

Operating Permits/Classifications & Pre-Proposal Title 129 Changes

Brad Reid

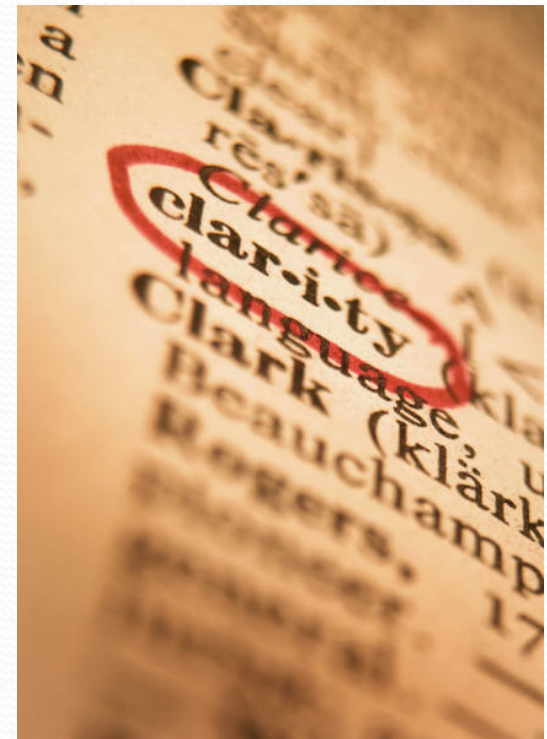
Air Quality Permitting Section

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Topics

- Operating Permit Classifications
- Chapter 5 – Operating Permits, When Required
 - Changes to Section 001 - Applicability and Scope
 - Clarifying and reorganizing language
 - Addressing GHGs
 - Revising Low Emitter Program
 - Creating a Registration Program
 - Changes to Section 002 – Exemptions
 - Clarifying Language



Topics, cont.

- Chapter 7 – Operating Permits, Application
 - Changes to Section 002.02
 - Clarifying Language on Timing of Class I Applications
 - Changes to Section 002.04
 - Clarifying Language on Timing of Class II Applications
- Chapter 1 – Definitions
 - Revise definition of “Low Emitter”
- Source Classifications and Examples

Potential to Emit (PTE)

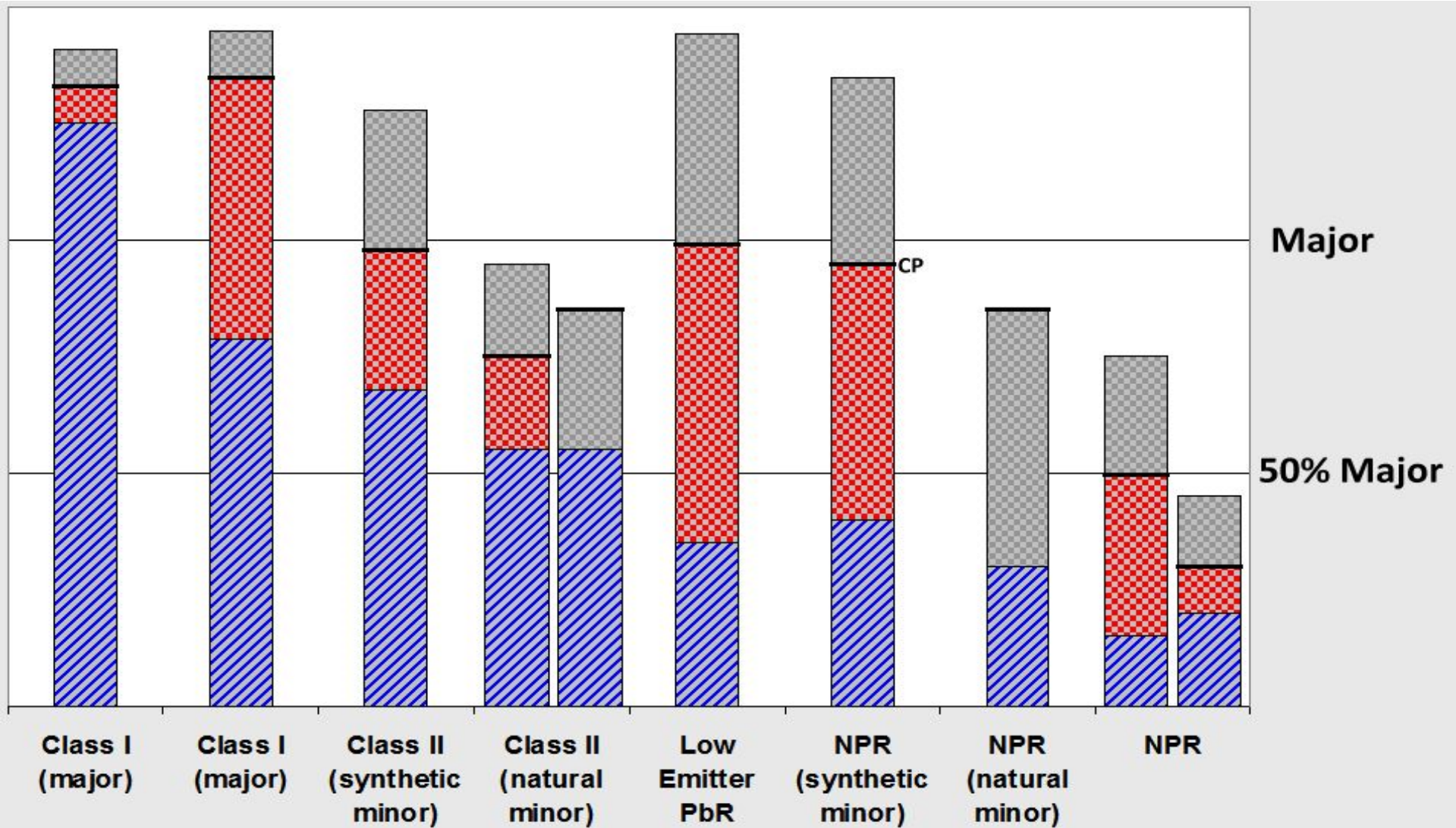
- Defined in Chapter 1, Section 116.
- “Theoretical” quantity of each air pollutant a source can legally emit
- Based on maximum capacity of the equipment
- Reduced by limitations in:
 - Construction or Operating Permits
 - State Rules (ex. Chapter 20 – PM limits)
 - Federal Rules (ex. NSPS, NeSHAPs)



