

TEXAS ENVIRONMENTAL RESEARCH CONSORTIUM

MINUTES BOARD OF DIRECTORS' MEETING SEPTEMBER 15, 2005

The regular meeting of the Board of Directors (Directors) of the Texas Environmental Research Consortium (TER) was held on Thursday, September 15, 2005 in Houston at the office of Chairman LaBoon. Chairman LaBoon convened the meeting at 2:00 p.m. The Agenda for the meeting is provided herein as Attachment I. Directors attending this meeting in addition to Chairman LaBoon were the Honorable Ron Harris, the Honorable Margaret Keliher, Mr. Jim Marston, and Jonathan Ward. The Honorable Robert Eckels, the Honorable James Yarbrough, the Honorable Bill White and the Honorable Chad Adams participated in the meeting by phone. Additional persons attending the meeting were Ms. Elena Marks, Mr. Doug Deason, Mr. Gregg Cooke, Ms. Amanda Oneacre, Mr. Todd Mitchell, Ms. Ivy Guice, Mr. David Hitchcock, Mr. Jim Lester, Mr. Rick Haut, Mr. Jay Olaguer, Mr. George Beatty and Mr. John Hall.

The Board took the following actions at the meeting:

- Approved the Minutes of the June 16, 2005 meeting;
- Approved Resolution 1.58 and authorized Chairman LaBoon to execute a new contract between TERC and HARC through August 31, 2010;
- Approved Resolution 1.59 and authorized Mr. LaBoon to execute new contracts between TERC and George Beatty and Associates and John Hall Public Affairs;
- Approved Resolution 1.60 and authorized TERC's Executive Director to execute a contract between TERC and Locke Liddell and Sapp LLLP for office space and administrative staff support;
- Approved Resolution 1.61 and established TERC's Ethics Policy after adding provisions to the policy to indicate that campaign contributions received by the elected members of the Board would not constitute a conflict, nor would deliberations and decisions by the Board that benefited the political subdivisions in which elected Board Members are serving;
- Approved Resolution 1.62 and thereby authorized Chairman LaBoon to sign TERC checks up to \$30,000 without a second signature;
- Approved Resolution 1.63 and changed TERC's fiscal year to coincide with the calendar year;
- Received the Budget and Research Report, including a discussion of the key air quality research that still needs to be completed in the future to address various air quality issues, especially ground level ozone;
- Approved Resolution 1.64 and thereby authorized the Houston Advanced Research Center to engage person and/or entities to complete the following research projects:
 - **Project H51:** Reevaluate Transfer and Storage Related Emissions and Control Strategy Options for Selected Source Categories at an Estimated cost of \$325,000; Contractor: URS
 - **Project H57:** Conduct an Inventory of Boilers, Process Heaters, and Stationary Engines and Gas Turbines (Including Duct Burners) at Minor Sources Of NOx at an Estimated cost of \$175,000; Contractor: ERG

- **Project H64:** Role of Biogenic Emissions in Dallas-Ft. Worth SIP Modeling at an Estimated cost of \$50,000; Contractor: Environ
 - **Project H65:** Event Emission Tracking, Transient High Ozone Event (THOE) Forecasting, and Reactivity-Based Modeling at an Estimated cost of \$120,000; Contractor: University of North Carolina, UT-Austin
 - **Project H66.HDD:** Heavy Duty Diesel Emissions Control Strategies at an Estimated cost of \$100,000; Contractor: ERG
 - **Project H66.SGU:** Emissions Inventory Verification Study on Small Electric Power Generating Units in the Houston Region at an Estimated cost of \$35,000; Contractor: ERG
 - **Project H66.LEV:** Further Evaluation of the NOx Emission Effects of Adopting the California LEV II Program at an Estimated cost of \$40,000; Contractor: ERG
 - **Project H67:** Emissions from Industrial Storage Tanks and Wastewater Facilities at an Estimated cost of \$200,000; Contractor: TBD
 - **Project H68:** NOx Emission Factors for Compressor Engines at an Estimated cost of \$100,000; Contractor: TBD
 - **Project H44.D:** Continued Satellite Data Assimilation and Modeling Support at an Estimated cost of \$80,000; Contractor: University of Alabama at Huntsville
 - **Project H45.C:** East Texas Air Quality (ETAQ) Forecasting Project at an Estimated cost of \$200,000; Contractor: University of Houston
 - **Project H45.D:** Real-Time Meteorological Modeling and Forecasting at an Estimated cost of \$160,000; Contractor: Texas A&M University
 - **Project H59:** 4DVar Data Assimilation at an Estimated cost of \$100,000; Contractor: TBD
 - **Project H60:** Regional Transport Modeling for East Texas at an Estimated cost of \$390,000; Contractor: University of Houston and others
 - **Project H61:** Diagnostic Modeling and Data Analyses of the Summer 2005 Data of the NETPS and SETTS Field Studies at an Estimated cost of \$180,000; Contractor: University of Alabama at Huntsville
 - **Project H62:** Design of an Extended Tetroon and Aircraft Study at an Estimated cost of \$75,000; Contractor: Battelle
 - **Project H63:** Aircraft Measurements in Support of East Texas Transport Studies at an Estimated cost of \$500,000; Contractor: TBD
- The Board directed its Executive Director and HARC to timely complete all of the SIP related projects;
 - Approved Resolution 1.65 and authorized the Houston Advanced Research Center to engage Texas A&M University to complete a research project regarding renewable energy supplies in accordance with HB2129;
 - Received the New Technology Research and Development Program Plan and discussed the necessity of implementing this program in partnership with the TCEQ, EPA, engine manufacturers, technology vendors, states, technology experts and the users of diesel fueled vehicles and equipment to assure that all legislative mandates are achieved through this program;

