#### environmental improvement

### ENVIRONMENTAL

## **RESEARCH** through research and science

### **CONSORTIUM**

#### Resolution 1.87

Whereas the Texas Environmental Research Consortium (TERC) is responsible for implementing the New Technology Research and Development (NTRD) Program under contract with the Texas Commission on Environmental Quality; and

Whereas the Houston Advanced Research Center has issued three Requests for Grant Assistance to solicit technology projects in accordance with previous authorizations by TERC's Board of Directors; and

Whereas well conceived and cost-effective technology projects have been received that would contribute to TERC's achievement of the legislative goals of the NTRD Program; and

Whereas these projects have been evaluated and recommended for funding by TERC's Environmental Technology Advisory Council.

Now Therefore Be It Resolved that the Board of Directors of the Texas Environmental Research Consortium hereby authorizes the Houston Advanced Research Center to finalize contracts with the following entities and/or persons;

- ERG for \$200,000 to complete Phase I the Strategic Technology Assessment Project (formerly the Diesel Data Base Project). Phase II of this project relating to the locomotive, industrial and onroad sectors will be initiated in FY 2007;
- \$200,000 to the University of Texas regarding verification of the EPA's Smartway Project; and
- Up to \$8.0 million for the fifteen projects proposed by the various entities in response to RFGA III, and as specified in the tables of Attachment I.

Adopted and Approved this 10th day of July 2006.	
	Bruce LaBoon, Chairman

#### environmental improvement

#### ENVIRONMENTAL

## **RESEARCH** through research and science

#### CONSORTIUM

#### **Resolution 1.88**

Whereas the Texas Environmental Research Consortium (TERC) has made the decision to comply with Chapter 556.0055 of the Government Code in order to assure its continued implementation of the Air Quality Research and New Technology Research and Development (NTRD) Programs: and

Whereas compliance with this provision of state law has resulted in TERC having additional financial obligations of \$300,000; and

Whereas the Houston Advanced Research Center has agreed to advance TERC these funds for two years; and

Whereas TERC is committed to repaying HARC these advanced funds with interest within two years; and

Whereas TERC is implementing an aggressive fundraising effort to meet its obligations resulting from compliance with Chapter 556.0055 of the Government Code.

Now Therefore Be It Resolved that the Board of Directors of the Texas Environmental Research Consortium hereby authorizes its Board Chairman to execute a Promissory Note with HARC regarding repayment of the funds that HARC is advancing TERC.

Adopted and Approved this 10<sup>th</sup> day of July 2006.

 Bruce LaBoon, Chairman

## **TEXAS** environmental improvement

## **ENVIRONMENTAL**

## **RESEARCH** through research and science

## **CONSORTIUM**

#### **Resolution 1.89**

Whereas the Texas Environmental Research Consortium (TERC) is providing planning and financial assistance to the Texas Air Quality Study II (Texas AQS II) which will extend from August 1, 2006 through September 30, 2006; and

Whereas this study's priority is to improve the emission inventories, meteorological inputs and various air quality models with regard to ozone, fine particulates and air toxins; and

Whereas TERC is already proceeding to sponsor and fund Research Projects H75 relating to Hydrocarbon Profiles Measured at Williams Tower, H74 relating to Measurements of Volatile Organic Compounds and Nitrogen Reservoir Species, H74B relating to Small Particles Distribution, H78 relating to the TexAQSII Radical Measurement Project, H53 relating to Air Quality Monitoring Technologies, and H63 relating to Aircraft Measurement; and

Whereas TERC has determined that the following budget adjustments are needed regarding these projects:

- An increase in the budget for H75 from \$200,000 to \$315,000;
- An increase of \$35,230 in H78's budget; and
- An increase of \$28,850 in the budget of H63B and H63C; and

Whereas TERC is funding a project to evaluate the impact of the Texas Emission Reduction Program (TERP) and the Low Income Vehicle Repair Assistance, Retrofit, and Accelerated Vehicle Retirement Program (LIRAP); and