Operating Permit Classifications

- Based on PTE and Actual emissions
- Class I - Major Source (Title V)
- Class II - Minor Source (FESOP)
 - Synthetic minor
 - Natural minor
- Low Emitter
- No-Permit Required
 - Synthetic minor
 - Natural minor





Major

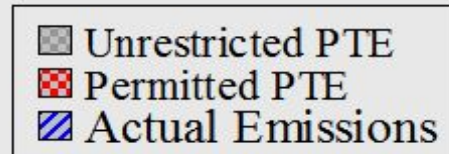
100 tons - individual air pollutant

25 tons - total combined HAP

10 tons - individual HAP

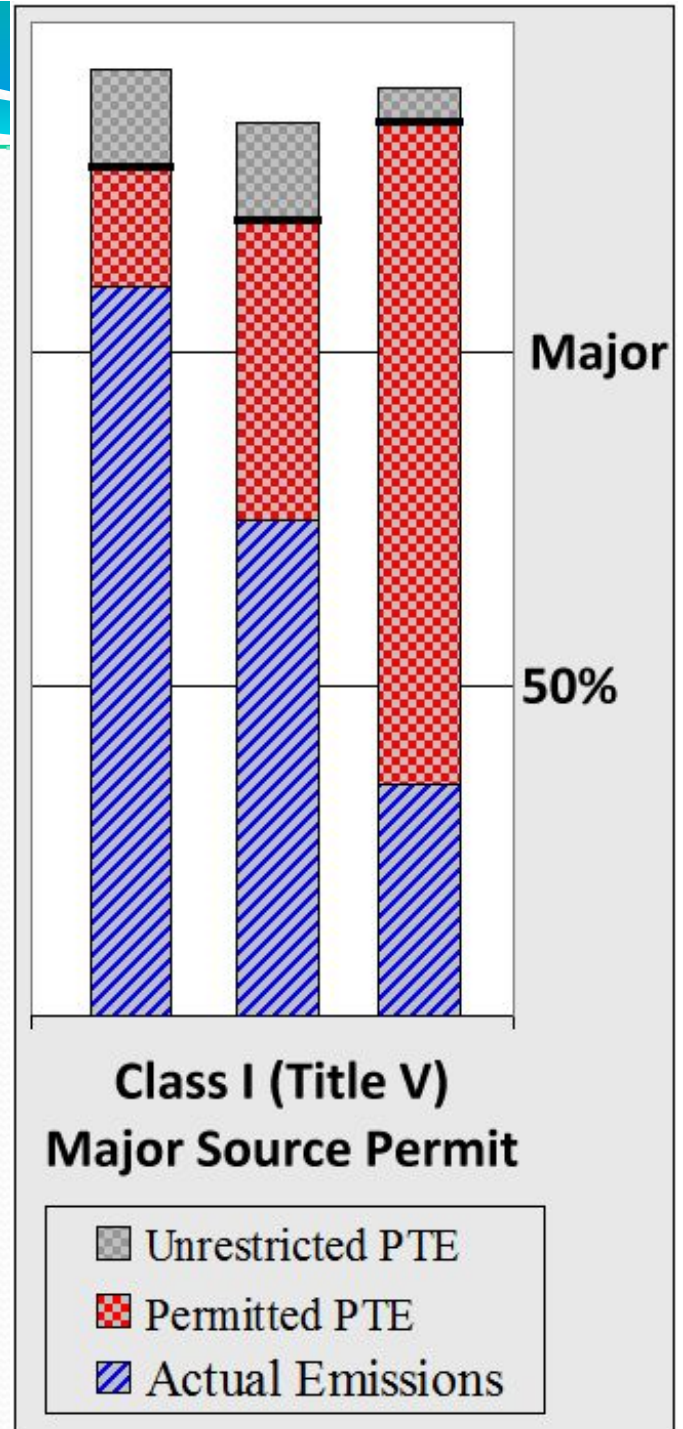
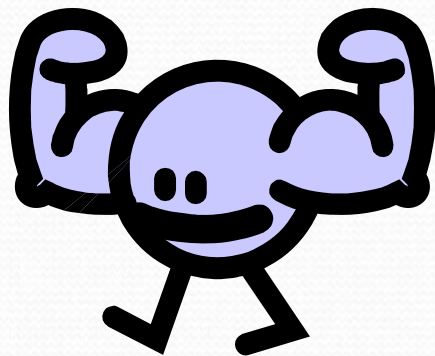
5 tons - lead

100,000 tpy CO₂e & 100 tons GHG



Class I – Major Source Permits

- PTE above Major Source level for one or more pollutants (some exceptions)
 - 100 tons - individual air pollutant
 - 10/25 tons - indiv/total HAP
 - 5 tons - lead
 - 100,000 tpy CO₂e & 100 tons GHG
- Actual emissions can be any level



Class I Permits Required for...

