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# **Overview of the Prevention of Significant Deterioration and Title V Greenhouse Gas Tailoring Rule**

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# Overview



*The AFIT of Today is the Air Force of Tomorrow.*

- Steps in GHG Permitting
- Rule Implementation
- PSD Greenhouse Gas (GG) requirements
- Title V GG Requirements



# Steps in Permitting of GHGs



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- May 2007- Supreme Court Ruling
- December 2009- Endangerment finding on GHGs
- April 2010- GHG Emission standards for Light-duty vehicles
  - 2 Jan 11- Stationary source permitting triggered
- May 2010- GHG Title V/PSD Tailoring Rule
- March 2011 - Guidance to states on GHGs permitting



# Rule Implementation



*The AFIT of Today is the Air Force of Tomorrow.*

- Two-step phase in of requirements for largest emitter of GHGs
  - Facilities responsible for nearly 70% of GHG emissions
- Expand rule to cover large sources of GHG not previously covered by CAA
- Additional EPA steps
  - Looking at smaller sources



# PSD Requirements



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- Step 1 (2 Jan 2011- 30 Jun 2011)
  - Only sources that are constructed or modified that have increase or net increase in emissions over thresholds required to address GHG emissions under PSD
  - For GHG increases over 75,000 TPY CO<sub>2</sub>e would have Best Available Control Technology (BACT) requirements AND
  - Greater than 0 TPY on a TPY mass basis



# PSD Requirements



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- Step 2 (1 July 2011 – 30 Jun 2013)
  - Builds upon Step 1
  - Three scenarios where PSD applies to GHG emissions
  - Scenario 1:
    - Modification subject to PSD (for other NSR pollutant) and has GHG emissions increase and net emissions increase:  
 $\geq 75,000$  TPY CO<sub>2</sub>e **AND**  
 $> 0$  TPY mass basis



# PSD Requirements



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- Step 2 (1 July 2011 – 30 Jun 2013)-(con't)
  - Scenario 2 (Both below conditions must apply)
    - Existing source has a PTE  $\geq 100,000$  TPY CO<sub>2</sub>e **AND** 100/250 TPY mass basis
    - Modification has a GHG emissions increase and net emissions increase  $\geq 75,000$  TPY CO<sub>2</sub>e **AND**  $> 0$  TPY mass basis





# PSD Requirements



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- Step 2 (1 July 2011 – 30 Jun 2013)-(con't)
    - Scenario 3 (Both below conditions must apply)
      - Source is an existing minor source for PSD
- AND**
- Modification alone has actual or potential emissions  $\geq 100,000$  TPY CO<sub>2</sub>e **AND** 100/250 TPY mass basis



# Title V Requirements



*The AFIT of Today is the Air Force of Tomorrow.*

- Step 1 (2 Jan 2011 – 30 Jun 2011)
  - Only sources currently subject to a Title V Permit would be subject to Title V Requirements for GHG
  - No sources would be subject to CAA permitting requirements due solely to GHG emissions



# Title V Requirements



*The AFIT of Today is the Air Force of Tomorrow.*

- Step 2 (1 Jul 2011 to 30 Jun 2012)
  - Comply with Step 1
  - Facilities can now require Title V permits for GHG emissions alone
    - Threshold is 100,000 TPY CO<sub>2</sub>e **AND**
    - 100 TPY GHG mass basis
- EPA estimates 550 sources will need Title V permits for GHG emissions
  - Majority will be solid waste landfills and industrial manufacturers



# Title V Permitting Requirements



*The AFIT of Today is the Air Force of Tomorrow.*

- Sources that fall under Step 1 or Step 2 must ensure applicable GHG requirements addressed in Title V permit
  - Permits must contain conditions to prove compliance
- EPA anticipates initial applicable requirements will be GHG control requirements resulting from PSD actions



# Additional Step- Step 3



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- Commence in 2011 and end NLT 1 Jul 12
- Will discuss whether smaller sources can be permanently excluded from permitting
- EPA will propose viable streamlining options
- Permits not required for smaller sources in Step 3 or other actions until at least 30 Apr 16
- Step 3 (if necessary) will not require permitting for sources < 50,000 TPY



# Other Steps



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- End of Apr 2015- EPA to complete study on remaining permit burdens that would exist if Step 3 applied
  - Rule by 30 Apr 2016 to address these facilities
    - Decide if streamlining is needed to phase in more sources or permanent exclusion from permitting
- Step 3 (if necessary) will not require permitting for sources < 50,000 TPY



# EPA Technical Tools/Resources



*The AFIT of Today is the Air Force of Tomorrow.*

- White Papers on:
  - Numerous sources including large commercial/industrial/institutional boilers,
- Control Technology Clearinghouses
  - RACT/BACT/LAER
  - GHG Mitigation Strategies
- GHG Permitting Action Team
- GHG Training for Permitting Authorities, Industry and Other Stakeholders
- One-stop website for GHG permitting resources:  
[www.epa.gov/nsr/ghgpermitting.html](http://www.epa.gov/nsr/ghgpermitting.html)

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# Summary



*The AFIT of Today is the Air Force of Tomorrow.*

- PSD/Title V Tailoring Rule – final rule 13 May 2010
  - Rule defines when permits are due under both programs
- Facilities responsible for nearly 70% of national GHG emissions covered under rule
- Requirements became effective 2 Jan 11
  - Implemented in two steps