Whereas additional tasks related to the impact of TERP, LIRAP and new EPA engine standards on ozone levels in DFW and HGA in 2012 have been added to the contract; and

Whereas TERC has determined that to complete the tasks requested the contractor will need a budget increase from \$147,590 to \$164,140, which exceeds the amount previously approved by the TERC Board;

Whereas TERC has determined that new Project H81 relating to Nocturnal Mixing from Micropulse LIDAR measurements at a cost of \$21,639 is needed to support H78 and other TexAQSII projects.
Page 2 of 2 Resolution 1.89

Now Therefore Be It Resolved that the TERC Board of Directors hereby authorizes the Houston Advanced Research Center to adjust the budgets of these research projects and fund H81 as outlined above.

Adopted and approved this 2<sup>nd</sup> day of August 2006

Bruce LaBoon, Chairman	

#### **BUDGET ADJUSTMENT TO SELECTED TERC 2006 FIELD STUDY PROJECTS**

#### **Williams Tower Experiments**

H75: Hydrocarbon Profiles at Sunrise Measured at Williams Tower (Contractor: Battelle) *Status*: H75 initial contract signed.

**Board Approval Needed:** Seeking SAC and Board approval to increase H75 budget from \$200,000 to \$315,803 to enable a full month's measurements to be collected instead of 2 weeks only.

#### **Moody Tower Experiments**

H78: TexAQS II Radical Measurement Project (Contractor: University of Houston) *Description:* Measurements at the top of Moody Tower dormitory will be made of aerosols, ozone, a wide range of ozone precursors, and meteorological parameters to determine how productively the Houston airshed makes ozone based on the abundance of radicals (highly reactive molecular fragments).

Contract Status: Initial contract signed. Original equipment purchases granted by TCEQ. Board Approval Needed: Seeking SAC and Board approval to add a PAN instrument to better characterize ozone chemistry at Williams Tower. **Total additional cost amounts to** \$35,230.

#### **Aircraft Measurements**

H63: Aircraft Measurements in Support of TexAQS II (Contractor: Baylor)

*Description:* The Baylor Aztec will conduct chemical and meteorological measurements in support of the NOAA Twin Otter (with ozone lidar), the SOF Experiment, Moody Tower, and Williams Tower.

*Contract Status*: H63 initial contract with Baylor pending. Formaldehyde instrument purchase approval granted by TCEQ.

H63.B: Planning of TexAQS II-2006 Aircraft Flights (Contractor: University of Alabama at Huntsville)

H63.C: Planning of TexAQS II Aircraft Measurements in the Vicinity of Stalled or Stationary Fronts (Contractor: University of Alabama at Huntsville)

**Board Approval Needed**: Seeking SAC and Board approval to fund H63.B at \$25,000 and H63.C at \$3,850.

#### Analyses of Voluntary Emission Reduction Programs: TERP and LIRAP

H72: TERP/LIRAP Analysis (Contractor: Environ)

*Description:* The achievements of the TERP and LIRAP programs will be assessed and options for improving the future effectiveness of these programs developed. One purpose of this study is to evaluate how changes in mobile source emissions from 2009 to 2012 resulting from TERP, LIRAP and new EPA engine standards will impact ozone levels in DFW and HGA. The ozone impacts of 2009 to 2012 mobile source emission reductions will be evaluated using the existing DFW and HGA SIP models.

*Contract Status*: Analyses of TERP and LIRAP programs are underway. The effects of TERP and EPA engine standards on ozone levels in DFW have been modeled.

Board Approval Needed: An equivalent study of the impact of TERP and new EPA engine standards on ozone levels in HGA has been approved. Board approval is needed to increase the project budget from \$147,590 to \$164,140, which exceeds the amount originally approved.

#### **New Project**

#### **Nocturnal Mixing from Micropulse LIDAR measurements**

H81: TRAMP Nocturnal Mixing from Micropulse LIDAR measurements (Contractor: Battelle) Description: This project uses a micropulse LIDAR to measure the mixing layer depth between Moody Tower and Williams Tower and between Moody Tower and downtown Houston. These measurements will be performed at Moody Tower and will provide valuable information to numerous TexAQS II scientists.

