

**New Source Review (NSR) Program Review Questionnaire
August, 2003**

Note: This questionnaire does not address implementation of changes made to the major NSR rules in EPA's rulemaking on December 31, 2002.

Unless otherwise stated, this review will cover permits issued in the last five years.

I. Program Requirements Common to Both Prevention of Significant Deterioration (PSD) and Nonattainment NSR

A. Netting

- Y X N 1. Is netting approved in your NSR SIP for determining whether modifications at major stationary sources are subject to major NSR (PSD or nonattainment NSR as applicable)? If no, please explain.
- Y X N 2. Is your contemporaneous look-back period five years, exactly the same as in the Federal PSD regulations at 40 CFR 52.21. If not, what is the contemporaneous time period for netting in your SIP?
- Y X N 3. For determining the baseline from which emission reductions are calculated do you require the applicant to submit the actual emissions from the units along with any permit limits that apply?
- Y N X 4. Do you allow an applicant to receive emission reduction netting credit for reducing allowable emissions instead of actual emissions? If yes, please explain.
- Y N X 5. Do you allow an applicant to receive emission reduction credit for reducing any portion of actual emissions that resulted because the source was operating out of compliance?
- Y N X 6. Do you allow an applicant to receive emission reduction credit for an emissions unit that has not

been constructed or operated?

- Y N X 7. Are emissions reductions to meet MACT requirements eligible for netting credits? If yes, under what conditions? (See EPA's November 12, 1997 memo from John Seitz entitled "Crediting of Maximum Achievable Control Technology (MACT) Emission Reductions for New Source Review (NSR) Netting and Offsets".)

Emissions reductions to meet MACT requirements are not routinely given to sources. However, MPCA has allowed early reduction credits and stated during the evaluation that if a permittee gave them sufficient information to justify using MACT requirement reductions for netting credits, they would allow it.

- Y X N 8. When any emissions decreases are claimed as part of a proposed modification, do you require that all stationary, source-wide, creditable and contemporaneous emissions increases and decreases of the pollutant be included in the major NSR applicability determination?

9. To avoid "double counting" of emissions reductions what process do you use to determine if emissions reductions considered for netting have already been relied on in issuing a major NSR permit for the source?

To avoid double counting of emissions reductions, MPCA tracks facilities that perform frequent netting analyses in their DELTA database. The PTE data is kept in the database for a rolling 5 year period. The files that are not in DELTA are kept in paper form for 5 years and then microfiched. Permit files are kept longer than 5 years.

- Y N X 10. Do you have a process to track projects that use credits to net out of major NSR? If yes, please explain.

As stated above, MPCA utilizes their DELTA system to track netting credits.

- Y X N 11. Do you require that emissions reductions (e.g., reductions from unit shutdowns) must be enforceable to be creditable for netting?
- Y N X 12. Have you had public concerns regarding the netting analysis and procedures used for any issued permits that avoided major NSR? If yes, please describe.
- Y N X 13. Do you allow interpollutant trading when netting, e.g., can a source use NOx or PM credits for netting out of VOC increases? If yes, please explain.
14. What process do you have to verify that a source's emissions reductions considered for netting, including emissions reductions that may have been "banked," are not already used by the source, or another source, as nonattainment NSR offsets? Please describe.

Currently, Minnesota does not have any nonattainment areas. Therefore, this questions does not apply.

B. Routine Maintenance, Repair, and Replacement (RMRR)

- Y X N 1. Do you have knowledge of the EPA letter dated May 23, 2000, to Henry Nickel of Hunton & Williams concerning Detroit Edison and the Wisconsin Electric Power Company (WEPCO) case RMRR documents?

MPCA stated that RMRR determination requests are not often made by permittees. They indicated that sources typically perform the RMRR determination on their own. However, projects that were considered to be RMRR and actually were not "routine" are sometimes uncovered during or as part of an enforcement action.

2. What other documents do you rely upon when making RMRR exemption determinations?

Although they do not have any MPCA-issued guidance specific to RMRR exemption determinations, staff routinely use previous determinations located in

EPA's guidance database.

- Y N X 3. Do you have a formal protocol for making RMRR exemption determinations? If yes, describe the protocol.

Because each RMRR exemption determination is evaluated on a case by case basis, no formal protocol is utilized. Staff consult with EPA's guidance database when supplemental information is needed prior to making a decision. If MPCA has any question on whether a project would be considered RMRR, they consult with EPA or formally refer the decision to Region 5.

4. Approximately how many formal RMRR exemption determinations have you made in the last five years? Using any one such determination as an example, describe the example, state the conclusion you reached, and discuss how you reached the conclusion.

MPCA recalled three formal RMRR exemption determinations that they have had in the last five years. Example: Anchor Glass rebricking project

- Y X N 5. Do you keep documentation of formal RMRR exemption determinations?

- Y X N 6. Do you restrict the RMRR exemption to units being modified and exclude replacement of entire units from RMRR exemption consideration?

MPCA stated that they typically do not allow replacements of entire units to fall under the RMRR exemption.

- Y X N 7. Regarding the "purpose" evaluation factor in an RMRR exemption evaluation, do you exclude projects from the RMRR exemption that result in an increase in production capacity?

A proposed project that would result in an increase in production capacity would lead MPCA to continue with the four factor test to determine if the

project was "routine maintenance".

8. Regarding the "frequency" evaluation factor in an RMRR exemption evaluation, do you consider just the history of the specific unit(s) in question, just the history of other similar units at the same facility, just the history of similar units at other facilities in the same industry, or some combination of these histories?

MPCA stated that, to the extent that the information is available to them, they consider the history of the specific unit(s) in question, the history of other similar units at the same facility, and the history of similar units at other facilities in the same industry.

9. Regarding the "cost" evaluation factor in an RMRR exemption evaluation, what procedure do you follow to take cost into account?

If the cost information that the source submits seems suspect, MPCA typically investigates the costs of similar projects on its own.

- Y N X 10. Do you provide RMRR exemption evaluation training to NSR permitting staff employees (other than on-the-job training)? If yes, describe the nature of the training provided.

Training on RMRR exemption evaluations is part of MPCA's on the job and NSR training for new staff. In addition, RMRR determinations that are in-house for evaluation are always discussed in the bimonthly LEADS meetings. LEADS meetings are held by MPCA as a forum for permit writing staff to share ideas, brainstorm on specific issues, discuss and make policy decisions and discuss technical issues and guidance. Minutes are taken during the LEADS meetings and are available to staff for future reference.

- Y N X 11. Do you provide an information outreach program on RMRR exemption evaluations for owners of regulated

sources? If yes, how frequently do you provide such information and how do you provide it?

MPCA stated that RMRR exemption evaluations are only discussed when the source broaches the issue. MPCA's permit manual mentions the RMRR exemption but does not discuss it in detail. MPCA normally would instruct the source to consult EPA's TTN website for previous determinations to help them in their evaluation of whether their project would qualify for a RMRR exemption.

C. Synthetic Minor Limits

- Y N X 1. Do you keep a list of synthetic minor sources (i.e., sources that would otherwise be major for NSR but are considered minor because of emissions limits or other limiting conditions in their permits) that is available for review by the public and EPA? If yes, please explain this tracking system and how it is updated.

A list of synthetic minor sources can be extracted from MPCA's DELTA system. In addition, since 1995, a spreadsheet has been kept of synthetic minor sources and their emissions data. This information can easily be made available for review by the public and EPA.

- Y X N 2. Do you include "prompt deviation" reporting requirements in synthetic minor source permits? If yes, how do you define "prompt deviation"?

Minnesota rules define "Deviation" as any noncompliance with an applicable requirement or permit condition. Although there is no definition of "prompt" reporting of deviations, the rules require that shutdown/breakdown reports must be made within 24 hours. Any deviation that could endanger human health or the environment must be reported immediately. CEMS are reported quarterly.

- Y X N 3. Do permit applications your agency reviews, and permits issued identify the requirements (e.g., PSD, nonattainment NSR, Title V, NESHAP) being avoided by keeping the source minor?

With each permit proposed, MPCA issues a Technical Support Document (TSD) that identifies the requirements that are avoided by keeping the source minor. Each program is addressed specifically and the TSD outlines the applicable rule requirements and how the source is avoiding them by taking synthetic minor limits.

4. Describe your formal process for establishing or designating a synthetic minor source.

If a source opts to take limits to restrict its emissions to below major threshold levels, they can apply for a "state" permit. In Minnesota, these permits are the result of state specific strategies approved by the federal government to regulate minor sources of air emissions and to attain compliance with broader air quality federal laws and regulations. There are three types of minor permits that a facility can obtain:

- 1) General permits cover a group of similar facilities, such as asphalt plants or construction aggregate producers with PTEs that are below federal thresholds. General permits only go through public comment when it is initially written. When a source obtains a general permit, it does not go through public comment again.

- 2) Registration permits are for facilities with low actual emissions versus their potential emissions. Typically, the facility's actual emissions must be less than 50% of the federal thresholds. There are four categories of eligibility for registration permits:

- A) Option A: facilities are eligible for this type of permit because they are subject to New Source Performance Standards and federal permit thresholds are not exceeded by potential emissions of any pollutant.

