# Neighborhood Air Toxics Modeling Project
# For
# Houston and Corpus Christi – Stage 1

## Quarterly Report for the Period

## April 1, 2009 through June 30, 2009

**Submitted to**

**The Honorable Janis Graham Jack**
**US District Court Judge, Southern District of Texas**
**Corpus Christi, Texas**

**Submitted by**

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**and**
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**August 13, 2009**

## I. Introduction

On February 1, 2008, the Court entered an Order (D.E. 981, Order (pp.1, 7-11)) regarding unclaimed settlement funds in Lease Oil Antitrust Litigation (No.11) Docket No. MDL No.1206. The Court requested a detailed project proposal from Dr. David Allen, the Gertz Regents Professor in Chemical Engineering and the Director of the Center for Energy and Environmental Resources at The University of Texas at Austin (UT Austin), regarding the use of $9,643,134.80 in the Settlement Fund. The proposal was for a project titled "Neighborhood Air Toxics Modeling Project for Houston and Corpus Christi" (hereinafter "Air Toxics Project"). The Air Toxics Project was proposed in two stages. In Stage 1, UT Austin will develop, apply, demonstrate and make publicly available, neighborhood-scale air quality modeling tools for toxic air pollutants in the Corpus Christi, Texas and will extend the operation of the air quality monitoring network in Corpus Christi, Texas. In Stage 2, subject to the availability of funds, UT Austin will extend the modeling to the Houston, Texas ship channel region, develop a mobile monitoring station that can be deployed in Corpus Christi and in other regions of Texas and/or further extend the operating life of the existing stationary network in the same or modified spatial configuration. If a mobile monitoring station is deployed, it will be used to map the spatial distributions of air pollutant concentrations and to inform the public. All ambient monitoring results will be used in synergy with the neighborhood-scale models to improve the understanding of emissions and the spatial distribution of air toxics in the region.

On February 21, 2008, the US District Court for the Southern District of Texas issued an order to the Clerk of the Court to distribute funds in the amount of $4,586,014.92, plus accrued interest, to UT Austin for the purposes of implementing Stage 1 of the Air Toxics Project as described in the detailed proposal submitted to the Court by UT Austin on February 15, 2008 (D.E. 998).

Under the Order to Distribute Funds in MDL No. 1206, on March 3, 2008, at the direction of the Settlement Administrator, $4,602,598.66 was disbursed to UT Austin for Stage 1 of the Project. This amount includes the interest accrued prior to distribution from the MDL No. 1206 Settlement Fund. Stage 2 funding has not been awarded by the US District Court.

This Stage 1 quarterly report has been prepared pursuant to the requirements of the Air Toxics Project and is being submitted to the US District Court.

## II. Air Toxics Project – Stage 1 - Phase 1A Overview

### A. Scope and Objectives

The objective of Stage I - Phase 1A of The Air Toxics Project for UT Austin and its subcontractors is to develop, apply, and make publicly available, neighborhood-scale air quality modeling tools for toxic air pollutants in the Corpus Christi area. Stage 1 – Phase 1A of the Air Toxics Project will provide significant and discernible environmental benefits to the Corpus Christi area by providing analyses of air pollutant concentrations experienced by the community, and providing post-event evaluation of pollutants emitted during releases. UT Austin is performing this work in collaboration with subcontractors at Texas A&M University and ENVIRON International Corporation.

**B.** Major Tasks

The major tasks for Stage I, Phase IA include:

1. *Development of a conceptual model of meteorological conditions likely to lead to high concentrations of air toxics in the Corpus Christi area.*
   This task will identify meteorological conditions (seasons, temperatures, wind speeds, wind directions, frontal passages and other parameters) and air quality conditions that are most likely to lead to high concentrations of air toxics in populated regions of Corpus Christi. The conceptual model will be used to identify historical periods that can be used to develop and test air toxics modeling systems for Corpus Christi.
2. *Development of emissions inventory and land cover input information.*
   These data will be developed at a spatial resolution that will allow the neighborhood scale air quality models to operate with a resolution of a few hundred meters.
3. *Application of dispersion models to estimate the neighborhood-scale concentrations of air toxics in Corpus Christi.*
   Dispersion models represent the current best practice for estimating air toxics concentrations in urban areas. Using emissions, land cover, and meteorological data, a dispersion model will be used to estimate concentrations of air toxics in plumes from sources identified in the emissions inventory and during historical meteorological conditions identified during the conceptual model development
4. *Development of improved meteorological models of air pollutant dispersion in the Corpus Christi area.*
   A more rigorous combined plume and gridded model able to characterize the complex coastal meteorology in the region will also be developed and applied in order to address uncertainties in predicted concentrations obtained from the dispersion model. A state-of-the-science meteorological model will be used to simulate the three-dimensional weather conditions in the Corpus Christi area, with a focus on the replication of historical weather patterns identified in the conceptual model. Simulation of local circulation features will be carefully assessed, and additional analyses will customize the model for best performance in the Corpus Christi area.
5. *Development of combined gridded and plume models to estimate neighborhood-scale concentrations of air toxics in Corpus Christi:*
   The combined gridded and plume model will predict three-dimensional concentrations of selected air toxic pollutants throughout the Corpus Christi area using the meteorological modeling, emission inventory and land cover data described above. An evaluation framework will be developed to compare predicted and observed concentrations during specific historical episodes and to refine the modeling approach and performance.
6. *Application of the combined dispersion and gridded modeling tools to estimate concentrations of air toxics in Corpus Christi.*
   The combined dispersion and gridded modeling tools will be applied to estimate concentrations of air toxics in Corpus Christi under a variety of meteorological conditions for routine emissions and when monitoring data has indicated higher concentrations of air toxics than would be expected under routine emission conditions; spatial mappings of the estimated air toxics concentrations will be made available on a Project website.

C. Project Milestone Schedule

UT Austin is currently completing internal review of the documentation of the first year results with an expected release for review by the TCEQ and the Corpus Christi Air Monitoring and Surveillance Camera Project Advisory Board during the summer 2009.

Emission inventory development and dispersion and photochemical modeling work for the second year of the project is on-going.

D. Scheduled Project Presentations and Meetings

The Corpus Christi Air Monitoring and Surveillance Camera Project Advisory Board met on March 25, 2009 on the campus of Texas A&M University in Corpus Christi Texas. A copy of the notes from that meeting are included in Appendix A, Pages 7 through 12.

By request of the Corpus Christi Air Monitoring and Surveillance Camera Project Advisory Board, UT Austin conducted a seasonal photochemical modeling analysis of the air quality impacts of the proposed Las Brisas facility. By invitation of the Chair of the Corpus Christi Air Quality Group, UT Austin presented the results of this analysis at a meeting on June 24, 2009. The presentation is posted on the Corpus Christi Air Monitoring and Surveillance Camera Project website (http://www.utexas.edu/research/ceer/ccaqp/project_reports.htm). UT Austin is currently preparing a report about the methodology and results of the analysis that will be submitted to the Advisory Board and the TCEQ for review, and that will be posted on the website after the responses to reviewer comments are completed.

## III. Air Toxics Project – Stage 1 - Phase 1B Overview

A. Scope and Objectives

The initial workplan for the Stage I funding called for application of the modeling tools to the Houston Ship Channel region after their demonstration in Corpus Christi with the goal of demonstrating that the neighborhood-scale air toxics modeling framework is applicable to other urban areas. The area surrounding the Ship Channel in east Harris County, Texas was to be used for this demonstration, and the period to be modeled will be August 15-September 15, 2006, which corresponds to the period of the Second Texas Air Quality Study (TexAQS II).

The initial workplan for Stage I has been restructured and Phase 1B of the project reserves approximately 50% of Stage 1 project funds, approximately $2.3 million, to extend the operation of the Corpus Christi ambient monitoring network. As a result the modeling of the Houston Ship Channel region will be deferred pending availability of Stage 2 funds.

B. Goals

Under Phase 1B the project team will use the air quality modeling results in synergy with the data collected from the ambient network to help develop recommendations for future changes in the geographic configuration and/or instrumentation for the network that might facilitate better characterization of the air toxics exposure patterns.

## IV. Stage 1 – Phase 1A Project Progress Report

**A.** Meteorological Team

Research staff, led by Mr. Gary McGaughey, completed the development of a conceptual model that describes meteorological conditions associated with total non-methane hydrocarbons (TNMHCs) and benzene concentrations in the Corpus Christi area.

During late spring and early summer 2009, research staff continued to analyze case studies of short term air toxics events in the Corpus Christi area to support the selection of additional episodes for modeling to complement the initially selected October/November 2006 episode that is currently being used for model development.