**Board Approval Needed**: Seeking SAC and Board approval to contract H81 for a total cost of \$21,639.

# TEXAS environmental improvement

## ENVIRONMENTAL

## **RESEARCH** through research and science

## **CONSORTIUM**

#### **Resolution 1.90**

Whereas the Texas Environmental Research Consortium (TERC) administers the New Technology Research and Development (NTRD) program under contract with the Texas Commission on Environmental Quality (TCEQ); and

Whereas the TERC Board of Directors preliminarily approved the following technology projects for funding under the NTRD program at its meeting June 15, 2006 in accordance with the TERC-TCEQ contracts;

<b>Technology Projects</b>	<b>Applicant</b>	Requested Funds from TERC
O-01 - Strategic Technology Assessment V-01 - Application of Smartway Technologies	ERG	\$200,000
To Drayage Vehicles V-02 – SCR System for On-& Off-Road	Univ. of Texas	\$200,000
Applications (On-Road & Construction) V-03 – Development of a Urea-SCR System	NETT Technologies	\$750,000
(On-Road) V-04 – Off-Road SCRT Retrofit System	Mack Trucks	\$750,000
(Construction) V-05 – On-Road SCRT Retrofit Systems	Johnson Matthey	\$749,400
(On-Road) V-06 – OnRoad SCRT Retrofit System	Johnson Matthey	\$749,400
(On-Road)	Combustion Components, Asso.	\$230,750
V-07 – SCR for Non-Road Applications (Construction)	Extengine Transport	
V-08 – SCR Systems for On-Road Applications	Systems	\$533,205
(On-Road)	Engine Control Systems	\$560,220
V-09 – Extended Verification of and SCR System For On-Road Applications	Extengine Transport	
V-10 – Verification of Compact SCR System for	Systems	\$529,555
Locomotives (Locomotives)	Engine, Fuel &	

Emissions Eng. \$116,635

Page 2 of 2 Resolution 1.90

<b>Technology Projects</b>	<b>Applicant</b>	Requested Funds from TERC
N-01 – Mechanical Variable Injection Timing (VIT Technology to Reduce NOx Emissions (Construction)	Motive Eng.	\$697,398
N-02 – Ammonia Storage System for SCR Off- Road Applications (Construction)	Extengine Transport Systems	\$344,955
N-03 – Diesel Particulate Filter System with NOx Reduction Capabilities (Construction)	Rypos	\$750,000
N-04 – Heavy Duty Natural Gas Engine (On-Road)	Cummins Westport	\$650,000
N-05 – Hydrocarbon SCR Retrofit Systems (On-Road) N-06 – Natural Gas Engine Development	Mack Trucks	\$750,000
(On-Road)	<b>Emissions Solutions</b>	\$382.500

Whereas the TCEQ has approved the funding of these projects except for N-02, N-04 and N-06;

Whereas TERC's Executive Director and the Houston Advanced Research Center concur with the TCEQ's assessment;

Now, Therefore, Be It Resolved that the TERC Board of Directors hereby provides final approval for TERC funding of the Technology projects outlined above, except for the technology projects N-02, N-04 and N-06.