- B) Option B: Sources whose only emissions are from the use of VOC-containing materials, insignificant activities, and dust from roads or parking lots are eligible for Option B if they purchase or use less than 2,000 gallons

of VOC-containing material in a 12 month period.

- C) Option C: Sources whose only emissions are from boilers, internal combustion engines, VOC-containing materials (or any combination of the three), insignificant activities and dust from roads or parking lots. The rule includes emission factors and calculations that must be used to determine eligibility under Option C.
- D) Option D: A source is eligible for a registration permit under Option D if it has the potential to emit pollutants at levels exceeding a state or federal threshold but reduces its emissions through the use of pollution control equipment or other measure so that the annual actual emissions for each pollutant are less than half of the federal permit threshold. PM10 sources in a nonattainment area must have actual emissions less than 25 tons per year, and must not require special facility-specific conditions in their permit, in order to qualify.

3) State Individual Total Facility permits cover facilities that do not qualify for the other types of state permits but are below federal threshold levels. These types of permits go through a 30 day public comment period.

Sources can demonstrate that actual emissions are below the thresholds by calculating actual emissions based on emission factors, performance tests, continuous emissions monitoring and material balance methods.

The rule includes control efficiencies for common types of pollution control equipment that can be used in calculating emissions. In addition to using pollution control equipment, facilities can reduce actual emissions by limiting the amount of fuel burned, the amount of VOC-containing material used, production levels, the number of hours equipment is operated or by employing pollution prevention practices.

In order to ensure that the facility actually falls below federal thresholds, MPCA requires that information such as pollutant, emission factors used, actual annual fuel usage, emission rate, maximum uncontrolled emissions, actual uncontrolled emissions, pollution control efficiency, maximum controlled emissions, limited controlled emissions and actual controlled emissions are included in the permit application.

- Y X N 4. For synthetic minor sources do your permits include enforceable limits to keep the sources minor?
5. How is compliance with the synthetic minor limits tracked over time? Please explain.

Synthetic minor sources are required to submit semi-annual deviations reports. They are also subjected to compliance inspections approximately once every 5 years. If MPCA has received complaints or if the deviation reports indicate a need to inspect more often, a synthetic minor facility will be moved up to a higher priority and will be inspected more frequently.

- Y X N 6. Are you satisfied that your tracking activities are sufficient to ensure that sources getting synthetic minor permits to avoid major NSR review are not actually operating above the applicable major source threshold?

MPCA stated that they feel their deviation reports adequately track emissions to ensure that sources are not operating above the applicable major source threshold.

- Y N 7. Do you include in your synthetic minor permits conditions requiring sources to notify you if and when the major source threshold is reached?

For state synthetic minor permits, MPCA includes limitations to keep the source minor, but do not include a notification requirement should the

facility exceed the permitted threshold. However, exceeding the limit would be a deviation and permit violation under Minnesota rules, so a deviation report would be required. Registration permits have language requiring notifications when thresholds are exceeded.

Y N X 8. Do you perform(or require) modeling for sources seeking synthetic minor permits to determine impacts on PSD increments?

Y N X 9. Do you consider visibility issues in Class I areas, if applicable, when reviewing synthetic minor applications?

As a general rule, MPCA does not consider visibility issues in Class I areas when reviewing synthetic minor applications. However, in certain instances, they have. For example, if a synthetic minor source is near a known contributor of visibility issues in a Class I area, MPCA will address it during the permitting process.

D. Pollution Control Projects (PCP) Exclusion

Y N X 1. Do you have standard permitting procedures or rules that allow for certain changes at non-utility emissions units to be designated as PCP, which are excluded from major NSR?

MPCA stated that they follow EPA guidance on how to handle PCPs at non-utility emissions units. Minnesota does not have specific rules for this so they use the minor NSR permit process with a 30 day public notice, if necessary.

2. How many PCP exclusions have been granted for "feed" or "fuel" switches?

MPCA could not recall any PCP exclusions for feed or fuel switches. They stated that they probably use "contravening permit terms" in situations in which a fuel or feed change would have little or no effect on emissions.

3. What process do you use to determine if the project is "environmentally beneficial" and not just "economically efficient"?

In order to determine if a proposed PCP is environmentally beneficial, MPCA reviews cost and emission estimates thoroughly. They also mandate pre and post project testing and monitoring to ensure the PCP is beneficial to the environment.

4. How are the collateral emission increases evaluated? Do you require a modeling analysis to demonstrate insignificant impacts from emissions increases?

MPCA has not approved any PCPs that involve significant collateral emission increases and thus, do not require a modeling analysis to demonstrate insignificant impact from emission increases.

5. How do you handle collateral increases in hazardous air pollutants (HAP)?

MPCA has not dealt with this issue because they generally do not allow a project with collateral increases to qualify as a PCP.

Y X N

6. Are the emission reduction credits from PCP available for netting or NSR offsets? Please explain.

MPCA explained that under the old NSR rules and guidance, emission reduction credits from PCPs were available for netting and/or NSR offsets because they were real, enforceable reductions. However, under the NSR reform rules, they would not consider them as netting credits.

7. Which add-on control devices are most frequently involved in PCP exclusion requests?

Prior to NSR reform, MPCA had not encountered any add-

on control devices in PCP exclusion requests.

8. Which types of industrial sources typically request PCP exclusions from major NSR?

In Minnesota, the taconite industry and utility industry typically request PCP exclusions from major NSR.

- Y N X 9. Does your NSR SIP include the PCP exclusion for electric utility steam generating units (often referred to as the WEPCO exclusion)?

Minnesota refers directly to 40 C.F.R. Part 52.21 in their rules.

E. Fugitive Emissions

1. Please provide your regulatory definition of "fugitive" emissions for major NSR applicability purposes and how does it differ from the federal definition.

Because Minnesota is a delegated state, they adopt the federal rules by reference into their state rules. As such, Minnesota follows the definition of "fugitive" emissions in 40 C.F.R. Part 52.21.

- Y X N 2. Do you make a distinction between "fugitive" emissions and "uncontrolled" emissions? If so, please explain.

MPCA defines "uncontrolled" emissions as those emissions that exit a stack without passing through a control device. "Fugitive" emissions are defined as pollutant discharges that could not reasonably pass through a stack, chimney or other functionally equivalent opening.

- Y X N 3. Do you include fugitive emissions in major NSR applicability determinations for new sources? For modified sources? Please explain.

Minnesota includes the requirements for fugitive emissions as detailed in 40 CFR Part 52. Thus, fugitive emissions are included in major NSR applicability determinations for new sources and modified sources.

- Y X N 4. Do you allow major sources to use reductions in fugitive emissions for netting purposes? If so, please explain, and describe how you determine the fugitive emissions "baseline" used for netting.

MPCA has used reductions in fugitive emissions for netting purposes. For example, they required Koch refinery (now Flint Hills Resources) use AP42 emission factors to determine a base line. MPCA has also required a facility to perform modeling if the project is expected to impact air quality.

5. Please provide a description of your guidelines or calculation methodology used to quantify fugitive emissions.

MPCA stated that they do not have guidance for calculating fugitive emissions, specifically. When quantifying fugitive emissions, MPCA uses EPA guidance documents, testing results, AP 42 emissions factors, and for certain industries, MPCA has developed their own emission factors.

- Y X N 6. Do your permits contain conditions for specific emission limits or control methods/work practice standards for fugitive emissions consistent with requirements for BACT?

MPCA has included BACT conditions in their permits such as fugitive dust control plans (closed door and windows, operational limits during windy periods, telescopic conveyors, etc) and specific leak rate percentages.

F. Modeling

- Y X N 1. Do you follow EPA's modeling guidelines in 40

CFR Part 51 Appendix W?

- Y X N 2. Are deviations from the modeling guidelines in Appendix W subjected to public comment and submitted to the regional EPA office for approval?
- Y N X 3. Are minor permit actions (i.e., proposed new and modified minor sources), evaluated to determine if modeling for PSD increments is needed? Under what circumstances is increment modeling triggered for these minor permit actions?

Typically, minor permit actions are not evaluated to determine if modeling for PSD increments is needed. However, in some instances, a minor project proposed concurrently with a major PSD project may trigger air pollution problems in the area.

- Y X N 4. Do you ask applicants to submit a modeling protocol for approval prior to submitting modeling?
- Y X N 5. Is the protocol provided to other interested organizations (e.g., EPA, Federal Land Manager)?

In rare instances, a modeling protocol is provided to EPA and Federal Land Managers. However, MPCA stated that usually no one is interested in reviewing modeling protocols.

- Y X N 6. Is the effect of downwash modeled if stacks are less than good engineering practice (GEP)?
- Y X N 7. Are modeling analyses available for public review?

Fact sheets on how modeling is performed is available to the public through the Public Affairs office. The fact sheet focuses on assisting the public in understanding the modeling process.

- Y X N 8. Do you review modeling submittals to determine if option switches are correct?

