadline for comments;

(J) A brief description of the procedures to be used to request a hearing, or

the time and place of the public hearing if the regional office decides to hold one without being asked.

(2) A copy of the public notice format is located in Appendix G.

(3) Copies of the public notice, together with information on the publication date and the deadline for comments, should be provided to the following:

(A) the DEQ Office of Public Affairs, so that Public Affairs staff can put it on the DEQ web site;

(B) The DEQ Office of Policy and Legislation, for submission to the Virginia Register;

(C) affected local air pollution control agencies (see section **D.** below);

(D) states sharing the affected air quality control region (see section **D.** below);

(E) EPA Region III (mccauley.sharon@epamail.epa.gov) ; and

(F) the newspaper which is advertising the public notice.

(4) If EPA requests a copy of a draft state operating permit, the copy should be provided.

(5) The public notice package should be sent to the affected local air pollution control agencies and the states sharing the affected air quality control region before the notice is published in the newspaper, in order to ensure that the recipient receives the full 30 days to comment on the draft permit. The public notice package should include the following:

(A) A cover letter (see sample cover letter in Appendix H).

(B) A copy of the public notice.

(6) The DEQ should consider and incorporate recommendations from any affected local air pollution control agencies and the states sharing the affected air quality control region, when these recommendations do not conflict with applicable requirements or with state air quality policy.

(7) Written comments received during the public notice period should get an

appropriate written response. The permit writer may review the comments and formulate a standardized response that addresses all of the comments received. This Aresponse to comments≅ document should be sent to everyone who commented during the public notice period. See also section **F.** below.

(8) Where comments received during the public notice period result in a determination by the DEQ regional office that Amaterial substantive changes≅ need to be made to the draft permit, it is likely that the public notice should be re-advertised and the public comment period repeated. This is a case-by-case decision by the regional office and the permit writer (see also section **F.** below). AMaterial substantive changes≅ to a draft permit are changes that:

(A) Make emission limitations or performance requirements less stringent;

(B) Make monitoring, record-keeping, or reporting requirements less stringent;

(C) Extend the time for compliance with any applicable requirement; or

(D) Result in a change in the compliance demonstration or test methods specified in the proposed permit.

(9) A record should be made of the public participation process for each permit. The record of these procedures should be put in the permit file and kept five years. The record should include:

(A) The public notice procedures the permit has undergone;

(B) a list of the commenters;

(C) a list of the issues raised during the public participation process.

(D) The Department=s responses to comments (the Comments and Responses document; see sections **C.**(7) (above) and **F.**.(1) below).

D. Affected Local Air Pollution Control Agencies and the States Sharing the Affected Air Quality Control Region

Pursuant to 9 VAC 5-80-1020 B.(2), the regional office must give notice of each draft state operating permit to any Astate sharing the affected air quality control region≅ and to any

Aaffected local air pollution control agencies.≅ The appropriate entities are defined below:

(1) Affected Local Air Pollution Control Agencies: Currently, the only Aaffected local air pollution control agencies≅ in Virginia are in some of the localities in the Northern Virginia region. If a source is in one of these localities, that locality=s air pollution control agency should be notified by DEQ=s Northern Virginia Regional Office.

(2) States Sharing the Affected Air Quality Control Region: Currently, in Virginia, there are only two (2) AInterstate≅ air quality control regions, regions for which other states share as well. The first is the Eastern Tennessee-Southwestern Virginia Interstate Air Quality Control Region, which Virginia shares with Tennessee. The second is the National Capital Interstate Air Quality Control Region, which Virginia shares with Maryland and the District of Columbia.

(A) *Notification.* If a SOP is drafted for a source in the southwestern region, then Tennessee must be notified. Likewise, if a SOP is drafted for a source in the northern region, then Maryland and the District of Columbia must be notified. SOPs drafted for sources in other regions of Virginia do not require notification of other states.

(B) *Addresses:* The Tennessee, Maryland, and District of Columbia addresses for notification are as follows:

(I) Tennessee:

Mr. Tupili Reddi
Chief, Operating Permit Program
Tennessee Air Pollution Control
9th Floor, L & C Annex
401 Church Street
Nashville, Tennessee 37243-1531
E-mail: treddy@mail.state.tn.us

(ii) Maryland:

Mr. David Mummert
Chief, Technical Support Division
Air Quality Permits
Department of the Environment
2500 Broening Highway
Baltimore, Maryland 21224
E-mail: dmummert@mde.state.md.us

(iii) District of Columbia:

Mr. Stanley Tracey
DCRA, Air Resources Management Division
2100 Martin Luther King, Jr. Avenue, S.E.
Suite 404
Washington, D.C. 20020
E-mail: stracey@mail.environ.state.dc.us

E. Public Hearing

The Regulations contemplate that public hearings on state operating permits will be held if people request them for the purpose of seeking reconsideration of the permit decision, and the Department agrees (9 VAC 5-80-1020 C. through -1020 G.). Sometimes, the Department will decide to hold a public hearing without being asked, thereby saving itself the time involved in deciding on public hearing requests.

(1) If a public hearing is requested, the permit writer should proceed through the following steps, each of which includes details set out below:

(A) Determine whether the request is timely and meets these information requirements:

(I) the name, mailing address, and telephone number of the requester;

(ii) the names and addresses of all persons for whom the requester is acting as a representative;

(iii) the reason why a hearing is requested, including the air quality concern that forms the basis for the request;

(iv) a brief, informal statement setting forth the factual nature and the extent of the interest of the requester or of the persons he or she is representing, including information on how and to what extent the permit decision would directly and adversely affect the requester.

(B) Within 30 days after the close of the public comment period, the regional office should decide whether to hold a public hearing (9 VAC 5-80-1020 D.). A public hearing must be held if both of the following are found to be

true:

(I) There is significant public interest in the air quality issues raised by the permit application in question, and

(ii) There are substantial, disputed air quality issues relevant to the permit application in question.

A public hearing may also be held if either of the following is true:

(iii) the applicant requests that it be held;

(iv) the regional office decides to hold it because the facility or the permit is known or suspected to be a matter of public interest or controversy.

(C) If the request meets criteria for a public hearing, arrange it for a convenient time and in a convenient location. Notice of the date and time of the public hearing (see Appendix I) should be published no earlier than 60 days and no later than 30 days before the hearing (9 VAC 5-80-1020 F.).

(D) Copies of the public notice should be sent to:

(I) People who requested the public hearing, as a means of responding to their requests (9 VAC 5-80-1020 F.);

(ii) the newspaper which advertised the public notice;

(iii) the Office of Policy and Legislation, for submission to the Virginia Register; and

(iv) the Office of Public Affairs, for addition of the notice to the DEQ web site.

(E) Contents of a public notice announcing a public hearing:

(I) the date and time of the public hearing;

(ii) the location of the public hearing;

(iii) procedures for the conduct of the public hearing (9 VAC 5-80-1020

E.); and

(iv) procedures to be followed as the DEQ reaches a permit decision after the public hearing (9 VAC 5-80-1020 E.).

(F) Hold the public hearing. As part of the hearing, announce the deadline for written comments, 15 days (or nearest mailing date) after the hearing.

(G) If the regional office decides that the request does not make the case for the public hearing and that one will not be held, the regional office must provide written responses to the applicant and to people who had requested the public hearing (9 VAC 5-80-1020 E.). These responses should indicate why the public hearing request is being denied. (See Appendix J for suggested format.)

F. Completing the Public Comment Period and Responding to Comments

(1) Authority for final processing steps. The public participation provisions in the Regulations (9 VAC 5-80-1020) do not specify the steps presented in this section. However, the Regulations, while specifying some processing steps, do indicate that others are not precluded; see 9 VAC 5-80-860 B. The steps given in this part of this Manual follow, in some degree, the steps in the revised draft Title V Guidance Manual.

(2) Revising the permit as needed. In making appropriate changes to the draft permit, the regional office must decide the extent to which the comments warrant changes in the permit, and whether these changes, in turn, warrant a new round of public participation (see section **C.** (5) above). If they do, the changes should be prepared and the public notification (and possibly also the public hearing) process begun anew.

(A) Decide whether and how to change the permit, based on the following:

(I) comments received at the public hearing, written or spoken, from any citizen, business, organization, or government agency; and

(ii) written comments received within 15 days after the public hearing, from any person or entity as above;

(iii) applicable requirements and the analysis underlying permit terms;

(iv) the opinion of the source.

(B) Make appropriate changes to the permit.

(C) If the changes amount to Amaterial substantive changes≅ as defined above in section **C.** (5), fresh public notification will be necessary. Repeat the steps in sections **D.** and **E.** above.

(3) Responding to Comments.. Based on the extent to which the permit was revised, prepare responses to the comments that were received within the public comment deadline (either 30 days after initial public notice, or 15 days after the public hearing if one was held).

(A) A single AResponse to Comments≅ document may be employed. See section **C.** (8) above.

(B) The response to comments should explain how public comments and suggestions were taken into account, if they resulted in changes to the draft permit.

Example 3-A: One or more commenters at the public hearing suggest that an emissions limit should be based on a particular NSPS provision. Upon analysis, the permit writer and colleagues agree that such a statement should be made in the permit. The statement, or attribution of the limit to the NSPS provision, should be written for the permit. The Aresponses to comments≅ document should indicate that this was done, and state where in the permit the change may be found.

(3) Final permit issuance. There is no provision in the state operating permit rules for a Aproposed permit≅ to be submitted for EPA review. Accordingly, once the permit has been revised following public participation, it should be issued.

(A) Secure approval of the air permit manager and any other approval that is pre-requisite to the issuance of the permit.

(B) Secure the signature of the appropriate official in the regional office.

(C) Mail the permit to the source, with a cover letter directing the source to maintain a copy of the permit at the site of the facility permitted (9 VAC 5-80-860 D.) and informing the source of permit appeal procedures (9 VAC 5-80-860 E.).

(D) Mail or e-mail a copy of the permit to EPA Region III, Air Protection

Division. Region III stated that e-mail is the preferred method. The contact is Sharon McCauley (mccauley.sharon@epamail.epa.gov) (9 VAC 5-80-820 F.6.).

G. Variations on the Public Participation Process for Permit Revisions

The permit revision procedures discussed in **Chapter 4** of this Manual differ in the extent to which they require public participation. The public participation requirement itself, however, applies when the permit provisions being sought are needed to make the permit federally enforceable (9 VAC 5-80-1020 A.) Accordingly, it is possible that a change to a state operating permit desired by a source would not be federally enforceable, which means that the source must ask for public participation, if federal enforceability is desired.

