



**SIERRA  
CLUB**  
FOUNDED 1892

Houston Regional Group  
P. O. Box 3021  
Houston, Texas 77253-3021  
713-895-9309  
<http://texas.sierraclub.org/houston/>

June 10, 2008

Mr. Alan Clark  
Transportation Department  
Air Quality Section  
Houston-Galveston Area Council  
P.O. Box 22777  
Houston, Texas 77227

REC'D JUN 16 2008

Dear Alan,

Enclosed are the comments of the Houston Regional Group and Lone Star Chapter of the Sierra Club (Sierra Club) regarding our initial input for the On-Road/Non-Road Mobile Source Control Strategies Catalogs (Control Measures) for the Houston-Galveston-Brazoria (HGB) Eight-Hour Ozone State Implementation Plan (SIP).

The Sierra Club is disappointed that HGAC has once again not fully explained what each control measure (CM) is. There are some CMs with explanations but even these are incomplete and cryptic at best. If HGAC wants the public to truly participate then it needs to take the time to fully explain what each CM is, possible emission reductions from each CM, approximate cost of each CM, and availability of each CM based on technological feasibility and statutory and regulatory requirements.

Without this kind of specific information the public is just guessing as to what CMs would be best and that it supports. It has been two years since HGAC went through this process. It is sad to see that the process appears to be no different than the one that failed two years ago. If the public is going to truly participate it must be educated about the options. These two catalogs inadequately educate the public so that it can review, comment on, understand the proposal and provide reasonable feedback.

### **SIP Planning Process**

The Sierra Club has been very disappointed with the SIP planning process over the past few years. The SIP planning process has removed from consideration CMs that were viable and should have been analyzed. We feel the SIP planning process was not operated with a good faith effort. At a minimum the SIP planning process should adhere to the following principles:

*"When we try to pick out anything by itself, we find it hitched to everything else in the universe." John Muir*

1) Abandon the minimalist and incremental CMs policy. The HGB ozone non-attainment area is in no danger of over-controlling ozone precursors and wasting money. The argument for over-controlling of ozone precursors has been around for as long as I have participated in the SIP planning process (31 years). Over-control has never occurred and with the terribly inaccurate emissions inventories (EMs) we have today (probably underestimating volatile organic compounds – VOCs 1-10 times for both mobile and non-mobile sources) will not be a concern for many years to come.

2) Analyze quantitatively and qualitatively the effect that implementation of state-wide applicable nitrogen oxides (NOx) and VOCs rules have on ozone attainment (and trans-boundary movement of ozone precursors) for all Texas ozone non-attainment areas including the HGB area.

3) Include interim CMs which will be implemented ahead of approval of the SIP so that contemporaneous ozone precursor reductions are obtained and the risk of morbidity and mortality is immediately and constantly reduced for people. This means we keep progress and momentum rolling while reducing people's health risks. This is particularly important since we have a new, lower, National Ambient Air Quality Standard (NAAQS) for ozone that we must meet.

4) Include more actual monitoring for ozone precursor emissions in the SIP and regulations. This includes monitoring of vehicle emission performance as the vehicle is operated and monitoring of inside vehicle air levels to determine driver exposure to air pollutants.

5) Adopt as many "more stringent" California regulations for on-road and non-road vehicles as possible.

6) Ensure that each CM is clearly explained with a narrative so the public understands what it is (see comments above).

7) Ensure that for each CM that is eliminated from consideration there is a clear, full, explanation of why it was eliminated.

8) Require that any SIP has additional personnel needs provided. The SIPs always state that no new personnel are needed to implement the SIP. The Sierra Club has talked to TCEQ and City of Houston Bureau of Air Quality Control (BAQC) personnel and they disagree that more personnel are not needed. More, complex, comprehensive, and thorough investigations are needed to implement a serious SIP attempt at meeting the eight-hour ozone standard along with more planning and education.

9) A comprehensive rule effectiveness analysis must be part of any quantitative and qualitative analysis of each CM.

10) The quantitative and qualitative analysis of CMs must be done before the CM is either kept or eliminated from study. This allows the public and decision-makers to comparatively view each CM.