During our periodic Air Toxics Project conference calls, Dr. Nielsen-Gammon (Texas A&M) continues to provide input to the UT Austin team in support of air toxics modeling in the Corpus Christi area. The Texas A&M team has defined the horizontal and vertical meteorological model grid domains to be used for the initial Weather Research and Forecasting (WRF) meteorological testcase modeling for a portion of the October/November 2006 episode. Texas A&M Staff are scheduled to deliver the WRF testcase model results to ENVIRON during the summer of 2009 to establish the procedures and methodology for data exchange and to verify the compatibility of the meteorological and photochemical grid domains.

**B.** Modeling Team

UT Austin and ENVIRON are conducting sensitivity studies with the AERMOD and CALPUFF dispersion models and the CAMx photochemical grid model as well as comparisons of the modeling results with ambient air toxics data collected as part of the Corpus Christi Air Monitoring and Surveillance Camera Project.

ENVIRON is currently developing area and mobile source inventories for the region to be used in future dispersion and photochemical modeling efforts.

The UT team worked with ENVIRON on the development and evaluation of a 2002 seasonal modeling episode for the City of Victoria. The modeling domain for this episode included the Corpus Christi area and the time period included an entire ozone season (i.e., May-September 2002). The Corpus Christi Air Monitoring and Surveillance Camera Project Advisory Board requested that UT Austin apply this model to analyze the air quality impacts of the Las Brisas facility, focusing on the impacts on local and regional ozone concentrations. The UT Austin team recently completed this analysis as well as an evaluation of model performance in the region. As described above, by invitation of the Chair of the Corpus Christi Air Quality Group, UT Austin presented the results of this analysis at a meeting on June 24, 2009. The presentation is posted on the Corpus Christi Air Monitoring and Surveillance Camera Project website. UT Austin is currently preparing a report about the methodology and results of the analysis that will be submitted to the Advisory Board and the TCEQ for review, and that will be posted on the website after the responses to reviewer comments are completed.

## V. Collaborative Relationships and Leveraging of the Air Toxics Project

No new collaborative relationships were established during this reporting period.

## VI. Financial Summary

### A. Financial Report

Details of the following financial summary information are included in Appendix B, pages 13 and 14.

1. Detailed List of the Actual Expenditures Paid from Air Toxics Project Funds through June 30, 2009

Expenditures of Air Toxics Project funds during this quarter totaled $180,990.75. The breakdown of expenditures can be found in Appendix B, page 14. The activities for which these expenditures were used are detailed in this report.

2. Total Interest Earned on Air Toxics Project Funds through June 30, 2009

The interest earned during this quarter totaled $26,823.62. A report providing detailed calculations of the interest earned on the Air Toxics Project funds is included in Appendix B, page 14.

3. Balance as of June 30, 2009, in the Air Toxics Project Account

The balance in the Air Toxics Project account, including interest earned totals $3,845,097.87.

4. Anticipated Expenditures for the Funds Remaining in the Air Toxics Project Account

The anticipated expenditures for the remaining funds will total $3,845,097.87.

**Quarterly Report Distribution List**:

U.S. District Court
Ms. Marianne Serpa, Assistant Deputy-In-Charge, District Court Operations
for distribution to the Honorable Janis Graham Jack

cc: The University of Texas at Austin
Mr. Lee Smith, Associate Vice President for Legal Affairs
Dr. Elena McDonald-Buller, Center for Energy & Environmental Resources
Mr. Gary McGaughey, Center for Energy and Environmental Resources
Mr. Vincent M. Torres, Center for Energy and Environmental Resources
Dr. David Sullivan, Center for Energy and Environmental Resources
Texas Commission on Environmental Quality
Ms. Sharon Blue, Litigation Division, Headquarters
Mr. David Brymer, Air Quality Division, Headquarters
Ms. Rosario Torres, Air Monitoring Section, Region 14
Members of the Advisory Board of the *Corpus Christi Air Monitoring and Surveillance Camera Project*

# APPENDIX A

**Advisory Board Meeting Notes**
**from the**
**March 25, 2009**

# ADVISORY BOARD MEETING

**Corpus Christi Air Monitoring and Surveillance Camera Installation and Operation Project**

Texas A&M University - Corpus Christi

*Room 2010, NRC Building*

*1:30 pm – 3:30 pm*

March 25, 2009

Advisory Board Members Present:

| | |
|---|---|
| Ms. Gretchen Arnold | Corpus Christi Pollution Prevention Partnership |
| TAMUCC | |
| Ms. Joyce Jarmon | Corpus Christi Community Council |
| Dr. Glen Kost | Public Health Awareness |
| Ms. Pat Suter | Coastal Bend Sierra Club |