(1) Summary of requirements.

(A) *Administrative permit amendments*. Changes made to a state operating permit through the administrative permit amendment process do not require any public participation, but the changes must be identified as having been made through this process. (See 9 VAC 5-80-970 B.2.)

(B) *Minor permit amendments*. Changes made through the minor amendment process do not require any public participation. Nothing is said in the Regulations about identifying these changes as such in the resulting permit. (See 9 VAC 5-80-980 E.)

(C) *Significant permit amendments*. Changes made through the significant permit amendment process require public participation in the same way as for the permit itself. (See 9 VAC 5-80-990 C.)

(2) Federal enforceability. In order to make a minor permit amendment federally enforceable, the source must ask, in applying for these amendments, that they be subjected to public review in keeping with 9 VAC 5-80-1020. See **Chapter 4** for additional detail on this matter.

Chapter 4

Permit Revisions

Introduction

State Operating Permit revisions are governed by provisions found in the Regulations at 9 VAC 5-80-860 through - 890. Revisions may be requested in writing by the permit holder, in which case certain procedures must be followed by the permit holder and the Department. Permit revisions may also be initiated by the Department, through permit re-opening procedures (see 9 VAC 5-80-1000). This chapter provides basic guidance from the Regulations and addresses some situations where that guidance requires additional interpretation.

A. Administrative Permit Amendments

Administrative permit amendments for state operating permits do not present the potential difficulties common to Title V permits. In the latter case, a source or the Department can encounter difficulties when incorporating requirements from minor new source review into a Title V permit. (See Chapter 4, section H of the Title V Air Permits Guidance Manual (dated June 15, 1999) prepared by the Office of Air Permit Assistance.) In the case of state operating permits, there is less opportunity for confusion because of the more limited scope of the administrative permit amendment definitions.

(1) Definitions. The Regulations are fairly clear on what constitutes an administrative amendment to a State Operating Permit. A source may ask for an administrative permit amendment for the following actions:

(A) Correcting typographical or other errors which do not "substantially affect" the permit;

(B) Changing names of people identified in the permit, or similar minor administrative changes;

(C) Changing ownership or control of the source; and

(D) Combining requirements from different permits (applicable to the source

or to one or more emission units in the source) into a single permit. (It is not necessary that any of these requirements be federally enforceable in itself.)

(2) Interpretations of definitions.

(A) The term Asubstantially affect≅ in paragraph (1)(A) above is not defined (see 9 VAC 5-80-970 A.1.). A correction to a permit should be regarded as Asubstantially affecting≅ a permit when it changes an obligation or entitlement of the source insofar as any of the following requirements are concerned:

(I) allowable emissions (see sub-section (C) below);

(ii) work practices;

(iii) operating restrictions;

(iv) monitoring, reporting, or record-keeping.

(B) The same is true for Asimilar minor administrative changes≅ mentioned in (1)(B) above (see 9 VAC 5-80-970 A.2.) That is, a Aminor administrative change≅ may be considered as not Asubstantially affecting≅ a permit.

(C) Note: increases in allowable emissions which, all totaled, are beneath the permit exemption requirements (9 VAC 5-80-11) and are for changes that would not need a NSR permit are administrative amendments or minor permit amendments. This is important because most SOPs are facility-wide and cover many or all pollutants.

Example 4-A. A facility with a NO_x limit near 100 TPY wants to add a 5 million BTU/hour boiler, which would not need an NSR permit. The SOP may require modification. It is unnecessary to put the permit through public participation for a boiler of this size. The change to the SOP should be either an administrative permit amendment or a minor permit amendment.

(3) Procedures. Procedural steps for administrative permit amendments are simple.

(A) The source makes a written request to the Department, describing the administrative change sought.

(B) The source may implement the change immediately after submitting the

request (9 VAC 5-80-970 B.3.)

(C) ANormal≅ processing time is 60 days from receipt of the request (9 VAC 5-80-970 B.1.) See item **C.**(2)(B) below for a discussion of what constitutes Anormally.≅

(D) The Department incorporates the change into the state operating permit, identifying it as a n administrative permit amendment made pursuant to 9 VAC 5-80-970. The Department communicates to the source that this has been done, or provides a copy of the revised permit. (See Appendix K for a suggested format for this communication.)

B. Minor Permit Amendments

(1) Definitions. The Regulations define minor permit amendments mostly in terms of what they are not. See the list of exclusions in 9 VAC 5-80-980 A.

(2) Interpretation. A minor permit amendment is needed for a change at the facility that does not rise to the definition of Amodification≅ in 9 VAC 5-80-10 B.3. (The minor source rule).

(3) Procedures. As with the procedures for administrative permit amendments to state operating permits, the procedures for minor permit modifications are relatively simple. They involve the following steps:

(A) The source or permit holder files a written request for a minor permit amendment. The request includes:

(i) A statement of the request;

(ii) A description of the proposed change in operation;

(iii) A description of the change in emissions resulting from the proposed change in operation; and

(iv) Any regulatory requirements that will apply if the change takes place.

(B) As with administrative permit amendments, the source may make the proposed change immediately after filing the request. During the time that the Department is considering the request, the source:

(I) must comply with the proposed permit terms and with any requirements applicable to the change; but

(ii) need not comply with existing permit terms that the source seeks to modify.

(C) If the source fails to follow proposed permit terms after filing the request for minor permit modification, then existing permit terms may be enforced against it.

(D) ANormal≅ processing time is 90 days from receipt of the request (9 VAC 5-80-980 F.); see item **C.**(2)(B) below for a discussion of what constitutes Anormally.≅

(E) The Department must decide on the requested minor permit amendment. The decision will be one of the following:

(i) To issue the permit amendment as proposed (see (F) below);

(ii) To deny the permit amendment request (Appendix L);

(iii) To determine that the requested amendment does not meet minor permit amendment criteria, and tell the permit holder that the request should be reviewed under the significant permit modification procedures (Appendix M).

(F) The Department incorporates the change into the state operating permit, identifying it as a minor permit amendment made pursuant to 9 VAC 5-80-980. The Department communicates to the source that this has been done, and provides a copy of the revised permit . (See Appendix N for a suggested format for this communication.)

(G) There is no public participation requirement for minor permit amendments in the SOP rule (9 VAC 5-80-980 B.)

C. Significant Permit Amendments

(1) Definitions. Significant permit amendments are defined as changes in a permitted

facility that do not qualify as minor. That is, they include the following:

(A) Permit amendments with Asignificant≅ changes to existing monitoring, reporting, or record-keeping requirements (9 VAC 5-80-990 A.2.a.). ASignificant≅ means making the requirements less stringent.

(i) Removing an obsolete condition, however, does not make the permit less stringent.

(B) Permit amendments requiring a change of a case-by-case determination of an emission limit or other standard;

(C) Permit amendments which seek to establish, or change, a permit term for which there is no underlying applicable requirement and that the source has assumed in order to avoid another requirement to which it would be otherwise subject. (See 9 VAC 5-80-990 A.2.)

(2) Interpretation. Insofar as significant permit amendments are concerned, there appear to be three matters for interpretation:

(A) ASignificant≅ changes to existing requirements. As indicated in item (1)(A) above), Asignificant≅ means making the requirements less stringent. See the example:

Example 4-B. A State Operating Permit was issued for only one pollutant, SO_2, at a facility, named XTV, containing only one emission unit (No. 2 oil-fired boiler, non-NSPS), EU-1. The permit was issued for the purposes of keeping XTV from the requirement to obtain a Title V permit. A permit emission limit of 95.0 tons per year (calculated on a daily basis) was set for SO_2. The issued permit requires the use of a Continuous Emission Monitoring System (CEMS) on EU-1 for the method of demonstrating compliance with the annual SO_2 emission limit.

Subsequent to permit issuance, XTV requests a change in the method of demonstrating compliance with the annual SO_2 emission limit. XTV proposes that in lieu of the CEMS on EU-1, compliance demonstration be made by monitoring and recording, on a daily basis, the quantity of fuel used (use of fuel flow meter), the fuel sulfur content (from fuel supplier certifications) and using stoichiometry, calculating the resulting SO_2 emissions.

The Department reviews the request and determines that the proposed method of compliance demonstration, although less stringent than the permitted method, is an adequate means of determining compliance with the annual SO_2 emission limit.

Since the proposed change results in a significant change in the permitted method of monitoring, the Significant Amendment Procedures described below in section (3), Procedures apply.

(B) The Department must "normally" make a decision within 90 days after receipt of a complete request for the significant permit amendment (see 9 VAC 5-80-990 D.). Whether the circumstances are "normal" depends on the following:

(I) whether the request for a significant permit modification is "complete" (see item (C) below);

(ii) whether there are delays in submission of information by the source, or in processing, public notification, addressing of comments and development of responses, or related matters. Where these delays are attributable to the source, they may constitute abnormal circumstances warranting a longer processing time.

(C) The meaning of "complete request" may be unclear in some situations. It means including all the elements and giving technically and legally complete descriptions of each, so that the Department (and the public, if public participation is involved) may determine the precise nature of the requested change. The elements are listed in section (3)(A) below.

(3) Procedures. Procedures for significant permit amendments differ from those for minor permit amendments or administrative permit amendments in at least two ways. First, they require public participation, where that is required under 9 VAC 5-80-1020. Secondly, they contemplate that the change must await Department approval (i.e., new permit issuance), rather than being made upon submission of the request for the change. They are similar to minor permit amendments in having a time frame of "normally" 90 days for processing after receipt of a complete application (see 9 VAC 5-80-990 D). Procedural steps follow:

(A) The source requests the significant permit amendment by submitting the following items (9 VAC 5-80-990 B.):

(I) A statement of the request;

(ii) A description of the proposed change in operation;

(iii) A description of the change in emissions resulting from the proposed

change in operation; and

(iv) Any regulatory requirements that will apply if the change takes place (9 VAC 5-80-990 B.1.).

(v) In addition, a suggested draft permit. (See 9 VAC 5-80-990 B.2.) Note, however, that a cover letter with a concise description of the changes requested, in conjunction with satisfactory completion of items (I) through (iv) above, will satisfy the need for a draft permit.

(B) The Department must take requests for significant permit amendments through the public participation process associated with the state operating permit rule, if the permit provisions at issue are necessary for the permit to be federally enforceable (9 VAC 5-80-990 C. and 9 VAC 5-80-1020 A.; see **Chapter 3** of this Manual).