11) Require bundling of CMs to assure overlapping and reinforcement of low reduction CMs. In this way bundled CMs can contribute more significant emission reductions and or assure that the expected emission reductions occur.

12) In the 2007 HGB Ozone SIP the emission control measure (ECM) selection processes were flawed. The processes stated that here is the master list, now give us input. The ECM selection processes stated that "Over the next few weeks, control measures on the Menu will be qualitatively analyzed". This action invalidated citizen input because there was no time for the public to discuss and know why the ECMs that were chosen were chosen and those ECMs that were not chosen were not chosen. The public does not have the ability to review, comment on, and learn about the master list; why some ECMs are or are not qualitatively or quantitatively analyzed "with respect to emission reductions, technical feasibility, public acceptability, relative air quality effect, and cost effectiveness"; and then comment before the process has already begun to reduce the number of ECMs that will be considered. A quantitative and qualitative analysis, assessment, and evaluation and rule effectiveness analysis must be conducted before eliminating any CMs.

13) Require an additional 20-30% reduction in ozone precursors above what the model shows are needed for attainment to take into account partially the inaccurate EIs.

14) There must be an explanation about how each score was derived and what it means for CMs in the screening process. This is particularly important when phrases are used which do not obviously provide a clear definition. For example, in the 2007 HGB Ozone SIP process regarding preliminary scoring criteria the following phrases were used with no definitions:

highly practical; may be practical if carefully implemented; appears to be impractical; too impractical to be implemented successfully; public likely to react positively; public will accept if carefully implemented; will generate controversy regardless of how it is implemented; public unlikely to accept measure; strategy is considered to be inexpensive to implement relative to the potential for emission reductions; strategy is considered to be moderately inexpensive to implement relative to the potential for emission reductions; strategy is considered to be moderately expensive to implement relative to the potential for emission reductions; and strategy is considered to be very expensive to implement relative to the potential for emission reductions.

15) CMs should have a minimum cost effectiveness of at least \$10,000/ton of ozone precursor controlled.

16) The SIP must require that any cap and trade CMs be fully estimated. In the 2007 HGB Ozone SIP process, Environ, in Appendix A, Evaluation of Suggested Short List Control Measures, stated "Determining an appropriate approach for demonstrating compliance with any revised MECT cap will require that each affected source performance an engineering and economic assessment of their operations and make a decision that is appropriate for their circumstances", or "Environ does not have sufficient information to accurately determine potential emission reductions via application of technically feasible control technologies", or "Without conducting source-specific engineering feasibility assessments, there is insufficient information to accurately predict the technical feasibility or cost of lowering NOx emissions for individual emission units or affected sources".

The analysis that should be in the CMs document was not in the document. This causes the public to end up with no reliable or close to reliable cost information and no reliable or close to reliable emission reduction information. How can the public give reliable feedback on ECMs when such important information is missing from the document? For this new SIP planning process this information must be available for CMs so the public and decision-makers can review, comment on, and understand the proposal.

### **Control Measures that Require Quantitative and Qualitative Analysis and Rule Effectiveness Analysis**

#### **On-Road Source Control Measures**

The following are the **On-Road Source CMs from the 2006 HGAC catalog** that the Sierra Club wants to be fully quantitatively and qualitatively analyzed and presented to the public and decision-makers for review, comment, and understanding of the SIP proposal.

1) For the **Bicycle and Pedestrian CM category**, a comprehensive program of bicycle and pedestrian CM is necessary for this category to work well as a CM. Even if quantification of emissions reductions for some CM cannot be done bundling of many CMs may be necessary to ensure that emissions reductions occur. In other words, an integrated program is necessary for the Bicycle and Pedestrian category to work well. A package of CM is necessary not one CM. As HGAC well understands, if air quality is to be addressed successfully then the transportation component of air quality must be addressed successfully.

The Sierra Club recommends that the following **Bicycle and Pedestrian CMs** be studied in a detailed qualitative and quantitative assessment, analysis, and evaluation and rule effectiveness analysis.