9. When off-site meteorological data are used what years are typically used?

For off-site meteorological data, the most recently modeled last five years of data or SIP meteorological data is used.

10. How do you train your modeling staff?

Training for the modeling staff includes one on one mentoring by experienced modelers, Trinity training classes and general on the job training.

Y X N

11. Do you follow The Air Quality Analysis, Additional Impacts Analysis, and Class I Area Impact Analysis guidance provided in the New Source Review Workshop Manual (Draft October 1990)?

12. For cumulative national ambient air quality standards (NAAQS) and PSD increment compliance assessment:

- a. How are the appropriate emission inventories of other sources developed?

MPCA stated that they try to use their DELTA database but it is currently somewhat unpopulated. Thus, they plan to utilize it more in the future. Currently, they use permit and SIP files and, sometimes, cross-reference the data in DELTA with the permit file to obtain adequate data to correctly model for the NAAQS increments.

- b. What are the reasons used to identify and/or eliminate emission sources?

MPCA stated that for sources outside of the Twin Cities, they usually model all emission sources. However, for the Minneapolis/St. Paul area, they identify and/or eliminate sources in one or a combination of three ways:

1)Theory - significant concentration

gradients

2)Short cut - qualitatively equivalent to the North Carolina 20-D approach, which is a function of distance and maximum allowable emission rates (tpy)

3)Use of professional judgement

- c. How are PSD increment consuming/expanding sources identified and tracked?

For major PSD projects, the data submitted by the source(s) is cut and pasted and kept in MPCA's files. For minor sources in areas of rapid growth, MPCA generally looks back once every ten years.

4. Are mobile sources modeled for increment compliance?

On-site facility mobile sources are modeled for increment compliance. However, if the minor source baseline data is less than 10 years old then the modeler uses professional judgement to estimate off-site impact.

13. What is the basis (e.g., allowable, maximum or average actual short-term emissions, last two year period, etc.) of the emission rates provided in the NAAQS and PSD increment consuming inventories of other sources?

For use in the NAAQS and PSD increment consuming inventories, MPCA uses allowable emission rates when the information is available or when the source is "important". Otherwise, actual emission rates are used in the inventory.

14. How do you ensure that the controlling concentrations reported by the applicant for each pollutant and averaging period were appropriately determined?

MPCA will selectively re-run some files in order to ensure the information reported by the applicant was appropriately determined, especially if the source is close to triggering the increment. They ask each source for electronic input and output files in order

to speed the review process.

Y X N 15. Are the impact modeling analyses reviewed to ensure that they are accurate and complete, and that appropriate modeling procedures (e.g., modeled to 100-m resolution, fence line and not property line, nearest modeled receptors, etc.) were followed?

Y X N 16. Is complex terrain an issue in your region? What modeling procedures are used to address impacts in complex terrain?

Because modeling in Minnesota involves some significant terrain (bluffs along the north shore of Lake Superior), MPCA is beginning to use AIRMOD. The AIRMOD model is specifically designed to account for simple terrain, as well as complex terrain issues.

Y N X 17. Are pollutants without NAAQS and/or PSD increments addressed in the air quality impact assessments? What threshold concentrations (e.g., acceptable ambient concentrations) are used to evaluate impacts?

Pollutants without NAAQS and/or PSD increments are only addressed during a state air toxics review.

Y X N 18. Do you have written agency-specific air quality modeling guidance for use by applicants? If yes, has the guidance been provided to other concerned organizations (e.g., regional EPA, appropriate FLM, etc.) for review and comment? Is your guidance available on the internet?

Agency-specific air quality modeling guidance is available to applicants on MPCA's website. The guidance has not been provided to any other organizations for review and comment. MPCA indicated that until recently, the guidance was targetted to T5 modeling only. However, they now have guidance available for PSD and air toxics modeling. Currently, they are developing guidance for NSR reform modeling that will be

available shortly.

19. How do you determine the appropriateness of proposed meteorological data for an application? When are "on-site" meteorological data required for an application? Are "on-site" meteorological data validated and accepted if recovery is less than 90 percent?

MPCA determines appropriateness using proximity, wind roses and number of calm hours per year. On-site meteorological data are seldom required for a PSD application except for the north shore of Lake Superior (e.g. Northshore Mining Company (NMC) in Silver Bay, MN). For NMC, a partial year (1991) was supplemented with a full year (1992) for a total of 18 months of meteorological data.

20. When an applicant's air quality modeling reveals NAAQS and/or PSD increment violations, what is required to grant the permit and how are the violations resolved?

When an applicant's air quality modeling reveals NAAQS and/or PSD increment violations, MPCA works to contain the project to below significance levels. If this cannot be accomplished, they require that the violations be resolved as soon as possible through a compliance plan and schedule. The source is also required to obtain offsets prior to permit issuance.

- Y X N 21. Do your regulations include the federal definition of ambient air? If no, what is your definition of ambient air?

22. Discuss your procedures for modeling "hot spots," including minimum receptor spacing?

Historically, minimum receptor spacing has been 100 meters. For down wash, they use tighter receptor spacing; typically, 25 meters.

23. How do you determine if background air quality data are representative?

MPCA's modelers use their professional judgement in determining if background air quality data are representative. They look at the number and size of nearby point sources, traffic levels and concurrent onsite meteorological data.

24. Do you use the same NAD for stack, receptor, and building UTM coordinates?

They prefer to use the same NAD for stack, receptor and building UTM coordinates, but they don't always.

G. Stationary Source Determinations

- Y N X 1. Do your SIP-approved rules define stationary source differently than 40 CFR 51.165 or 51.166? If yes, please explain.

Because Minnesota is a delegated state, stationary source is defined as in 40 C.F.R. 52.21.

- Y X N 2. When determining if emissions units are contiguous or adjacent, do you assess whether emissions units under common ownership or control may be a single stationary source regardless of the distance between the emissions units? Please explain.

MPCA typically looks at more than distance to determine if emissions units are a single stationary source. They stated that they try to determine if the units are connected somehow, i.e., under common ownership or control, and/or same SIC code.

- Y X N 3. Do you assess facilities' financial, personnel, and contractual relationships to determine common ownership or control?

To assess whether the facilities are under common ownership or control, MPCA requests a great deal of information, including financial, personnel and contractual relationships. They focus on the relationship between the facilities and their dependency on one another.

- Y X N 4. Do you assess whether sources with different first two-digit SIC codes (i.e., emissions units not in the same industrial grouping) may qualify as separate stationary sources?

D. Debottlenecking and Increased Utilization

- Y X N 1. When determining if proposed modifications are subject to major NSR, do you include emissions increases from existing emissions units that are not physically modified(i.e., units that will be debottlenecked or have increased utilization such as boilers)?
2. What method is used to determine the emissions increase from these emissions units? What EPA guidance do you consider for this issue?

When determining the emissions increase from debottlenecked units, MPCA performs an analysis of the facility that includes the dependency of the units on each other, and the modes of operation between the units. They also use emission factors, mass balance equations or stack test data to calculate emissions increases. MPCA typically uses the EPA "Puzzle Book", and other correspondence/guidance documents located on the TTN website when guidance is needed.

- Y X N 3. Do you train your permitting staff to include such emissions increases when determining if a modification is major for NSR?

MPCA stated that usually these types of discussions are held in the LEADS meetings. They consider this a type of on-the-job training for their staff.

H. Relaxation of Limits Taken To Avoid Major NSR

1. Describe your knowledge of the "relaxation" regulatory provisions of 40 CFR 51.165(a)(5)(ii), 51.166(r)(2), and 52.21(r)(4).

MPCA stated that they are knowledgeable in the

"relaxation" provisions in 40 C.F.R. 52.21(r)(4) and they train staff using this requirement.

2. What types of changes do you consider potentially subject to relaxation assessments?

When a facility seeks to change a synthetic minor permit, MPCA performs a relaxation assessment.

Y N X

3. Do you have a written policy on relaxation assessments?

MPCA does not have its own written policy on relaxation assessments. They follow EPA guidance and regulations.

4. Approximately how many relaxation assessments have you made in the last five years?

MPCA could not quantify how many relaxation assessment have been made in the last five years, but they characterized it as "a few". In permits, synthetic minor limits are identified as Title I conditions.

Y X N

5. Do you include specific permit limits and conditions to make potential future relaxation possibilities more identifiable?

In permits, synthetic minor limits are clearly identified as Title I conditions, so when a facility comes in for a modification to the permit, the permit writer is sufficiently warned that a relaxation of the specific limit could trigger 52.21(r)(4).

6. What is your understanding of the appropriate circumstances under which an existing minor source is allowed a 100/250-tons-per-year emissions increase without triggering relaxation provisions?

MPCA stated that any modifications to a synthetic minor made within 2 years of the last modification, would trigger close scrutiny for

the project.

- Y X N 7. Do you provide relaxation evaluation training to NSR permitting staff employees (other than on-the-job training)? If yes, describe the nature of the training provided.

Relaxation evaluation training is included in the training provided to NSR permitting staff.

