

# Highly Reactive Volatile Organic Compound (HRVOC) Stakeholder Group Meeting

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July 2, 2009  
Air Quality Planning Section



# HECT Rulemaking 2009

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- The HECT Rulemaking is a critical part of the HGB 2009 HGB Ozone Attainment Demonstration SIP Revision:
  - Reallocation
    - TCEQ has committed to Reallocation
    - Actual Emissions Monitoring Data Available for 3 Years
  - 25% HRVOC Harris County Cap Reduction



# Meeting Agenda

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- Highlights of June 10, 2009 HRVOC Stakeholder Group meeting
- HRVOC Emission Cap and Trade (HECT) program allowance reallocation methodology options



# June 10 Meeting Highlights

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- Allowance allocation was not equitably distributed
  - Historical emissions ensure that companies are not credited for not making reductions and all companies receive enough allowances to operate
- 25% HRVOC Cap Reduction Photochemical Modeling Ozone Sensitivity Review
- A 25% reduction, not a 50% reduction, in the cap was modeled
  - There is nearly a 50% 'buffer' between actual annual average HRVOC emissions from 2006 through 2008 and the existing cap.



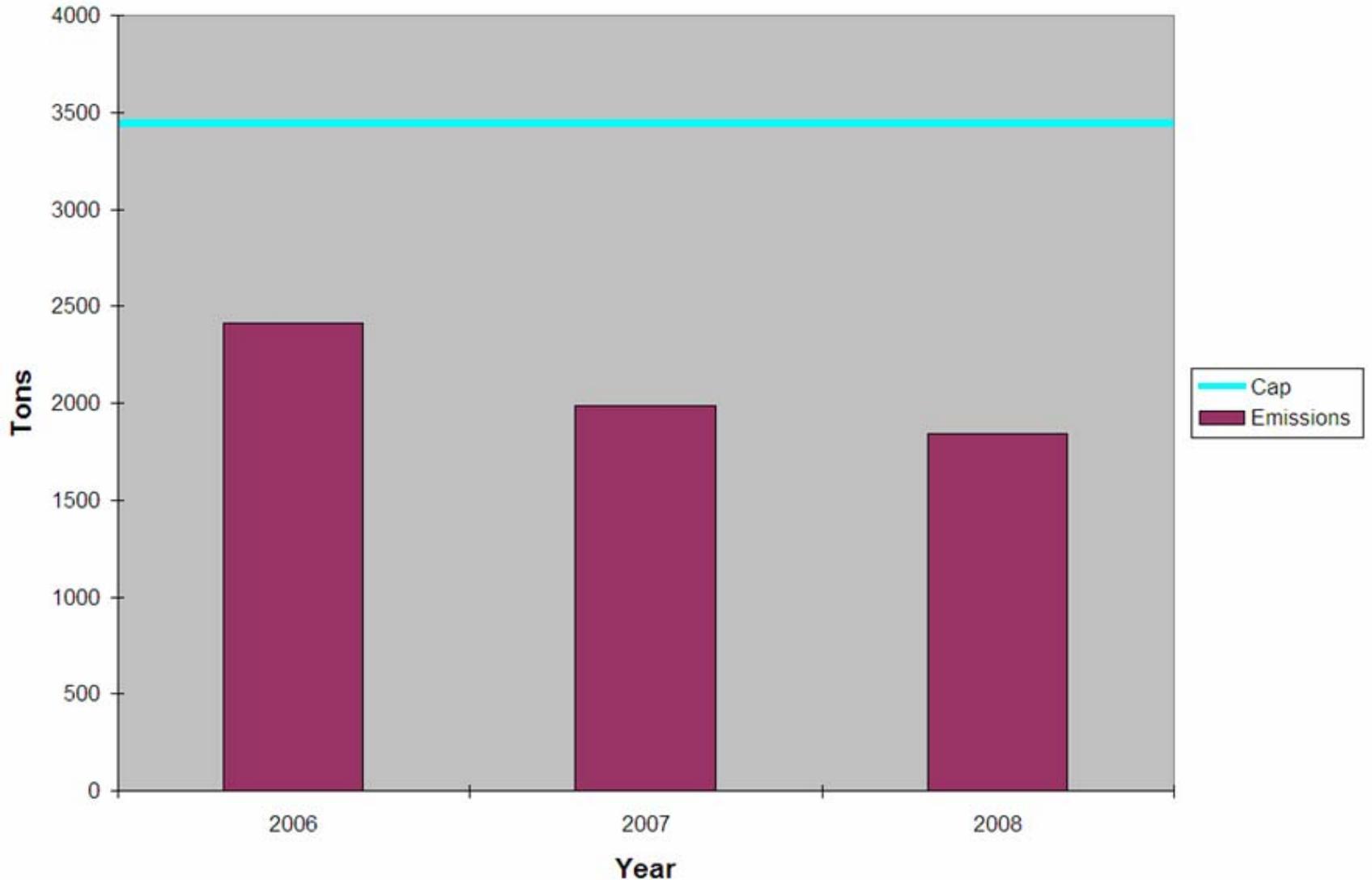
## June 10 Meeting Highlights, cont.

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- Reduced emissions in 2007 and 2008
  - Three years of data should account for all factors, including economic downturn
- Emission events:
  - Hurricane Ike as an example
  - Have a set aside pool
  - Monitor “spikes”
  - The 1200 lb/hr limit



# HECT Program Cap vs Actual Emissions





# Reallocation Methodology Fundamentals

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- Use 2006 – 2008 actual emissions data
- Create Industry-Type Sector Pools
- Create Emission Event Set-Aside Pool
- Increase minor source minimum allocation to 10 tons
- Calculate “Uncontrolled Emissions” using Special Inventory reported control efficiencies for flares and average actual emissions 2006 - 2008



# Reallocation Methodology Fundamentals, cont.

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- Industry Sectors
  - Refineries
  - Chemical Manufacturers
  - Polymer/Plastics Producers
  - Storage/Other



# Emission Event Set-Aside

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- Proposed Emission Event Set-Aside Pool is 250 tons
  - Total Harris County reported emission events 2006: 225 tons
  - Total Harris County Hurricane Ike associated emissions, 9/7 – 9/15, 2008: 196 tons



# Reallocation Options

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- Option #1 – Uncontrolled Emissions Based Reallocation
- Option #2 – Standard Controlled Emissions Based Reallocation
- Option #3 – Permit Allowable Industry Sector Share with Uncontrolled Emissions



# Available Cap

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- Total Modeled Available Harris County HRVOC CAP: 3,633.1 tons
- Subtract required EPA 5% Environmental Contribution: 3,451.4 tons
- Subtract 250 ton Emission Event Set-Aside – Final Available Cap for Reallocation: 3,201.5 tons
- 25% Cap Reduction Final Available Cap:  
2,338.6 tons



# Option #1 – Uncontrolled Emissions Based Reallocation

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Allocation =  $3201.5 \times (\text{Sector Share } \%) \times (\text{Facility Share})$

Sector Share = [Actual average emissions for Industry Sector/Total actual emissions for all sectors]

Facility Share = [Uncontrolled total site emissions/Total uncontrolled emissions for all sites in sector]



# Reallocation Numbers Option #1

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- Please see Handout “HECT Reallocation Option #1”



# Option #2 – Standard Controlled Emissions-Based Reallocation

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Allocation = Available Cap x [ Sector Share %] x [Facility Share %]

Sector Share = [Actual emissions for Industry Sector/Total actual emissions for all sectors]

\*Facility Share = [Standard controlled emissions total for site/ Standard controlled emissions for all sites in sector]

\*Standard controlled emissions are uncontrolled emissions from Option #1 with Flare emissions controlled to 99%



# Reallocation Numbers Option #2

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- Please see Handout “HECT Reallocation Option #2”



## Option #3 – Permit Allowable Sector Share with Uncontrolled Emissions Based Reallocation

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Allocation =  $3201.5 \times (\text{Sector Share } \%) \times (\text{Facility Share})$

Sector Share =  $[\text{Permit Allowable total for Industry Sector} / \text{Total Permit Allowable for all sectors}]$

Facility Share =  $[\text{Uncontrolled total site emissions} / \text{Total uncontrolled emissions for all sites in sector}]$



# Reallocation Options Comparison and Discussion

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- Please see Comparison handout



# Compressed Schedule

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- Please provide comments *before*:  
**July 15, 2009**
- Scheduled rule proposal date:
  - September 23, 2009



# Contact Information

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# Discussion