Adopted and approved this  $2^{\text{nd}}$  day of August 2006

Bruce LaBoon, Chairman	

# **Summary of Recommended Projects to be Awarded for NTRD RFGA-03**

	Duningt		Amount		Amount	
	Project (Emission Source)	Applicant	Requested	Cost Share	Total	Summary
0-01	Strategic Technology Assessment	ERG	\$200,000	-	\$200,000	Develop an understanding of the available technologies to reduce diesel emissions and their compatibility with the existing inventory.
VERIFIC <i>E</i>	ATION PROJECTS					
V-01	Application of SmartWay Technologies to Drayage Vehicles	Univ. of Texas	\$200,000	-	\$200,000	Refine a drayage truck test cycle to represent transportation in and around the Port of Houston and quantify the reduction of NOx emissions through the use of widesingle low-rolling resistance tires.
V-02	SCR System for On- & Off- Road Applications (On-Road & Construction)	NETT Technologies	\$750,000	\$421,353 36%	\$1,171,353	Develop and EPA verify a urea-SCR NOx emissions control system for retrofitting heavy-duty off-road and on-road diesel engines.
V-03	Development of a Urea-SCR System (On-Road)	Mack Trucks	\$750,000	\$333,076 \$30.8%	\$1,083,076	Development of urea-SCR NOx emissions control system for currently operational heavy duty trucks in Texas.
V-04	Off-Road SCRT Retrofit System (Construction)	Johnson Matthey	\$749,400	\$524,500 41.2%	\$1,273,900	Verification of a Selective Catalytic Reduction Technology System (SCRT) for off-road (construction) applications.
V-05	On-Road SCRT Retrofit System (On-Road)	Johnson Matthey	\$749,400	\$699,000 48.3%	\$1,448,400	Verification of an SCRT system for on-road, heavy duty diesel applications.
V-06	SCR for Non-Road Applications (Construction)	Combustion Components Associates	\$230,750	\$83,386 26.5%	\$314,136	EPA verification of an SCR system for diesel non-road construction engines.
V-07	SCR System for Off-Road Engines (Construction)	Extengine Transport Systems	\$533,205	\$205,260 27.8%	\$738,465	EPA verification of an SCR NOx retrofit system for off-road engines.
V-08	SCR Systems for On-Road	Engine	\$560,220	\$276,578	\$836,798	Verification of a urea SCR system for Class

	Applications (On-Road)	Control Systems		33.1%		8 heavy duty trucks commonly used in short haul distribution/delivery fleets.
V-09	Extended Verification of an SCR System for On-Road Applications (On-Road)	Extengine Transport System	\$529,555	\$145,445 21.5%	\$675,000	Extended verification testing for addition engines of an SCR system that is currently undergoing EPA verification testing. Will enable wider application of technology.
V-10	Verification of Compact SCR System for Locomotives (Locomotives)	Engine, Fuel & Emissions Engineering	\$116,635	\$400,100 77.4%	\$516,735	Pre-verification testing of a compact urea- SCR system for retrofitting locomotive engine.
	Duoinat	Annligant		Amount		Summany
	Project	Applicant	Requested	Cost Share	Total	Summary
<b>NEW TECHN</b>	OLOGY PROJECTS					
N-01	Mechanical Variable Injection Timing (VIT) Technology to Reduce NOx Emissions (Construction)	Motive Engineering	\$697,398	\$144,843 17.2%	\$842,241	Demonstrate a feasible low-cost, retrofittable technology for enabling VIT in older diesel engines.
INELLIGIBLE N-02	Ammonia Storage System for SCR Off-Road Applications (Construction)	Extengine Transport Systems	\$344,955	\$118,455 25.6%	\$463,410	Develop and verify a solid crystalline matrix structure for an SCR system for the storage and delivery of ammonia gas for off-road engines.
N-03	Diesel Particulate Filter System with NOx Reduction Capabilities (Construction)	Rypos	\$750,000	\$227,800 23.3%	\$977,800	Develop, optimize and verify a hybrid Diesel Particulate Filter (DPF) system that is capable of reducing NOx emissions.
INELLIGIBLE N-04	Heavy Duty Natural Gas Engine (On-Road)	Cummins Westport	\$650,000	\$990,000 60.4%	\$1,640,000	Develop and EPA certify a heavy-duty spark ignited ultra low NOx natural gas engine for heavy duty truck applications.
N-05	Hydrocarbon SCR Retrofit System (On-Road)	Mack Trucks	\$750,000	\$348,930 31.8%	\$1,098,930	Develop a hydrocarbon SCR system to reduce NOx emissions for heavy duty truck applications.
<b>INELLIGIBLE</b> N-06	Natural Gas Engine Development (On-Road)	Emissions Solutions	\$382,500	\$182,214 32.3%	\$564,714	Develop and EPA certify natural gas engines for on-road applications.

## **ENVIRONMENTAL**

### **RESEARCH** through research and science

#### **CONSORTIUM**

#### **RESOLUTION 1.91**

Whereas the Texas Environmental Research Consortium (TERC) is providing planning and financial assistance to the Texas Air Quality Study II (Texas AQS II) which will extend from August 1, 2006 through October 15, 2006; and

Whereas this study's priority is to improve the emission inventories, meteorological inputs and various air quality models with regard to ozone, fine particulates and air toxins; and

Whereas TERC is already proceeding to redirect the instruments originally intended for three levels at Williams Tower to three ground level locations at Deer Park, Bayland Park and Aldine for Research Project H75 which requires parallel adjustments to various allied activities, including: securing additional trailers as part of coordination of TexAQS II activities in Research Project H80, additional canister sampling at Moody Tower for Research Project H78, additional travel expenses for aircraft coordination for Research Project H63B, additional support for meteorological forecasts beyond August 31, 2006 as part of Research Project H45D, and additional indirect costs for the Micropulse LIDAR project, which is Research Project H81; and

Whereas TERC has determined that the following budget adjustments are needed regarding these projects:

- An increase of \$23,500 in the budget of H75;
- An increase of \$20,000 in the budget of H78;
- An increase of \$5,000 in the budget of H81;
- An increase of \$31,000 in the budget of H80;
- An increase of \$4,100 in the budget of H63B;
- An increase of \$45,000 in the budget of H45D; and

Whereas TERC has determined that new Project H82 needs to be completed with regard to TERC's Annual Report and a second legislative report on the assessments of the TERP, LIRAP, School Bus Emissions and Texas A&M University's renewable energy study at a cost of \$32,000; and

Whereas the total costs of the adjustments to these projects and initiating TERC Project H82 amount to \$160,600, and the TERC Science Advisory Committee has recommended that TERC redirect funds as needed to focus on TexAQS II projects; and

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Whereas TERC Project H62, originally intended for the analysis of data from the TexAQS II Summer 2005 campaign, and H65, intended for modeling emission events and THOE forecasting will be cancelled, and the cancellation of these projects will result in the following budget adjustments:

- A decrease in the budget of H62 from \$45,000 to \$0, and
- A decrease in the budget of H65 from \$120,000 to \$0

Now, Therefore, Be It Resolved that the TERC Board of Directors hereby authorizes the Houston Advanced Research Center to adjust the budgets of these research projects and fund H82 as outlined above.

Adopted and approved this 21 <sup>st</sup> day of Sep	tember 2006
	Bruce LaBoon, Chairman

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#### environmental improvement

## **ENVIRONMENTAL**

## **RESEARCH** through research and science

#### **CONSORTIUM**

#### **RESOLUTION 1.92**

Whereas the Texas Environmental Research Consortium (TERC) has responsibility for administering the New Technology Research and Development (NTRD) Program in accordance with state law to facilitate the development and verification of new technologies to maximize NO<sub>x</sub> reductions from diesel fueled vehicles and equipment; and

Whereas the marine sector in the Houston-Galveston area generates significant levels of  $NO_x$  emissions which need to be substantially reduced in order to assure attainment of federal air quality standards; and

Whereas TERC has not funded any technology and verification projects related to the marine sector over the past year; and

Whereas there is an urgent need for additional  $NO_x$  reduction technologies in the marine sector to assure appropriate levels of  $NO_x$  reduction.

Now, Therefore, Be It Resolved that the Board of Directors of the Texas Environmental Research Consortium hereby authorizes the Houston Advanced Research Center to publish and distribute Requests for Grant Assistance #7 for the purpose of soliciting technology development and verification projects for the marine sector.

Adopted and Approved this 21st day of September 2006

Bruce LaBoon, Chairman	

#### environmental improvement

#### ENVIRONMENTAL

#### **RESEARCH** through research and science

## **CONSORTIUM**

#### **RESOLUTION 1.93**

Whereas the Advisory Council is one of the vehicles through which the Texas Environmental Research Consortium (TERC) seeks to obtain ongoing input from a cross section of stakeholders and individuals;

Whereas there have been two key resignations from the Advisory Council due to relocations; and

Whereas TERC is committed to expanding its outreach efforts through the Advisory Council.