J. Circumvention/Aggregation Issues

- Y X N 1. When you review a modification to determine if it is major for NSR, do you consider aggregating prior minor emissions increases at the stationary source?
2. Please provide any criteria you may use to determine if a series of minor modifications or projects needs to be aggregated for NSR applicability purposes?

MPCA considers the timeframe in which the modifications occurred and the relationship between projects when assessing if modifications should be aggregated for NSR.

- Y X N 3. When requests are made to permit new or modified emissions units as separate minor changes over time, do you evaluate whether the permitting process is purposely staged as minor when the changes are really one permitting action subject to major NSR?
4. How do you track multiple modifications at a source over a short period of time?

All modifications are kept in the DELTA database and applications for modifications for a source are usually assigned to the same engineer.

II. Prevention of Significant Deterioration (PSD)

Note: The PSD program implements part C of Title I of the Clean Air Act for new or modified major stationary sources.

A. Program Benefits Quantification

- Y X N 1. In your opinion, is the PSD program an incentive to reduce emissions below major source levels?

MPCA stated that the PSD program is an incentive to reduce emissions below major source levels because their state rules do not go far enough in this regard. In addition, they stated that the New Source Performance Standards (NSPS) are not updated enough to make a significant difference in emissions.

- Y X N X 2. In your opinion, have PSD permits been used as the authority to implement other priorities such as toxic emission reductions and improved monitoring and reporting?

Because PSD permits require citizen participation, they often result in additional monitoring and reporting. MPCA uses PSD permits as a way to encourage sources to act as good neighbors and to work with community groups, which can drive additional requirements into the permit.

- Y N X 3. In your opinion, does the case-by-case nature of a PSD permit allow you to implement emission reducing programs or controls more quickly than rulemaking?

MPCA stated that the case-by-case nature of PSD permitting definitely made the process more lengthy and political pressures pitted against community groups can lengthen the process even more. In their opinion, standard operating procedures or sector-based rulemaking would be more beneficial, if they were updated on a regular basis.

- Y N X 4. In your opinion, does the PSD program provide communities a mechanism to be involved in improving their own air quality?

MPCA felt that the PSD program provides the public with the opportunity to voice their opinion, but does not effectively provide the mechanism for

improving their air quality.

- Y X N 5. In your opinion, has the PSD program contributed to sustaining good air quality?

They stated that without the PSD program, Minnesota air quality would definitely degrade. They felt the current PSD program was better than not having a PSD program at all, but there was need for improvement in certain areas.

B. Best Available Control Technology (BACT)

- Y X N 1. Do you require permit applicants to use the "top-down" method for determining BACT? If no, what approach do you require?

- Y X N 2. Do you commonly use information resources other than the RACT/BACT/LAER Clearinghouse to identify control options, costs, etc.? If yes, what resources do you commonly use and rate the usefulness of each one?

To identify control options, costs, etc., MPCA consults the RACT/BACT/LAER Clearinghouse first. They typically have to consult additional resources such as vendors or vendor websites, consultations with other regions, data obtained from libraries or pollution control reference catalogs.

- Y X N 3. Do you provide a detailed documentation/explanation of draft BACT determinations in the public record?

A detailed explanation of BACT information, determinations and rationale in the TSD, which is a public document.

- Y X N 4. In your public record for draft BACT determinations, do you provide an economic rationale if a BACT option is rejected as being prohibitively expensive?

Located in the TSD is a summary of total and incremental costs associated with the BACT

analysis. Details of the cost information are not made public in the TSD. However, this information is available in the permit file, which can be requested by the public.

5. What procedures do you use to calculate baseline emission rates for calculation of cost effectiveness values? What do you view as "uncontrolled" emissions?

When calculating cost effectiveness values for baseline emission rates, NSPS/SIP allowable and uncontrolled emissions are used. "Uncontrolled" emissions are defined as those emissions that exit a stack without passing through a control device.

- Y X N 6. Do you consider combinations of controls when identifying and ranking BACT options (e.g., low organic solvent coatings plus thermal oxidation)?

Combinations of controls have been considered when identifying and ranking BACT options. In addition, MPCA has asked a source to spread the costs over multiple pollutants.

- Y X N 7. Do you ever re-group the emissions units included in a cost evaluation? For example, if an applicant's approach is to evaluate the cost of controlling each unit separately, do you ever consider combining units for control by one control device? Conversely, if an applicant combines all units for control by one control device and concludes this approach is too expensive, do you ever consider controlling individual units or a small group of units that have the greatest percentage of total emissions?

MPCA stated that they have asked a source to re-group emission units included in a cost evaluation. They have also asked them to separate units. This is usually done in a pre-meeting to drafting the permit. Otherwise, the source would have to redo the BACT analysis.

- Y X N 8. Do your PSD permits specify emissions limits and

control methods consistent with the basis (and capabilities) of the selected BACT options?

Usually, Minnesota PSD permits specify emission limits and control methods consistent with the basis of the selected BACT options. They have also started to incorporate additional monitoring, startup/shutdown emission limits that may be different from BACT and have limited the number of emission units starting at the same time.

9. How do you establish the compliance averaging times for BACT emissions limits?

BACT emission limits are set on a short-term basis, usually every hour or sometimes every 15 minutes. As a rule, averaging times are never greater than 3 hours.

- Y X N 10. Do you make sure that permit conditions impose restrictions consistent with BACT evaluation assumptions? For example, if the annual emissions used in a BACT cost evaluation are based on an assumption of less than continuous operation and/or operation at less than maximum capacity, do permit conditions contain limits based on the assumption used?

MPCA stated they always have short term limits in their PSD permits. They have also restricted production rate, based on assumptions used in the BACT cost evaluation.

For questions 11-16 regarding BACT cost evaluations:

- Y N X 11. Do you allow deviation from EPA's recommended cost evaluation procedures? If yes, please explain.

When discussing BACT analyses with sources, MPCA advises them to read the regulations, consult the TTN and EPA's NSR manual and control cost manual. If the source chooses to deviate from guidance, the rationale must be detailed and well documented.

12. Do you place primary reliance on total or incremental cost effectiveness values? If you give greatest (or equal) weight to incremental costs, what is your basis for doing so?

Primary reliance is placed on total costs. However, MPCA stated that they may consider incremental costs at times, but they are reluctant to use this approach unless significant costs are shown.

- Y N 13. Do you place primary reliance on a comparative cost approach or a "bright line" test?

Primary reliance is placed on a comparative cost approach, not a "bright line" test. MPCA tries to deal with costs by pollutant, industry and/or sector. They stated that cost analyses would be easier if there was a "bright line" approach to follow.

- Y X N 14. If you place greatest importance on a comparative cost approach, do you try to obtain cost data for projects outside your permitting jurisdiction?

Because operational costs can vary greatly for different locations, MPCA sometimes consult other states with similar industries on cost data.

- Y N 15. If you use what can be described as a "bright line" test, what is the basis of your "bright line" cost effectiveness value and do you change the value over time to account for inflation?

The "bright line" effectiveness values used change over time.

- Y X N 16. Do you use a different cost approach for different pollutants? If yes, please explain.

Cost approaches vary with different pollutants, i.e., costs are generally lower for carbon dioxide.

17. Under what circumstances do you conduct a BACT

cost evaluation independent of the cost evaluation provided by the applicant? (An independent evaluation could entail obtaining additional vendor quotes.)

MPCA stated that they have not conducted a BACT cost evaluation independent of the cost evaluation provided by the applicant. They usually instruct sources to gather additional data for them to evaluate. They have also confirmed cost data with vendors to verify cost data supplied by the source.

- Y X N 18. Are cost estimates required to be referenced to a common base year (e.g., 1998) so that cost estimates can be easily compared?

Cost estimates are required to be referenced to a common base year in the same permit application.

- Y N X 19. Are other agencies contacted to determine if their cost estimates need to be normalized before comparisons can be made?

Other agencies are only contacted for normalization under special circumstances only, usually if cost data is challenged for some reason.

- Y X N X 20. Do you perform a BACT assessment for all new/modified emissions units or activities emitting a pollutant subject to PSD review no matter how small the emissions from an affected unit or activity?

Although they stated that even insignificant activities are not automatically excluded, there are some instances where they do not always perform a BACT assessment for all new/modified emissions units subject to PSD review.

- Y X N 21. Do you consider increases or decreases in corollary toxic/hazardous air pollutants as part of a BACT evaluation? [This question addresses implementation of EPA's "North County Resource Recovery Remand" memo dated September 22, 1987.]

If yes, please give a specific example.

Increases or decreases in corollary toxic/hazardous air pollutants are considered in the additional environmental impact section of the BACT analysis.

- Y X N 22. Do you provide BACT evaluation training to new (or newly-assigned) new source review (NSR) permitting staff (other than on-the-job training)? If yes, describe the nature of the training provided.

Other than on-the-job training, MPCA send staff engineers to STAAPA/ALAPCO or EPA training. After attending these training classes, staff engineers are required to disseminate information to staff that did not attend. New staff also consult with MPCA expert staff engineers with BACT analysis questions/issues.

