

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

Quarterly Report for the Period

January 1, 2004 through March 31, 2004

Submitted to

**Judge Janis Graham Jack
US District Court for the Southern District of Texas
Corpus Christi, Texas**

**Mr. Robert Todd
US Environmental Protection Agency, Region 6
Dallas, Texas**

**Mr. C. Buddy Stanley
Texas Commission on Environmental Quality, Region 14
Corpus Christi, Texas**

Submitted by

**David Allen, Ph.D.
Principal Investigator
Center for Energy and Environmental Resources
The University of Texas at Austin
10100 Burnet Road, Bldg 133 (R7100)
Austin, TX 78758
512/475-7842
allen@che.utexas.edu**

May 21, 2004

I. Introduction

On October 1, 2003, 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 \$6,700,000, plus interest accrued, to The University of Texas at Austin to implement the court ordered condition of probation (COCP) project *Corpus Christi Air Monitoring and Surveillance Camera Installation and Operation* (Project). This quarterly report has been prepared pursuant to the requirements of the project proposal and is being submitted to the US District Court, the US Environmental Protection Agency (EPA), and the Texas Commission on Environmental Quality (TCEQ).

II. Project Progress Report

The focus of work during the quarter ending March 31, 2004 has been directed to the following five activities.

A. Scheduled Meetings of the Volunteer Advisory Board

The first meeting of the Advisory Board was held on January 16, 2004 on the campus of Texas A&M University in Corpus Christi Texas. Notes from the January 16th meeting are attached hereto as Appendix A. As a result of decisions made during the January 16th meeting the following actions have been taken by the Advisory Board: 1) Gretchen Arnold and Ron Barnard have been appointed Co-Chairs and spokespersons and Lena Coleman as Recording Secretary; 2) a subcommittee of the Board visited the monitoring sites to develop the Board's recommendation for the location of the two surveillance cameras; and 3) after review of the contractors' bids the Board offered input on the selection of the site installation contractor.

Appendix B is a copy of the Briefing Book provided to the attendees of the Advisory Board meeting on January 16th. The Briefing Book will serve to hold all of the project materials that are given to the Board members during the course of their tenure.

The second meeting of the Advisory Board has been scheduled for Tuesday, May 25, 2004 on the campus of Texas A&M University in Corpus Christi Texas.

B. Selection of Phase I Contractor

The selection of a subcontractor for the installation of the monitoring sites has been finalized. Execution of a contract in the amount of \$1,588,050 between The University of Texas at Austin and URS Corporation was completed on March 29, 2004. Given the contract amount exceeded \$1,000,000 approval of any expenditure amount over \$1,000,000 (in aggregate) is subject to the approval of the Board of Regents of The University of Texas System and is scheduled for hearing at the May 2004 meeting of the Board of Regents. The contract has been written so that progress can begin, with expenditures up to \$1,000,000, prior to hearing by the Board of Regents.

C. Site Lease Agreements between TCEQ and Property Owners Signed

The lease agreements between TCEQ and the property owners for the seven (7) monitoring sites in the Corpus Christi area have been signed. Attorneys with UT System's Office of General Counsel with TCEQ's Legal Division are addressing the requirements relating to the assignment of the leases to the University giving the University and URS access to the sites to begin the installation of the monitoring equipment.

D. Development of the Request for Bids for Phase II, the Operations and Maintenance Phase of the Project

The Request for Bids for the Operation and Maintenance Phase of the Project is being developed and will be reviewed internally by The University of Texas at Austin. The Request for Bids will be submitted to TCEQ for review and comment before being posted by the University for public response.

E. Project Management and Planning

Project management and planning focused on development of a project schedule and development of the system for providing reports to stakeholders of this project. A copy of the project schedule is included in Appendix C. A monthly report of activities is prepared by project staff and distributed electronically to the Advisory Board members, the TCEQ and the EPA to keep stakeholders apprised of the status of the project.

In addition the monthly report of activities a website for the project is maintained at <http://www.utexas.edu/research/ceer/ccaqp/>

III. Financial Report

As required by the project proposal, the following financial summary information is provided. Details supporting this financial summary are included in Appendix D.

A. Total Amount of COCP Funds and Other Funds Received Under the Project
The COCP funds received totals \$6,794,721.11. This total includes interest earned through March 31, 2004, after the initial distribution of project funds by the US District Court. No other funds were received by the project during this quarter.

B. Detailed List of the Actual Expenditures Paid by COCP Funds
Expenditures during this quarter totals \$21,686.63. The detailed breakdown of the actual expenditures is included in Appendix D. The activities for which these expenditures were used are detailed in Section II of this report.

C. Total Interest Earned on COCP Funds During the Quarter
The interest earned during this quarter totals \$16,453.13. A report providing detailed calculations of the interest earned on the COCP funds during each month of the quarter is included in Appendix D.

D. Balance as of March 31, 2004 in COCP Account, including Interest Earned During the Quarter

The balance in COCP account totals \$6,734,466.55.

E. Expected Expenditures for the Funds Remaining in the COCP Account

The expected expenditures for the funds remaining totals 6,734,466.55.

Quarterly Report Distribution List:

U.S. District Court, Mr. Bill Cazalas, Assistant Deputy Chief

Texas Commission on Environmental Quality

Ms. Kate Hodgins, Litigation Division – Headquarters*

Mr. David Brymer, Laboratory and Mobile Monitoring – Headquarters*

Mr. C. Buddy Stanley, Director – Region 14*

Mr. David Kennebeck, Field Operations – Region 14*

Environmental Protection Agency

Mr. Robert Todd, Air Enforcement Officer – Dallas Regional Office*

* *Distributed without Appendix B*

Volunteer Advisory Board (*without Appendices*)

APPENDICES

APPENDIX A

Notes and Resulting Action Items from January 16, 2004 Advisory Board Meeting

Corpus Christi Air Monitoring and Surveillance Camera Installation and Operation Project

Notes and Resulting Action Items from the 1/16/04 Advisory Board Meeting

ATTENDEES:

1. David Allen UT-Austin, Principal Investigator
2. Gretchen Arnold Corpus Christi Pollution Prevention Partnership – TAMUCC
3. Ron Barnard City of Corpus Christi
4. Ardys Boostrom Corpus Christi/Nueces County Public Health District
5. David Brymer TCEQ Headquarters - Austin
6. Vinay Dulip Moody High School
7. William Honker EPA Dallas Regional Office
8. David Kennebeck TCEQ – Region 14
9. Glen Kost Public Health Awareness Group
10. Ken Rozacky TCEQ Headquarters - Austin
11. C. Buddy Stanley TCEQ – Region 14
12. Pat Suter Coastal Bend Sierra Club
13. Robert Todd EPA Dallas Regional Office
14. Vince Torres UT- Austin

Absent:

- Eugene Billiot TAMUCC
Lena Coleman Community Advisory Council

The meeting was held in Room 1003, NRC, Texas A&M University-Corpus Christi, from 3:30pm until 6:45pm. Vince Torres welcomed everyone and called the Board Meeting to order.

David Allen asked the Board Members to introduce themselves. He then gave an overview of the project. Ms. Pat Suter asked how soon the results of an *event* would be known. (Per Dr. Allen, approx. 2-3 days) A system (protocol) should be developed to add an automatic *event* trigger which would notify the appropriate (industrial) contacts in the Corpus Christi area.

Buddy Stanley, Director of TCEQ Region –14, presented information on the locations and activities of the current (and future) Corpus Christi monitoring sites.

ACTION ITEM

Dr. Kost asked that the information be fed to the *Texas Department of Health*. He felt it of critical importance that public health needs be addressed by keeping public health related information dissemination a part of the network.

ACTION ITEM

Vince Torres asked the Board Members to consider adopting rules of operation for the Board. He provided guidance for these rules and for the responsibilities of the Board Chairperson and Board Secretary. *Members were asked to submit nominations for these two positions* (self-nominations are acceptable). Bi-annual meetings of the Board were suggested – with 3 this first year (in June and then prior to the annual report – September).

ACTION ITEM

David Allen discussed Site Selection for installation of two cameras. It was decided that one camera should be located at Site 6, Dona Park. *The placement of the second camera at either Site 8 (Up River Road at Flint Hills Resources easement) or Site 9 (Solar Estates Park) would be considered by the Board with recommendations to be sent to UT.*

Members were informed of the subcontracting deadline to *select a subcontractor to construct the sites and install the monitoring equipment.* Two subcontractors submitted bids to UT. Those subcontractor bids were made available to the Board. Dr. Kost felt strongly that only a contractor with experience setting up all the air monitoring equipment (including the Auto CGs) should be hired. A discussion on the experience and backgrounds for both subcontractors followed. Ms. Arnold suggested the Board be given time to review the subcontractor bids before making a recommendations concerning selection.

ACTION ITEM

The Board agreed to provide additional input regarding the selection of a subcontractor by the end of next week – so that the subcontractor can be announced by the end of January.

The availability of members for the next Board meeting was discussed. The hope is to meet in June. It was decided that the location of the first meeting (TAMUCC) was a good location. Many voiced concerns about meeting late on a Friday afternoon.

A summary of the action items follows:

BOARD MEMBERS

Nominate Chairperson and Recording Secretary

Provide input for subcontractor selection on or before 1/26

Prior to next meeting determine where the second camera (and high-speed lines) are to be installed – either at Site #8 (Up River Road) or Site #9 (Solar Estates Park)

Notify UT of availability for the next Board Meeting in June-2004

UT

Provide a detailed plan for information dissemination from the network

Develop the project website

Send the Board Contact List to each Board member for approval.

APPENDIX B

Briefing Book from the January 16, 2004 Meeting of the Advisory Board

AGENDA
ADVISORY BOARD MEETING
Corpus Christi Air Monitoring and Surveillance Camera Installation
and Operation Project
Room 1003, NRC Building
Texas A&M University – Corpus Christi
Corpus Christi, Texas
January 16, 2004 3:30 pm – 6:30 pm

- I. **Call to Order** *3:30 pm*
- II. **Introductions** *(10 minutes)*
 - a. Project Personnel and Ex-Officio Advisory Board Members
 - b. Advisory Board Members – Self Introductions
- III. **Overview of Project** *(30 minutes)*
 - a. Contract Requirements
 - b. Project Plan and Budget
 - c. Project Organization
 - d. Action Items
- IV. **Coordination with Existing Monitoring Activities in the Corpus Christi Area** *(20 minutes)*
 - a. Presentation by Carlton Buddy Stanley, Director, TCEQ – Region 14
- V. **New Business**
 - a. Establishment of the Advisory Board *(30 minutes)*
 - Process for selection of spokesperson for the Board
 - Process for selection of the recording secretary of the Board
 - Discuss establishment of the rules of operation for the Board
 - Project Communications
- BREAK** *(15 minutes)*
 - b. Information on Locations and Equipment at Monitoring Sites *(30 minutes)*
 - c. Input from the Advisory Board *(20 minutes)*
 - Selection of site installation subcontractor
 - Site installation of equipment schedule
 - Equipment Monitoring Plan
 - d. Comments and discussion *(10 minutes)*
- VI. **Other Issues** *(15 minutes)*
 - a. Set next meeting date, time and site
 - e. Recommendations for agenda items for next meeting
- VII. **Adjourn** 6:30 pm

Corpus Christi Air Monitoring and Surveillance Camera Installation and Operation Project

ADVISORY BOARD MEMBERS

<u>Last Name</u>	<u>First Name</u>	<u>Affiliation/Organization</u>	<u>Area of Representation on the Board</u>
Arnold	Gretchen (Ms.)	CC Pollution Prevention Partnership Texas A&M University – Corpus Christi	At-Large
Barnard	Ron (Mr.)	Environmental Specialist City of Corpus Christi	Near Non-Attainment Area Liaison
Billiot	Eugene (Dr.)	Asst. Prof. Analytical Chemistry Texas A&M University – Corpus Christi	Measurement Technologies Expertise
Boostrom	Ardys (M.D.)	Physician – Corpus Christi-Nueces County Public Health District	Local Public Health
Coleman	Lena (Ms.)	Community Advisory Council	Neighborhood Organization
Dulip	Vinay (Mr.)	Chemistry Teacher Moody High School	Local Educator
Kost	Glen (Dr.)	Public Health Awareness Group	At-Large
Suter	Pat (Ms.)	Costal Bend Sierra Club	Local Advocacy Group

Ex-Officio Members

Brymer	David (Mr.)	Texas Commission on Environmental Quality - Headquarters	Manager, Laboratory and Mobile Monitoring Section
Kennebeck	David (Mr.)	Texas Commission on Environmental Quality – Region 14 - Field Operations	Air Section Work Leader
Stanley	C. Buddy (Mr.)	Texas Commission on Environmental Quality – Region 14 - Field Operations	Regional Director
Todd	Robert M. (Mr.)	Environmental Protection Agency Dallas Regional Office	Environmental Engineer

III. Overview of the Project

[GENERAL PROJECT INFORMATION]

Jan. 16, 2004

Corpus Christi - Air Monitoring Project

Center for Energy and Environmental Resources

University of Texas at Austin

David Allen (allen@che.utexas.edu)

Vince Torres (vmtorres@mail.utexas.edu)

MaryAnn Foran (ma_foran@mail.utexas.edu)

1/16/04

Agenda

- Purpose of the network
- Plan
- Budget
- Project Organization
- Action items

1/16/04

What Are We Trying To Accomplish?

Meet Court Requirements

- ▷Nexus
- ▷Benefit to the Community
- ▷No Benefit to Industry

1/16/04

What is the Plan?

Establish a monitoring network in/near communities; network design developed by TCEQ; project lifetime a minimum of seven years

Monitor for VOCs (including benzene) and sulfur compounds; deploy cameras

Report measurements in a public forum, allowing citizens and TCEQ to identify potential problem areas

1/16/04

What is the Plan?

Monitoring Sites

Seven total sites

VOC monitoring sites capable of providing short/long term exposure data and capable of analyzing events

1/16/04

What is the Plan?

Site Selection Considerations

Sites selected by TCEQ based on:

- Site Accessibility
- Proximity of Communities to Industry
- Meteorology
- Citizen Complaints

1/16/04

Site Selection



1/16/04

What is the Plan?

VOC Monitoring Technology

By Automated Gas Chromatograph with Flame Ionization Detector (2 sites; to assess community exposures)

By Event Triggered Canister Sampler (all sites; to help identify sources and collect samples during releases)

1/16/04

What is the Plan?

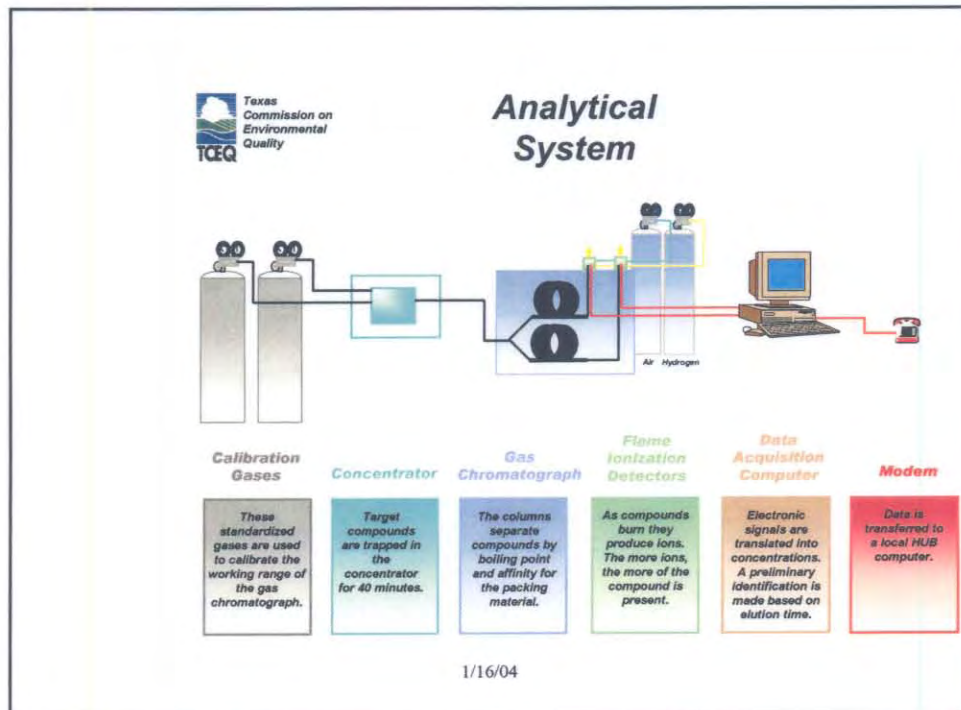
Perkin-Elmer AutoGC

Concentrates air over a 40 minute time period and has 1 analysis/hr

Proven to be reliable technology as field deployed instrument

Provides data on over 50 VOCs including benzene

1/16/04





Site Selection



1/16/04

What is the Plan?

Event Triggered VOC Samplers

- ▶ Trigger is based on a continuous measurement of total hydrocarbon concentration; once total hydrocarbons exceed threshold, air samples are collected; sampling can also be triggered by telephone
- ▶ Air samples are collected in canisters and returned to UT-Austin for analysis; analysis can be similar to auto-GC or can be performed by GC/MS with an expanded target list^{1/16/04}

Site Selection



1/16/04

What is the Plan?

Sulfur Monitors

- ▶ H₂S and SO₂ emitted primarily by industrial sources; all sites will include continuous measurements of these two sulfur species
- ▶ SO₂ Monitored by a Monitor Labs 9850 Continuous Emission Monitor
- ▶ H₂S Converted to SO₂ via a Dasibi 4109 H₂S converter and measured by a Monitor Labs 9850

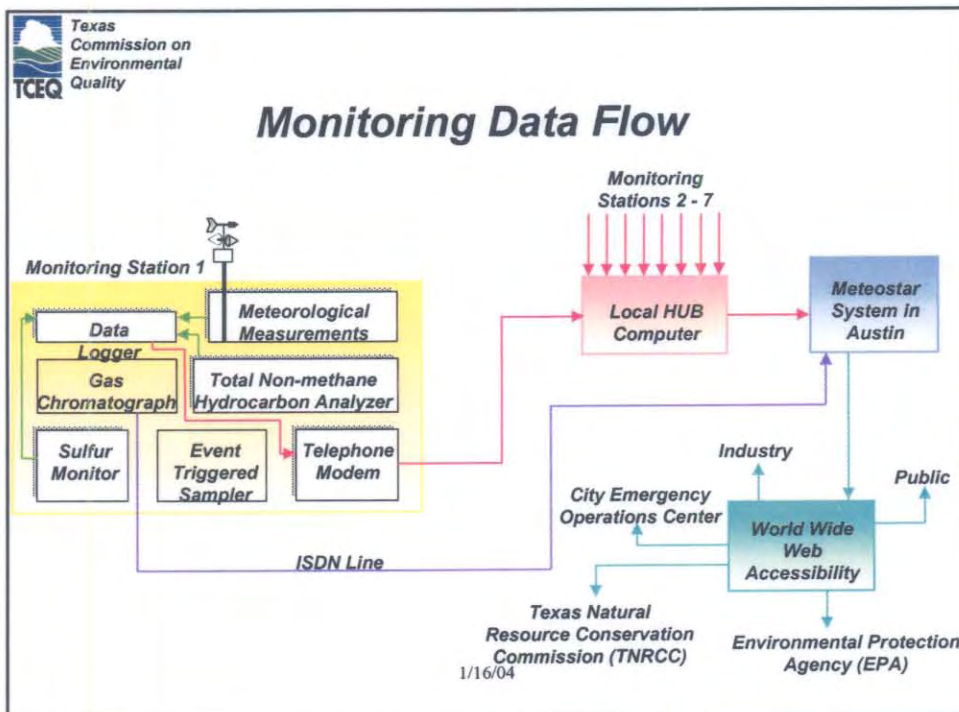
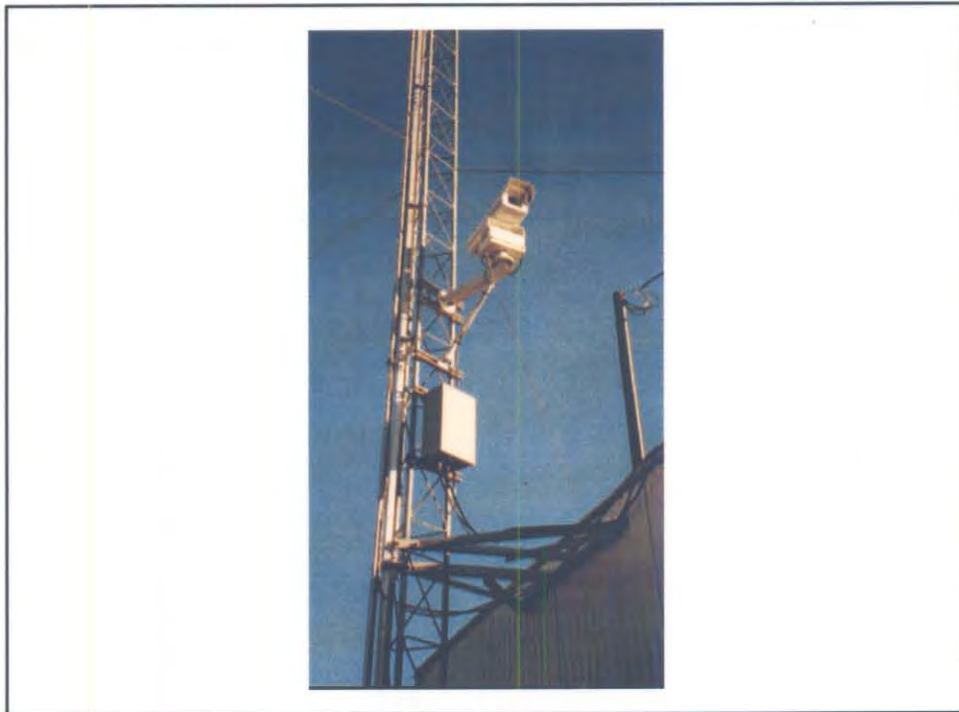
1/16/04

What is the Plan?

Cameras

- ▶ Provide surveillance over a wide area to identify or evaluate visible plumes and/or events (2 sites; three cameras available)
- ▶ Full remote pan/tilt/zoom capability; current plan is to have remote control at UT-Austin

1/16/04





1/16/04

What is the Plan?

Evaluation/Flexibility

- ▶ Annual Review of Plan/Sites
- ▶ Flexibility to Move, Shut Down, or Expand sites and Monitors

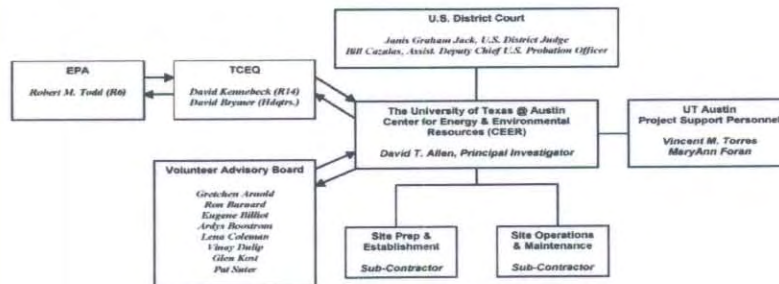
1/16/04

What is the Budget?

Equipment/Installation/Phase I Operation/Phase II

- ▶ Total funds available = \$6.7 M plus accumulated interest
- ▶ Estimated Phase I total cost = \$2.3M
- ▶ Estimated Phase II cost = \$680,000 (year 1)
- ▶ Minimum 7 year project life ^{1/16/04}

Project Organization



V. Torres (12/15/2003)

1/16/04

Action item for today:

***Discuss bids for Phase 1;
Seek Advisory Board input on
selection of contractor***

1/16/04

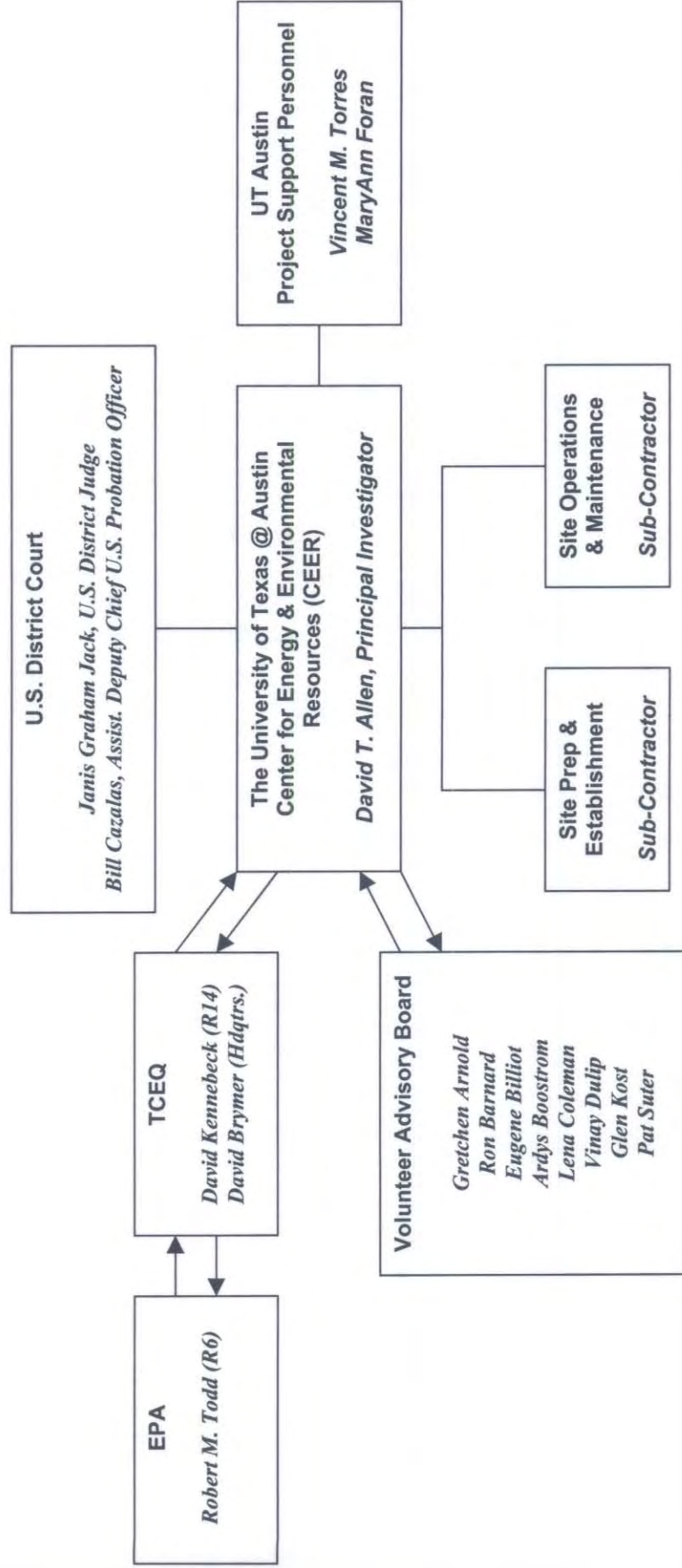
Project Organizational Chart

[GENERAL PROJECT INFORMATION]

Jan. 16, 2004

Corpus Christi Air Monitoring and Surveillance Camera Installation and Operations Project

Project Organization



The University of Texas at Austin's Project Contract

[GENERAL PROJECT INFORMATION]

Jan. 16, 2004

AIR MONITORING PROJECT PROPOSAL

Submitted By

**THE UNIVERSITY OF TEXAS at AUSTIN
on behalf of the
Center for Energy and Environmental Resources**

The University of Texas at Austin: The University of Texas at Austin (the "University") is a public, degree-granting institution of higher education and a component of The University of Texas System, an agency of the State of Texas. The University's core missions entail research, teaching, and service.

Cause: Koch Petroleum Group, L.P. entered a guilty plea on April 9, 2001, in *U.S. v. Koch Petroleum Group, L.P.* (S.D. Tex.) CR-C-00-325, resulting in a felony conviction which required Koch Petroleum Group, L.P. to pay Ten Million Dollars (\$10,000,000) to fund and to develop, in coordination with the Texas Commission on Environmental Quality ("TCEQ") and the U.S. Environmental Protection Agency ("EPA"), air and water quality remediation projects in and around Corpus Christi, referred to in this Project Proposal as Court Ordered Condition of Probation ("COCP").

COCP Project: The University will implement the following project: *Corpus Christi Air Monitoring and Surveillance Camera Installation and Operation* (Project).

I. Project Description

A. Project Scope

The University will install, maintain and operate an air monitoring and surveillance camera network along the Corpus Christi ship channel to record the concentrations of specific air pollutants along the industrial area. The University will install at least seven air monitoring stations and approximately two surveillance cameras along the ship channel. The air monitoring stations will record concentrations of hydrogen sulfide (total reduced sulfur), sulfur dioxide and volatile organic compounds, including benzene, and meteorological data. Data obtained from the monitors will be made available to the public via the TCEQ website (Internet) as soon as possible after it becomes available electronically, dependant on the type of monitor. Additionally, access to view the images captured by the surveillance cameras will be made available to the public via the Internet. The University will not identify emission sources, investigate and remediate air quality concerns and/or initiate enforcement actions. These functions are outside the scope of this Project Proposal.

The services of University's Dr. David T. Allen as Principal Investigator and TCEQ's Director of Field Operations Region 14 and TCEQ's Section Manager of Lab and Mobile Monitoring, Monitoring Operations Division, Office of Compliance and Enforcement are essential to the performance of the Project Proposal activities. Any replacement of Dr. David T. Allen or the aforementioned TCEQ officials on the Project Proposal shall be made only upon the prior written concurrence of the University and TCEQ.

1. Monitoring Equipment

Monitoring equipment will include (1) Automatic Gas Chromatographs, which provide semi-continuous monitoring of volatile organic compounds; (2) event-triggered monitors, which measure volatile organic compounds during emission release events; and (3) instruments to provide continuous measurements of sulfur dioxide and hydrogen sulfide. The surveillance cameras will be high-resolution digital cameras with zoom, pan/tilt and web-based remote control access capabilities.

Subject to the TCEQ obtaining the necessary and appropriate lease and/or license agreements, including payment by TCEQ of all associated cost of obtaining the lease and/or license agreements, the monitors and cameras will be located initially at the following sites:

- a. An Auto GC, event-triggered monitor and meteorology station will be located at Oak Park Recreation Center.
- b. Instruments to measure sulfur dioxide and hydrogen sulfide, an event-triggered monitor and a meteorology station will be located at the grain elevator at the Port of Corpus Christi.
- c. Instruments to measure sulfur dioxide and hydrogen sulfide, an event-triggered monitor, and a meteorology station will be located at the J.I. Hailey site at the Port of Corpus Christi.
- d. Instruments to measure sulfur dioxide and hydrogen sulfide and an event-triggered monitor will be located at a current TCEQ monitoring site at Donna Park.
- e. Instruments to measure sulfur dioxide and hydrogen sulfide, an event-triggered monitor, and a meteorology station will be located near the Port of Corpus Christi building on the west end of the Corpus Christi Inner Harbor.
- f. Instruments to measure sulfur dioxide and hydrogen sulfide, an event-triggered monitor, and a meteorology station, will be located off of Up River Road on property on which Flint Hills Resources, LP has a pipeline easement.
- g. An Auto GC, instruments to measure sulfur dioxide and hydrogen sulfide, an event-triggered monitor, and a meteorology station, located at Solar Estates Park at the end of Sunshine Road.

Two cameras will be located at two of the Huisache, Donna Park, Up River Road, or Sunshine Road sites. