



AIR & WASTE MANAGEMENT  
ASSOCIATION

SINCE 1907

# September 2013 BAT Changes

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# Topics

- Background
- Deciding BAT *Emission Level*
- Deciding BAT *Limit Format*
- Common Q & A

# Background

- Issued final BAT guidance August 30, 2013
- Effective October 1, 2013
- Significant changes in approach to BAT
- Designed to align w/ 2006 SB 265 changes

# ● What is Best Available Technology (BAT)?

- Air pollution control requirement for new or modified sources
- State requirement
- Requires “state-of-the-art” type controls when new
- More cost-effective to control when new rather than retrofit

# ● Overall Approach to Determining BAT

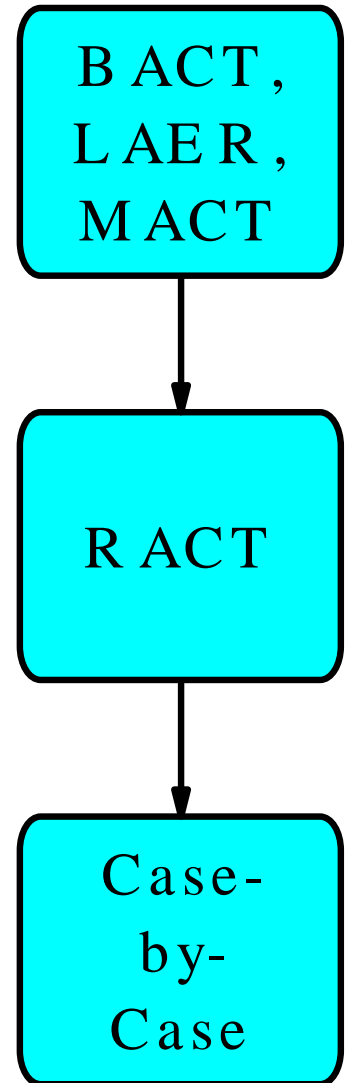
- Decide on appropriate control level/emission level
  - Three step process
- Decide how to express the limit
  - Four options



# DECIDING APPROPRIATE EMISSION LEVEL

# Determining BAT

- Memo issued August 1, 2013
- Follows 2006 SB 265 approach
- BAT = MACT, GACT, BACT or LAER
- If not, then BAT = RACT...
- If not, then case-by-case BAT



# How do you determine BAT?

- Check each pollutant separately
- Check to see if MACT, GACT, BACT, LAER applies
- If so, then establish BAT
- If not, then review RACT rules

BACT,  
LAER,  
MACT



# RACT Rule Review for VOC

- Review 01/01/06 version of Chapter 21 for VOC limits
- VOC limits apply anywhere in the state to the same size and type of source?
- If so, then find most stringent, establish limit as BAT floor for VOC
- Then move on to case-by-case approach for VOC



RACT

# Case-by-Case BAT

- Step one – complete case-by-case analysis for BAT
  - Review similar sources
  - Complete cost-effectiveness
  - Each criteria pollutant and each operating scenario
- Determine control level/emission level for BAT
- More stringent than RACT floor?

Case-  
by-  
Case

# Case-by-Case BAT

- Step two – determine how BAT should be *expressed*

Case-  
by-  
Case



# EXPRESSING BAT



# SB 265 Expression Options

- Work Practice
- Source Design Characteristic/Design Efficiency
- Raw Material/Throughput
- Monthly Allowable

# Work Practices

- Most will be description of work practice
- No opacity, no ton/yr
- Few will be traditional opacity
- Still no ton/yr



# Source Design/Design Efficiency

- Applies when source/control was designed to limit a particular pollutant
- Short term appropriate but:
  - No emission limit in permit
  - Only “designed for” approach
- BAT = “Install a baghouse designed to meet 0.03 gr/dscf”



# ● Source Design/Design Efficiency

- Larger sources... initial test
- No ongoing emission limit obligation
- Will need to maintain per manufacture's recommendations
- Will need to maintain records on maintenance
- OAC/other rules provide short-term backup



# ● Raw Material Specifications or Throughput Limitations

- Typical of part of synthetic minor limitations
- “45.6 tons of steel processed per rolling twelve-month period”
- No lb/hr, ppm, etc. for BAT... may need for synthetic minor
- This format not used too often

# Monthly Allowable

- Similar to synthetic minor limitations
- “3.2 tons VOC/month averaged over a 12 month rolling period”
- Same as tons/12-month rolling but use above language

# Monthly Allowable

- May need monitoring, recordkeeping and reporting
- No lb/hr, ppm etc. short term limits
- OAC/other rules provide short-term



# DECIDING WHICH OPTION



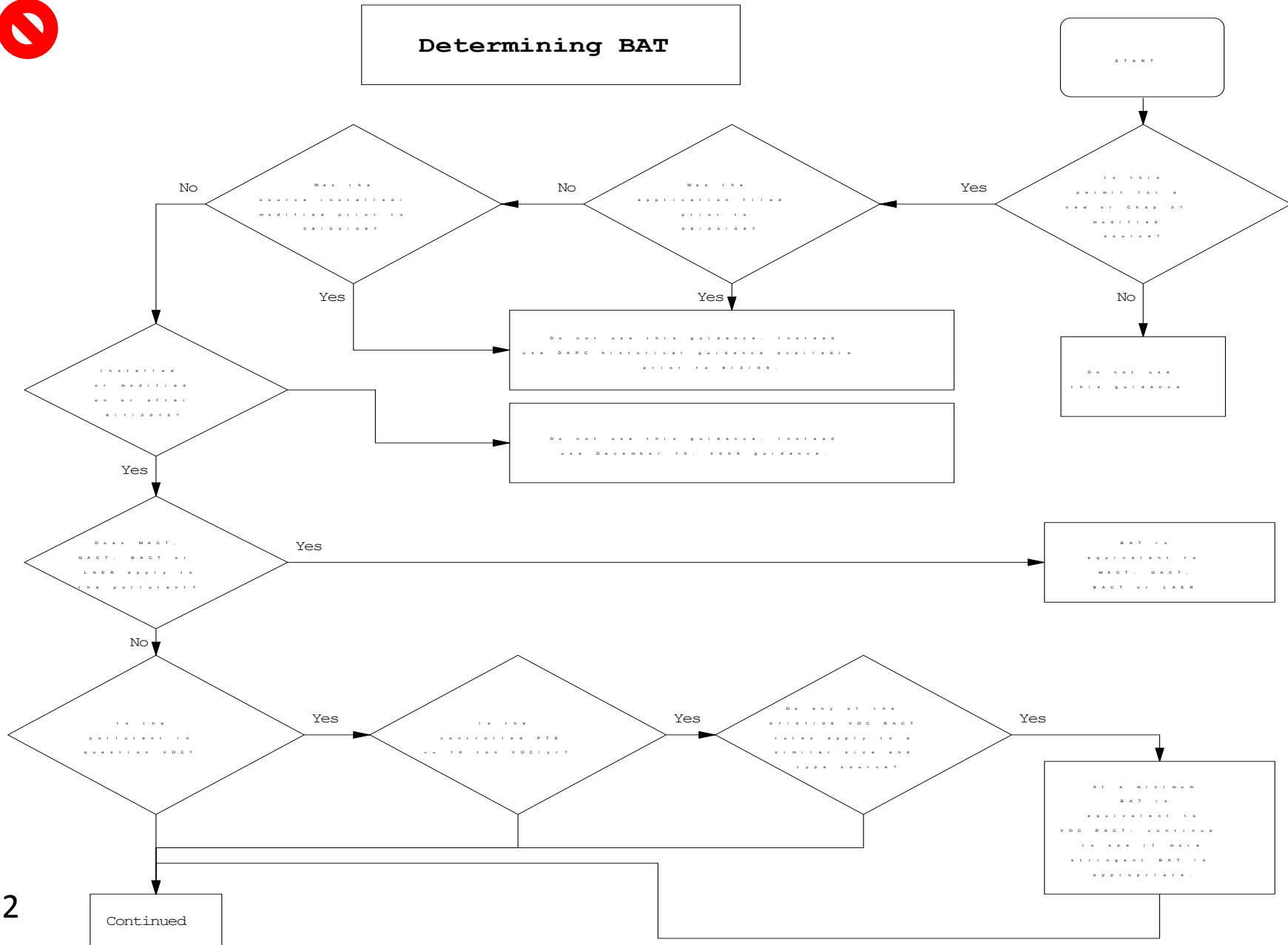
# Deciding Which Option

- Text of memo discusses decision guidance
- Also has decision flow chart





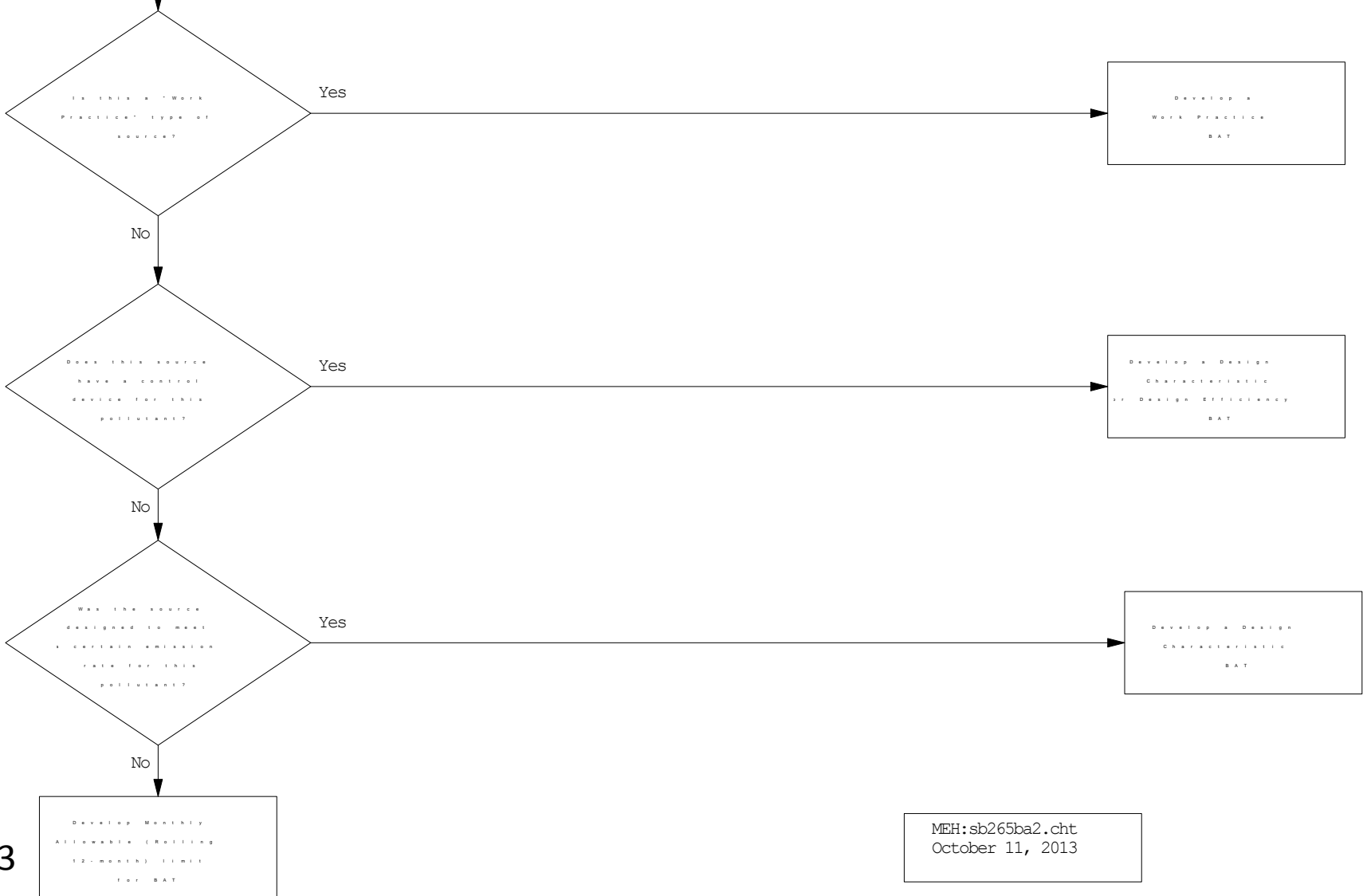
# Determining BAT





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# Determining BAT





# COMMON Q & A

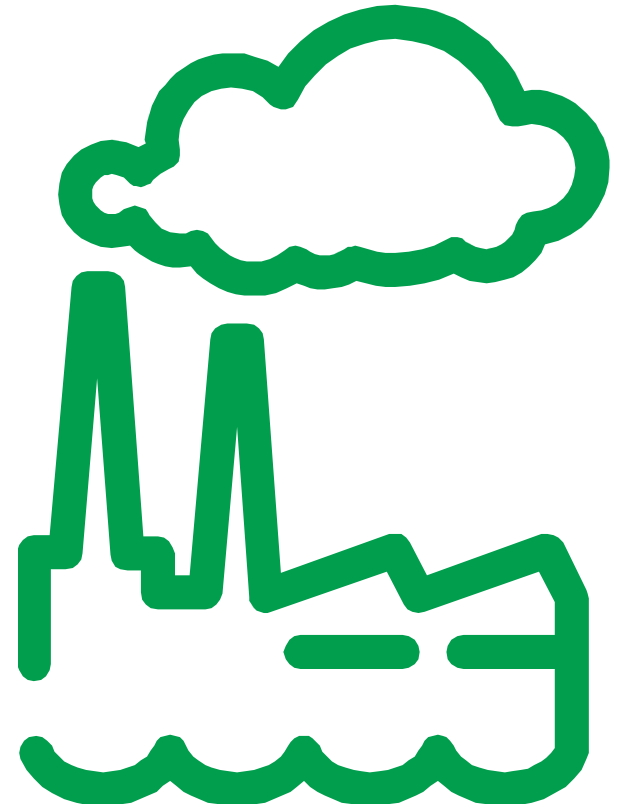






# More Than One Stack

- Can't establish limit for each stack
- Must establish BAT for entire source
- Other rules/limits may apply per stack





# Impact on PTE Decisions

- Work Practices
  - PTE based on maximum annual emissions taking into account work practice control level
- Source Design/Design Efficiency
  - Will use “designed for” BAT for PTE for NSR
  - Still have to use “before controls” for PTE for Title V applicability purposes



# Impact on PTE Decisions

- Raw Material/Throughput BAT
  - Can be used to restrict PTE
  - Need more for synthetic minors
- Monthly Allowable
  - Can be used to restrict PTE
  - Need more for synthetic minors



# Operating Scenarios

- If using 12-month type BAT, then only have one BAT limit covering all operating scenarios
- If using Source Design/design efficiency then can establish BAT for each operating scenario
- If using work practices, then can establish BAT for each operating scenario



# What about NAAQS

- Still evaluate using modeling thresholds
- Model based on short-term emissions
  - Work Practice: short-term PTE
  - Source Design/Design Efficiency: short-term design value
  - Raw Material/Throughput: short-term PTE
  - Monthly Allowable: short-term PTE



# What about NAAQS

- If needed, establish limits to protect NAAQS
- More likely needed for short term NAAQS (NO<sub>x</sub>, SO<sub>2</sub>)
- Can be established as voluntary limit





# When do we start using?

- Required for:
  - Permits issued on or after October 1, 2013
  - New or modified sources
  - Pollutant specific
- BAT determinations made before October 1, 2013 use old guidance



# Remember...

- Will simplify BAT decisions
- Other rule backstops
- NAAQS compliance backstop
- No impact on Major NSR (BACT/LAER the same)
- No impact when MACT/BACT/LAER/GACT apply



# Wrap-up

- Questions?