Project Personnel Present:

| | |
|---|---|
| Mr. James Martinez | Probation Office - US District Court |
| Mr. Vince Torres | The University of Texas at Austin |
| Dr. David Sullivan | The University of Texas at Austin |
| Ms. Susan Clewis | TCEQ – Region 14 |
| Mr. David Kennebeck | TCEQ – Region 14 |
| Mr. David Turner | TCEQ – Region 14 |
| Mr. Ken Rozacky | TCEQ Headquarters - Austin |
| Mr. Edward Michel | The University of Texas at Austin |
| Dr. Elena McDonald-Buller | The University of Texas at Austin |
| Mr. Gary McGaughey | The University of Texas at Austin |

## I. Call to Order and Welcome

Vince Torres called the meeting to order at 1:35 pm.

## II. Project Overview and Status

A. Data Collection and Analyses

Dave Sullivan reviewed the location of the seven air monitoring stations, the instrumentation at the sites, and the relevant air quality monitoring terms. He also identified the location of the air monitoring sites that are operated by Texas A&M University Kingsville (TAMUK) and the Texas Commission on Environmental Quality (TCEQ). A map of the Port of Corpus Christi area was used to show the areas of ship loading and unloading operations and its relationship to the monitoring sites.

Dr. Sullivan discussed the monitoring terms and the relationship between the monitoring terms and the data generated from the monitoring network. In particular the term "elevated concentrations" does not represent a violation of a standard, which requires an enforcement action by the TCEQ, rather, this term means the concentration is higher than is normally expected given historical data.

Dr. Sullivan mentioned that during 2008, the benzene concentrations continue to be significantly lower at both the Oak Park and Solar Estates sites than during the first years of operation of the network. He continued that sometime in late 2007, as was previously reported, the Corpus Christi automated alert system began to receive more frequent alerts under northerly winds. He showed that the northerly wind direction "cone" from Dona Park associated with elevated TNMHC concentrations points to White Point, which may have been the location of the emissions causing some of the alerts. Oil and natural gas companies are either reworking or creating new wells in that area. Dr. Kost asked if the
fields at White Point are the same as the Saxet Fields. Mr. David Turner responded that he was not sure.
Dr. Kost mentioned that a report published in the USA Today late in 2008, listed wrong information and has misinformed the public about normal emissions from oil and natural gas tanks. He continued that the public is not getting "due diligence" from the Texas Railroad Commission. Dr. Sullivan mentioned that effects screening levels for species in natural gas are higher than for gasoline. Mr. Turner replied that the TCEQ had a helicopter fly the over industrial areas with an IR camera. There was nothing unusual to report except on the north side in the vicinity of White Point.

## III. Related Matters

A. Update on approval of installing surveillance cameras at Port of Corpus Christi sites

Mr. Torres updated the Board on acquiring approval to install surveillance cameras at the Port of Christi sites. He made sure the authorities were aware that if we did install the cameras, there would be no live video feeds to a publicly accessible web site. It would be recorded locally (at the site) only. We would use video collected for analysis purposes only. He will continue to work on getting permission to install the cameras. **Action item**

B. Report on Recruiting Participants for the Automated Alert Notification System Project

No companies have signed up to receive automated alerts through the UT system. Mr. Torres has not given up and will continue to try to enlist industry to participate and sign up for the Automated Alert Notification System.

C. Update on the status of SEP Projects

Mr. Torres reported to the Advisory Board that the TCEQ has changed its interpretation of the UT Austin SEP Master Agreement. This change will affect the two newest SEP proposals. In the original SEP Master Agreement, UT was granted a waiver for salaries and other UT personnel related expenses, i.e., fringe benefits, travel and project management expenses. Upon renewal of the SEP Master Agreement, TCEQ has now decided that after a five year period, which ended in January 2009, no funds can be used from SEP awards to support UT Personnel and project related expenses.

The revised or soon to be revised SEP proposals are summarized below.

1) TM Corpus Christi Services, Ltd. - $67,900 – This project has been awarded and will be used for subcontractor fees; purchase of a new camera and/or extend the life of the Corpus Christi Project.