- Y X N 23. Do you provide BACT evaluation refresher training to experienced NSR permitting staff? If yes, how frequently do you provide this training and what is the nature of the training provided?

MPCA stated that they encourage experienced permit writers to attend BACT evaluation refresher training and rule update training, as offered.

- Y N X 24. Do you provide an information outreach program on BACT evaluations for owners of regulated sources? If yes, how frequently do you provide such information and how do you provide it?

No formal outreach on BACT evaluations is provided for owners of regulated sources. MPCA typically refers source owners to EPA's web site.

- Y N X 25. Do you provide an information outreach program on BACT evaluations to the public? If yes, how frequently do you provide such information and how do you provide it?

MPCA does not routinely provide an information outreach program on BACT evaluations to the public. Any BACT information disseminated to the public would occur during public meetings.

Y X N 26. Do you enter each BACT determination in the RACT/BACT/LAER Clearinghouse?

Y X N 27. Before establishing BACT as work practice, design, or operational standards do you determine that emissions limits (e.g., lbs/mmBTU, lbs/hr) are not feasible? If no, please explain.

MPCA answered yes to this questions, but added that they only do it as required by the regulations.

Y X N 28. Do you apply BACT to fugitive emissions? If no, please explain.

BACT for fugitive emissions has been determined to be work practices, LDAR, road dust suppression and enclosed discharge.

C. Class I Area Protection For PSD Sources

1. How do you determine which proposed projects need a Class I impacts analysis, including consideration of distance of the source from Class I areas (e.g., maximum distance criteria)? Please explain.

Distance (100 km) is used when determining which projects need a Class I impacts analysis. If a large project is proposed further than 100 km from a Class I area, MPCA will discuss the need for involvement with the Federal Land Manager.

Y X N 2. For new or modified sources within 10 kilometers of Class I areas do you require sources to submit an impact analysis for all pollutants to determine if any have impacts greater than 1 ug/m³?

Yes, but the occurrence is rare.

- Y N X 3. Do you require applicants to submit a Class I increment analysis for each pollutant subject to PSD review for which an increment exists?

When Class II impacts are negligible, MPCA will skip a Class I analysis if the project is far enough away.

- Y N X 3. Do you require applicants to submit a Class I increment analysis for each pollutant subject to PSD review for which an increment exists?

When Class II impacts are negligible, MPCA will skip a Class I analysis if the project is far enough away.

- Y X N 4. Do you require applicants to identify and provide a cumulative impacts analysis (maximum impact within Class I areas) for all Class I areas impacted by the source?

MPCA requires applicants to identify and provide a cumulative impacts analysis for all Class I areas impacted by the source, unless the Class II analysis shows a negative impact.

- Y X N 5. Do you have a formal procedure for notifying Federal Land Managers (FLMs)? If yes, please explain.

When an application is received, an email is sent to the FLMs notifying them of the application. They forward additional information to the FLMs as it is received.

- Y N X 6. Do your permitting procedures require the applicants to notify Federal Land Managers? If yes, please explain.

Although there are no formal procedures or requirements to do so, MPCA encourages sources to notify the FLMs directly.

- Y X N 7. Is there communication, consultation, and discussion between you and FLMs? If yes, to

what extent(e.g, high, moderate, minimal).

MPCA characterized their communication, consultation and discussion with FLMS as moderate to high.

- Y X N 8. Is there communication, consultation, and discussion between the applicant and FLMS? If yes, to what extent (e.g., high, moderate, minimal)?

Historically, communication between the applicant and FLMS has been low, but it can be characterized recently, as moderate to high.

- Y X N 9. Do you actively seek input from FLMS during the permitting process?

Recently, MPCA has actively sought more input from FLMS during the permitting process.

- Y X N 10. Is the applicant required to address potential adverse impacts on air quality related values (AQRVs) that are identified by the FLM during the notification process?

- Y X N 11. Do you require prior approval of Class I area impact analysis procedures that applicants plan to use?

- Y X N 12. Do you require applicants to perform a visibility analysis for Class I areas?

A visibility analysis is required for applicants with a project within 100 km of a Class I area, or if a "large" project, MPCA will require a visibility analysis even if it is more than 100 km away from a Class I area.

- Y X N 13. If a visibility impairment is indicated, do you require the applicant to notify the appropriate FLM for the Class I area?

- Y X N 14. Is the applicant required to address potential effects on scenic vistas associated with Class I

areas that may have been identified by the FLM during the notification process?

- Y X N 15. Do you have a formal process for handling Class I area increment violations if predicted?

MPCA does not issue a permit until the predicted increment violation is addressed.

- Y N X 16. Have you issued PSD permits where the FLM objected? If yes, please explain and identify the projects.

D. Additional Impacts -Soils, Vegetation, Visibility, Growth

- Y N X 1. Do your PSD application forms specifically require information regarding additional impacts? If yes, include a copy of the forms.

MPCA refers applicants to EPA web documents.

- Y X N 2. If no, do you require applicants to submit sufficient information necessary to complete an additional impact analysis?

The applicant is required to complete an additional impact analysis themselves.

3. What resources do you use for researching additional impacts?

MPCA uses the FLMS for researching additional impacts.

- Y N X 4. Do you include environmental justice and/or endangered species issues in your analysis?

MPCA stated that they do not follow EPA's process for determining if the source is located in an environmental justice area.

- Y X N 5. Has an additional impact analysis in the last 5 years been a cause for concern in an issuance of a

PSD permit? If yes, please explain.

In the U.S. Steel-Minnetac backward looking PSD permit, the additional impact analysis has been a cause for concern.

- Y N 6. Do you generally allow arguments that the protection of the NAAQS will assure protection of vegetation? If yes, please explain.

MPCA allows arguments that the protection of the NAAQS will assure protection of vegetation for Class II areas, not Class I areas.

- Y N 7. Do you require that predicted short-term impacts (e.g, one hour NOx impacts) be used to assess impacts on vegetation for pollutants which do not have short term ambient standards? If no, please explain.

MPCA stated that they have performed one hour modeling but they have focused more on health impacts than welfare.

- Y N 8. Regarding visibility impacts, do you require assessments for vistas (e.g., parks, airports) near the proposed source or modification? If no, please explain.

Assessments for vistas is required only for Class I areas.

E. Preconstruction Monitoring

- Y N 1. Do you have formal preconstruction monitoring requirements?

- Y N 2. Do you have a formal public participation process regarding requirements for preconstruction monitoring for specific proposed projects?

- Y N 3. Have you ever consulted with FLM regarding preconstruction monitoring requirements for a proposed source or modification?

- Y N 4. In the last five years have you ever required an

applicant applying for a PSD permit to conduct preconstruction ambient monitoring or meteorological monitoring?

Y N X 5. Do you have a formal approval/denial process at the conclusion of preconstruction monitoring?

Y N X 6. Do you have a formal process during preconstruction monitoring for resolving conflicts between the FLM and the applicant? If yes, please explain.

Y X N 7. Do you routinely provide ambient monitoring data in lieu of requiring applicants to perform preconstruction monitoring? If yes, please briefly describe the monitoring network used and the basis for the monitoring value selected.

MPCA stated that they use representative data, in lieu of requiring applicants to perform preconstruction monitoring. This, however, can be subjective so they try to use the most conservative data available in order to err on the side of benefits to the environment.

Y X N 8. Do you follow EPA guidance (e.g., siting, equipment, data validation, audits) regarding collection of preconstruction monitoring data?

9. Under what circumstances would you require post construction ambient monitoring as a condition of a PSD permit?

Because MPCA relies on offsite data, there have been instances where on-site monitoring was debated. Ultimately, other modeling data was submitted to eliminate the need for this.

F. Increment Tracking Procedures

1. What method do you use to assign baseline dates, e.g., county-specific, region-specific, or entire state?

MPCA uses the county-specific method to assign baseline dates.

Y X N 2. Do you have a list of the minor source baseline dates for each area?

Y N X 3. Do you have an understanding of receptor location dependence vs. source location dependence for increment tracking?

Neither R5 nor MPCA had a clear understanding of what this question was asking.

4. Do you have a formal or informal program for increment tracking?

A formal program is used for increment tracking of major PSD sources. An informal program is used for increment tracking of minor sources.

Y N X 5. Do you maintain and update a computerized emission source database for increment tracking that includes minor sources that affect increment? If yes, does the database include the information needed for modeling (e.g., source locations, stack parameters, emissions)?

6. Do you use allowable or actual emissions for increment tracking purposes? If actual emissions, how do you calculate emissions for each averaging period covered by the increments?

MPCA stated that they prefer to use allowable emissions for increment tracking purposes but the rules allow the use of actual emissions. Thus, they look at past records.

Y X N 7. Are area sources included in increment tracking analyses, e.g., growth-related and transportation-related emissions?

Area sources are included in increment tracking analyses only in vast growth areas, such as Rochester, where a significant amount of time has elapsed since the baseline data was established.

8. How frequently is increment consumption evaluated

- on a scheduled basis or just when occasioned by a new permit application?