- **Chapter 5, Section 001.01**
 - A. Any Major Source as defined in Chapter 2
 - B. Any source subject to an NSPS (Chapter 18)
 - C. Any source, including an area source, subject to NESHAP/MACT (Chapters 23, 27, 28)
 - D. Any “affected source” (Chapter 26 - Acid Rain)
 - E. Anybody else as required by the Director, or any other requirement in T129 or the CAA



Class I Permits Required for...(cont.)

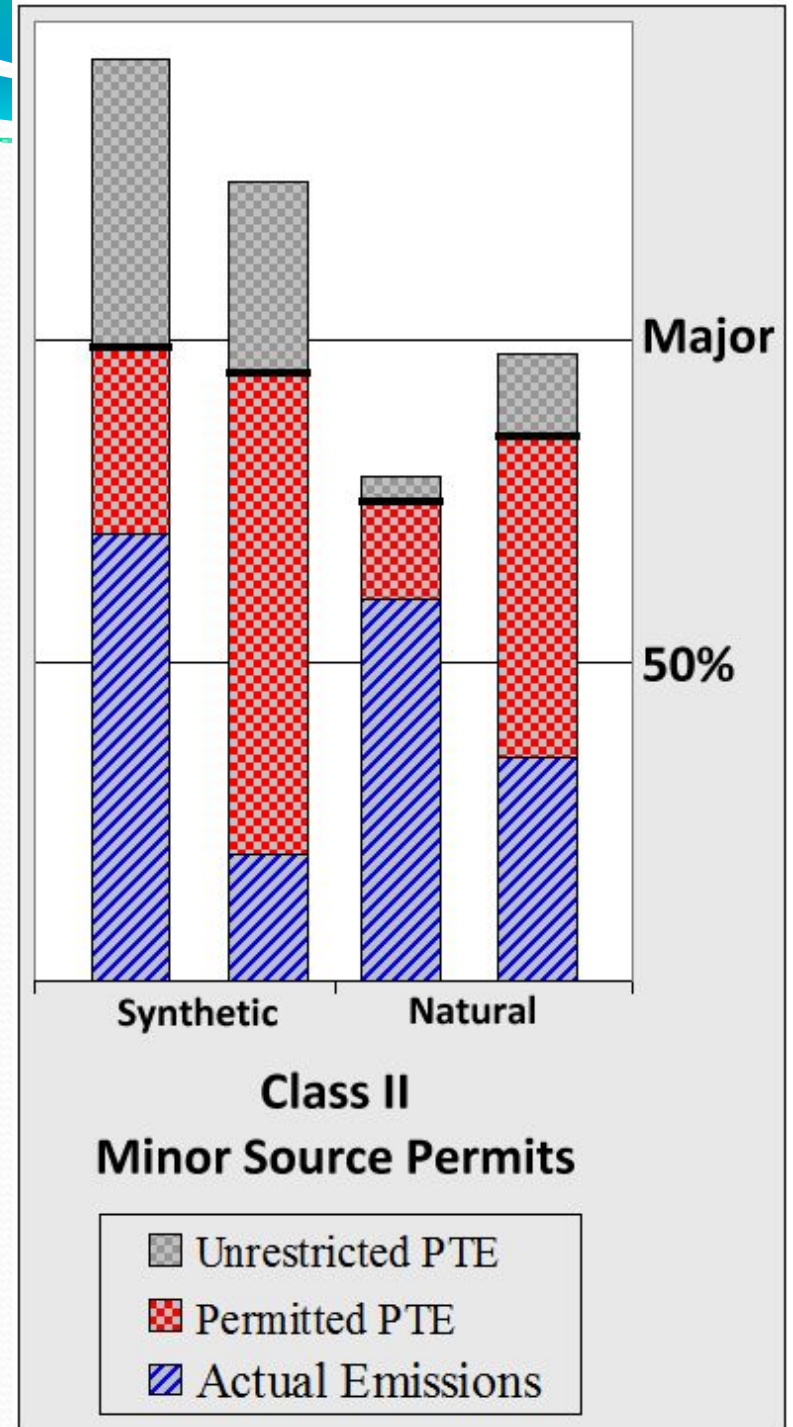
- **Chapter 5, Section 001.01 ...**(continued)
 - B. Any source subject to an NSPS (Chapter 18)*
 - C. Any source, including an area source, subject to NESHAP/MACT (Chapters 23, 27, 28)*



- **Chapter 5, Section 002 - Exemptions**
 - Exempts all NSPS and NESHAP sources, those in B. and C., unless they are required to get a Class I permit for any other reason (ex: if NSPS/NESHAP specifically says so)
- **Proposed Revisions:** Reword Sections 001.01B & C, include a list of the NSPS/NESHAPs that specifically require a Class I permit be obtained by an area source.

Class II – Minor Source Permits

- PTE below Major Source levels
 - Synthetic Minor
 - PTE limited by a CP/OP to below Major level (avoiding Class I)
 - Natural Minor
- Actual emissions can be any level



Class II permits required for...