2) Equistar Petro Chemicals/Millennium - $400,000 - Mr. Torres is in the process of submitting a revised proposal to the TCEQ in which the first $200,000 will be used to purchase and provide training for an IR camera. The second $200,000 will be used to extend the life of the Corpus Christi Air Monitoring and Surveillance Camera Project. **Action item**

D. Request of the Railroad Commission to make a presentation to the Board Spring 2009 or sooner if possible

Vince Torres will contact the Texas Railroad Commission Regional Director to set up a meeting with the Advisory Board some time possibly in May, if not sooner. **Action item**

E. Report on Annual Meeting before the Honorable Judge Jack

The Honorable Judge Jack expressed her pleasure with the work of the Advisory Board, TCEQ and the UT Austin personnel. She reiterated that her intentions are that the Corpus Christi Air Monitoring and Surveillance Camera Project continue for as long as possible with additional funding from any and all sources possible, including SEP Projects. She also clarified her intention that the Advisory Board provide input to UT on projects funded by SEP awards.

## IV. Neighborhood Air Toxics Modeling Project

A. Update on Corpus Christi Neighborhood-Scale Air Toxics Modeling Project

Dr. McDonald-Buller reviewed the objectives and accomplishments during the first year of the Neighborhood Air Toxics Modeling Project. The Honorable Judge Jack expressed that she would like the original Corpus Christi Air Monitoring and Surveillance Camera Project to continue for an extended time period. Dr. McDonald-Buller indicated that UT will retain funds from Phase I of the Neighborhood Air Toxics Modeling Project for continued operation of the ambient monitoring network pending Phase II funding. In addition, the air quality modeling and data analysis being conducted under the Neighborhood Air Toxics Modeling Project will be used to investigate and suggest appropriate revisions to the monitoring strategy or network configuration.

Mr. Turner mentioned that there have been discussions about adding a new site or expanding an existing site, with the addition of an auto GC in the Hillcrest Neighborhood. He asked Mr. Torres if the monitoring equipment that was available for use from the Odessa site had been confirmed for use in the Hillcrest Neighborhood. Mr. Turner mentioned that there would be a few possible sites that would benefit from the equipment such as Williams Park and the Hillcrest Neighborhood. Mr. Torres reported

that he would talk with and invite a representative from one of these groups about possibly joining this Advisory Board. **Action item** Dr. Kost mentioned that he was friends with Rev. Williams and suggested that Rev. Williams could be used as a contact for the Hillcrest Neighborhood group. Dr. Kost will forward Rev. Williams' contact information to Vince Torres.

Dr. McDonald-Buller also discussed air quality modeling simulations that could be conducted using the models developed for the Corpus Christi Neighborhood Air Toxics project and recent seasonal modeling being developed for the City of Victoria to respond to community questions about the Las Brisas facility. Dr. Kost commented that an educated response from someone that was not directly involved in the process would benefit the community. Both Dr. Kost and Ms. Arnold felt that more information needs to be related to the public. Mr. Turner mentioned that Dr. John from Texas A&M Kingsville had conducted modeling simulations based on emission rates in the permit application. Dr. John used a week-long September 1999 episode. The group briefly discussed Dr. John's results. Dr. McDonald-Buller and the Advisory Board agreed that the UT team would conduct seasonal modeling with an available 2002 episode being developed for the Victoria area to examine the impacts of Las Brisas on concentrations of ozone, sulfate, and oxides of nitrogen. Mr. Turner will put Dr. McDonald-Buller in contact with Randy Hamilton from the TCEQ to obtain input data for the modeling runs.

Ms. Suter asked if there were any special permits required for bulk materials (pet coke) storage. Mr. Kennebeck suggested that some type of special cover may be required. Dr. Kost inquired about whether or not Las Brisas fell under the Public Utilities Commission. Mr. Torres mentioned that he would inquire and report his findings to the Board. **Action item**

In response to the USA Today 2008 article regarding the concentrations of air toxics near U.S. schools, Mr. Turner added that there are at least 10 near-school sites in Texas where further air toxics monitoring is to be conducted. He is not aware of any school location in the Corpus Christi area. Dr. Kost mentioned that Driscoll Middle School may be a candidate for monitoring.

## V. Advisory Board

A. Replacement of Advisory Board member

Dr. Kost gave Terri the contact information for a possible Board Member. Her name is Irma Valverde. He said there is also a possibility that a Science Director from the secondary schools in the Tuloso would be interested in serving on the Board. Vince will follow up with Dr. Kost and to get contact information for the Tuloso ISD. He will also contact Ms. Valverde, and the Science Director from the Tuloso ISD. **Action item**

B. Possible dates for future meeting of the Advisory Board

The following weeks are being held for possible future 2009 meeting dates: Week of July 20, if Board requested, Week of October 26 or November 2. Possible future 2010 meeting dates are: Week of March 22, Week of July 19, if Board requested, and Week of October 25 or November 1.

C. Recommendations for agenda items for next meeting

## VI. Other Issues

None mentioned.

## VI I. Adjourn

The meeting was adjourned at 4:15pm.

# APPENDIX B

## FINANCIAL REPORT
## of
## Expenditures
## and
## Interest Earned

## Neighborhood Air Toxics Modeling Project for Houston and Corpus Christi - Stage 1 Phase 1A

***Accounting Report for the Quarter***
***04/01/2009 - 06/30/2009***

### A. Total Amount of Air Toxics Funds and Other Funds Received Under This Proposal

| | |
|---|---|
| **Total Grant Amount:** | $4,602,598.66 |
| **Total Interest Earned:** | $157,152.31 |
| **Total Funds Received:** | **$4,759,750.97** |

### B. Summary of Expenditures Paid by Air Toxics Funds

| | | Yr 1 and Yr 2 Budget Increment | Budget Adjustments this Quarter | Adjusted Budget | Prior Activity | Current Activity 04/01/09-06/30/09 | Encumbrances | Remaining Balance 6/30/2009 |
|---|---|---|---|---|---|---|---|---|
| **Salaries-Prof** | **12** | $616,882.00 | 0.00 | $616,882.00 | ($344,389.31) | ($83,079.83) | ($25,268.24) | $164,144.62 |
| **Salaries-CEER** | **15** | $66,780.00 | 0.00 | $66,780.00 | ($42,748.68) | ($3,442.12) | ($6,895.86) | $13,693.34 |
| **Fringe** | **14** | $149,185.00 | 0.00 | $149,185.00 | ($83,676.68) | ($18,641.91) | ($6,252.50) | $40,613.91 |
| **Supplies** | **50** | $61,991.00 | 0.00 | $61,991.00 | ($18,276.23) | ($379.24) | $0.00 | $43,335.53 |
| **Contingency** | **51** | $6,746.00 | 0.00 | $6,746.00 | $0.00 | $0.00 | $0.00 | $6,746.00 |
| **Consultants** | **60** | $22,500.00 | 0.00 | $22,500.00 | $0.00 | $0.00 | $0.00 | $22,500.00 |
| **Subcontracts** | **61-63** | $600,000.00 | 0.00 | $600,000.00 | ($133,799.59) | ($51,840.16) | $0.00 | $414,360.25 |
| **Modeling/Computer Svs** | **67** | $46,500.00 | 0.00 | $46,500.00 | $0.00 | $0.00 | $0.00 | $46,500.00 |
| **Tuition** | **71** | $17,727.00 | 0.00 | $17,727.00 | ($7,740.00) | $0.00 | $0.00 | $9,987.00 |
| **Travel** | **75** | $15,000.00 | 0.00 | $15,000.00 | ($91.77) | $0.00 | $0.00 | $14,908.23 |
| **Equipment** | **80** | $17,500.00 | 0.00 | $17,500.00 | ($7,245.00) | $0.00 | $0.00 | $10,255.00 |
| **Indirect Costs** | **90** | $243,122.00 | 0.00 | $243,122.00 | ($95,695.09) | ($23,607.49) | $0.00 | $123,819.42 |
| **TOTALS** | | **$1,863,933.00** | **0.00** | **$1,863,933.00** | **($733,662.35)** | **($180,990.75)** | **($38,416.60)** | **$910,863.30** |

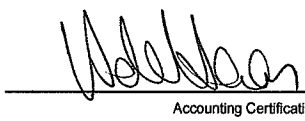
### C. Interest Earned by COCP Funds as of 06/30/2009

| | | |
|---|---|---|
| **Prior Interest Earned:** | $130,328.69 | |
| **Interest Earned This Quarter:** | $26,823.62 | *includes interest for June '09 |
| **Total Interest Earned to Date:** | **$157,152.31** | |

### D. Balance of COCP Funds as of 06/30/2009

| | | |
|---|---|---|
| **Total Grant Amount:** | $4,602,598.66 | |
| **Total Interest Earned:** | $157,152.31 | *includes interest for June '09 |
| **Total Expenditures:** | ($914,653.10) | |
| **Remaining Balance:** | **$3,845,097.87** | *includes interest |

I certify that the numbers are accurate
and reflect acutal expenditures
for the quarter



Accounting Certification