(C) A final determination on a significant permit amendment must Anormally≅ be made within 90 days after receipt of a complete request (9 VAC 5-80-990 D.). See item **C.**(2)(B) above for a discussion of the term Anormally.≅

(D) The Department incorporates the change into the state operating permit, identifying it as a significant permit amendment made pursuant to 9 VAC 5-80-990. The Department then re-issues the permit and communicates to the source. (See Appendix O for a suggested format for this communication.)

D. Re-opening State Operating Permits

Re-opening state operating permits is an action which can only be initiated by the Department. In contrast, the three types of permit amendments discussed above are initiated by the permit holder. (See 9 VAC 5-80-960 A.2., -960 B.1., and -960 C.)

(1) Reasons, or Cause, to re-open a permit. (9 VAC 5-80-1000 A.) The notice to the source that the permit is to be re-opened must articulate one or more of these reasons; see section (3)(A) below.

(A) Additional requirements, or changes to existing requirements, become applicable to emissions units or pollutants covered by the permit.

(B) The permit contains a material mistake, or one or more of its conditions was predicated on inaccurate statements.

(C) Revision is required to ensure compliance with applicable requirements.

(2) Interpretations.

(A) AMaterial mistake≅ means a mistake which impairs the essential value of the permit. That is, because of the mistake, the permit conditions do not effectively communicate applicable requirements or provide for their enforcement in the circumstances at hand.

(i) This definition is intended to allow flexibility to permitting and compliance staff in addressing different situations that arise.

(ii) In re-opening a state operating permit, the Department staff should be able to specify the mistake that was made and describe what makes it material.

(B) A material mistake may, or may not, result in the need to revise the permit to ensure compliance with applicable requirements (see (1)(C) above). Ensuring compliance is a separate reason for re-opening a permit and may exist in its own right, or together with the material mistake and/or the need to add new applicable requirements.

(C) Similarly, the need to add new applicable requirements is a separate basis for re-opening in its own right. It may or may not coexist with either material mistake or the need to ensure compliance.

(3) Re-opening procedures. The Department must institute re-opening procedures Aexpeditiously,≅ and the procedures are the same as for initial permit issuance (9 VAC 5-80-1000 B.) The steps for re-opening are as follows:

(A) Send a notice of intent to re-open the permit to the source, as soon as possible after cause to re-open has been determined. See Appendix P for a suggested format.

(B) Allow at least 30 days before actual re-opening, unless an emergency exists, in which case this time frame can be shorter than 30 days (9 VAC 5-80-1000 C.).

(i) The Regulations define Aemergency≅ as follows:

... a situation that immediately and unreasonably affects, or has the potential to immediately and unreasonably affect, public health, safety, or welfare; the health of animals or plant life; or property, whether used for recreational, commercial, industrial, agricultural, or other reasonable use. (9 VAC 5-10-20)

(ii) In re-opening a state operating permit, regional office staff are invited to apply the definition of Aemergency≅ in the same way as they would apply it in other permit programs.

(C) The re-opening may Aaffect only those parts of the permit for which cause to re-open exists.≅ (9 VAC 5-80-1000 B.) This means that the rest of the permit remains undisturbed by the re-opening procedure. This point should be emphasized in any public notice, if one is required, as well as in the notice to the source.

(D) The re-opening of a state operating permit may require additional information from the source. In that case, the Department staff should request the information from the source, in terms as specific as the circumstances allow, and provide a reasonable time frame for response.

(E) The result of a re-opening of a permit is a re-issuance of that permit, including the terms changed through the re-opening. It is recommended that the changed terms be highlighted in some way in the permit or else narrated, or referred to, in the cover memo sent to the source. (See Appendix Q for a sample cover letter for a re-issued state operating permit .)

E. Comparison Chart, State Operating Permit Revisions

The chart on this page provides a handy comparison of some of the concepts described in the foregoing discussion of permit revisions.

Permit Revision Type	Feature				Criteria/Definitions
	Initiated By	**Public Participation Required**	**When Source May Make Proposed Change**	**Time Frame for Department Action**	
Administrative Permit Amendment	Source	No	After submission of request	60 days after receiving request	9 VAC 5-80-970 A
Minor Permit Amendment	Source	No	After submission of request	90 days after receiving complete request	9 VAC 5-80-980 A., -B., -C
Significant Permit Amendment	Source	Yes, if permit conditions are needed to make permit federally enforceable	After issuance of permit amendment	90 days after receiving complete request	9 VAC 5-80-990 A
Re-openings	Department	Yes, if permit conditions are needed to make permit federally enforceable	After re-issuance of re-opened permit	As per original SOP: 30 days for completeness review, 90 days after receiving complete application, 180 days after that if public participation involved	9 VAC 5-80-1000 A

Chapter 5

General Permits and Exclusionary General Permits

Introduction

The State Operating Permit rules allow for the issuance of general permits, which allow sources subject to them to avoid case-by-case permitting actions and to qualify for permits more quickly than would otherwise be the case. Such permits are, in effect, blanket authorizations for sources or units which have many common characteristics and can be permitted with the same or similar requirements. The Regulations, at 9 VAC 5-80-1030, set out requirements for development of general permits, application for general permits, and their issuance and enforcement. The development of general permits under the rules cited is pre-eminently a function of the Office of Air Program Development in the Division of Air Programs Coordination.

This chapter also describes the separate Exclusionary General Permits program in greater detail (section **B.** below). The Regulations, beginning with 9 VAC 5-500-10, set out requirements for sources which may be eligible, on the basis of low actual emissions, to avoid both Title V and State Operating Permits. An EGP is applicable to an entire source, not to an emission unit as in the general permit under the SOP program. Procedures and rules for that program can be found in the following files:

K:\AGENCY\DTE\PERMAST\ GP500.PER,

K:\AGENCY\ DTE\PERMAST\GP50061.PER, and

K:\AGENCY\AIRGIDE\ POLICY\97-1002.

A. General Permits under the State Operating Permit Program

(1) *Development.* The development (the Regulations use the word Aissuance,≅ 9 VAC 5-80-1030 A., -A.1., and A-4.) of general permits by the Department is similar to rule-making in some respects. According to 9 VAC 5-80-1030 A.4., this development is governed chiefly by a provision of the Administrative Process Act (*Virginia Code* sections 9-6.14:1 et seq.), specifically *Virginia Code* section 9-6.14:4.1 C.11.

(2) *Issuance.* Following the development of a general permit by the advisory committee, and after necessary public participation and approvals, the Board issues the general permit. The term Aissue≅ has a particular meaning when applied to general permits, as suggested above. Rather than developing a permit document and having the regional director sign it and mail it to the source, the Department must seek the Board=s approval to issue a general permit.

(3) *Application for coverage.* In the case of general permits, the Aapplication≅ takes place after, rather than before, the Aissuance≅ because of the unique nature of the general permit. While the Regulations do not state, in so many words, the content requirements for the application (as, for example, they do extensively for Title V applications in 9 VAC 5-80-90 B. through -K.), the purpose of the general permit application is to demonstrate that the source or emission unit seeking coverage qualifies for such coverage and can and will stay in compliance. (9 VAC 5-80-1030 B.)

B. Exclusionary General Permits

(1) Why an Exclusionary General Permit might be Desirable. If a source can qualify for Virginia=s Exclusionary General Permit (EGP) under 9 VAC 5 Chapter 500 (9 VAC 5-500-10 et seq.) in the Regulations, it may avoid a number of limitations and requirements to which it would otherwise be subject under the State Operating Permit (SOP) rules, 9 VAC 5 Chapter 80, Article 5 (9 VAC 5-80-800 et seq.), or the Title V rules (9 VAC 5 Chapter 80, Article 1 (9 VAC 5-80-50 et seq.). Table 5-1 in this section displays the comparative approaches of the SOP and EGP rules to a number of requirements which appear in the former.

(A) *Avoiding state operating permit requirements*. The requirements for state operating permit contents make several categories of requirements optional to the permit writer instead of mandatory, but the assumption is that if a permit is issued, it will contain as many of these requirements as needed to accomplish its intended purpose(s) (listed in 9 VAC 5-80-800 C.). The requirements which can be avoided entirely by an EGP include:

(I) specification of permitted equipment;

(ii) specification of air pollution control equipment;

(iii) requirements for proper operation and maintenance, and for parts inventory, for pollution control equipment.
(iv) the requirement to pay permit fees.

Other requirements associated with state operating permits can be avoided by taking an EGP when the requirements are not needed to Aassure compliance≅ with the EGP itself, or to keep the source below the threshold for a state operating permit. These include:

(v) emission standards;

(vi) stack test requirements;

(vii) monitoring requirements;

(viii) the requirement for a compliance schedule.

Table 5-1. Comparison of SOP and EGP Approaches to Common Types of Requirements

Requirement	**SOP approach**	**SOP citation** (9 VAC 5-80-_____)	**EGP approach**	**EGP citation** (9 VAC 5-500-_____)
emission standards	optional	-850 C.	required to keep the EGP	-120 B. and -160
conditions enabling enforcement	optional	-850 F.2.	required to keep the EGP	-120 B., -F., and -G.
specifications for permitted equipment	optional	-850 F.3.	none[1]	
specifications for air pollution control equipment	optional	-850 F.4., -F.5.	none	
operation and maintenance requirements for pollution control equipment; parts inventory	optional	-850 F.6.	none	
stack test requirements	optional	-850 F.7., -880 A.	as needed to keep the source in compliance	-120 G.1.
record-keeping and reporting requirements	optional	-850 F.8., -900 A.	required above certain emission thresholds	-120 E.
monitoring or CEM requirements	optional	-850 F.9., -890 A.	monitoring Ato assure compliance≅	-120 G.1.
compliance schedule	optional	-850 F.10	inspection/entry/ access to information	-120 G.2.

[1] Note: 9 VAC 5-500-120 H. requires permit terms Apertaining to other requirements≅ which ensure compliance with the Regulations.