- **Chapter 5, Section 001.02**

- Required if ACTUAL emissions are above 50% Major Levels (section 001.02A)

- **Proposed revisions:**

- add criterion for $PM_{2.5}$ – 50 tpy (same as PM_{10})
- Make language more consistent with Chapter 17
- Not proposing to add a 50% level for GHGs as this would create a minor source GHG program
 - Class II permit can still be used to limit GHGs below Major Source level



Avoiding Class I permits...



Avoiding Class I permits...

- **Construction Permits**

- Chapter 17, Section 014.01

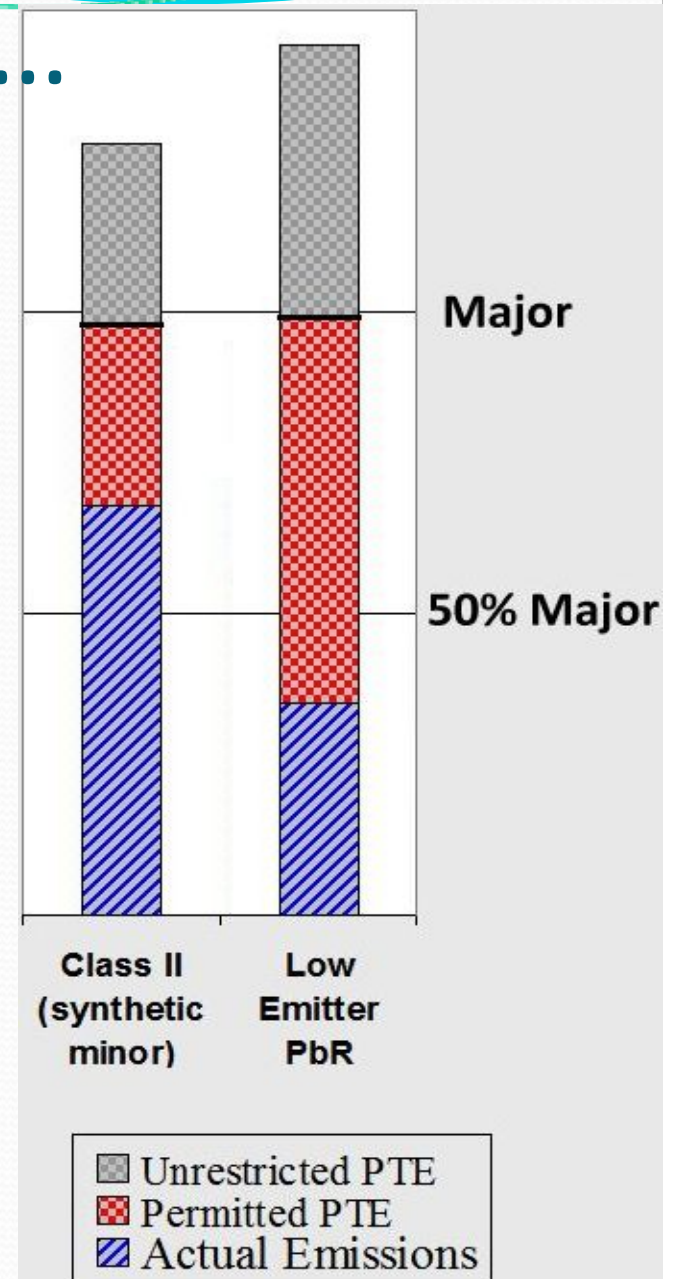
“Establishing enforceable limits to avoid otherwise applicable requirements under the provisions of Title 129.”

- **Operating Permits**

- Chapter 5, Section 001.03

001.03A Synthetic Minor Permit

001.03B Low Emitter Provisions



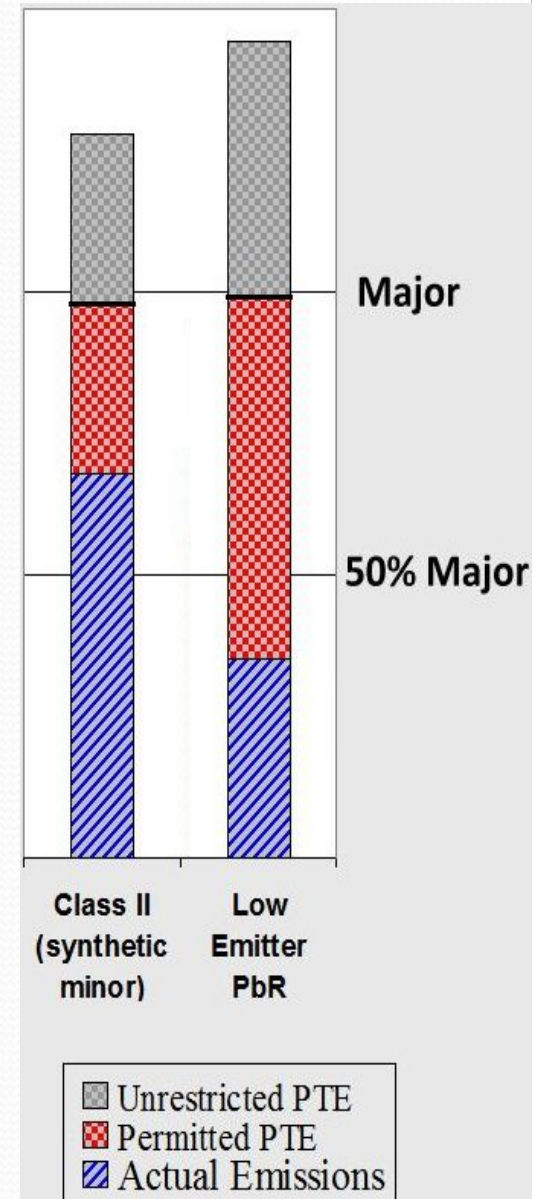
Avoiding Class I permits...