1. Segways should not be allowed for use on sidewalks because they are motorized vehicles. Hike/bike trails should be for pedestrians and human

powered modes of transportation (skates, in-line skates, human-powered scooters, etc.). Segways do not require that you exercise and add to the obesity problem. We should not allow operation of a motorized vehicle where human-powered vehicles or walking occurs.

2. Safer bike routes with better signs marking lanes and routes.
3. Inclusion of bicycle lanes on state/federal funded thoroughfare projects.
4. Bicycle route signalization.
5. Bicycle lanes on every arterial/frontage road.
6. Bicycle lane/path repaving.
7. Bicycle route lighting.
8. Increased bicycle/pedestrian outreach to immigrant communities.
9. Media coverage/promotion of bicycle facilities.
10. Bicycle education.
11. Region-wide mandatory bicycle racks at work sites.
12. Address security concerns of pedestrians/cyclists.
13. Showers and clothing lockers.
14. Bicycle lockers, rack, and other storage facilities.
15. Biking/hiking patrols to ensure safety.
16. Integration of bicycle/pedestrian facilities with transit.
17. Permit bicycles on rail transit.
18. Bicycle racks on buses.
19. Street level shops.
20. Give bicyclists/pedestrians the right-of-way.
21. Cyclist/pedestrian sidewalk furniture.
22. Sidewalks and walkways.

23. Crosswalks.
24. Additional pedestrian access and circulation.
25. Pedestrian signals.
26. Connected street system and pedestrian pass-throughs.
27. Pedestrian design improvements.
28. Mid-block pedestrian connections.
29. Wide, unobstructed sidewalks on both sides of all arterials, major roads, and other streets.

2) For the **Clean Vehicle Program CM category**, voluntary programs must be replaced by mandatory programs or the emission reductions are not guaranteed. The Sierra Club recommends that the following **Clean Vehicle Program CMs** be studied in a detailed qualitative and quantitative assessment, analysis, and evaluation and rule effectiveness analysis.

1. Close loopholes in the Texas Clean Fleet Program making fewer exemptions for fleets.
2. Hybrid vehicles.
3. Electric buses.
4. Fuel cell school buses.
5. Airports use Ultra Low Emitting Vehicle (ULEV) or electric vehicles instead of diesel for ground transportation.
6. Propane school buses.
7. Use solar cells to run air conditioning and other electrical equipment on Metro buses.

3) For the **Freeway Incident/Roadway Construction Management CM category**, the Sierra Club recommends that the following **Freeway Incident/Roadway Construction Management CMs** be studied in a detailed qualitative and quantitative assessment, analysis, and evaluation and rule effectiveness analysis.

1. Locate hazardous freeway areas for possible improvements, sharp turns, clover leafs, etc.

- 4) The Sierra Club recommends that the following **Freeway System Infrastructure** CMs be studied in a detailed qualitative and quantitative assessment, analysis, and evaluation and rule effectiveness analysis.

1. Limit road and highway improvements to those benefiting transit and high occupancy vehicle lanes.

2. Shift highway funds to transit.

3. No new peripheral highways or loops.

- 5) The Sierra Club recommends that the following **Fuel Standards** CMs be studied in a detailed qualitative and quantitative assessment, analysis, and evaluation and rule effectiveness analysis.

1. Federal ultra lower sulfur diesel.

2. California diesel fuel.

3. Reformulated fuels for off-road vehicles

- 6) The Sierra Club recommends that the following **General Public Education and Outreach** CMs be studied in a detailed qualitative and quantitative assessment, analysis, and evaluation and rule effectiveness analysis.

1. Educate public about fuel savings from properly inflated tires, regular tune-ups, and driving speed.

2. Celebrity volunteers for ozone alert announcements.

3. Air quality information with driver training.

4. Air quality public outreach.

- 7) The Sierra Club recommends that the following **Goods Movement** CMs be studied in a detailed qualitative and quantitative assessment, analysis, and evaluation and rule effectiveness analysis.

1. Designated truck routes.

2. Dedicate truck lanes.

3. Require short-haul trucks to use alternative fuels.

8) The Sierra Club recommends that the following **High Occupancy Vehicle (HOV) Lanes/Managed Lanes** CMs be studied in a detailed qualitative and quantitative assessment, analysis, and evaluation and rule effectiveness analysis.