(B) *Avoiding a Title V permit or a state operating permit*. A source which is eligible for a Title V permit on the basis of its potential to emit (PTE) (but not on the basis of its NSPS or MACT eligibility; see 9 VAC 5-500-40 D.2., -40 E., and -40 F.) may, if its circumstances warrant, withdraw an application for a Title V permit or rescind an existing Title V permit and pursue an Exclusionary General Permit. Such rescission or withdrawal enables it to avoid the whole panoply of Title V requirements in favor of the minimal reporting and record-keeping requirements associated with EGPs. (Note, however, that as actual emissions approach the permitting threshold, the record-keeping and reporting requirements become more stringent. See 9 VAC 5-500-120 E.3. for the exemptions at lower emission levels, and 9 VAC 5-500-190 and -200 for examples of more stringency.) A source may also avoid a state operating permit through the EGP process; an existing SOP may be rescinded (see 9 VAC 5-80-950 B.) or the application for it withdrawn in favor of the EGP.

(C) Limitation: an EGP cannot be used to get a HAP source or an NSPS source out of Title V permitting. (See 9 VAC 5-500-40 D.2.)

(2) Qualifying for an Exclusionary General Permit. Qualifying for an Exclusionary General Permit is a matter of low emissions and record-keeping to prove them, as well as not being a MACT or NSPS source. Note that eligibility for an EGP is based on facility-wide emissions: a source either qualifies for an EGP based on all its actual emissions, or it doesn=t. Here is how a source may qualify.

(A) *Keep records*. Develop or maintain records showing that actual emissions of regulated air pollutants for the 24 months preceding the application have stayed below half of the Title V potential-to-emit threshold for major sources, e.g., that emissions have stayed below any of the following levels which might apply (9 VAC 5-500-90 A.):

(I) 50 TPY of any regulated air pollutant (excluding hazardous air pollutants (HAPs) or non-attainment pollutants in serious non-attainment areas);

(ii) 25 TPY of any VOC or NOx in a serious non-attainment area for ozone.

. (B) *Apply for EGP coverage*. Given the focus of this Manual on the State Operating Permit Program, the reader should consult the DEQ=s Procedures for Exclusionary General Permit for Major Sources of Air Pollutants for details on applying for an Exclusionary General Permit (see K:\AGENCY\DTE\PERMAST\GP50061.PER for a copy of the EGP procedures. This file also contains the EGP authorization memo, the application form, the EGP rule, and other forms involved in EGP approval. The Procedures start on page 30 of this file.). However, two aspects of the Exclusionary General Permit program should be mentioned here. These are the timing of the application and the form to use for it.

(i) *Time frames.*

(a) Once a source has accumulated two years= worth of emission records as mentioned in **B.**(1) above, it may apply for EGP coverage at any time, unless it is subject to Title V permitting or has already obtained synthetic minor status through a state operating permit. In these cases, however, a showing of the necessary records, before withdrawing the Title V or SOP application (or before a rescission of the permit, if a permit has been issued), makes an otherwise major source eligible for coverage under the EGP. (See 9 VAC 5-500-40, particularly sub-sections D., E., and F.)

(b) If a source qualifies for an EGP, it should submit its records and application to DEQ before spending a lot of time and effort on applying for a Title V or a state operating permit.

(ii) The application form for coverage by the Exclusionary General Permit is DEQ Form 500. (See K:\AGENCY\DTE\PERMAST\ GP50061.PER for a copy of this form.) The State Operating Permit program still uses DEQ Form 7 (K:\AGENCY\FORMS\ FORM7AP.WPD).

(B) *Receive Exclusionary General Permit coverage*. The DEQ will make a determination whether the materials submitted by the source qualify it for EGP coverage. No public participation is required for this authorization. See 9 VAC 5-500-130.

(3) Losing an Exclusionary General Permit and Asoft landing≅ provisions. A source

holding an EGP may lose EGP status if it fails to operate within the limitations which qualify it for the EGP in the first place (see 9 VAC 5-500-80 A.2.b.). Other enforcement provisions, similar to those in other permitting programs, apply (9 VAC 5-500-80). However, there is a grace period in which such a source may obtain a regular permit (see 9 VAC 5-50-220 B.).

Appendices

Appendix A

List of Reference Materials

Due to the size of some reference documents and their easy access in other locations, they are not replicated in this Appendix. This Appendix lists those documents.

1. DEQ Air Permit Application, Form 7. This form is developed and maintained by the Office of Air Permit Programs.

See K:\AGENCY\FORMS\FORM7AP.WPD.

2. EPA guidance memo on limiting potential to emit. This memo was signed by the director of EPA=s Office of Air Quality Planning and Standards on June 13, 1989.

See K:\AGENCY\DTE\SOPMAN99\APPENDIX\APPEN-Q.PDF. This file can be retrieved and printed using the Adobe Acrobat software.

Appendix B

DEQ Pollution Prevention Information

Pollution Prevention and Pollution Control
Know Your Options

Pollution Prevention May Help Your Facility Reduce Air Emissions

Today, many facilities are taking the opportunity to look at achieving broader environmental management objectives rather than concentrating solely on meeting pollution control and regulatory standards. These facilities are realizing that pollution prevention is very often economically beneficial and can result in significant environmental benefits.

What is Pollution Prevention?

Liquid, solid and /or gaseous waste materials are generated during the manufacture of any product. In addition to environmental problems, these wastes represent a loss of valuable materials and energy from the production process and may require significant investment in pollution control equipment. In addition, there are costs associated with waste handling, compliance man-hours and liabilities.

Traditional *pollution control* focuses on an end-of-pipe and out-the-back-door viewpoints. *Pollution prevention* emphasizes the elimination or reduction of wastes at the source of generation. If wastes are not generated, the wastes do not have to be managed.

Facilities have many reasons to implement pollution prevention techniques. Achieving compliance with regulatory standards, saving money, improving public relations, and concern for the environment are a few of the reasons why proactive Virginia facilities are investing in pollution prevention alternatives.

For example, a small chemical manufacturing facility in Richmond, VA has recently installed state of the art pollution prevention technology that will enable the facility to stay below MACT pharmaceutical and Title V permit thresholds. The company reports the initial investment is justified by the cost savings associated with the decreased compliance activities alone and enjoy the added benefits of reduce waste disposal costs and improved public image .

Pollution Prevention Assistance

The Office of Pollution Prevention, a voluntary, non-regulatory technical assistance program within the

Virginia Department of Environmental Quality, is available to assist your facility with its pollution prevention efforts. Services of OPP include:

X Access to engineers trained to assist you in evaluating your processes and needs
X Access to up-to-date information on new and innovative pollution prevention techniques
X P2 training and workshops targeted at specific waste-generating activities
X Industry-specific reports and fact sheets researched and written by Office of Pollution Prevention staff for the benefit of Virginia-based facilities
X On-site assistance in the form of confidential APollution Prevention Opportunity Assessments≅

For more information, please contact:

Office of Pollution Prevention
Virginia Department of Environmental Quality
PO Box 10009
Richmond, VA 23240
804-698-4235/4545
http://www.deq.state.va.us

More Resources for Pollution Prevention Information:

Virginia Department of Environmental Quality=s Small Business Assistance Office
http://www.deq.state.va.us/osba/smallbiz.html
Environmental Protection Agency
http://www.epa.gov
North Carolina Pollution Prevention
http://www.p2pays.org
State and Territorial Air Pollution Prevention Administration, Association of Local Air Pollution Control Officials (STAPPA/ALAPCO)
http://www.4cleanair.org
Pollution Prevention Experts: Pollution Prevention referral service developed by the Northeast Waste Management Official=s Office
http://www.p2.org/p2experts
EPA EnviroSense: Assists in Pollution Prevention implementation
http://es.epa.gov
Department of Energy=s Office of Pollution Prevention
http://em.doe.gov/wastemin
Technology Transfer Network Bulletin Board
http://ttnwww.rtpnc.epa.gov

Pollution Prevention Techniques: An Overview

Pollution Prevention Techniques may be applied to any manufacturing process for a product as simple as a paper clip to as complex as a space shuttle. Available techniques range from easy operational changes to state-of-the-art recovery equipment. The common factor in these techniques generally are used in concerns the reduction of bottom line operational costs.

Waste reduction techniques may be broken down into three major categories: inventory management, volume reduction and process modification. Because the classifications are broad, some overlap occurs. In the actual application of these methods, pollution prevention techniques are used in combination with each other to achieve the maximum at the lowest possible cost.

Inventory Management

Proper control over raw materials, intermediate products, final products and their associated waste streams, is an important waste reduction technique. In many cases, waste is just out-of-date raw materials, spill residues, or damaged final products. The cost of disposing of these materials not only includes actual disposal costs but also the cost of lost raw materials or product. Methods for controlling inventory range from simple changes in ordering procedures to implementation of just-in-time manufacturing techniques. Many companies may help reduce their waste generation by tightening up and expanding their current inventory control programs. This action will significantly impact the three major sources of waste that result from improper inventory control: excess, out-of-date and no-longer-used raw materials.

Purchasing only the amount of raw materials needed for a production run or a set period of time is the key to proper inventory control. Excess inventory often must be disposed of because it becomes out-of-date. Companies may eliminate this problem by more effective application of existing inventory management procedures. This method should be coupled with the implementation of educational programs for purchasing personnel on the difficulties and costs associated with disposal of excess materials. Additionally, set expiration dates should be evaluated, especially for stable compounds, to see if they are too short. For example, if inventory is not available for production because the raw materials have passed an expiration date, the supplier/manufacturer should be contacted in order to improve the situation by getting materials that will last longer. Or, production methods may be varied to use soon-to-expire materials faster.

Developing review procedures for all materials purchased is another step in establishing an inventory control program. Standard procedure should require that all materials be approved prior to purchase. In the approval process, all production materials are evaluated to determine if they contain hazardous constituents, and if so, what alternative non-hazardous substitute materials are available. The development of review procedures may be made either by one person having the necessary chemistry

background or by a committee consisting of people that have a variety of backgrounds. Needed information may possibly be obtained from the Material Safety Data Sheets (MSDS) provided by the chemical supplier. Many companies from electronics to textile firms have established successful materials review programs.

The ultimate in inventory control procedures is just-in-time (JIT) manufacturing, since this method eliminated the need for inventory. This process is done by moving raw materials directly from the receiving dock to the manufacturing area for immediate use. The final product is then shipped out without any intermediate storage. Just-in-time manufacturing is a complex program to implement and cannot be used by all facilities; however, this technique may reduce waste significantly. For example, the 3M Company reduced waste generation by 25 to 65% in their individual plants by using JIT techniques.

Production Process Modification

Improving the efficiency of a production process can significantly reduce waste generation at the source of generation. Some of the most cost-effective reduction techniques are included in this category; many methods are simple and consist of relatively inexpensive changes to production procedures. Available techniques range from the elimination of leaks in process equipment to the installation of state-of-the-art production equipment modification.

X Operational Procedures: A wide range of methods are available to operate a production process at peak efficiency. These methods are neither new nor unknown and are usually inexpensive to institute, as little or no capital cost is necessary. For example, a producer of breaded foods instituted a number of operational changes such as dry cleanup, installation or modification of drip trays under process equipment, and development of better systems. Improved operation procedures are quite simply methods that make optimum use of the raw materials employed in the production process. The fist step in instituting such a program is to review all current operation procedures and to examine the production process for ways to improve its efficiency. A review would include all segments of the process, from the delivery area through the production process to final product storage. One important are that is commonly overlooked or is not given proper attention in many manufacturing facilities is material handling procedures. Proper material handling will insure that raw materials will reach the production process without loss of material through spills, leaks or contamination. This method guarantees that the material is efficiently handled in the production process. Once proper operating procedures are established, they must be fully documented and handled in the production process. Once proper operating procedures are established, they must be fully documented and made part of an employee training program. A comprehensive training program is a key element of any effective waste reduction program. Through training, for example, a dairy plant, a semiconductor manufacturer, and a furniture plant reduced waste by 14%, 40%, and 10% respectively. For a program to be effective, all levels of personnel should be included, from the line operator to the corporate executive officer. The goal of any program

is to make the employee aware of waste generation, its impact on the company and the environment, and ways that waste may be reduced. Written materials should be prepared and used in conjunction with hands-on training. This process should be employed constantly and review updates and interaction between employees and supervisors should be carried out on a regular basis.

X Maintenance Programs: One company found that one-fourth of its excess waste load was due to poor maintenance. A strict maintenance program that stresses corrective and preventive maintenance can thus reduce waste generation caused by equipment failure. Such a program will help to spot potential problems before any materials are lost. A good maintenance program is important because the benefits of the best waste reduction program may be wiped out by just one process leak or equipment malfunction. A maintenance program may include maintenance cost tracking and preventive maintenance scheduling and monitoring. To be effective, a maintenance program should be developed and followed for each operational step in the production process, with special attention given to potential problem points. Strict schedules and accurate records of all maintenance activities should be maintained. Computer-based maintenance scheduling and tracking programs are also available from a variety of vendors. A comprehensive program should also include predictive maintenance; this approach provides a means to schedule repairs or replacement of equipment based on the actual condition of the machinery. A number of non-destructive testing technologies are available for making the needed evaluations in this approach.

X Materials Change: Use of solvents such as methanol, toluene, and methyl ethyl ketone (MEK) typically in product formulations and surface cleaning operations, can subject facilities to strict air quality requirements. To prevent or reduce these requirements, a facility should first examine the manufacturing process to determine if a process modification could eliminate or reduce the use of a solvent. If it is determined that a solvent is needed, using the least hazardous material could reduce a facility's environmental requirements, save money, and reduce employees' exposure to hazardous chemicals. Product reformulation is a more difficult waste reduction technique, yet reformulation can be very effective. Examples of product reformulation include the elimination of pigments that contain heavy metals from ink, dyes and paint formulations; the replacement of phenolic biocides with less toxic compounds in metal-working fluids; and the development of new paint, ink and adhesive formulations based on water rather than organic solvents. Hazardous chemicals used in the production process may also be replaced with less hazardous or non-hazardous materials. Changes may range from the use of purer raw materials to the replacement of solvents with water-based products. This method is a very widely-used reduction technique and is applicable to many industries. Many of these changes involve switching from a solvent to a water-based process solution. For example, a diesel engine remanufacturing facility switched from cleaning solvents and oil-based metal-working fluids to water-based products. This change reduced its coolant and cleaning costs by about 40%. Additionally, the company was able to eliminate one cleaning step and machine filters lasted twice as long, thus reducing material and labor costs. One important area that is sometimes overlooked in making a material change is the modification=s impact of the total waste stream. By switching from a solvent-based to a water-based product, a firm may increase wastewater

volumes and concentration. This action could adversely affect the current wastewater treatment system, cause effluent limits to be exceeded and possibly increase wastewater treatment sludge production. Thus, before any change is made, its impact on all discharges must be evaluated.

X Process equipment modifications: Waste generation may be reduced by installing more efficient process equipment or by modifying existing equipment to take advantage of better production techniques. New or updated equipment can use process materials more efficiently and thereby produce less waste. In addition, higher efficiency systems may reduce the number of rejected or off-specification products, thereby reducing the amount of material that must be reworked or disposed. Modifying existing process equipment can be a very cost-effective method to reduce waste generation. In many cases this technique may consist of relatively simple and inexpensive changes in the way materials are handled within the process to insure that they are not wasted or lost. This method can be as easy as redesigning parts racks to reduce drag-out in electroplating operations, installing better seals on process equipment to eliminate leakage, or installing drip pans under equipment to collect leaking process material for reuse. One chemical company reduced its waste from a pump in a production area from 31,750 kg/year to 1,360 kg/year by installing a sight glass, using better pump seals and purchasing a broom. Installing new and more efficient equipment and, in some cases, modifying current equipment, will require capital investment in equipment, facility modifications and employee training. The extent of this investment will vary greatly depending on the type of equipment, facility modifications and employee training. The extent of this investment will vary greatly depending on the type of equipment employed. These investments, however, can have a rapid payback. For example, a power tool manufacturer replaced a spray solvent paint system with a water-based electrostatic immersion painting unit. This modification decreased material costs by $600,000/yr, reduced waste disposal costs by 97% and greatly increased productivity.

Volume Reduction

Volume reduction includes techniques that separate toxic, hazardous and/or recoverable wastes from the waste stream. These methods are usually used to increase recoverability; to reduce the volume of wastes, and thus disposal costs; or to increase management options. Available techniques range from simple separation of wastes at the source to complex concentration technology. These techniques may be divided into two general areas; source separation and waste concentration.

X Source Separation: Separation of wastes is, in many cases, a simple and economical technique for waste reduction. For example, by segregating wastes at the source of generation and by handling hazardous and non-hazardous waste separately, waste volume and thus management costs may be reduced. Additionally uncontaminated or undiluted wastes may be reusable in the production process or may be sent off-site for recovery. This technique applies to a wide variety of waste streams and industries and usually involves simple changes in operational procedures. For example, in metal finishing facilities, wastes that contain different types of metals can be treated separately so that the metal valued in the sludge may be recovered. Keeping spent solvents or waste oils segregated from other solid or liquid waste may allow

them to be recycled. Wastewater that contains toxic material should be kept separate from uncontaminated process waste, reducing the volume of water that must be treated. A commonly used waste separation technique is to collect and store for reuse in the production process wash-water or solvents that are used to clean process equipment(such as tanks, pipes, pumps, or printing presses). This technique is used by paint, ink, and chemical formulators as well as by printers and metal fabricators. For example, a printing firm segregates and collects toluene used for press and roller cleanup operations. By segregating the used toluene by color and type of ink contaminant, the solvent may be reused later for thinning inks of the same type and color. The firm now recovers 100% of its waste, toluene, thereby totally eliminating a hazardous waste stream.

X Concentration: Various techniques are available to reduce the volume of a waste through physical treatment. Such techniques usually remove a portion of a waste, such as water. Available concentration methods include gravity and vacuum filtration, evaporation, ultrafiltration, reverse osmosis, freeze vaporization, filter press, heat drying and compaction. Unless the material can be recycled, simply concentrating a waste so that more can be fit into a drum is not waste reduction. In some cases, the concentration of a waste stream may also increase the likelihood that the material can be reused or recycled. For example, filter presses or sludge driers can increase the concentration of metals in electroplating wastewater treatment sludge to such a level that the metals become valuable raw material for metal smelters. A printed circuit board manufacturer de-waters its sludge to 60% sludge by using a filter press. The company receives $7,200/year in the sale of the dewatered sludge to copper reclaimers.

Summary

As has been shown, a wide range of pollution prevention techniques currently exist and are available for most manufacturing steps. However, technology alone will not reduce waste generation- only a comprehensive pollution prevention program will be successful. Such a program should include management commitment, data collection, cost-effective technology selection and implementation, employee training and involvement, and program monitoring. The foundation of any successful program is the evaluation of the wastes that are generated and the reasons they are produced. Using this information, a range of reduction techniques can be identified and evaluated, and cost-effective options implemented.

In the final analysis, pollution prevention depends on looking at waste in a different way; not as something that inevitable must be treated and disposed, but rather as a loss of valuable process materials, the reduction of which can have significant economic benefits. One corporation executive summarized it all when he stated that waste is a specialty product for which a market has not yet been found.

for more information please contact:

Virginia Department of Environmental Quality
Office of Pollution Prevention
PO Box 10009
Richmond, VA 23240
804-698-4545
www.deq.state.va.us/opp/opp.html

Appendix C

Sample Completeness Letter

Regional Office letterhead

date

[Responsible official name]
[Facility name]
[Mailing address]
[Mailing address]

Location: [_____]
Registration No. [_____]
AIRS ID No. [_____]

Dear [Responsible official name]:

This will acknowledge the receipt of your permit application dated (__(date)__) The Department of Environmental Quality - Air Division (DEQ - Air Division) (_____) Region staff has completed its initial review of your permit request. Based on the DEQ - Air Division's initial determination, your facility is subject to the permitting requirements in Part VIII, 9 VAC 5-80-10, 9 VAC 5-80-20, 9 VAC 5-80-30, Article 5, 9 VAC 5 Chapter 80 [formerly 9 VAC 5-80-40] of the Commonwealth of Virginia Regulations for the Control of and Abatement of Air Pollution. Please note, however, that this determination is subject to change upon further review.

The permit application appears to contain the necessary information to begin processing the application. If during the permit application analysis it is found that additional information is required to support your permit application, such information will be requested at a later date.

You are reminded that construction of a source subject to permitting requirements in Part VIII of the Virginia Regulations for the Control and Abatement of Air Pollution, without a permit, can result in enforcement action.

If you have any questions concerning this matter please contact me at (___(phone number)___).