Increment consumption is evaluated only when occasioned by a new major permit application (i.e., only if it triggers PSD review).

9. How "transparent" (i.e., understandable) is the emission source inventory used for PSD modeling? Could an outside reviewer (such as a member of the public) clearly identify the sources included (e.g., name, location, stack parameters) and the sources excluded in a modeling analysis?

MPCA stated that an outside reviewer could probably decipher the information in the emission source inventory with the aid of staff, but they would not be able to do it on their own.

10. How do you handle interstate increment tracking (for state reviewing authorities) or interjurisdiction tracking (for local reviewing authorities), including consistency of tracking across jurisdiction boundaries?

This is seldom an issue for MPCA. If a source is within 50 miles of the jurisdictional boundaries, they would notify the state or local reviewing authority.

11. What procedure do you follow in planning for and incorporating new modeling tools?

In planning for and incorporating new modeling tools, MPCA consults with professional contacts, i.e., consultants, FLMS, other modelers, etc.

- Y N 12. Do you provide increment tracking training to NSR permitting staff (other than on-the-job training)? If yes, describe the nature of the training provided.

The permit writers do not feel the need for increment tracking training.

G. Endangered Species Act (ESA)

- Y N 1. Do you have a PSD program that is fully approved by EPA (i.e., SIP-approved?
- Y N 2. Do you have a fully or partially-delegated PSD program? (Note: ESA obligations apply only when all or portions of a PSD program have been delegated.) If yes, answer questions 3 through 6 below.

Minnesota has a fully delegated PSD program.

- Y N 3. Do you notify PSD permit applicants of their ESA obligations? If so, please provide a copy or description of your notice.
- Y N 4. Do you know the difference between a formal vs. an informal consultation process?
- Y N 5. Do you advise applicants, concerning their ESA obligations, to consult with a.) EPA; b.) The U.S. Fish and Wildlife Service; and/or c.) Federal Land Manager? If yes, please explain, and describe what information you provide to applicants concerning their ESA obligations.
- Y N 6. Does an ESA consultation affect the timing of your issuance of a proposed or final PSD permit? If yes, please explain.

An ESA consultation would affect the timing of issuance of a proposed or final PSD permit.

III. Nonattainment NSR

A. Program Benefits

- Y N 1. In your opinion, is the nonattainment NSR program an incentive to reduce emissions below major source levels?
- Y N 2. In your opinion, have nonattainment NSR permits been used as the authority to implement other priorities such as toxic emission reduction and improved monitoring and reporting?

- Y N 3. In your opinion, does the case-by-case nature of a nonattainment NSR permit allow you to implement emission reducing programs or controls more quickly than rulemaking?
- Y N 4. In your opinion, does the nonattainment NSR program provide communities a mechanism to be involved in improving their own air quality?
- Y N 5. In your opinion, have the nonattainment NSR requirements contributed to reducing emissions or avoiding emissions increases in nonattainment areas?

B. NSR Offsets

- Y N 1. Do you have an emissions "bank" for offsets? If no, go directly to 10.
- Y N 2. Is the bank a database used for emissions trading? Please explain how the trading works.
- Y N 3. Do you, as the reviewing authority, control the trading of credits in the "bank"? If no, who controls the trading?
- Y N 4. Are the credits certified "creditable" (including surplus for attainment planning purposes and other Clean Air Act requirements) by you at time of entry into the bank?
- Y N 5. Are the credits evaluated and certified "creditable" (including currently surplus) at the time of withdrawal and use? If no please explain.
6. How long are the "offsets" valid from time of reduction?
- Y N 7. Are the banked credits included in the attainment demonstration and inventory as "real emissions" (i.e., emissions being emitted into the air)?
- Y N 8. Are the banked credits used for NSR offsets only? If no, what are the other uses?

- Y N 9. Are the banked credits discounted with time? If yes, please explain the discounting procedures.
10. How do you determine that the reductions being used are properly included in the attainment demonstration?
- Y X N 11. Are the emissions reductions available for NSR offsets only allowed from the same nonattainment area as the proposed source or modification? If no, please explain.
12. What procedures do you use to determine the baseline to quantify the reductions? How do you quantify the amount of creditable reduction?
- Y N 13. Are the records for determining actual emissions available for review by you?
- Y N 14. Are copies of permits required as part of the permit application to determine if the reductions from other sources being proposed as NSR offsets are federally enforceable?
15. How do you verify that the reductions proposed for NSR offsets are "surplus" to other Act requirements and are "real," i.e., reductions in emissions that were actually emitted into the air?
16. What process do you use to verify that the reductions were not used in a previously issued permit?
- Y N 17. Do you allow interpollutant trading for NSR offsets? If yes, please describe this trading procedure (e.g., pollutants allowed, ratio of reductions required, eligibility criteria, etc.).
- Y N 18. For serious and severe ozone nonattainment areas do you allow "internal offsets" instead of

lowest achievable emissions rate (LAER)? What is the offset ratio?

- Y N 19. Do you allow credits used for netting to be used as nonattainment NSR offsets?
- Y N 20. Do your nonattainment NSR rules require the offset ratios prescribed in the Clean Air Act? If no, please explain what other ratios are used?
- Y N 21. Do you require that applicants proposing to use NSR offsets include a "net air quality benefit" modeling analysis as part of their permit application? If yes, please describe what information is required.

C. LAER Determinations

- Y N 1. Do you require permit applicants to use a top-down approach to determine the most stringent control option available for LAER? If no, what approach do you require?
- Y N 2. Do you require a permit applicant to identify all available control options? If yes, do you require the applicant to identify control options as being:
- Y N a. Achieved in practice?
- Y N b. Contained within the SIP of any other state or local reviewing authority?
- Y N c. Technologically feasible?
- Y N d. Cost effective?
- Y N 3. Do you use information sources other than the RACT/BACT/LAER Clearinghouse to identify control options? If yes, what information sources do you commonly use and rate the usefulness of each?
4. Please describe under what circumstances you would conduct a LAER analysis independent of the

analysis conducted by the permit applicant.

- Y N 5. Do you submit your LAER determinations to the EPA's RACT/BACT/LAER Clearinghouse?
- Y N 6. Do you consider technology transfer in your LAER determinations?
7. If you consider cost effectiveness in LAER determinations, please describe the procedures used. (For example, describe the procedures used to calculate the baseline emission rate in the cost effectiveness determination.) For each criteria pollutant, provide the dollar/ton threshold used to determine whether a control option is cost effective (and state whether this is total or incremental cost).
- Y N 8. Do you use a different cost approach for different pollutants? If yes, please explain.
- Y N 9. Do you provide detailed documentation or explanations of proposed LAER determinations in the technical support document (TSD) or public record?
- Y N 10. Do you provide an economic rationale in the TSD or public record if a LAER option is rejected as being prohibitively expensive?
- Y N 11. Do you consider combinations of controls when identifying and ranking LAER options?
- Y N 12. Do you perform a LAER assessment for all new/modified emission units or activities emitting a nonattainment pollutant subject to major NSR review no matter how small the emissions from an affected unit or activity?
- Y N 13. Does your LAER analysis include "time of" considerations? (For example, if a new or modified source had constructed without a permit and at a later time went through nonattainment NSR review, would you consider LAER at the time of permit issuance or at the time of emission unit construction/ modification?)

- Y N 14. Do your permits contain conditions requiring specific emission limits/ control method conditions/work practice standards consistent with the basis (and capabilities) of the selected LAER option?
15. Please describe how you establish compliance averaging times for LAER emission limits.
- Y N 16. Do your permits contain conditions requiring emissions testing, monitoring, recordkeeping, and reporting so that inspectors and enforcement personnel can easily determine compliance with LAER requirements? If no, please explain.
- Y N 17. Do you ensure that permit conditions impose restrictions consistent with the LAER determination? (For example, if emissions used in the LAER determination are based on an assumption of less than continuous operation and/or operation at less than maximum capacity, do permit conditions contain limits or restrictions based on the assumptions used?)
18. Please describe how you incorporate public comments into your LAER determinations.
- Y N 19. Do you provide LAER evaluation training to new (or newly-assigned) NSR permitting staff other than on-the-job training? If yes, please describe the nature of the training provided.
- Y N 20. Do you provide LAER evaluation refresher training to experienced NSR permitting staff? If yes, how frequently do you provide this training and what is the nature of the training provided?
- Y N 21. Do you provide an information outreach program on LAER evaluations for owners or operators of regulated sources? If yes, how frequently do you provide such information and how do you provide it?
- Y N 22. Do you provide an information outreach program on LAER evaluations to the general public? If yes, how frequently do you provide such information and how do you provide it?

D. Alternatives Analysis

- Y N 1. Does each nonattainment NSR permit action address the alternatives analysis as required by section 173(a)(5) of the Clean Air Act?
- Y N 2. Is this alternatives analysis a specific requirement of your nonattainment NSR rules?
- Y N 3. Do you have criteria that would address the depth of analysis required for a specific project? If so, what are the criteria?
- Y N 4. Do you include project-specific environmental justice and/or endangered species issues that are raised as part of this analysis?
- Y N 5. Do you know of any projects where this analysis resulted in changes to proposed projects? If yes, what changes resulted?