1. We are against the Use of HOV lanes by trucks.
2. We are against allowing alternative fuel vehicles in HOV lanes if they are single occupancy vehicles (SOV).
3. More aggressive HOV enforcement.
4. We are against SOV access to HOV and transit stations.
5. HOV service on all freeways with increased access.
6. We are against managed lanes to accommodate some SOV in HOV lanes.

9) HGAC needs an entire program dealing with high emitters and a suite of alternatives that people can choose to resolve the problem. The Sierra Club recommends that the following **High-Emitting Vehicle Detection and Programs** CMs be studied in a detailed qualitative and quantitative assessment, analysis, and evaluation and rule effectiveness analysis.

1. Focus on finding and penalizing extreme high emitters. The emphasis of this should be finding and replacing, not penalizing.
2. Rewards for reporting smoking or high emitting vehicles.
3. More enforcement of smoking vehicles; peace officers.
4. Roadside pullovers (portable inspection/maintenance measures).
5. High-emitting vehicle repair assistance.
6. Accelerated vehicle retirement program.
7. Dedicated funding for school bus replacement. This should require alternative fueled vehicles.
8. Buy vehicles older than model year 1975 to retire from use. This should include vehicles as new as 1985.
9. Expanded repair and replacement assistance program (near low income and non-low income).

10. Enforce smoking vehicle reports and require repairs.
11. New vehicle discounts for old vehicle trade-ins.
12. Low-interest financing for low income and or old vehicle trade-ins.
13. Transit passes/credit in exchange for old vehicle scrappage.
14. Ban sale of high-emitting vehicles.
15. Deny registration to vehicles with repeated emission failures.
16. Increase parking at transit centers or stops.
17. Provide parking at all major transit stations.

10) The Sierra Club recommends that the following **Parking Management** CMs be studied in a detailed qualitative and quantitative assessment, analysis, and evaluation and rule effectiveness analysis.

1. Preferential parking for HOV lanes users and ride sharers; rate reduction.

11) The Sierra Club recommends that the following **Pricing Measures** CMs be studied in a detailed qualitative and quantitative assessment, analysis, and evaluation and rule effectiveness analysis.

1. We are against cheaper gasoline prices during evening hours.
2. We oppose encouraging having multiple cars.
3. State and local exemptions for pooling/transit subsidies.
4. No tolls for buses and vanpools.

12) The Sierra Club recommends that the following **Speed** CMs be studied in a detailed qualitative and quantitative assessment, analysis, and evaluation and rule effectiveness analysis.

1. Aggressive driving enforcement.
2. The Sierra Club supports leaving the speed limits as they are but implementing aggressive enforcement to bring down average speeds. There are far too many drivers who drive at 10-20 miles/hour over the posted speed limit.

13) The Sierra Club recommends that the following **Sustainable and Transit-Oriented Development** CMs be studied in a detailed qualitative and quantitative assessment, analysis, and evaluation and rule effectiveness analysis.

1. Manage location of new growth to limit additional sprawl.
2. Incentives for infill and redevelopment. However, this needs to be implemented so that those who presently live in the area are not forced to leave due to higher taxes. Don't make this CM benefit the well off and hurt those who are not.
3. Mixed use development ordinance and zones.
4. Encourage or require complementary uses in close proximity in all developments or development areas.

14) The Sierra Club recommends that the following **Traffic Flow Improvements** CMs be studied in a detailed qualitative and quantitative assessment, analysis, and evaluation and rule effectiveness analysis.

1. We are against freeway bottleneck improvements that add lanes instead of focus on transit.
2. Prohibit truck use of right lanes for loading on bus and bike routes.
3. Pedestrian mall route diversion.

15) HGAC needs an entire program dealing with traffic management and a suite of alternatives that will be implemented to resolve the problem. The Sierra Club recommends that the following **Traffic Flow Improvements** CMs be studied in a detailed qualitative and quantitative assessment, analysis, and evaluation and rule effectiveness analysis.

1. Require two or more occupants per vehicles to enter designated congested activity centers during am and pm peak traffic periods.
2. Require two or more occupants per vehicle to enter designated congested activity centers all day.
3. Subsidize transit service.
4. More transit access near universities and airports.
5. Accelerate rail expansion.
6. Light Rail.

7. Commuter Rail.

8. High-speed rail.

9. We support the specific, localized, allowance of jitneys. This is not mentioned as an alternative.

10. We support putting Metro and other public buses on propane or other lower polluting fuels.

16) HGAC needs an entire program dealing with traffic management and a suite of alternatives that will be implemented to resolve the problem. The Sierra Club recommends that the following **Transit** CMs be studied in a detailed qualitative and quantitative assessment, analysis, and evaluation and rule effectiveness analysis.

1. Subsidize transit service.

2. Implement seamless public transit, connectivity.

17) HGAC needs an entire program dealing with traffic management and a suite of alternatives that will be implemented to resolve the problem. The Sierra Club recommends that the following **Travel Demand Management – Business Operations** CMs be studied in a detailed qualitative and quantitative assessment, analysis, and evaluation and rule effectiveness analysis.

1. We support a mandatory employer trip reduction program for all employers who employ 20 or more people. This is not mentioned as an alternative.

18) The Sierra Club recommends that the following **Travel Demand Management – Schools and Colleges** CMs be studied in a detailed qualitative and quantitative assessment, analysis, and evaluation and rule effectiveness analysis.

1. Restrict student drivers to high schools.

19) The Sierra Club recommends that the following **Vehicle Engine Modifications** CMs be studied in a detailed qualitative and quantitative assessment, analysis, and evaluation and rule effectiveness analysis.

1. Engine software upgrade (DHFV4) or low NOx software upgrade.

20) The Sierra Club recommends that the following **Vehicle Idling** CMs be studied in a detailed qualitative and quantitative assessment, analysis, and evaluation and rule effectiveness analysis.

1. School bus idling Airborne Toxic Control Measure.

2. Statewide emissions testing.

21) The Sierra Club recommends that the following **Vehicle Inspection and Maintenance** CMs be studied in a detailed qualitative and quantitative assessment, analysis, and evaluation and rule effectiveness analysis.

1. Centralized IM-240 test with repairs done separately.

22) The Sierra Club recommends that the following **Vehicle Operations Management** CMs be studied in a detailed qualitative and quantitative assessment, analysis, and evaluation and rule effectiveness analysis.

1. Raise the driving age.

### **Non-Road Source Control Measures**

The following are the **Non-Road Source CMs from the 2006 HGAC catalog** that the Sierra Club wants to be fully quantitatively and qualitatively analyzed and presented to the public and decision-makers for review, comment, and understanding of the SIP proposal.

1) The Sierra Club recommends that the following **Off-Road Source** CMs be studied in a detailed qualitative and quantitative assessment, analysis, and evaluation and rule effectiveness analysis.

1. Aircraft vapor recovery.

2. Use electric or cleaner technology auxiliary power units (APUs) for gate electrification.

3. Use electric or cleaner technology APUs for preconditioned air.

4. Federal ultra low sulfur diesel.

5. Ban equipment such as two-stroke engines.

6. Electrification of rail switching yards.

7. Use liquefied natural gas engines for locomotives. Also use compressed natural gas.

8. Selective catalytic reduction for locomotives.

## 2008 HGAC On-Road Source Control Measures

The following are the **On-Road Source CMs from the 2008 HGAC catalog** that the Sierra Club wants to be fully quantitatively and qualitatively analyzed and presented to the public and decision-makers for review, comment, and understanding of the SIP proposal.

1. #54, Private sector clean fuel fleets.
2. #56, Close loophole in the Texas Clean Fleet Program making fewer exemptions for fleets.
3. #59, Public agency clean fleet program.
4. #144, Divert trucks from non-attainment areas. **The Sierra Club recommends a new CM, Construct and designate truck only lanes.**
5. # 147, Permit HOV lane use by qualifying low emission vehicles (LEV). **The Sierra Club does not support this CM because it does not get people to change their one person/one car mode of transportation and works against other forms of transportation that carry more than one person.**
6. #157, Single Occupant Vehicles (SOV) access to HOV and transit stations. **The Sierra Club does not support this CM because it does not get people to change their one person/one car mode of transportation and works against other forms of transportation that carry more than one person.**
7. #161, Managed lanes to accommodate some single occupant vehicles in HOV lanes. **The Sierra Club does not support this CM because it does not get people to change their one person/one car mode of transportation and works against other forms of transportation that carry more than one person.**
8. #163, Focus on finding and penalizing extreme high emitters.
9. #165, Rewards for reporting smoking or high emitting vehicles.
10. #172, Scrappage/buy-back plan.
11. #181, Dedicated funding for school bus replacement.
12. #188, Enforce smoking vehicle reports and require repairs.
13. #191, Low interest financing for low income and or old vehicle trade-ins.
14. #193, Ban sale of high emitting vehicles.

15. #227, Preferential parking for HOV lane users and ride sharers; free spaces, reserved spaces.
16. #228, Preferential parking for HOV lane users and ride sharers; rate reduction.
17. #231, Free parking at park and ride facilities for HOV lane and transit users.
18. #235, Increase parking at transit centers or stops.
19. #248, Eliminate employee parking subsidies.
20. #249, Employee parking cash out program.
21. #298, No tolls for buses and vanpools.
22. #302, Aggressive driving enforcement.
23. #321, Encourage or require complementary uses in close proximity in all developments or development areas.
24. #323, Comprehensive design guidelines for activity centers.
25. #371, Reduce transit fares.
26. #433, Accelerate rail expansion.
27. #436, Commuter rail.
28. #437, High speed rail.
29. #438, Free circulator service to major generators.
30. #459, Mandatory or voluntary compressed work week.
31. #461, Internet ride-matching services.
32. #462, Purchase vans for vanpools.
33. #463, Mandate or encourage vanpooling and carpooling.
34. #465, Mandatory or voluntary flextime program (daily start and end time).
35. #470, Pay or other financial incentive for not driving.

36. #487, Telecommuting incentives or mandates.
37. #496, Regional vanpool programs.
38. #551, If the California Low Emitting Vehicle Program is adopted and only LEV certified, gasoline vehicles are for sale in Texas, then mandated fleets should have to purchase the ULEV alternative fuel version of the same vehicle rather than the gasoline version.
39. #553, Adopt California standards for vehicle emission rates.
40. #576, Limitations on idling of heavy duty vehicles.
41. #587, Heavy duty vehicle border inspection program for AB 1009.
42. #601, Extend or expand light duty diesel engine inspection and maintenance program.
43. #632, Enhanced enforcement for smoking vehicles program – vehicle impounding for violators (like Dallas Emissions Enforcement Pilot Program).
44. #635, Prime parking for vanpools, carpools, hybrids. The Sierra Club recommends that hybrids be removed from this CM since they continue one person/one vehicle transportation.
45. #638, Increased use of hybrid buses.
46. #639, Initiate a flex-bike service to encourage bicycling.
47. #642, More stringent I/M cut points.
48. #643, Accelerate development and construction of mass transit projects.

### **2008 HGAC Non-Road Source Control Measures**

The following are the **Non-Road Source CMs from the 2008 HGAC catalog** that the Sierra Club wants to be fully quantitatively and qualitatively analyzed and presented to the public and decision-makers for review, comment, and understanding of the SIP proposal.

1. #1, Aircraft emission standards.
2. #2, Ordering lowest emission engines.