Sincerely,

[Regional Director/designee]

Appendix D

Sample Application Deficiency Letter

Regional Office letterhead
date

[Responsible official name]
[Facility name]
[Mailing address]
[Mailing address]

Location: [_____]
Registration No. [_____]
AIRS ID No. [_____]

Dear [Responsible official name]:

This will acknowledge the receipt of your permit application dated _____. The Department of Environmental Quality - Air Division (DEQ - Air Division) _____ Region staff has completed its preliminary screening of your permit request. Based on the DEQ - Air Division's initial determination, your facility is subject to the permitting requirements in Part VIII, 9 VAC 5-80-10, 9 VAC 5-80-20, 9 VAC 5-80-30, Article 5, 9 VAC 5 Chapter 80 [formerly 9 VAC 5-80-40] of the Commonwealth of Virginia Regulations for the Control of and Abatement of Air Pollution. Please note, however, that this determination is subject to change upon further review.

In screening your permit application, the following deficiencies were identified:

_ The following DEQ - Air Division Form 7 pages:

Page ;

- Notification letter signed by the authorized local official, that the proposed facility is consistent with local ordinances pursuant to Chapter 11 (ə 15.1-427 et seq.) of Title 15.1 of the Code of Virginia. [(See attachment.)]
  Note: the notification letter must be submitted before a permit can be issued.

- The Document Certification Form signed by the appropriate authorized individual.
  Note: a signed Document Certification Form must be submitted before a permit can be issued.

- Site plan of facility including all buildings at the facility indicating property line and fenceline locations;

- Dimensions of all buildings (length, width and height) at facility indicating all stack and emissions point locations by stack I.D.;

- Process flow diagram/schematic and narrative description;

- Material Safety Data Sheets for 3 used in your proposal;

- Emission estimate calculations including documentation of assumptions used in the calculations;

- Stack test data.

- [Other]

[In order to determine the Best Available Control Technology (BACT) for this facility as required under 9 VAC 5-50-260 of the Regulations for the Control and Abatement of Air Pollution, the DEQ - Air Division is requesting additional information. Consequently, it is requested that an evaluation of the feasibility of controlling (pollutant) emissions from the (equipment) using (control technology) be submitted. The analysis should at minimum include the estimated percent reduction of emissions and a cost analysis (annualized capital costs and annual operating and maintenance costs associated with the addition of the control technology). Documentation of all assumptions used in the BACT analysis should also be included.]

[The above information must be provided to begin the application review.] **or** [Your permit application contains sufficient information to begin the application review process, however, it is important that you provide the information indicated above before the engineering staff can complete the review of your application.] If the above requested information is not received within days of the date of this letter, your permit application will be considered withdrawn. At the discretion of the DEQ - Air Division, an extension may be granted if requested in writing [before the end of the __ days].

If upon further review it is found that additional information is required to support your permit application, such information will be requested at a later date.

You are reminded that construction of a source subject to permitting requirements in Part VIII of the Virginia Regulations for the Control and Abatement of Air Pollution, without a permit, can result in enforcement action.

Prompt submittal of the requested information will help expedite processing of your permit application, however, there are a number of applications ahead of yours and it may take some time to issue your permit. If you have any questions concerning this matter, please contact [permit writer] at (__(phone number)____).

Sincerely,

[Regional Director/designee]

Appendix E

Practically Enforceable Conditions

A practically enforceable permit is one that an inspector can use to readily assess a source=s compliance status (with respect to the permit or permit condition). The term Apractically enforceable≅ permit for a source-specific permit means that the permit provides: (1) clear statements as to the applicability of each standard to each piece of equipment affected; (2) a technically accurate limitation on the portion(s) of the source that are subject to the limitation; (3) explicit statements of the compliance time frames (e.g. hourly, daily, monthly, or 12-month rolling sum, etc.); and (4) the time frame and the method of compliance (monitoring) employed to protect the standard including appropriate record-keeping and reporting requirements necessary to demonstrate compliance with the specified standard.

A state operating permit may be used to create a synthetic minor source from a major source. The SOP must be federally enforceable and must limit the source=s annual potential to emit by placing practically enforceable production or operational limitations on the source. Restrictions on the source=s production or operation may include limitations on quantities of raw materials consumed, fuel burned, hours of operation, or conditions which specify that the source must install and maintain controls that reduce emissions to a specified emission rate or to a specified control efficiency level.

Following is an example of a practically enforceable permit and practically enforceable conditions. These are actual permit conditions used in a permit issued for a large coal (oil backup) fired boiler. Examples of practically enforceable conditions that limit the potential to emit of the facility are contained in Conditions 1, 2, 4, 8, 9, 10, 17, and 18. Conditions 5 and 6 set the standards of performance for the boiler. Conditions 1, 2, and 3 specify the control methods used to achieve the standards set forth in Condition 5.

Conditions

1. Sulfur dioxide emissions from the boiler shall be controlled by a lime spray drying system (a dry flue gas desulfurization (FGD) system) having a design efficiency for SO_2 removal of 94 percent, based on firing 1 percent sulfur coal in the boiler. The dry FGD system shall have a minimum control efficiency of 90.0 percent on a 30-day rolling average while firing low-sulfur coal and achieving the SO_2 emission limits in Condition 5. The dry FGD system shall be in operation at all times when the

boiler is firing coal except during boiler start-ups. The FGD system shall be provided with adequate access for inspection.

2. Nitrogen oxide emissions from the boiler shall be controlled by combustion technology and selective catalytic reduction (SCR). The following conditions apply to the design and construction of the selective catalytic reduction system.

    1. The SCR system shall be designed and constructed to achieve a nitrogen oxides emissions rate of 0.10 lbs/10^6 Btu on a 30-day rolling average.

    2. The design specifications of the SCR system shall be submitted to the DEQ for review and approval within ninety (90) days after the effective date of this permit. Such information included in the design specifications shall include, but not be limited to, the design catalyst volume, the expected catalyst replacement schedule to achieve the design control efficiency of nitrogen oxides, and the anticipated operating range of ammonia-to-nitrogen-oxides mole ratio.

    3. The SCR system shall be provided with adequate access for inspection when the boiler is shut down.

3. The SCR system for the boiler shall be designed and optimized as stated in Condition 2. In the event that the nitrogen oxides emission rate exceeds 0.10 lbs/10^6 Btu on a 30-day rolling average, the permittee shall do one or more of the following, as necessary:

    i. Maintain the ammonia-to-nitrogen oxides mole ratio at the design level, provided that no detrimental effect on equipment downstream of the SCR system occurs.

    ii. Add catalyst as necessary to achieve a nitrogen oxides emissions limit of 0.10 lbs/10^6 BTU on a 30-day rolling average to the extent that catalyst addition is limited by the SCR design catalyst bed volume.

    iii. Replace catalyst as necessary to achieve a nitrogen oxides emissions limit of 0.10 lbs/10^6 BTU on a 30-day rolling average to the extent that catalyst replacement need not exceed 50 percent of the SCR design catalyst bed volume within each 3-year operating period for this facility.

    If none of the above alternatives proves effective in attaining or maintaining the emission limit of 0.10 lbs/10^6 Btu on a 30-day rolling average, then a maximum nitrogen oxides

emission limit of 0.15 lbs/10^6 Btu must not be exceeded.

4. The throughput of coal, as fired, to the boiler shall not exceed 100,000 tons per year, calculated monthly for the latest 12-month rolling sum.

5. Emissions from the operation of the boiler shall not exceed the limitations specified below:

Sulfur Dioxide	0.10	lbs/10^6 Btu [lbs/hr*] [tons/yr*]	(30-day rolling average)
Nitrogen Oxides	0.15	lbs/10^6 Btu [lbs/hr*] [tons/yr*]	(30-day rolling average)

[*Optional based on Regulatory requirement or engineering judgement]

6. Visible emissions from the boiler stack shall not exceed ten (10) percent opacity, except during one six minute period in any one hour in which visible emissions shall not exceed twenty (20) percent opacity. The opacity standards apply at all times except during periods of start-up, shutdown, and malfunction.

7. Within the time limits specified in this permit, stack emission tests for particulate matter (PM_{10} and PM), carbon monoxide, sulfur dioxide, sulfur dioxide removal efficiency, nitrogen oxides, and volatile organic compounds from the boiler shall be conducted. All testing shall be conducted when firing coal at greater than 90 percent of maximum boiler heat input capacity. Stack tests for new or modified sources shall be conducted and reported and data reduced as set forth in [Sections] of State Regulations and the test methods and procedures contained in each applicable section or subpart. At the same time, opacity tests, in accordance with 40 CFR, Part 60, Appendix A, Method 9, shall also be conducted on the boiler exhaust stack. The details of the emission tests are to be arranged with the DEQ [regional office].

8. The approved fuel for the boiler is low-sulfur bituminous coal. Number 2 distillate fuel oil may be used during start-up. Distillate fuel oil is defined as fuel oil that meets the specifications for fuel oil numbers 1 or 2 under the American Society for Testing and Materials, ASTM D396-78 "Standard ation for Fuel Oils", except that the sulfur content shall not exceed the limit specified in Condition 10. A change in the fuels may require a permit to modify and operate.

9. The maximum sulfur content of the coal to be burned in the boiler shall not exceed 1.0 percent by weight on an annual average and 1.2 percent by weight per shipment. ("Shipment" is defined for this condition as a continuous, single delivery of fuels or blend of fuels from the same origin.) The permittee shall maintain records of all coal shipments received, indicating sulfur and ash content per shipment. The permittee shall also obtain a proximate analysis of the coal sulfur content at least once per shipment. Details of the sampling procedure shall be arranged with the DEQ [regional office]. All fuel delivery records and sampling results shall be available on site for inspection by DEQ personnel. They shall be kept on file for the most current five year period. A summary of the sampling analysis shall be submitted quarterly to the DEQ [regional office] for at least two years. At the end of the two-year period, the DEQ [regional office] will determine if continued quarterly submittal of the sampling analyses is required.

10. The maximum sulfur content of the Number 2 fuel oil to be burned in the boiler during start-up shall not exceed 0.30 percent by weight per shipment. The permittee shall either sample and analyze the Number 2 fuel oil tank(s) to determine sulfur content by weight immediately after each shipment is added to the tank(s) or obtain a certification from the fuel supplier, including sampling and analysis representative of each shipment of Number 2 fuel oil. Each sampling analysis or fuel supplier certification shall include the following:

    a. the name of the fuel supplier,

    b. the date on which the oil was received,

    c. the volume of Number 2 fuel oil delivered in the shipment,

    d. the sulfur content of the oil,

    e. documentation of sampling of the oil indicating the location of the oil when the sample was drawn, and

    f. the method used to determine the sulfur content of the oil.

    Records of sampling results or fuel certifications shall be available on site for inspection by the DEQ and be kept current for the most current five-year period.

