TEXAS ENVIRONMENTAL RESEARCH CONSORTIUM

environmental improvement through research and science

RESOLUTION 2.12

Whereas the County Judge of Harris County has been a member of the Board of Directors of the Texas Environmental Research Consortium (TERC) since its inception in 2002; and

Whereas the Honorable Robert Eckels recently resigned from the position of County Judge of Harris County; and

Whereas the Honorable Ed Emmett has been elected as County Judge of Harris County; and

Whereas Judge Emmett has expressed a genuine willingness to serve on TERC's Board of Directors.

Now, Therefore, Be It Resolved that the Honorable Ed Emmett is hereby elected to serve as a member of the Board of Directors of the Texas Environmental Research Consortium.

Adopted and Approved this 14th day of June 2007.

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Kelly Frels, Chairman

RESOLUTION 2.13

Whereas the Texas Environmental Research Consortium (TERC) is committed to pursuing a research agenda that analyzes the significant data collected during the Texas Air Quality Study II; and

Whereas preliminary analyses indicate the continuing need to improve the emissions inventory in the Houston-Galveston-Brazoria nonattainment area, particularly with regard to Highly Reactive VOCs and the key sources of these pollutants; and

Whereas TERC's Science Advisory Committee and the staff of the Texas Commission on Environmental Quality have recommended the completion of air quality research projects in these areas.

Now, Therefore, Be It Resolved that the Board of Directors of the Texas Environmental Research Consortium hereby authorizes the Houston Advanced Research Center to engage persons and/or entities to complete the following air quality research projects:

- Research Project H83, relating to Effects of Process Type and Chemical Emissions of Flaring on Air Emissions in the Houston-Galveston Area at a budgeted cost of $ 80,738; and
- Research Project H85, relating to Top-Down Emissions Verification (TDEV) of Houston Ship Channel Sources during TexAQS II at a budgeted cost of $50,000.

Adopted and Approved this 14th day of June 2007.

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Kelly Frels, Chairman

PROJECT NUMBER: H83
TITLE: Effects of Process Type and Speciation of Flaring on Air Emissions in the Houston-Galveston Area
INVESTIGATORS: Lamar University
DURATION: May 1, 2007 – August 31, 2007
PROJECT COST: $80,738
PROJECT DESCRIPTION:
This project will analyze data from previous TERC projects and perform computer simulations to achieve the following objectives:

- To investigate flare mass flow rate/chemical species as a function of process plant type (Refinery/Olefin/Polymer), Feedstock (General Hydrocarbon/Naphtha/ Ethane/Propane, etc.) and operation mode (Emergency/Start up/Shutdown/Normal);
- To infer flare combustion efficiency and emission species based on designed plant/flare operating conditions (mass flow, flare maintenance, etc.);
- To assess the impact of the flare species/flow rates/flare design on the Point Source Emissions Inventory; and
- To study possible intermediates/by-products (e.g., formaldehyde).

(N.B. This study was already initiated in compliance with TERC Board Resolution 2.00, specifically requiring development of an improved emission inventory for formaldehyde.)

PROJECT NUMBER: H85
TITLE: Top-Down Emissions Verification (TDEV) of Houston Ship Channel Sources during TexAQS II
INVESTIGATORS: University of Alabama at Hunstville
DURATION: June 15, 2007 – August 31, 2007 (study will extend beyond FY2007)
PROJECT COST: $50,000
PROJECT DESCRIPTION:
The goal of this study is to improve Houston VOC emissions inventories (including the inference of direct formaldehyde emissions) based on Solar Occultation Flux (SOF) and aircraft measurements of NOx, VOCs, ozone, and other secondary products of VOC-NOx chemistry, obtained on September 13, 2006 during TexAQS II. The study will complement an ongoing project by the TCEQ deploying the Large Eddy Simulation model with chemistry (LES-chem) to perform TDEV of petrochemical sources in Houston This study will examine aircraft data both close-in and farther downwind of the sources to reconcile, in particular, observed concentrations of ozone, formaldehyde, and other secondary products of Houston Ship Channel (HSC) emissions with SOF data and the most current VOC inventories. For this purpose, the study will utilize an emissions inventory based on the TCEQ's 2006 special inventory for point sources. Adjustments to this inventory will be recommended based on simulations with a Lagrangian Reactive Plume Model (LRPM) equipped with the CB-05 chemical mechanism. The LRPM will be used to conduct analysis of SOF, aircraft, and meteorological data to characterize VOC emissions, and explain ozone, reactive nitrogen, and secondary formaldehyde production in the measured pollution plumes.

TEXAS ENVIRONMENTAL RESEARCH CONSORTIUM

environmental improvement through research and science

RESOLUTION 2.14

Whereas the Board of Directors of the Texas Environmental Research Consortium (TERC) previously authorized the Houston Advanced Research Center (HARC) to issue a Request for Qualifications (RFG) for the purpose of soliciting additional organizations and consortia to serve as TERC Research Teams under the Air Quality Research Program; and

Whereas HARC timely issued the RFQ as authorized and received applications from a number of qualified entities to serve as a TERC's Air Quality Research Team Members; and

Whereas the applications have been carefully evaluated by HARC and TERC's Science Advisory Committee, in consultations with the Executive Director.

Now, Therefore, Be It Resolved that the Board of Directors of the Texas Environmental Research Consortium hereby authorizes the Houston Advanced Research Center to appoint the following organizations and enter into contracts with the following entities so that they may serve as TERC's additional Research Teams:

- Eastern Research Group;
- Georgia Institute of Technology;
- ICF;
- MACTEC;
- Pechan;
- Washington State University;
- Aerodyne Research;
- Baylor University;
- Chalmers University of Technology; and
- Desert Research Institute.

Adopted and Approved this 14th day of June 2007.

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Kelly Frels, Chairman

The following new research teams have been unconditionally qualified by the SAC:

Eastern Research Group, Inc. (ERG)
ERG has been qualified in the following areas:

- Modeling and Assessment of Mobile Source Emissions.

ERG's outstanding capabilities and experience include the following:

- Providing support for MOBILE model updates and the development of the MOVES model. ERG is updating the California Air Resources Board's (ARB) on-road and non-road emission models (EMFAC and OFFROAD), modifying user interfaces and computational algorithms;
- Lead contractor for TCEQ's TexAER project;
- Performed a detailed evaluation of all federal and state regulations impacting emissions for TCEQ's Rate of Further Progress assessments for non-road sources;
- Involved with the analysis and development of several of the State's (Texas) key mobile source programs, including the current Motorist Choice I/M program, the TxLED fuel program, and the TERP;
- Survey approach relies upon detailed, bottom-up surveys of equipment operators, including phone and in-person interviews, using on-site observations and other information for data validation;
- Range of emissions inventory and modeling support activities, from simple emissions modeling exercises to surveys of previously unevaluated, difficult-to-quantify sources such as non-road construction and industrial equipment;
- Performed extensive activity and emissions forecasting and backcasting using state-specific economic data from the Texas REMI model;
- A leader in vehicle emission measurements;
- Capability to conduct field instrumentation using portable emission monitoring;
- Completed, with NuStats, of in-use emissions study from light-duty vehicles for USEPA; and
- Strong working relationship with many industrial organizations and entities, such as the Port of Houston and the rail industry, has facilitated work on activity characterization and emissions modeling associated with those sources.

Georgia Institute of Technology (Georgia Tech)
Georgia Tech has been qualified in the following areas:

- Air Quality Modeling Research.

Georgia Tech's outstanding capabilities and experience include the following:

- Adaptive grid modeling;
- Variable time step modeling; and
- Automated sensitivity techniques (DDM).

ICF

ICF has been qualified in the following areas:

- Modeling and Assessment of Mobile Source Emissions; and
- Urban, Regional, and Transportation Planning Related to Air Quality Issues.

ICF's outstanding capabilities and experience include the following:

- Instrumental in development of EPA's MOBILE6;
- Development of greenhouse gas emission factors for MOVES;
- Application of MOBILE6 and NONROAD for calculation of emission benefits for a number of clients;
- Development of guidance documents on preparing commercial port emission inventories, including ocean-going vessels, harbor craft, cargo handling equipment, rail and trucks servicing ports;
- Designed and surveyed over 15,000 California households on recreational off-highway vehicle use on public lands in California;
- Developed surveys for public fleets for CARB's diesel emission reduction program;
- Developed emission factors for Mexican trucks that would come over the border as part of NAFTA;
- Developed various mitigation measures for number of clients on emission reductions for heavy-duty fleets and off-road equipment;
- Examined the effects of gasoline fuel sulfur levels on OBD systems;
- Helps states, metropolitan planning organizations (MPOs), and regional organizations in examining the implications of transportation and land use plans on air pollutant emissions - supported development of national guidance and resource documents;
- Transportation conformity analysis - ICF developed and taught the National Transit Institute (NTI) course on "Introduction to Transportation Air Quality Conformity" from 2001 to 2005. Also developed resource guides on "Rural Conformity: A Survey of Practice", "Methodologies for Regional Emissions Analysis in Small Urban and Rural Areas;
- Integrated land use and air quality planning – analysis of alternative land use scenarios and the impacts of urban design changes on travel behavior;
- Prime contractor with EPA's Development, Community, and Environment Division - manages a team of specialized consultants that provides focused technical and policy assistance to states and communities in overcoming barriers to implementing smart growth and related growth and environmental challenges;
- Conducted national-level studies on interactions between land use, transportation, and air quality, including a resource book "Our Built and Natural Environments: A Technical Review of the Interactions between Land Use, Transportation, and Environmental Quality" and an assessment of transportation modeling practices that incorporate land use factors for US EPA;

- Experience applying economic analysis models such as IMPLAN and REMI in order to forecast the direct and indirect employment and economic impacts associated with major investments in transportation, utilities, and other infrastructure;
- Regional energy analysis modeling capability with Energy 2020; and
- Analyzed the implications of the New York State Energy plan on transportation planning within the state, which included development of inventories of GHG emissions for each metropolitan area, and an analysis of potential GHG reduction strategies.

MACTEC

MACTEC has been qualified in the following areas:

- Emission Processes and Inventories for Point and Area Sources.

MACTEC's outstanding capabilities and experience include the following:

- As the fifth largest air pollution engineering and consulting company in the United States, MACTEC has extensive experience in managing contracts similar to the proposed program;
- MACTEC is currently the US Environmental Protection Agency's (USEPA) prime contractor for reengineering the emissions factor development process to upgrade AP-42;
- MACTEC is also developing an electronic reporting tool to allow source test data to be collected in a consistent manner which will allow its use for developing emissions factors, developing source test methods for measuring PM2.5 emissions, and validating and improving dispersion models including AERMOD;
- MACTEC has prepared emission inventory estimates for USEPA's National Emissions Inventory (NEI) for several source categories and supported the Emissions Inventory Improvement Program (EIIP) committees for fine particulates, area sources, and emissions modeling; and
- MACTEC is producing SMOKE growth and control factors and NEI Input Format (NIF) inventories for area, non-energy point, and non-road source emissions.

Pechan

Pechan has been qualified in the following areas:

- Emission Processes and Inventories for Point and Area Sources; and
- Modeling and Assessment of Mobile Source Emissions.

Pechan's outstanding capabilities and experience include the following:

- Pechan has developed inventories for individual facilities, counties, States, multi-State regions, and the nation that have been used for a variety of applications including policy analysis, regional air quality modeling, and litigation;
- Pechan has experience and knowledge of several industrial sectors that are important contributors in the Dallas-Ft;
- Pechan has worked several years with EPA developing and using emissions estimation techniques (e.g., AP-42);

- Pechan is highly skilled with emissions processing software (SMOKE) as well as process monitoring and measurement-based emissions estimation techniques;
- Pechan currently supports EPA in preparing the 2002 NEI that EPA uses as the starting point for national, regional, and local studies to evaluate regulatory programs for controlling air pollution;
- Pechan has extensive experience in estimating mobile source emissions (on-road and non-road);
- Pechan is the primary technical support contractor for the EPA National Emissions Inventory (NEI);
- Pechan has populated EPA's National Mobile Inventory Model (NMIM) model with onroad and nonroad emission modeling inputs based on inputs provided by the State and local agencies;
- Pechan has MOBILE emissions modeling capabilities; and
- Pechan developed a Strategic Work Plan for Air Toxics Research for the Federal Highway Administration (FHWA) and performing an FHWA-sponsored study on Estimating the On-Road Traffic Contribution to Particulate Matter and Mobile Source Air Toxic Pollution.

Washington State University (WSU)
WSU has been qualified in the following areas:

- Meteorology;
- Air Monitoring Research and Ambient Measurement; and
- Air Quality Modeling Research.

In addition, WSU has been conditionally qualified in the following areas:

- Atmospheric Chemistry of Ozone, PM, Regional Haze, and Air Toxics
    - modeling analysis.

WSU's outstanding capabilities and experience include the following:

- Computational Fluid Dynamics (FLUENT);
- Participation in Joint Urban 2003 Dispersion Study in Oklahoma City;
- TRAVERT automated profiling system for SF6 tracers;
- Tracer ratio techniques for emission rate measurements;
- Measurement of VOCs (grab sampling, GC-MS, PTR-MS);
- Participation in many large scale air quality experiments, including TexAQS II, and experience on NOAA and DOE aircraft platforms;
- Measurement of biogenic hydrocarbon emissions using micrometeorological techniques;
- Optical spectroscopy and development of remote sensing instruments for satellite based measurements of air pollutants (e.g., OMI) and ground-based long-path measurement techniques (e.g., DOAS) for NO_2, SO_2, O_3, ammonia, and formaldehyde;
- Airborne and ground-based observations of aerosol physico-chemical properties;

- Real-time forecasting with AIRPACT-3 (MM5/SMOKE/CMAQ);
- Smoke dispersion modeling (CLEARSKY);
- Regional windblown dust modeling;
- Modeling with CALMET/CALGRID;
- Satellite data assimilation;
- Global atmospheric chemistry modeling (MOZART2, PCM); and
- Neighborhood scale transport.

The following new research teams have been conditionally qualified by the SAC, in that they are restricted to specific sub-areas not explicitly stated in the solicitations:

Aerodyne Research, Inc.
Aerodyne has been conditionally qualified in the following areas:
- Air Monitoring Research and Ambient Measurement
    - optical detection of ambient trace gases
    - single particle mass spectrometry.

Baylor University
Baylor has been conditionally qualified in the following areas:
- Air Monitoring Research and Ambient Measurement
    - aircraft studies.

Chalmers University of Technology
Chalmers has been conditionally qualified in the following areas:
- Air Monitoring Research and Ambient Measurement
    - Solar Occultation Flux (SOF) measurements.

Desert Research Institute (DRI)
DRI has been conditionally qualified in the following areas:
- Atmospheric Chemistry of Ozone, PM, Regional Haze, and Air Toxics
    - chemical mechanisms
    - modeling analysis
- Air Monitoring Research and Ambient Measurement
    - measurement and analysis of aerosol properties and composition.

The following research teams have previously been qualified by the SAC, but have expanded their composition and capabilities in the designated areas:

Texas A&M University (TAMU)
TAMU has been qualified in the following areas:

- Meteorology;
- Air Monitoring Research and Ambient Measurement; and
- Air Quality Modeling Research.

In addition, TAMU has been conditionally qualified in the following areas:

- Atmospheric Chemistry of Ozone, PM, Regional Haze, and Air Toxics
    - modeling analysis.

University of Houston (UH)
UH has been qualified in the following areas:

- Urban, Regional, and Transportation Planning Related to Air Quality Issues;
- Air Monitoring Research and Ambient Measurement;
- Air Quality Modeling Research; and
- Assessment of Efficacy of Emission Control Measures.

In addition, UH has been conditionally qualified in the following areas:

- Atmospheric Chemistry of Ozone, PM, Regional Haze, and Air Toxics
    - modeling analysis.

University of North Carolina (UNC)
UNC has been qualified in the following areas:

- Urban, Regional, and Transportation Planning Related to Air Quality Issues;
- Air Quality Modeling Research; and
- Assessment of Efficacy of Emission Control Measures.

In addition, UNC has been conditionally qualified in the following areas:

- Atmospheric Chemistry of Ozone, PM, Regional Haze, and Air Toxics
    - smog chambers
    - chemical mechanisms modeling analysis.

RESOLUTION 2.15

Whereas the Texas Environmental Research Consortium (TERC) has responsibility for administering the New Technology Research and Development (NTRD) Program to facilitate the development and verification of technologies to maximize NOx reductions from diesel fueled vehicles and equipment; and

Whereas TERC has not solicited technology proposals specifically related to hybrid vehicles and equipment; and

Whereas significant developments are underway that have the potential to improve the fuel economy of hybrid vehicles and thereby reduce NOx and various other pollutants.

Now, Therefore, Be It Resolved that the Board of Directors of the Texas Environmental Research Consortium hereby authorizes the Houston Advanced Research Center to develop and publish Request for Grant Assistance #12 to solicit proposals on Proof-of-Concept Testing to Evaluate NOx Reductions in Hybrid Truck and Bus Applications, subject to the approval of the Texas Commission on Environmental Quality..

Adopted and Approved this 14th day of June 2007.

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Kelly Frels, Chairman

Request for Grant Applications (RFGA-12)

by

The Texas Environmental Research Consortium (TERC)

and the Houston Advanced Research Center (HARC)

Proof-of-Concept Testing to Evaluate NOx Reductions in Hybrid Truck and Bus Applications

TBD, 2007

Applications are being requested for proof-of-concept testing of a hybrid powertrain in a class 4 through class 8 truck. Testing of hydraulic hybrid or hybrid electric trucks should focus on attainable emissions reductions based on appropriate mission profiles or drive cycles.

This request for grant applications is part of the State of Texas' New Technology Research and Development (NTRD) program. The (NTRD) program provides funds for projects related to reductions of oxides of nitrogen (NO_x). Projects funded by this program should advance technology that can be offered for sale in the state of Texas in less than five years after grant award.

In limited testing, hybrid drivetrains have shown to be capable of delivering significant emissions reductions of nitrogen oxides (NO_x), particulate matter (PM), hydrocarbons (HC) and carbon monoxide (CO) depending on the drive cycle or missions profile. Drive cycles that contain a significant portion of "stop-and-go" driving where, for instance, brake energy can be recovered for a subsequent acceleration can benefit greatly from hybridization. Avoiding high engine load conditions in transient driving conditions will reduce emissions.

Projects proposed in response to this RFGA should seek to quantify the emissions benefits of hybrid trucks compared to the same or similar trucks with a conventional drivetrain. Eligible projects will be limited to class 4 and higher trucks and must include a diesel engine as part of the hybrid drivetrain. Emissions testing should be performed under controlled conditions at an approved testing facility. Any proposed drive cycles or missions profiles must be approved by the NTRD grant manager.

It is anticipated that a total of $2,500,000 will be awarded for projects ranging from $100,000 to $500,000. A cost share equal to a minimum of 20% of the total project costs is required.

RESOLUTION 2.16

Whereas the current Bylaws of the Texas Environmental Research Consortium (TERC) authorizes the creation of an Executive Committee to act on behalf of TERC between regular meetings of the Board of Directors; and

Whereas the Board of Directors wishes to establish the Executive Committee as authorized in the Bylaws to assure timely consideration of various issues by the Board of Directors; and

Whereas it is prudent for the Executive Committee to be established in a timely manner; and

Whereas the Board of Directors also wishes to delegate certain restricted powers to the Executive Committee to act on behalf of TERC between regular meetings of the Board of Directors.

Now, Therefore, Be It Resolved that the Board of Directors of the Texas Environmental Research Consortium hereby establishes an Executive Committee which is to consist of Board Members that are selected by the Board of Directors at its June 14, 2007 meeting; and

Be It Therefore Further Resolved that the Executive Committee shall fully comply with TERC's Bylaws, relevant state and federal laws, TERC's Annual Operating Budget, the TCEQ-TERC contracts, the Strategic Plans for the Air Quality Research and the New Technology Research and Development Programs and Requests for Great Assistance (RFGA) regarding the NTRD Program.

Be It Therefore Further Resolved that the Executive Committee is delegated authority to take the following actions:

- Approve specific air quality research projects that are consistent with the Strategic Plan and budget for this program;
- Approve specific technology projects that are consistent with the Strategic Plan for this program and previously approved RFGAs; and
- Specific expenditures up to $50,000.

Be It Finally Resolved that the Executive Committee shall assume its duties beginning July 1, 2007,

Adopted and Approved this 14th day of June 2007.

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Kelly Frels, Chairman

TEXAS ENVIRONMENTAL RESEARCH CONSORTIUM

environmental improvement through research and science

MEMORANDUM

To: Chairman Kelly Frels
The Honorable Robert A. Eckels
The Honorable Bill White
The Honorable Chad Adams
The Honorable James Yarbrough
Dr. Jonathan Ward
Mr. Tom Leppert
Mr. Jim Marston

From: George Beatty
John Hall

Subject: Proposed Delegation of Authority to an Executive Committee by the TERC Board of Directors

Date: June 14, 2007

The existing Bylaws of the Texas Environmental Research Consortium (TERC) authorize the Board of Directors to establish an Executive Committee to act on behalf of the Board as appropriate between regular Board meetings. The Board has not utilized its authority in this area to date. A proposal to establish an Executive Committee of the TERC Board is proposed herein, along with delegation of limited authority to this Committee.

The Proposed Executive Committee

It is proposed that an Executive Committee of the TERC Board of Directors be created to include the Board Chairman, the Executive Director and two or three additional Board Members.

The Executive Committee, if established, could be convened as necessary by the Chairman between regular Board meetings. This committee would be required to conduct TERC's business in full compliance with the organization's Bylaws and policies, all applicable state and federal laws and the

TERC-TCEQ contracts. Minutes shall be taken at all meetings of the Executive Committee and promptly distributed to the full Board of Directors.

Delegated Authority to the Executive Committee

It is TERC's policy and procedure for Board decisions to be consistent with the following crucial documents:

- The Strategic Plans for TERC's Air Quality Research and New Technology Research and Development Programs, which are periodically updated;
- TERC's Annual Operating Budget;
- The TERC–TCEQ Contracts; and
- Requests for Grant Assistance regarding the NTRD Program.

It is recommended that the Strategic Plans, the budget, the TCEQ-TERC contracts, the TERC-HARC contract and concepts for technology projects be reviewed and approved by the full Board of Directors in the future. It is further recommended that the Executive Committee of the Board, when constituted, be delegated authority to finalize the following types of decisions:

- The approval of specific air quality research projects that are consistent with the Strategic Plan for the Air Quality Research Program and the budget targets to be included in future plans;
- Requests for grant assistance regarding the NTRD program that are consistent with the technology concepts previously approved by the Board and specific technology projects that are consistent with the Strategic Plan for the NTRD Program and TCEQ approved RFGAs; and
- Specific expenditures, unrelated to air quality research and technology projects, up to $50,000.

It is recommended that the Executive Committee delegation authority become effective on July 1, 2007.

TEXAS ENVIRONMENTAL RESEARCH CONSORTIUM

environmental improvement through research and science

RESOLUTION 2.17

Whereas the Texas Legislature has adopted Senate Bill 12 and the FY 2008 – 2009, Appropriation Bill to extend and fund the Texas Emission Reduction Plan (TERP) through 2013, and

Whereas, in extending the TERP, the Legislature also continued the Air Quality Research (AQR) and the New Technology Research and Development (NTRD) Programs that have been administered by the Texas Environmental Research Consortium (TERC), and

Whereas TERC is committed to continuing its stewardship of these program under contract with the Texas Commission on Environmental Quality (TCEQ) in accordance with SB12, the Appropriation Bill and various other relevant state statues; and

Whereas TERC's contracts with the TCEQ to administer these programs extends through the current biennium, which ends on August 31, 2007.

Now, Therefore, Be It Resolved that the Board of Directors of the Texas Environmental Research Consortium hereby authorizes its Executive Director and the Houston Advanced Research Center to timely submit proposals to the TCEQ to continue its administration of the AQR and the NTRD Programs.

Adopted and Approved this 14th day of June 2007.

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Kelly Frels, Chairman

TEXAS ENVIRONMENTAL RESEARCH CONSORTIUM

environmental improvement through research and science

RESOLUTION 2.18

Whereas the Texas Environmental Research Consortium (TERC) has engaged the Houston Advanced Research Center (HARC) to serve as its Research Management Organization for the Air Quality Research (AQR) and the New Technology Research and Development (NTRD) Programs through August 31, 2010; and

Whereas HARC, in conjunction with the Executive Director; is responsible for the implementation of TERC's AQR and NTRD Programs in accordance with the TCEQ-TERC contracts, TERC's Bylaws and relevant state and federal laws; and

Whereas the TERC-HARC contract calls for the TERC Board to complete a performance review of HARC as Research Management Organization every two years; and

Whereas Board Policy requires the completion of a performance review of HARC at its next regularly scheduled Board meeting; and

Whereas it has been the practice of the Board to appoint a subcommittee of Board Members to work with the Executive Director to coordinate the performance review of HARC.

Now, Therefore, Be It Resolved that the Board of Directors of the Texas Environmental Research Consortium hereby appoints a subcommittee of the Board Members as selected at the June 14, 2007 Board of Directors meeting to coordinate the completion of the performance review of HARC by September 15, 2007.

Adopted and Approved this 14th day of June 2007.

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Kelly Frels, Chairman