Now, Therefore, Be It Resolved that the Board of Directors of the Texas Environmental Research Consortium hereby appoints the following persons to its Advisory Council:

- Dr. Jim Lester of the Houston Advanced Research Center;
- Ms. Jane Laping of Mothers for Clean Air; and
- Ms. Sabrina Strawn of the Galveston-Houston Association for Smog Prevention.

Adopted and Approved this 21st day of September 2006

 Bruce LaBoon, Chairman	

**Sabrina Strawn** is the Executive Director of the Galveston-Houston Association for Smog Prevention. Sabrina worked at the Houston Advanced Research Center in the mid 1990s and served as co-coordinator of the Houston Environmental Foresight project. Prior to HARC, she worked with Dr. Marvin Legator at the University of Texas Medical Branch, where she was a faculty associate and director of the Toxics Assistance Program. Sabrina holds degrees in economics and political science, and a master's degree from the Lyndon B. Johnson School of Public Affairs at the University of Texas.

Jane L. Laping is currently Executive Director of Mothers for Clean Air. She was elected as the first president in 1997, but resigned in 1998 to take on the positions of field organizer, community organizer, and project manager until May of 2001. Ms. Laping built the organization from one that was unknown to a well-respected name with nearly a thousand members. In 2001, she became the MfCA's first executive director and continues to lead the organization, simultaneously working toward reducing air pollution in the Houston-Galveston area and protecting children from its adverse health effects. Jane holds an M.S. degree and a Master of Public Health from UT School of Public Health.

**Jim Lester** is the Director of the Environment Group at the Houston Advanced Research Center, which he joined in 2002. Prior to joining HARC, he was a faculty member and administrator with the University of Houston System for many years and directed the Environmental Institute of Houston from 1991 until his departure. Jim has worked closely with TERC on management of its air quality research and NTRD programs. He holds B.A. and Ph.D. degrees from the University of Texas at Austin in zoology.

#### environmental improvement

## ENVIRONMENTAL

### **RESEARCH** through research and science

#### **CONSORTIUM**

#### **RESOLUTION 1.94**

Whereas the Texas Environmental Research Consortium (TERC), through its Research Management Organization – the Houston Advanced Research Center (HARC) -- published a Request for Qualifications for air quality research contractors in 2003; and

Whereas the TERC Board of Directors selected six contractors to complete air quality research on its behalf as a consequence of the Request for Qualifications; and

Whereas it is prudent and potentially economically advantageous for TERC to select additional air quality contractors to complete air quality research in the future; and

Whereas it is appropriate for HARC as TERC's Research Management Organization to seek these additional contractors through the qualification process and procedures used in 2003.

Now, Therefore, Be it Resolved that the Board of Directors of the Texas Environmental Research Consortium hereby authorizes the Houston Advanced Research Center to publish and distribute a Request for Qualification for the purpose of selecting additional air quality research contractors.

Adopted and Approved this 21sth day of September 2006.