- Approved Resolution 1.66 and authorized the use of \$2.0 million during the FY06 and FY07 biennium in NTRD funds for air quality research as directed by the relevant state statutes, including up to \$1.5 million in FY06;
- Approved Resolution 1.67 and authorized the Houston Advanced Research Center to engage persons and/or entities to complete the Diesel Database and Technology Assessment Project at a cost not to exceed \$300,000;
- Approved Resolution 1.68 and authorized HARC to engage Dr. Michael Walsh to assist in the development of TERC's Strategic Plan; and
- Directed the Executive Director to work with Board Members to schedule the next meeting in late November or early December in Dallas.

The regular meeting of the Board of Directors adjourned at 4:00 p.m.

Attachment

**TEXAS ENVIRONMENTAL RESEARCH CONSORTIUM
BOARD OF DIRECTORS MEETING**

THURSDAY, SEPTEMBER 15, 2005
2:00 – 4:00 P.M.

CHAIRMAN LABOON'S OFFICE, 600 TRAVIS STREET, SUITE 3500, HOUSTON, TEXAS

AGENDA

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| I. | CONVENING OF MEETING AND INTRODUCTIONS | Chairman Bruce LaBoon |
| II. | BUDGET AND ADMINISTRATION | Directors |
| A. | Consideration and Approval of the Minutes of the June 16, 2005 Board of Directors' Meeting (John Hall) | |
| B. | Consideration and Adoption of Resolution 1.58 Authorizing Chairman LaBoon to Execute a New Contract with the Houston Advanced Research Center (Todd Mitchell, John Hall) | Directors |
| C. | Consideration and Adoption of Resolution 1.59 Authorizing Chairman LaBoon to Execute Contracts with George Beatty and Associates and John Hall Public Affairs (Chairman LaBoon) | Directors |
| D. | Consideration and Adoption of Resolution 1.60 Authorizing the Executive Director to Finalize a Contract with Locke Liddell & Sapp LLP for Office Space and Administrative Staff Support (John Hall) | Directors |
| E. | Consideration and Adoption of Resolution 1.61 relating to TERC's Conflict of Interest Policy (John Hall) | Directors |
| F. | Consideration and Adoption of Resolution 1.62 Authorizing Chairman LaBoon to Sign Checks up to \$30,000 Without Second Signature | Directors |
| G. | Consideration and Adoption of Resolution 1.63 Regarding Alignment of TERC's Fiscal Year with the Calendar Year (John Hall) | Directors |

III. AIR QUALITY RESEARCH

- A. Consideration and Discussion of the Budget and Research Report (Dr. Jim Lester, Dr. Jay Olaguer, John Hall) Directors
- B. Consideration and Adoption of Resolution 1.64 Authorizing the Houston Advanced Research Center to Engage Persons and/or Entities to Complete Various Research Projects (Jim Lester, Jay Olaguer, John Hall) Directors
- C. Consideration and Adoption of Resolution 1.65 Authorizing the Houston Advanced Research Center to Engage Texas A&M University to Complete Research Project Regarding Renewable Energy Supplies in Accordance with HB2129 (Jim Lester, Jay Olaguer, John Hall) Directors

IV. NEW TECHNOLOGY RESEARCH AND DEVELOPMENT PROGRAM

- A. Consideration and Discussion of the New Technology Research and Development Program Report (John Hall, Rich Haut, George Beatty) Directors
- B. Consideration and Adoption of Resolution 1.66 Authorizing the Use of Up to \$1.5 Million of the NTRD funds for Air Quality Research in Accordance with the State Statutes Adopted During the 77th, 78th and 79th Legislative Sessions (John Hall) Directors
- C. Consideration and Adoption of Resolution 1.67, Authorizing the Houston Advanced Research Center to Engage Persons and/or Entities to Complete NTRD Data Base and Related Technology Assessment (John Hall) Directors

V. MISCELLANEOUS

- A. Scheduling of Next Meeting Directors
- B. Adjournment (4:00 P.M.) Directors

FY 04/05 Project Budget

	Number of Projects	Funds Committed	Total Fund Source	Uncommitted Funds	Percent Uncommitted Funds
Completed Projects	20	\$3,344,186	\$6,091,422	\$73,797	1.21%
Active Projects	8	\$2,414,159			
Pending Projects	1	\$63,780			

	Full Costs	Sub-contract Costs
HGA Budget	\$1,123,112	\$880,464
DFW Budget	\$1,521,160	\$1,192,513
2005 Field Study	\$3,114,073	\$2,441,278
Pending Projects	\$63,780	\$50,000
Reserved for Contracts	\$195,500	\$195,500
Sub-Total	\$6,017,625	\$4,759,755
Total Available	\$6,091,422	\$4,817,608
Uncommitted	\$73,797	\$57,853

Completed FY 04/05 Projects

Project Number	Project Title	Contractor	Full Costs	Sub-contract Costs
H12.2004.8HRA.T1	A Conceptual Model for 8-Hour Ozone Exceedances in East Texas	TAMU	\$58,127	\$45,569
H12.2004.8HRB.T1	Role of Modeling Assumptions in the Houston Mid-Course Review and Impacts on the Sensitivity of 1-Hour	UT/UH/UNC	\$716,356	\$561,587
H12.2004.EE.T1	Survey of Technological and Other Measures to Control HRVOC Event Emissions	UT-Austin	\$159,072	\$124,704
H17.2004.A.T1 Add-on	Urban Heat Island Modeling	U. of Houston	\$31,581	\$24,758
H18.2004.A.T1 Add-on	Locomotive Emissions	ERG	\$27,317	\$21,416
H22.2005.A	Permit Data for Maximum Release Levels	URS	\$76,299	\$59,815
H31.2004.T1 (Phase 1 A&B)	Survey and Demonstration of Monitoring Technology for Houston Industrial Emissions	Environ	\$139,804	\$109,600
H35.2004.T1	Transport Contributions of Out-of-State Sources to East Texas Ozone	Environ	\$204,093	\$159,999
H36.2004.T1	Ozone Precursor Control Strategies in Texas vs. Out-of-State	Environ	\$70,154	\$54,997
H37.2004	Evaluation of the NOx Emission Effects of Adopting California LEV II Program	ERG	\$11,241	\$8,812
H39.2004	TexAQS II Tetroon Campaign	Battelle	\$336,352	\$263,683
H40.T121.2004	NOx from Oil and Gas Production	ERG	\$116,716	\$91,500
H41.2004 (Part I)	Analysis of EPA Policy Development on the 8 Hour Ozone and PM 2.5 Standards	John Seitz	\$63,780	\$50,000
H42.2004.T1	Analysis of 2010 On-Road and Non-Road Emission Reductions	Environ	\$62,394	\$48,914
H43.2004	Diesel Construction Equipment	ERG	\$227,396	\$178,267
H44.T117.2004.T1	Met and Sci Planning and Support for TexAQS II	UAH \$309,103 SEAMS \$36,431	\$406,452	\$318,638
H44C.2004	Aircraft and Instrumentation Support for TexAQS II	TVA	\$263,781	\$206,791
H46.T28.2004	New E. Texas Land Cover Data	UT/CSR	\$191,339	\$150,000
H56.2005	Deployment of Two C-Band Radars to DFW and HGB for the 2005 Ozone Season	TAMU	\$171,677	\$134,586
H58.2005 A&B	Science Policy Synthesis	Environ, Harvey Jeffries	\$10,256	\$8,040
Total:			\$3,344,186	\$2,621,675

Active FY 04/05 Projects

Project Number	Project Title	Contractor	Completion Date	Full Costs	Sub-contract Costs
H41.2004 (Part II)	Analysis of EPA Policy Development Ozone and PM 2.5 Standards	John Seitz	12/31/2005	\$31,890	\$25,000
H45.S.2004.T1	Modeling Strategy in Support of TexAQS-II and 8-Hour Ozone Assessment	UH \$455,085 TAMU \$329,995	2/28/2006	\$1,077,977	\$845,080
H48.T3.2004.T1	Aircraft Measurements of Highly Reactive Volatile Organic Compounds Using Proton Transfer Reaction Mass Spectrometry	TAMU	12/31/2005	\$333,567	\$261,500
H54	The Potential Impact of Solvent Emission Controls in East Texas/Developing SOW	PCA Services	3/31/2006	\$191,339	\$150,000
H57	Inventory of Boilers, Process Heaters, and Stationary Engines and Gas Turbines (including duct burners) at Minor Sources of NOx/Developing SOW while waiting for funding (\$175,000)	ERG	2/15/2006	\$223,229	\$175,000
H60	Regional Transport	UH, UNC, Environ	4/30/2006	\$497,481	\$390,000
H68	NOx Emissions from Compressors	ERG	4/30/2006	\$31,890	\$25,000
H70	Annual Report	Dawson		\$26,787	\$21,000
Total:				\$2,414,159	\$1,892,580

Pending FY 04/05 Projects

Project Number	Project Title	Contractor	Full Costs	Sub-contract Costs
H52	Houston Exposure to Air Toxics Study (HEATS)	NUARTC	\$63,780	\$50,000
Total:			\$63,780	\$50,000

FY 2006 Project Budget

	Number of Projects	Funds Committed
Completed Projects	0	\$0
Active Projects	3	\$579,758
Pending Projects	12	\$2,112,895
Total Projects	15	\$2,692,653

Active FY 2006 Projects

Project Number	Project Title	Contractor	Completion Date	Full Costs	Sub-contract Costs
H51	Reevaluation of Transfer and Storage Related Emissions and Control Strategy Options for Selected Source Categories	URS	5/15/2006	\$322,088	\$250,000
H55	Enhanced Land Surface Characterization	UT/CSR	8/31/2006	\$128,835	\$100,000
H59	4DVar Data Assimilation	Virginia Tech	8/31/2006	\$128,835	\$100,000
Total:				\$579,758	\$450,000

Pending FY 2006 Projects

Project Number	Project Title	Contractor	Full Costs	Sub-contract Costs
H44.D	Continued Satellite Data Assimilation and Modeling Support	UAH	\$51,534	\$40,000*
H45.C	East Texas Air Quality (ETAQ) Forecasting Project	UH	\$219,020	\$170,000*
H45.D	Real Time Meteorology and Forecasting	TAMU	\$115,952	\$90,000*
H50	Analysis of Potential Air Quality Improvements from Railroad Modifications	ERG	\$193,253	\$150,000
H53	Reconciliation of Point Source Inventories Using Remote Sensing and SODAR Techniques	UH	\$219,020	\$170,000
H61	Diagnostic Modeling and Data Analyses of the Summer 2005 NETPS	UAH	\$103,068	\$80,000*
H62	Development of Data from the 2005 SETTS Project	Battelle	\$57,976	\$45,000*
H63	Aircraft Measurements in support of East Texas Transport Studies	TBD	\$644,175	\$500,000
H65	Event Emission Tracking, THOE Forecasting, and Reactivity Based Modeling	UNC, UT	\$154,602	\$120,000
H66.LEV	Further Evaluation of the NOx Effects of Adopting the California LEV II Program	ERG	\$51,534	\$40,000
H66.SGU	Emissions Inventory Verification Study on Small Electric Power Generating Units in the Houston Region	ERG	\$45,092	\$35,000
H67	Emissions From Industrial Storage Tanks and Wastewater	TBD	\$257,670	\$200,000
Total:			\$2,112,895	\$1,640,000

*Project costs were reduced as indicated on the following page per SAC recommendations.

Cancelled FY 2006 Projects

Project Number	Project Title	Contractor	Sub-contract Costs	Reason for cancellation
H64	Role of Biogenics in DFW SIP Modeling	Environ	\$50,000	Unlikely to be completed by SIP deadline.
H66.HDD	Heavy Duty Diesel Emissions Control Strategies	ERG	\$100,000	Moved to NTRD

FY 2006 Project Cost Reductions Per SAC

Project Number	Project Title	Contractor	Original Sub-contract Costs	Revised Sub-contract Costs
H44.D	Continued Satellite Data Assimilation and Modeling Support	UAH	\$80,000	\$40,000
H45.C	East Texas Air Quality (ETAQ) Forecasting Project	UH	\$200,000	\$170,000
H45.D	Real Time Meteorology and Forecasting	TAMU	\$160,000	\$90,000
H61	Diagnostic Modeling and Data Analyses of the Summer 2005 NETPS	UAH	\$180,000	\$80,000
H62	Development of Data from the 2005 SETTS Project	Battelle	\$75,000	\$45,000