E. Compliance of Other Major Sources in the State

- Y N 1. Do you require the permit applicant to demonstrate that all major stationary sources owned or operated by the applicant in your State are subject to emission limitations and are in compliance, or on a schedule for compliance, with all applicable emission limitations and standards?
2. Please describe - a) the criteria used by an applicant in a statewide compliance demonstration, and b) when in the permitting process you require the applicant to make the statewide compliance demonstration.

IV. Minor NSR Programs

A. NAAQS/INCREMENT Protection

- Y N X 1. Do you use modeling to assure that minor sources and minor modifications will not violate the NAAQS?

MPCA stated that they would use modeling to assure that minor sources and minor modification will not violate the NAAQS if it was part of a major PSD application.

- Y N X 2. As a result of modeling are air quality monitors required for some sources as a permit condition?

MPCA has considered this in some instances but have never required air quality monitors as a permit condition.

- Y X N 3. For the pollutants with PSD increments established do you have a list of areas where the minor source baseline has been triggered?

- Y N X 4. Do you model minor sources for PSD increments if the minor source baseline is triggered?

Generally, MPCA does not model minor sources for PSD increments if the minor source baseline is triggered, unless the minor source baseline is more than 10 years old.

- Y N X 5. Do you have procedures in place to identify minor sources that consume or expand PSD increment?

Formal procedures are not in place to identify minor sources that consume or expand the PSD increment. Modelers use common knowledge in this regard.

6. How does the public access a list of sources that affect PSD increments?

The public can access this information by contacting Chris Nelson or Dennis Becker, of the MPCA. They stated that the public seldom asks for PSD increment information. They are generally

more interested in total health and welfare impacts (i.e. ambient standards).

B. Control Requirements

- Y X N 1. Does your SIP require any level of control for emissions units not subject to major NSR requirements (e.g., BACT or LAER)? For example, do you have a BACT or similar requirement for minor modifications?

Some sources are required to install some level of control but it would not be equivalent to BACT. Minnesota's rule 7011.0070 states "Unless a Part 70, state or general permit specifies a different control efficiency, the owner or operator of a stationary source must all times attain at least the control efficiency listed in Table A for each piece of listed control equipment at the stationary source..." Table A then lists a control equipment description, a pollutant and a control efficiency, using a total enclosure or with a hood. See Attachment A for 7011.0070, Table A.

- Y X N 2. Are there any monitoring or reporting requirements for minor sources?

There are monitoring and reporting requirements for minor sources in permits and in the Minnesota SIP. Rule 7011.0080 details the monitoring and record keeping requirements for listed control equipment. For example, a cyclone is required to measure and record pressure drop every 24 hours if in operation.

- Y N X 3. Does the application or permitting process require modeling for minor sources?

Modeling for minor sources is not required as part of the NSR program. At times, minor sources may be modeled as part of an air toxics study.

- Y X N 4. Do you require minor sources with Federally applicable permit limits for MACT, NSPS, or

NESHAP to report compliance?

Minor sources with federally applicable permit limits are required to report compliance to MPCA's enforcement group. Reports are tracked and prioritized.

C. ~~Tracking Synthetic Minor NSR Permits~~

- ~~Y N~~ 1. ~~Do you have records listing sources permitted as synthetic minors? If yes, how is this list updated?~~
- ~~Y N~~ 2. ~~Do you have an established procedure for tracking synthetic minor permits?~~
- ~~Y N~~ 3. ~~Do you include "prompt deviation" reporting requirements in synthetic minor source permits? If yes, how do you define "prompt deviation"?~~
- ~~Y N~~ 4. ~~Do permit applications your agency reviews, and permits issued identify the requirements (e.g., PSD, nonattainment NSR, Title V, NESHAP) being avoided by keeping the source minor?~~

IV. Public Participation

A. Public Notification

1. What criteria are used to determine if a permit is public noticed?

- Y X N Are new nonattainment NSR and PSD permits noticed?
- Y X N Are major modifications noticed?
- Y X N Are synthetic minor permits noticed?
- Y X N Are netting permits noticed?
- Y N X Are minor permits noticed?

Generally, minor permits are not noticed, but some are.

Other?

- Y X N 2. Do you publish notices on proposed NSR permits in a newspaper of general circulation?
- Y X N 3. Do you use a state or other publication designed to give general public notice? If yes, please describe.
- Y N X 4. Do you have procedures for notifying the public when major NSR permit applications are received?
- Y X N 5. Have you developed a mailing list of interested parties for NSR permit actions [e.g., public officials, concerned environmentalists, citizens]? If yes, how does one get on the list?

The permit engineer assigned to a facility is responsible for compiling a mailing list. The list includes any one person or group that has expressed interest in the company. The lists also includes public officials and federal land managers. Lists are maintained by facility, county or state.

- Y X N 6. Aside from methods described above, do you use other means for public notification? If yes, what are they (e.g., post notices on your webpage, email)?

All announcements are posted on the MPCA website. In addition, MPCA has begun to post draft Title V permits, draft construction permits and TSDs on their webpage.

- Y X N 7. Do your public notices clearly state when the public comment period begins and ends?
8. What is your opinion on the most effective ways to provide public notice?

MPCA feels that it is very important to reach the public and receive their comments early in the permitting process, i.e. long before the draft permit is sent to public notice.

Y N X

9. Do you provide notices in languages besides English?

Y X N

10. Have you ever been asked by the public to extend a public comment period? If yes, did you grant the extension? If no, please explain?

MPCA has extended the public comment period, normally to schedule public meetings.

Extensions are granted on a case by case basis but MPCA states that they are granted routinely for any logical reason. For example, MPCA will grant an extension if a mistake is made by MPCA in publishing the time of a public hearing or the specific location of the facility.

11. What approximate percentage of your major NSR permits are revised due to public comments? Remands? State appeals?

1 - 2% of major NSR permits are revised due to public comments, remands or state appeals.

12. If a draft permit is revised, what criteria do you use to determine if a permit should be re-issued in draft?

If the permit is made less stringent, it would be re-proposed for public comment. Otherwise, changes to the draft permit are not re-proposed for public comment.

13. What type of comments or other concerns trigger a public hearing?

A request for a hearing must be made in writing. Any logical request for a public hearing is granted, i.e., there is no minimum number of requests to trigger a hearing. Most hearings are informative, question and answer sessions, not formal hearings (i.e., no stenographer). Public comments are received up to 15 days after the hearing, unless otherwise pressured.

14. How are public hearings noticed? How much notice is given?

A public notice for a meeting/hearing is published in a newspaper (and also sent to the same list used for the permit's public notice) at least 30 days prior to the meeting/hearing. In addition, often a news release is prepared prior to the meeting.

15. What is your process for the public to obtain permit-related information (such as permit applications, draft permits, deviation reports, monitoring reports) especially during the public comment period?

Concerned citizens must call the MPCA office to request documents. Usually, a clerical person will make the requested copies. However, there is also an option offered to the public of scheduling a time to review the file. In that case, a room is reserved and the interested party can look through the file and copy what they need. MPCA will also send information to interested parties.

Y N X

16. Do you have a website for the public to get permit-related documents? What is available online? How often is the website updated? Is there information on how the public can be involved?

The public announcement, the draft permit and the TSDs are all available on-line. The permits are removed from MPCA's website when the public comment period has ended. They are on the web for the full 30 or 45 day period. In addition, there is information on the website on public participation.

Y N X

17. Do you provide training to citizens on public participation or on NSR? If yes, approximately how many training opportunities have been provided in the last five years.

In the past, EPA has provided the training to

citizens on public participation. In April 2003, EPA provided training to the citizens of Bemidji on the public participation process.

18. How do you notify affected States (including tribes and Canada) of draft permits?

Affected States are notified of draft permits in the same manner as all other interested parties. They are placed on the Statewide mailing list(s).

- Y X N 19. Do public notices for PSD permits specifically state the amount of increment consumed?

Yes, when applicable, as in the case of Rochester Public Utilities.

- Y X N 20. Are public notices for PSD permits sent to each party identified in 40 CFR 51.166(q)(2)(iv)?

MPCA didn't think they follow this rule completely. The rules talks about "the chief executives of the city and county where the source would be located". They thought county personnel are included in their lists, but city personnel are not necessarily included.

B. Environmental Justice (EJ)

Note: By EJ analysis we refer to any procedures applied during the permitting process, regardless of whether they are called EJ, that consider demographics (race, income, nationality, etc.), cumulative effects, (burden, exposure, risk), comparative effects or modifications to the public involvement processes to address unique characteristics of the project.

- Y N X 1. Do you consider EJ issues during the permitting process? If yes, please provide a description of the criteria, guidelines, or screening procedures used to address EJ issues.

- Y N X 2. Regarding section 173(a)(5) of the Clean Air Act, do you conduct an alternatives analysis as part of your nonattainment area permitting process? If yes, please provide a description of the EJ

criteria or guidelines used for this analysis.

Y N X 3. Regarding section 165(a)(2) of the Clean Air Act, does your NSR permitting program and public comment process for PSD regulated pollutants provide for consideration of alternatives?

4. How are the demographics of the affected community taken into account in the permitting process?

Because MPCA does not routinely perform an environmental justice analysis, this question was not applicable.

5. How are cumulative effects and/or pre-existing burden addressed in the permitting process?

Because MPCA does not routinely perform an environmental justice analysis, this question was not applicable.

6. What additional community information and/or demographics (for example - children, the elderly) do you consider important for an EJ analysis?

Because MPCA does not routinely perform an environmental justice analysis, this question was not applicable.

Y N X 7. Do you allow public involvement during an EJ analysis? If yes,

a. What stakeholder groups do you try to involve?

Not applicable.

b. At what point in the EJ analysis or permitting process do stakeholders become involved?

Not applicable.

c. To what degree and in what manner do

stakeholders or the community influence the permit decision making process?

Not applicable.

d. To what degree do you know about how stakeholders or the affected community participated in the permit decision making process?

Not applicable.

e. Describe how you make information available to stakeholders and the affected community. (For example - translation of information, understandable and accessible materials, personal contacts, clearly explained technical information including potential risk, distribution of information, public meetings, etc.)

Not applicable.

Y N X

8. In the EJ analysis, do you consider direct and indirect benefits and burdens from the proposed actions? If yes,

a. Describe what benefits you consider in the EJ analysis. (For example - economic, social, cultural, health, environmental, etc.)

Not applicable.

b. Describe what burdens you consider in the EJ analysis. (For example - economic, social, cultural, health, environmental, etc.)

Not applicable.

Y N X

9. In the EJ analysis, do you consider comparative and disproportionate impacts? If yes,

a. Describe the criteria or procedures used to determine any potential or actual adverse health or environmental effects or impacts.

Not applicable.

- b. Describe the criteria or procedures used to determine whether evidence exists to describe these effects or impacts.

Not applicable.

- c. Describe the criteria or procedures used to determine whether the proposed project complies with all applicable environmental laws.

Not applicable.

V. Program Staffing and Training Issues

1. What is the total number of staff dedicated to permitting for your NSR program? Please provide an organizational chart.

There are 10 FTEs dedicated to NSR permitting.

2. For your NSR program please breakdown the staff into the different job functions (e.g., number of modelers, review engineers, technicians, environmental scientists, clerical, supervisory, enforcement).

See Attachment C.

3. Please describe your training program for new and existing staff who work on NSR permitting and issues. List any materials you use or training course you try to attend.

MPCA encourages their NSR permit writers to attend EPA's APTI training courses, both in person and in the form of telecourses. They also attend STAPPA/ALAPCO training when offered. For new staff, MPCA assigns a senior level permit writer as a mentor. The mentoring program provides on the job training to inexperienced staff. In addition, the LEADS meetings are valuable learning tools for new staff and the minutes of previous LEADS discussions

are archived for reference purposes.

4. Describe any additional training that you believe would be beneficial. Would you like for EPA to provide more NSR training?

MPCA would like to see more training on NSR reform, as well as written guidance materials for them to reference. For example, they have asked Region 5 for an update to EPA's puzzlebook.

- Y N X6. Do you provide NSR program training opportunities for the public, including the regulated community? If yes, please describe.

NSR program training for the public, including the regulated community has been limited in the past. However, MPCA is anticipating and preparing for a NSR reform training program that will be offered to external parties, including the regulated community.

7. Total number of staff w/ 3(?) years or more of experience" 5 yrs? 10 yrs?

3 years of experience in air quality permitting = 20 permit writers

5 years of experience in air quality permitting = 15 permit writers

10 years of experience in air quality permitting = 6 permit writers

VI. General NSR Program Issues

- Y X N 1. Do you implement EPA issued program guidance and policy for NSR? In no, please explain.

As a delegated state, Minnesota implements EPA issued program guidance and policy for NSR.

- Y N 2. In general, how do you learn about federal NSR rule changes? Do you use EPA's TTN website at www.epa.gov/ttn to monitor NSR program changes and implementation issues? Do you find the info on the TTN adequate? Is there any other information you would like to see provided?

MPCA has a staff-level employee whose responsibilities include researching and updating other staff in federal NSR rule changes. They also stated that they use EPA's TTN website, monthly conference calls with R5, quarterly state calls, and STAPPA/ALAPCO websites to monitor NSR program changes and implementation issues.

3. How do you determine if emissions factors (e.g., AP-42) are acceptable for NSR applicability purposes?

MPCA utilizes AP-42 and the fire database for emission factor information. Permit writers often consult with sector-experienced staff when questions arise on NSR applicability.

4. Please provide any comments, suggestions, or concerns you may have regarding the NSR program.

5. Please provide the number of non-major permits you issued last year, ~~not counting renewals~~.

In 2002, MPCA issued 97 non-major permits.

6. How many PSD permits did you issue last year?

In 2002, 5-6 PSD permits were issued.

7. How many nonattainment NSR permits did you issue last year? Since 1990?

Since there are no nonattainment areas in Minnesota, to date, there have been no nonattainment NSR permits issued by MPCA since 1990.

8. For PSD permits what is the average time (months) taken by you to issue the permit, starting from the time the application was determined complete? For nonattainment NSR permits?

On the average, it takes MPCA 12-15 months to

process and issue a PSD permit.

- Y X N 9. Do you have a formal procedure for establishing past permit violations related to NSR requirements?

In the permit application, the permittee is asked about their compliance status.

- Y X N 10. Do you have a formal procedure for dealing with "self reported" NSR violations?

Self reported NSR violations are referred to the enforcement section for follow up.

- Y X N 11. Do you have formal enforcement procedures for dealing with past violations of NSR requirements, including applicable BACT or LAER requirements of major NSR?

In situations where past NSR violations are noted, MPCA usually meets to discuss the issues and decide what action should be taken.

- Y X N 12. Do you include PM10 condensible emissions in the total amount of PM10 emissions when determining PSD applicability, BACT, PSD increment, and NAAQS?

PM10 condensibles are included in the total PM10 emissions when determining PSD applicability, BACT, PSD increment and NAAQS. However, MPCA noted that they don't always have accurate emission factors to predict PM10 condensibles.

- Y X N 13. When PM10 testing is required do you include a permit condition that requires testing and specifies testing methods for PM10 condensibles?"

VII. Effective Construction Permits

Do your construction permits:

- Y X N 1. Identify each emissions unit regulated?
- Y X N 2. Establish emissions standards or other operational limits that must be met, including appropriate averaging times for numeric limits?
- Y X N 3. Include specific methods for determining compliance and excess emissions, including reporting, record keeping, monitoring, and testing requirements?
- Y X N 4. Outline procedures necessary to maintain continuous compliance with emission limits?
- Y X N 5. Establish specific, clear, concise, and enforceable permit conditions?
- Y X N 6. Include conditions necessary for a source to avoid otherwise applicable requirements (e.g., keeping a modification "minor")?
- Y X N 7. Do you use statements of basis for construction permits?

VIII. Reform Questions

A. Program Implementation

- Y X N 1. PSD Delegated States: Are you fully implementing the new PSD provisions that went into effect on March 3, 2003? If not, what provisions are not being implemented? Why?
- Y N 2. PSD SIP-approved States and nonattainment NSR: Are you currently developing rulemaking to adopt the 3/3/03 provisions? What is your timeline for adoption? Does this include changes to minor NSR regulations?

This question is not applicable because Minnesota is a delegated state without any

nonattainment areas.

B. Previous Experience with Provisions

Y X N 1. Have you granted any PCP exclusions prior to the new regulations (pursuant to the 7/1/94 EPA policy memo or the WEPCO rules)?

Y N X 2. Have you made PSD/NSR applicability determinations based on a past actual vs. projected future actual test (WEPCO)? If Yes, how do you track future actual emissions?

MPCA currently has a facility (Potlach) who will be determining PSD applicability on past actuals versus projected future annual emissions. They are requiring Potlach to submit an annual report, and to use the same format/calculation methods as used in their applicability analysis, which is attached as an appendix to the permit.

Y X N 3. Have you issued any PAL permits?

A PAL was issued in 1992 for 3M Corporation. Two other PALs, one for Anderson Corporation and one for Flint Hills, were processed but were not issued.

C. New Provisions

Y X N 1. Have you received permit applications requesting any of the new NSR provisions? If yes, please explain.

A number of Clean Unit designations and one VOC PAL application have been requested since the NSR provisions became effective. In addition, a number of submitted applications have utilized the actual-to-projected actuals applicability test.

Y X N 2. Have you provided training to your staff on the new NSR provisions?

EPA provided training to MPCA permit writers in June 2003 in Minneapolis-St. Paul. MPCA staff also attended EPA training held in Chicago. They

have participated in STAPPA/ALAPCO reform discussions and the Michigan DEQ teleconference training. MPCA wrote their own guidance on NSR reform, which is available to their staff as well as the regulated community and is located on their website.