001.03A Synthetic Minor Permits

- Limits PTE of all pollutants below the Major level (limited applicability to future projects)
- Emission unit specific, but may restrict PTE source-wide (ex. 100 tpy source-wide limit)
- Actual emissions can be at any level

001.03B Low Emitter Provisions

- Quicker and easier to get than SM permit
- Like SM, limits PTE below the Major level
- Source-wide PTE limit, not emission unit specific
- Future projects inherit PTE limit, still may need CP
- Actual emissions must stay below 50% level



Low Emitter – Background

- A regulatory program (Chap 5, Sect. 001.03B) established to:
 - Relieve “low emitting” sources from the obligation to obtain a Class I permit or a Class II Synthetic Minor permit
 - Limit the source-wide PTE below the Major Source levels
- A source is given LE status provided:
 - The source demonstrates their actual emissions are below 50% Major level;
 - The source keeps records documenting their actual emissions are below the LE criteria; and,
 - Their control equipment is being properly operated and maintained.



LE Program....

A Permit-by-Rule (PbR) program

- Because this is a regulatory provision that limits the source's PTE and actual emissions, it is essentially a **PbR** program
- However, it does not meet the requirements that were subsequently established for PbR programs (Chapter 42)
- Walks and talks like a PbR, but currently is not consistent with other PbRs in Title 129
- Improve enforceability of program



Low Emitter PbR - Proposal

- Propose to restructure the LE program into a PbR
- Issues being addressed:
 - Clarify the LE program is a PbR program;
 - Clarify when a source must apply for a Class I or Class II permit;
 - Clarify the amount of data required to obtain LE status;
 - Create a recertification process.



Low Emitter PbR – Proposal (cont.)

- New program will keep the core elements already established in Chapter 5, Section 001.03B.
- Include a Notice of Intent (NOI) that requires the owner/operator to certify:
 - Truth and accuracy of the emission calculations required;
 - They agree to operate the source such that actual emissions remain less than the 50% Major level;
 - They will continue to comply with all previous permits issued under Chapter 17 and/or Chapter 19; and,
 - They will continue to comply with all provisions of Title 129.



Low Emitter PbR – Proposal (cont.)

- New program will also:
 - Include a provision outlining the source must apply for and obtain an operating permit before their actual emissions exceed the 50% Major level;
 - Clarify that it is a violation to have actual emissions exceed the 50% Major level without the proper permit (Class I or II-SM);
 - Allow less than one year of data for new sources;
 - Include criteria for GHGs
 - Actuals less than 100,000 tpy CO₂e, or 100 tpy (mass basis)



LE Program – Data Requirements



- Currently requires:

“The source has submitted a demonstration and maintains records on site, updated at least monthly, for at least 5 years that actual emissions for each regulated pollutant do not exceed the levels specified in section 001.02A;”

- Implies you may need 5 years of actual emissions before you can apply for LE, yet as a NEW Major Source you have only 12 months after operation to apply for a permit

- **Proposal:**

Emissions inventory covering the highest emitting year in last 5 years. If less than 1 year of data at the time of submittal, extrapolate annual emissions using 10 months of data

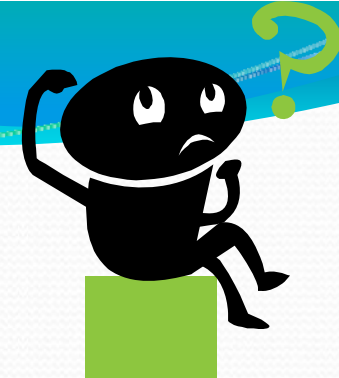
LE Program - Recertification

- **Proposed Recertification**

- Currently, the program does not have a recertification process
- Because the LE program exempts a source from a Federal requirement (Title V), the NDEQ believes a source should recertify periodically (perhaps every 5 or 10 years)
- Include and verify same information that was included in the initial NOI

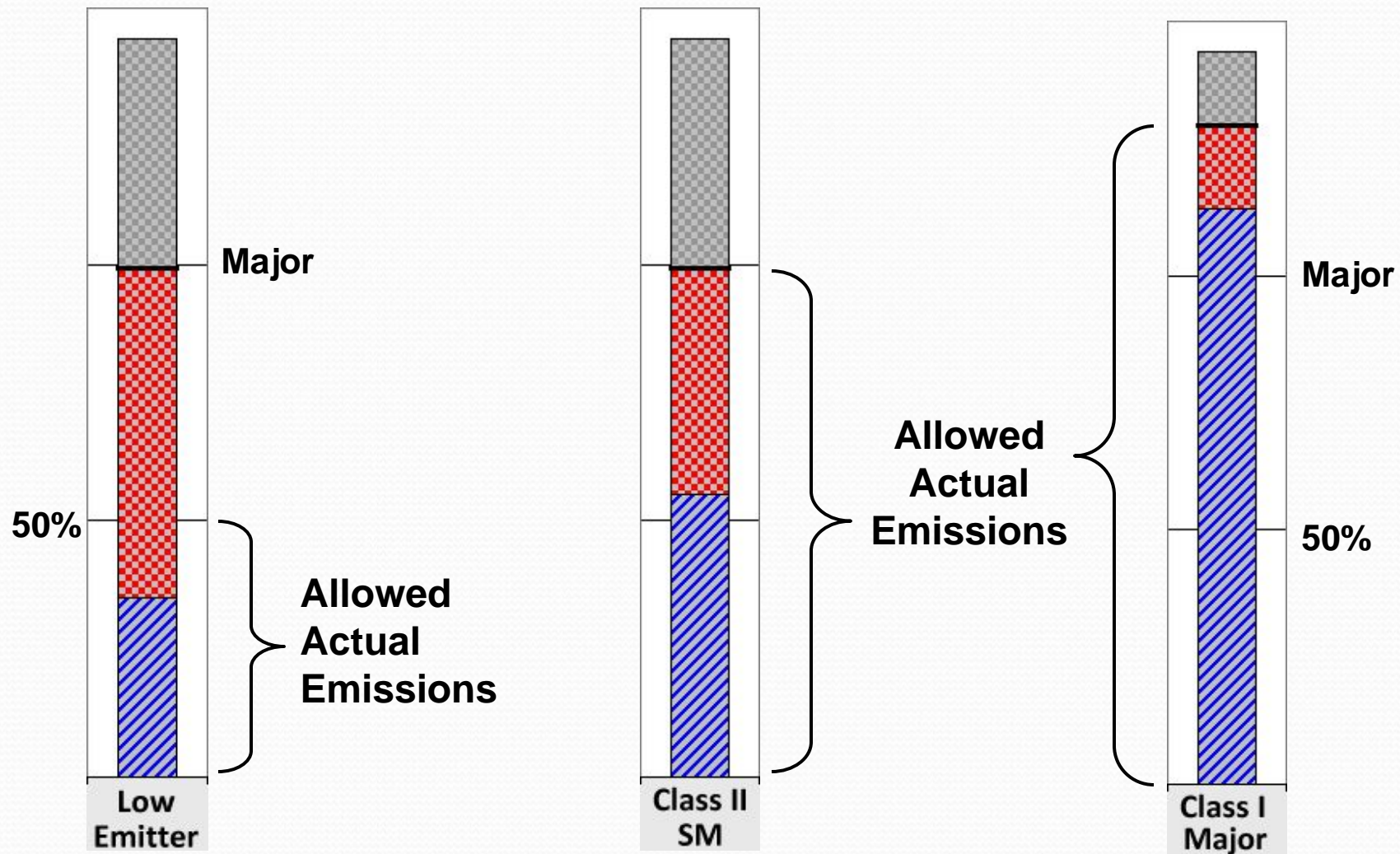


LE Program – Permit requirements



- **When must a LE obtain a Class I or Class II permit?**
 - Current rules do not clearly specify – left to interpretation.
 - Air Program interpretation: A source with a PTE above Major levels must apply for a permit within 12 months of operation.
 - After initial application, source must comply with their ‘permit’ until it has been revised/replaced. Until then, they are prohibited from operating as a Class I or Class II SM source.
 - That is, current LE program restricts actual emissions to less than 50% of the Major Source level.
 - If source wants the flexibility to emit at levels greater than 50% Major level, they should get a Class I or II permit.
- **Answer?: Before actual emissions >50% Major level**

Comparison of Class I and “Class I avoidance” Permits



Chapter 7, Timing of Applications

- The operating permit program is initially based on a source's potential to emit (PTE)
- New source: 12 months after "first becomes operational"
 - PTE above Major source level?
 - Source MUST apply for either Class I, II, or LE
 - PTE below Major source level?
 - Source MUST apply if actual emissions are greater than 50% Major level. If actuals are less than 50% level, source can voluntarily apply for a Class II OP.
- Propose to revise Chap 7 to require a source to 'register' if they elect not to apply for a Class II permit.



Chapter 7, Timing Class I Apps (cont.)

- **Section 002.02** A source that becomes subject to the Class I operation permit program...
- Low Emitter sources
 - Already have been subject Class I program, now must receive a permit prior to their actual emissions of any regulated air pollutant exceeding the 50% levels (or GHG @ Major levels)
- Registration Sources
 - Never been subject to Class I program, must apply within 12 months of the date on which their PTE exceeds Major levels.
 - GHGs: exceed 100 tpy on a mass basis and 100,000 tpy CO₂e
- Propose to revise Section 002.02 to clarify the above



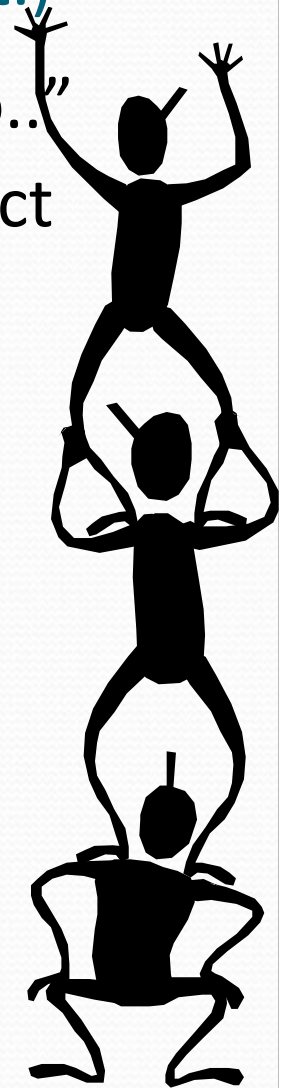
Chapter 7, Timing of Class II Apps

- **Section 002.04** A source required to obtain a Class II operating permit ...
- Low Emitter sources
 - Already have been subject OP program, now must receive a permit prior to their actual emissions of any regulated air pollutant exceeding the 50% levels (excluding GHGs)
- Registration Sources
 - Never been subject to the OP program, must apply within 12 months of the date on which their actual emissions (excluding GHGs) exceed the 50% Major levels (Class II criteria).
- Propose to revise Section 002.04 to clarify the above



Chapter 7, Timing of Apps (Cont.)

- Section 002.02; Becoming “otherwise subject to..”
- This provision covers sources that become subject to the permitting requirements due to another regulatory requirement
- Generally, these are small sources with PTE of criteria pollutants and HAPs less than the major source thresholds
- Examples
 - “Area source” NSPS and NESHAP standards
 - Addition of a new regulated air pollutant, e.g., GHGs



Time Check



Much to learn,
you still have!

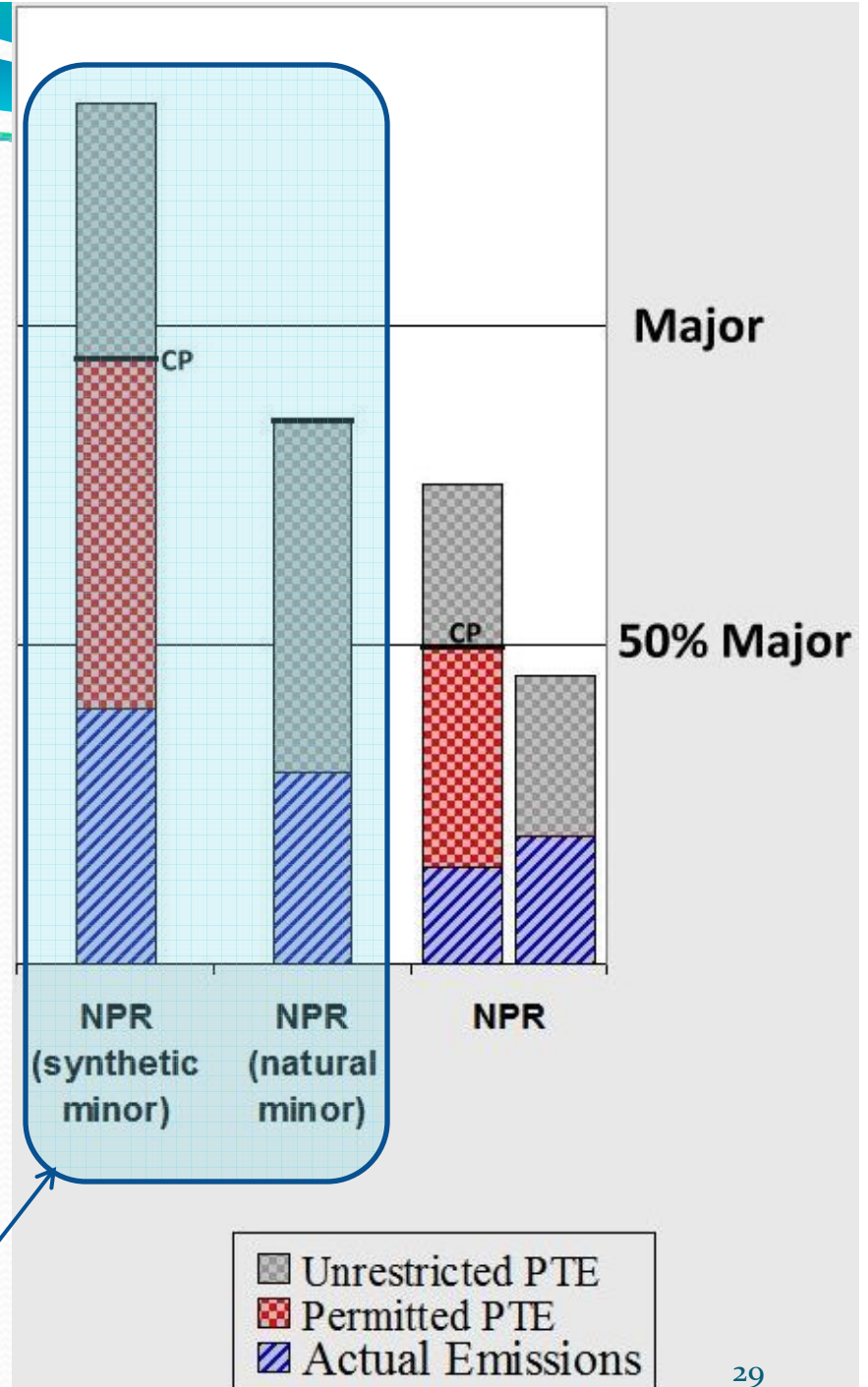


Chapter 5, NPR

Registration Program

- NPR if PTE less than Major and actual less than 50% level.
- Problem? NDEQ is unsure if source doesn't need an OP (documented actual emissions less than 50%), or if they failed to apply for an OP.
- Solution? Propose a one-time registration for sources that:
 - Do not want to have an OP;
 - Have a PTE between the major source and 50% level; and,
 - Have actual emissions less than the 50% level.