Bruce LaBoon, Chairman	

#### REQUEST FOR QUALIFICATIONS

#### AREAS OF EXPERTISE TARGETED

- 1) Emission Processes and Inventories for Point and Area Sources: General knowledge of point and area source emissions of NO<sub>x</sub>, VOCs, SOx, particulates, and air toxics. Specialized knowledge of industrial processes and volatile materials used in various industry sectors.
- 2) Modeling and Assessment of Mobile Source Emissions: Experience with the development and application of on-road and non-road emissions models. Knowledge of locomotive, marine vessel, construction equipment, and/or aircraft emissions is desirable.
- **3)** Urban, Regional, and Transportation Planning Related to Air Quality Issues: The ability to apply models for regional economics, regional energy, building energy efficiency, land use, and transportation.
- **4) Atmospheric Chemistry of Ozone, PM, Regional Haze, and Air Toxics:** Laboratory studies of chemical kinetics, smog chamber testing and development of model chemical mechanisms, design and implementation of airborne measurement campaigns, and modeling and measurements of pollution on intercontinental, regional, and urban scales.
- **5) Meteorology:** Measurements and modeling related to neighborhood and urban scale mixing and transport, and the interaction between the Planetary Boundary Layer (PBL) and the Free Troposphere (FT) on regional scales.
- 6) Air Monitoring Research/Ambient Measurement: Expertise in statistical analysis of monitoring data is essential. In-depth knowledge and experience of monitoring network design, new monitoring technologies and methods, and remote sensing is also required.
- 7) Air Quality Modeling Research: Coupling of neighborhood, urban, and regional scale models, and advanced computational methods.
- **8) Human Exposure Research:** Measurements of personal exposures and the factors determining them, development and application of human exposure models and related human activity databases.
- 9) Assessment of Efficacy of Emission Control Measures: In-depth understanding of new generation air quality models, air quality measurements, and control strategy analysis is essential, as is the capability of performing high quality, fast-turnaround modeling work subject to rigorous timetables, and the ability to write easy-to-understand but technically proficient reports for a policy audience.
- **10)** Air Quality Policy and Regulatory Analysis: Experience with both voluntary and mandated approaches, including emissions trading and substitution, economic incentive programs, etc.

#### environmental improvement

## **ENVIRONMENTAL**

### **RESEARCH** through research and science

## **CONSORTIUM**

#### **RESOLUTION 1.95**

Whereas the Texas Environmental Research Consortium (TERC) is committed to supporting and/or competing air quality research that is objective and scientifically valid; and

Whereas it is recognized that TERC's commitments to objective and scientifically valid research may be jeopardized or compromised by the manner and method in which air quality research and NTRD reports are presented and released; and

Whereas TERC's Board of Directors is committed to avoiding the premature release of project reports in the future.

Now, Therefore, Be It Resolved that the Board of Directors of the Texas Environmental Research Consortium hereby directs its Executive Director and the Houston Advanced Research Center to adhere to the following procedures in completing and releasing air quality research and NTRD project reports:

- Draft reports shall not be released to the press or general public. These draft reports may
  only be distributed to TERC's Board of Directors, Executive Director, Advisory Council,
  Science Advisory Committee, Environmental Technology Advisory Committee, staff, the
  research management organization staff and other designated persons for review and
  comments;
- All TERC sponsored research will be peer reviewed before they are finalized and released to the public or the press;
- Only finalized and peer reviewed research projects may be released to the public or the press;
- TERC's staff and research management organization may provide the Board of Directors status reports on pending research projects before they are peer reviewed and finalized;
- TERC Board Members and staff shall not release these status reports to the public or press; and
- TERC's Executive Director and Research Management Organization will take the necessary steps to assure that TERC air quality research findings are presented in a clear and objective manner and without the use of subjective and potentially biased terms.

Adopted and Approved this 21st day of September 2006

#### environmental improvement

## **ENVIRONMENTAL**

## **RESEARCH** through research and science

## **CONSORTIUM**

#### **RESOLUTION 1.96**

Whereas the Texas Environmental Research Consortium's (TERC) Annual budget is approximately \$12 million; and

Whereas there is the potential that TERC's budget may increase over the next year due to various fundraising efforts that are underway; and

Whereas TERC's Board of Directors is committed to effective and proper stewardship of the organization's finances; and

Whereas the Board of Directors' stewardship and oversight of these financial resources may be strengthened and enhanced by the creation of a Board level Budget at Finance Committee;

Now, Therefore, Be It Resolved that the Board of Directors of the Texas Environmental Research Consortium hereby establishes a Budget and Finance Committee. Be It Further Resolved that the Budget and Finance Committee initially will be comprised of the following members:

- The Board Chairman; and
- Ms. Jan Hart-Black because of her extensive experience in budgeting and fiancé matters.

Adopted and Approved this 21st day of September 2006

 Bruce LaBoon, Chairman	