3. #9, Develop air quality best management practices (BMPs); use BMPs to manage emissions from construction sites, construction vehicles, and wind-blown dust.
4. #10, Limitations on idling of heavy duty construction equipment.
5. #11, Water injection for diesel engines.
6. #14, Lean NOx catalyst.
7. #15, Early introduction of low NOx engines.
8. #16, Selective catalytic reduction (SCR).
9. #21, Lawnmower exchange; trade in old gas powered equipment for discounts on zero emission models.
10. #22, Lawnmower recycling programs (rebate program); replace gas mowers with electric.
11. #23, Promote use of cleaner lawn and garden equipment such as lower emission four stroke and electric powered equipment.
12. #24, Buy a Clunker concept for small gas equipment.
13. #26, Ban equipment such as two stroke engines.
14. #30, Use of auxiliary power units (APUs) for locomotives operating; controls for locomotives are re-empted by federal law, but voluntary controls might have some success.
15. #31, Accelerated purchase of Tier II locomotive engines.
16. #32, Electrification of rail switching yards.
17. #34, Limitation on idling of locomotives.
18. #36, California Marine Vessel Auxiliary Engine Rule.
19. #37, California Cargo Handling Equipment Rule.
20. #38, Clean fuel option: expand TxLED use. The use of TxLED could occur in source categories not currently required to implement the fuel use including marine and other engines.

21. #42, Establish emissions trading program for non-road vehicles (DERC). **The Sierra Club recommends no such trading programs and specific emission limitations on non-road vehicles so that each vehicle will have to reduce its emissions.**

22. #46, Adopt policies and programs to increase the number of clean construction machines used on public works projects.

### **Other Source Control Measures**

The Sierra Club recommends that the following **Other Source** CMs be studied in a detailed qualitative and quantitative assessment, analysis, and evaluation and rule effectiveness analysis.

1. Ban leaf blowers.

2. Keep freeways out of or near parks and away from schools and neighborhoods (Highway 90 at I-10/I-610, going through Herman Brown Park and between Furr High School and Houston Community College, is a good example of this problem).

3. Do not allow highways to bypass the National Environmental Policy Act (NEPA) since the Act is the only requirement for citizen participation for most transportation projects and the only thing that requires that a hard look be taken and that project data be revealed to the public for its review and comment regarding air quality.

4. Spend transportation dollars where the people and congestion are and not on proposals, like the proposed Grand Parkway (present estimated cost of \$5.4 billion), where there is undeveloped land, few people, and little congestion.

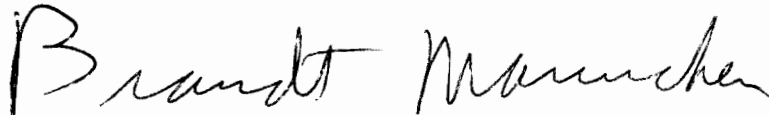
5. Additional ozone, NO<sub>x</sub>, VOC, and other ambient monitors are needed so that better modeling can be done and where these monitors should be located. Except for most of Harris County, other counties either have no monitors (Fort Bend and Waller Counties) or very few monitors (Montgomery, Liberty, Chambers, Galveston, and Brazoria). It is obvious that additional monitors in rural areas are needed for transportation, transport, and biogenic emissions information.

6. Research is needed on the amount of air pollution that different vehicles emit during actual, in motion, trips. This information is crucial for the improvement of MOBILE6 and its variants, would make the grid modeling immeasurably more precise, and would make prediction of ozone attainment more accurate. There is a need to more accurately depict the typical driving trip that MOBILE6 depends on for emissions estimation and mobile source inventories in the HGB area.

7. The new ozone NAAQS (0.075 ppm eight hour standard) should be the ultimate goal for attainment for the modeling that is conducted and the conformity analysis. The Sierra Club understands that the Environmental Protection Agency will develop a schedule for implementation of the ozone standard. However, since the new ozone standard has been determined and is real we need to aim for what the real goal is: clean air that is healthy to breath. Meeting the 0.08 ppm eight hour ozone standard will not achieve this clean air goal. The 0.08 ppm eight hour ozone standard is now obsolete and we must pursue the more protective clean air goal (0.075 ppm ozone eight hour standard) that has been approved.

The Sierra Club appreciates this opportunity to comment. Thank you.

Sincerely,

A handwritten signature in black ink that reads "Brandt Mannchen". The signature is written in a cursive style with a large, prominent initial "B".

Brandt Mannchen  
Air Quality Issue Chair  
Lone Star Chapter of the Sierra Club  
Chair, Air Quality Committee  
Houston Regional Group of the Sierra Club  
5431 Carew  
Houston, Texas 77096  
713-664-5962  
[brandtshnfbt@juno.com](mailto:brandtshnfbt@juno.com)