Registration Sources



Registration Program Requirements

- A demonstration their potential and actual emissions meet the criteria
- A registration requiring the owner/operator certify:
 - The truth and accuracy of the emissions calcs required;
 - To operate the source to where their actual emissions remain less than the levels specified;
 - They will continue to comply with all previous Chap 17 & 19 construction permits; and all provisions of Title 129

True



False



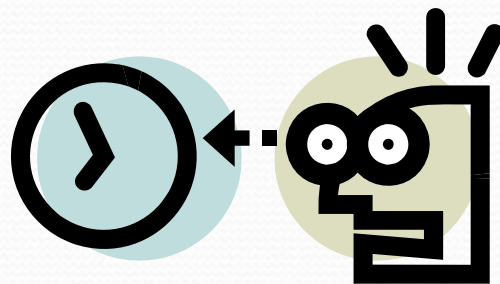
Registration Program Requirements

- The source maintains records that actual emissions are less than the criteria; and,
- A requirement the source submit an OP application within 12 months of the date their actual emissions exceed 50% level, or PTE exceed Major source levels.



Summary of submittal requirements

- If the proposed changes in the LE program and creation of the registration program are implemented:
 - All existing LE sources submit an NOI (or Class I/II-SM app);
 - All existing registration sources submit their registration;
 - The above be submitted within 12 months of the date to be established in the regulations; and,
 - All new sources to submit either a NOI or a registration within 12 months of becoming operational.



Flashback to Exemptions...



Flashback...Who needs a Class I permit?

- **Chapter 5, Section 001.01**

- B. Any source subject to an NSPS (Chapter 18)*

- C. Any source, including an area source, subject to NESHAP/MACT (Chapters 23, 27, 28)*



- **Chapter 5, Section 002 - Exemptions**

- Exempts all NSPS and NESHAP sources, those in B. and C., unless they are required to get a Class I permit for any other reason (ex: if NSPS/NESHAP specifically says so)

- **Proposed Revisions:** Reword Sections 001.01B & C, include a list of the NSPS/NESHAPs that specifically require a Class I permit be obtained by an area source.

Chapter 5, Source Category Exemptions

- **Section 002.01:** proposal to clarify that only those sources listed in sections 001.01B and 001.01C are required to obtain a Class I permit.
- **Emergency Generator Exemption - (002.02D)**
Exempted if source is “required to obtain a permit solely because of the presence of a **generator whose sole function is to...**”

Revise to clarify that only those sources with one emergency generator are exempted under this provision



Recap Source Classifications and permit application requirements?



Existing Stationary Sources – 1

- NPR ($50 < \text{PTE} < 100$)
 - Apply for Class II OP within 12 months after actual emissions exceed 50% level (12 month rolling total)
 - This is when they first become subject to requirement for Class II permit
 - If new project increases PTE above Major:
 - CP issued? Classified as Class I upon issuance of CP, must submit Class I/II-SM/LE app within 12 months of operation of new project. {7.002.03}
 - No CP required? Classified as Class I upon date of first operation of the project, must submit OP app (I, II-SM, LE) within 12 months of first operation of the project {7.002.02}
- Source can never exist longer than 12 months with PTE > Major Source levels without having submitted an OP app

Existing Stationary Sources – 2

- Class II - Natural Minor ($50 < \text{PTE} < 100$)
 - Source has flexibility to have actual emissions up to 100 tpy
 - If new project increases PTE, but not above Major level:
 - **CP issued?** Must submit revised Class II OP app within 12 months of operation of the new project {7.002.03}.
 - **No CP required?** Must submit written notification 30 days prior to commencing construction on the new project {15.007}.
 - New OP must be issued before operation of new project if such operation is prevented by permit.

Existing Stationary Sources – 3

- Class II - Natural Minor ($50 < \text{PTE} < 100$)
 - If new project increases PTE above Major level:
 - **CP issued?** Source is re-classified as Class I upon issuance of CP, must submit OP app (I, II-SM, LE) within 12 months of operation of new project {7.002.03}.
 - **No CP required?** Source is re-classified as Class I upon the date of the “proposed change” as indicated in their Chap 15, Sect. 007 notification, must submit OP app (I, II-SM, LE) within 12 months of operation of the change {7.002.02}.
 - New OP must be issued before operation of new project if such operation is prevented by permit, and/or before actual facility-wide emissions exceed Major levels.

Existing Stationary Sources – 4

- Class II-SM ($50 < \text{PTE} < 100$)
 - Source has flexibility to have actual emissions up to 100 tpy
 - If new project increases PTE above Major level:
 - **CP issued?** Source is re-classified as Class I upon issuance of CP, must submit OP app (I, II-SM, LE) within 12 months of operation of new project. {7.002.03}
 - **No CP required?** Source is re-classified as Class I upon the date of the “proposed change” as indicated in their Chap 15, Sect. 007 notification, must submit OP app (I, II-SM, LE) within 12 months of operation of the change. {7.002.02}
 - New OP must be issued before operation of new project if such operation is prevented by permit, and/or before actual facility-wide emissions exceed Major Source levels.

Existing Stationary Sources – 5

- Relaxation of CP limits placing PTE above Major level:
 - **OP already been issued?** Doesn't matter what the revised CP does, source classification is unchanged. Only obligation for the source is to comply with their existing OP. Source has the option to apply for an OP revision
 - **OP not issued?** Source is re-classified as Class I upon issuance of the CP, must submit new or updated OP app (I, II-SM, LE) within 12 mo of CP issuance date. {7.002.02}
 - Source 'first becomes operational' as a Class I source on the date their CP is issued (assuming they operate that day)



Questions?



Complaints?



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