11. A device shall be installed and operated to measure and record the volumetric flow rate of the stack exhaust gas. It shall be maintained and calibrated in accordance with the manufacturer's specification. This device shall be performance-tested in

accordance with procedures in Performance Specification Number 6, 40 CFR60, or in accordance with procedures approved by the DEQ [regional office].

12. A continuous emission monitoring system (CEMS) consisting of a NO_x monitor and a suitable diluent monitor (either CO_2 or O_2), shall be installed downstream of the selective catalytic reduction system on the boiler. The continuous monitoring data generated by the NO_x CEMS shall be used to determine continuous compliance with the 30-day rolling average NOx emission standard (in lbs/10^6 Btu and lbs/hr) in Condition 5. The NO_x CEMS shall be performance-tested in accordance with EPA Performance Specification Number 2 (40 CFR 60, Appendix B). A 30-day notification prior to the demonstration of continuous monitoring system performance and subsequent notification requirements, are to be submitted to the DEQ [regional (office]. For the purposes of the reporting requirements of this condition, a boiler operating day shall be defined as a 24-hour period between 12:00 midnight and the following midnight during which any fuel is burned at any time in the boiler. It is not necessary for fuel to be burned continuously for the entire 24-hour period.

13. A continuous emission monitoring system (CEMS) consisting of a SO_2 monitor and a suitable diluent monitor (either CO_2 or O_2), shall be installed to measure SO_2 at the inlet and outlet of the SO_2 control device. An "as fired" fuel monitoring system (upstream of the coal pulverizers) meeting the requirements of Method 19 (40 CFR 60, Appendix A) may be used to determine potential sulfur dioxide emissions in place of a continuous sulfur dioxide emission monitor at the inlet to the sulfur dioxide control device as required and stated above in this condition. The continuous monitoring data generated by the SO_2 CEMS shall be used to determine continuous compliance with the SO_2 30-day rolling average emission standard (lbs/10^6 BTU and lbs/hr) in Condition 5 and the SO_2 30-day rolling average removal efficiency specified in Condition 1. The SO_2 CEMS shall be performance-tested in accordance with EPA Performance Specification Number 2 (40 CFR 60, Appendix B). A 30-day notification prior to the demonstration of continuous monitoring system performance and subsequent notification requirements, are to be submitted to the DEQ [regional office]. For the purposes of the reporting requirements of this condition, a boiler operating day shall be defined as a 24-hour period between 12:00 midnight and the following midnight during which any fuel is burned at any time in the boiler. It is not necessary for fuel to be burned continuously for the entire 24-hour period.

14. The permittee shall install and maintain instrumentation necessary to determine compliance during on-site inspection by agency personnel. This instrumentation should indicate and record the following, at minimum:

a. the hourly heat input of the boiler in 10^6 Btu/hr

b. the 30-day rolling average SO_2 emission rate, in lbs/10^6 Btu and lbs/hr, on a daily basis,

c. the 30-day rolling average SO_2 removal rate, expressed as a percent, on a daily basis, and

d. the 30-day rolling average NO_X emissions rate in lbs/10^6 Btu and lbs/hr, on a daily basis.

These data shall be kept on file for the most recent five-year period and made available to the DEQ upon request.

15. A continuous opacity monitoring system shall be designed, installed, and operated in accordance with EPA Performance Specification Number 1 (40 CFR Part 60, Appendix B). The continuous monitoring data generated by the opacity monitoring system may, at the discretion of the Board, be used as credible evidence of violation of the applicable emission standards. This data shall be kept on file and made available to the DEQ upon request.

16. The SO_2 and NO_X monitoring systems required by this permit shall obtain valid data for no less than 90 percent of boiler operating hours in each calendar quarter, and the SO_2 and NO_X monitoring systems shall obtain valid data for no less than 75 percent of operating hours in 22 of every 30 successive boiler operating days. If this data requirement is not met with a single monitoring system, the permittee shall supplement the emissions data with data collected with other monitoring systems as approved by the DEQ (office) or by the procedures set forth in 40 CFR 60.47a (h). The SO_2 and NO_X monitoring systems shall also meet the quality assurance requirements of 40 CFR 60, Appendix F. The opacity monitoring system shall be operated in accordance with 40 CFR 60.13 and other quality assurance procedures approved by the DEQ (office).

17. The permittee shall submit quarterly reports to the DEQ (office) within 30 days after the end of each calendar quarter. Each quarterly report shall contain, at a minimum, the dates included in the calendar quarter and the following (additional details of the quarterly reports are to be arranged with the DEQ (office)).

a. With regard to Number 2 fuel oil, fuel sulfur content; if no shipments of Number 2 fuel oil were received during the calendar quarter, the quarterly report shall include a statement that no oil was received

during the calendar quarter. If Number 2 fuel oil was received during the calendar quarter, the reports shall include:

i. one of the following; copies of all fuel analyses, a summary of all fuel analyses that includes the information specified in Condition 10, fuel supplier certifications for all shipments of distillate oil received during the calendar quarter, or a quarterly summary from each fuel supplier that includes the information specified in Condition 10 for each shipment of Number 2 fuel oil, and

ii. a signed statement from the owner or operator of the facility that the information required by paragraph i. above is representative of all of the Number 2 fuel oil burned at the facility.

b. With regard to the SO_2 and NO_X monitoring systems, the quarterly report shall include the information required under 40 CFR ∋ 60.49a (b)-(g).

c. With regard to SCR system operations, the quarterly report shall include each replacement or addition of SCR catalyst and a summary of ammonia injection rates (details are to be arranged with the DEQ [regional office]).

18. The permittee shall retain records of all emission data and operating parameters required, to include process throughput, by the terms of this permit. These records shall be maintained by the source for the most current five-year period. At a minimum, these records shall include:

a. The annual quantity (mass) of coal burned, calculated as the sum of each 12 month rolling period;

b. Records required to demonstrate compliance with the conditions of this permit:

i. Condition 1: The 30 day rolling average FGD control efficiency for SO_2;

2. Condition 3: The 30 day rolling average of No_x emissions;

3. Condition 9: The annual average of sulfur and ash content in the coal burned;

4. Condition 10: The fuel oil sampling or certification statements for determination of sulfur content in the oil.

5. Condition 11: The volumetric flow rate of the stack exhaust gases; and,

6. Condition 17: Quarterly Report submittals.

Appendix F

Sample Cover Letter sending Draft Permit.

Regional Office letterhead
Date

{Source Contact Name}
{Source Contact Title}
{Source Name}
{Mailing address}
{City, State, Zip}

Location: {City/County}
Registration No: {number}
AIRS No: {number}

Dear {contact name},

Attached please find a draft copy of your State Operating Permit. This is a **DRAFT VERSION ONLY** and is **SUBJECT TO CHANGE** prior to permit issuance. Please review all parts of the permit.

Please notify {regional office name} in writing within ten (10) working days of any comments that you may have regarding this draft permit. If we have not heard from you within this time period, we will proceed with processing the permit. If, while reviewing the draft permit, you find that you need more time than the above to complete the review, please contact this office with your request for additional time. We recommend that you review the attached draft thoroughly.

If you have any questions about the attached permit, or about operating permits in general, please call [permit writer] at {phone number}.

Sincerely,

[Regional Director/designee]

cc: DEQ - File

Appendix G

Draft Permit Public Notice

PUBLIC NOTICE
ISSUANCE OF A STATE OPERATING PERMIT
UNDER THE STATE AIR POLLUTION CONTROL LAW

Public Notice Date: {date}

The Department of Environmental Quality (DEQ) - _____ Regional Office has received an application for a State Operating Permit pursuant to 9 VAC 5 Chapter 80, Article 5 of the Virginia Regulations for the Control and Abatement of Air Pollution for the following source:

Source Name: {enter source name}
Registration No.: {enter source registration number}
Mailing Address: {enter source address}
Location: {enter specific location}, {road}, {county/city}

This state operating permit will be issued to the following permit holder: {IF DIFFERENT}

{enter name of permit holder}
{enter address of permit holder}

This draft permit will allow the above source to operate the following equipment:

{enter description of the source=s activities}

{The intent of the draft State Operating Permit is to set federally enforceable conditions which limit the source's potential to emit to levels below the 1990 Clean Air Act Amendment's Title V major source thresholds.}

The DEQ will accept comments for 30 days following the appearance of this notice in the newspaper. Only those comments received within this period will be considered. The DEQ will hold a public hearing if response is significant. Information on the proposed permit action and the format for hearing requests may be obtained by contacting {Mr./Ms. permit writer}, {phone number}, {street address}, {mailing address}, {city, state, zip code} on any business day between the hours of 8:30 a.m. and 4:30 p.m.

{Name}
Regional Director

Appendix H

Sample Cover Letter for Public Notice Package

Regional Office letterhead

Date

{Name}
{Title}
{Company}
{Address Line 1}
{Address Line 2}
{City, State, Zip}

Dear {name} :

In accordance with the requirements of 9 VAC 5-80-1020 of the Virginia Regulations for the Control and Abatement of Air Pollution, enclosed is a copy of the public notice announcement for the proposed issuance of a State Operating Permit to the {Facility Name}. The public notice period for this draft permit begins on {Date}, and will continue for 30 days.

If you have any questions regarding the above draft permit or would like to have information sent to you please contact me at {phone number}. Please direct any comments you may have to the above regional office address. Thank you for your consideration in this matter.

Sincerely,

{Permit Writer}
{Title}

Enclosure

cc: DEQ - File

Appendix I

Sample Public Hearing Notice

NOTICE OF PUBLIC HEARING
ISSUANCE OF A STATE OPERATING PERMIT
UNDER THE STATE AIR POLLUTION CONTROL LAW

The Department of Environmental Quality (DEQ) will conduct a public hearing in accordance with 9 VAC 5-80-1020 E. of its regulations on {public hearing date}, at {public hearing location}. The hearing is to consider a State Operating Permit application from {facility name} for their facility located at {facility location}.

The source seeks a State Operating Permit governing its air emissions from (type of facility), pursuant to 9 VAC 5 Chapter 80, Part II, Article 1 of the Virginia Regulations for the Control and Abatement of Air Pollution. [The changes in actual emissions that will result from this permit are as follows:]

The staff has completed its review of this permit application, with regard to consideration of air quality issues only, and is now ready to receive public comment. The public may examine the application and a draft State Operating permit at {location(s)} on each business day during normal business hours until the public hearing.

A public briefing will be held on __(date)__ at __(time)__ in _____(location)_____.

The public hearing will be held on __(date)__ at __(time)__ in _____(location)_____.

The purpose of the public hearing is to obtain input that may not have been considered during the review process. Persons desiring to make a statement concerning this application at the hearing are requested to furnish this office two copies of their testimony, along with any supporting documents or exhibits. All testimony, exhibits and comments received are public records. Comments may be submitted by mail or by personal appearance at the hearing. Oral comments will be accepted at the hearing. In lieu of appearance at the hearing, written comments must be received by the close of business on {date}. Based upon the nature of the comments received, the Director of the Virginia Department of Environmental Quality may extend the comment period up to the full 15 days provided in section 10.1-1307.01 of the Code of Virginia.

{RD Name}
Regional Director

Appendix J

Denial of Public Hearing Request

Regional Office letterhead

date

[Commenter name]
[Commenter title, if applicable]
[Mailing address]
[Mailing address]

Dear [Name]:

This letter is in response to your request for a public hearing concerning the draft State Operating Permit for [facility name], which appeared in your letter dated [date]. The [_____] Regional Office has reviewed your request in light of the criteria by which we must judge such requests. These criteria appear in the Virginia Regulations for the Control and Abatement of Air Pollution at 9 VAC 5-80-1020 D. The Regulations require that, for a public hearing request to be granted, *both* of the following statements must be true:

a. There is significant public interest in the air quality issues raised by the permit application in question; and

b. There are substantial, disputed air quality issues relevant to the permit application in question.

Your request for a public hearing fails to meet [the first, the second, both] of these criteria in that [reasoning for the request not meeting the criteria}. For these reasons, we decline to schedule a public hearing for this draft permit.

If you wish to discuss this determination, or to discuss the draft permit in general, please contact [permit writer name] at this office, telephone number [number].

Sincerely,

[_____]
Regional Director

Appendix K

Sample Letter Informing Source of Incorporation: Administrative Permit Amendment

[Regional Office letterhead]
date

[Responsible official name]
[Facility name]
[Mailing address]
[Mailing address]

Location: [_____]
Registration No. [_____]
AIRS ID No. [_____]

Dear [Responsible official name]

The [_____] Regional Office of the Department of Environmental Quality has completed its review of your request for an administrative permit amendment to your State Operating Permit pursuant to the Regulations for the Control and Abatement of Air Pollution, 9 VAC 5 Chapter 80, Part II, Article 5, 9 VAC 5-80-970.

Based on our review, we find your request for an administrative permit amendment to be complete within the meaning of 9 VAC 5-80-830 and 9 VAC 5-80-840, as of [date] Your request has met the requirements of 9 VAC 5-80-970 A. Your State Operating Permit is now amended in accordance with the changes you requested. A copy of the amended permit, showing the changes requested in [sections ___ and ___ as appropriate] is attached.

Sincerely,

[Regional Director/designee]

Appendix L

Sample Letter Denying Minor Permit Amendment

Regional Office letterhead

Date

{Responsible Official}
{Responsible Official Title}
{Source name}
{Mailing address}
{City, State, Zip}

Location: {City/County}
Registration No: {number}
AIRS No: {number}

Dear {Responsible Official}:

The [regional office] of the Department of Environmental Quality has completed its review of your application for a minor permit amendment to your State Operating Permit pursuant to the Virginia Regulations for the Control and Abatement of Air Pollution, 9 VAC 5-80-800 et seq.

We must deny this minor permit amendment for the following reasons: [list and explain reasoning for denial].

At this time, you must resume operating according to the terms in your State Operating Permit that you sought to modify with this minor permit amendment application. These were [condition numbers, etc.].

If you wish to discuss the matter, please feel free to call me or [permit writer, or air permit manager} at [telephone number].

Sincerely,

[regional director or designee]
Regional Director

Appendix M

Sample Letter Directing the Source to apply for a Significant Permit Amendment

Regional Office letterhead

Date

{Responsible Official}
{Responsible Official Title}
{Source name}
{Mailing address}
{City, State, Zip}

Location: {City/County}
Registration No: {number}
AIRS No: {number}

Dear {Responsible Official}:

The [regional office] of the Department of Environmental Quality has completed its review of your application for a minor permit amendment to your State Operating Permit pursuant to the Virginia Regulations for the Control and Abatement of Air Pollution, 9 VAC 5-80-800 et seq.

The change in the State Operating Permit which you seek to make is not eligible for the minor permit amendment procedures because [reason, based on 9 VAC 5-80-980 A., -B., and/or -C.]. The change may be addressed through a significant permit amendment, pursuant to 9 VAC 5-80-990.

Accordingly, if you wish to pursue this change to your State Operating Permit, please submit a request for a significant permit amendment to this office at your earliest convenience. The request, or application, should include the following information (9 VAC 5-80-990 B.):

(1) A description of the change;

(2) Emissions resulting from the change;

(3) Any new applicable requirements that will apply if the change occurs; and

(4) A suggested draft permit.

Please note that changes may not be made until a significant permit amendment (or other permit action) has been issued that covers those changes.

Thank you for your attention to this matter. If you have any questions, please feel free to contact [permit writer] at [telephone number].

Sincerely,

[Regional Director/designee]

Appendix N

Sample Letter Informing Source of Incorporation: Minor Permit Amendment

Regional Office letterhead

date

[Responsible official name]
[Facility name]
[Mailing address]
[Mailing address]

Location: [_____]
Registration No. [_____]
AIRS ID No. [_____]

Dear [Responsible official name]

The [_____] Regional Office of the Department of Environmental Quality has completed its review of your request for a minor permit amendment to your State Operating Permit pursuant to the Regulations for the Control and Abatement of Air Pollution, 9 VAC 5 Chapter 80, Part II, Article 5, 9 VAC 5-80-980.

Based on our review, we find your request for a minor permit amendment to be complete within the meaning of 9 VAC 5-80-830 and 9 VAC 5-80-840, as of [date] Your request has met the requirements of 9 VAC 5-80-980, and the minor permit amendment is hereby issued. Your State Operating Permit is now amended in accordance with the changes you requested. A copy of the amended permit, showing the changes requested in [sections ___ and ___ as appropriate] is attached.

Sincerely,

[Regional Director/designee]

Appendix O

Sample Letter Informing Source of Incorporation: Significant Permit Amendment

Regional Office letterhead

date

[Responsible official name]
[Facility name]
[Mailing address]
[Mailing address]

Location: [_____]
Registration No. [_____]
AIRS ID No. [_____]

Dear [Responsible official name]

The [_____] Regional Office of the Department of Environmental Quality has completed its review of your request for a significant permit amendment to your State Operating Permit pursuant to the Regulations for the Control and Abatement of Air Pollution, 9 VAC 5 Chapter 80, Part II, Article 5, 9 VAC 5-80-990.

Based on our review, we find your request for a significant permit amendment to be complete within the meaning of 9 VAC 5-80-830 and 9 VAC 5-80-840, as of [date] Your request has met the requirements of 9 VAC 5-80-990. Public participation procedures required by 9 VAC 5-80-1020 for this application were completed on {date}; [these included a public hearing held on [date] if applicable].

The significant permit amendment is hereby issued, and your State Operating Permit is now amended in accordance with the changes you requested. A copy of the amended permit, showing the changes requested in [sections ___ and ___ as appropriate] is attached.

Sincerely,

[Regional Director/designee]

Appendix P

Sample Notice of Intent to Re-open a Permit

Regional Office letterhead

date

[Responsible official name]
[Facility name]
[Mailing address]
[Mailing address]

Location: [_____]
Registration No. [_____]
AIRS ID No. [_____]

Dear [Responsible official name]

The [_____] Regional Office of the Department of Environmental Quality has determined that your State Operating Permit, previously issued pursuant to the Regulations for the Control and Abatement of Air Pollution, 9 VAC 5 Chapter 80, Part II, Article 5, 9 VAC 5-80-800 et seq., needs to be re-opened for cause under 9 VAC 5-80-1000. This procedure requires that the state operating permit process issuance process be repeated, with respect to the portions of the permit which require re-opening.

Your State Operating Permit requires re-opening because [reasons and parts of the permit affected, and how they fit any of the three situations in 9 VAC 5-80-1000 A.]

Accordingly, please submit an application for a State Operating Permit which covers the matters described above not later than [at least 30 days after date of the letter except in emergency]. If you have questions, please feel free to call [permit writer] at [telephone number].

Sincerely,

[Regional Director/designee]
[Title]

Appendix Q

Sample Cover Letter for Issued Permit

Regional Office letterhead

Date

{Responsible Official}
{Responsible Official Title}
{Source name}
{Mailing address}
{City, State, Zip}

Location: {City/County}
Registration No: {number}
AIRS No: {number}

Dear {Responsible Official}:

Attached is a permit to operate a miscellaneous metal parts and products coating facility in accordance with the provisions of the Commonwealth of Virginia State Air Pollution Control Board Regulations for the Control and Abatement of Air Pollution. [This permit supersedes your permit dated [___(date)___].

The permit contains legally enforceable conditions. Failure to comply may result in a Notice of Violation and civil penalty. Please read all permit conditions carefully.

In the course of evaluating the application and arriving at a final decision to approve the project, the Department of Environmental Quality (DEQ) deemed the application complete on [__(date)__].

This approval to operate shall not relieve _____ of the responsibility to comply with all other local, state and federal permit regulations.

9 VAC 5-170-200 [formerly Section 5-20-90] of the Regulations provides that you may request a formal hearing from this case decision by filing a petition with the Board within 30 days after this case decision notice was mailed or delivered to you. Please consult the relevant regulations for additional requirements for such requests.

Additionally, as provided by Rule 2A:2 of the Supreme Court of Virginia, you have 30 days from the date you actually received this permit or the date on which it was mailed to you, whichever occurred first, within which to initiate an appeal to court by filing a Notice of Appeal with:

{Current Director}, Director
Department of Environmental Quality
P.O. Box 10009
Richmond, Virginia 23240-0009

In the event that you receive this permit by mail, three days are added to the period in which to file an appeal. Please refer to Part Two A of the Rules of the Supreme Court of Virginia for additional information including filing dates and the required content of the Notice of Appeal.

If you have any questions concerning this permit, please contact the regional office at (___) _____-_____.

Sincerely,

Sincerely,

[Regional Director/designee]

Attachment: Permit

cc: Director, OAPP (electronic file submission)
Manager, Data Analysis (electronic file submission)
Permits and Technical Assessment Branch, U.S. EPA, Region III (electronic file submission)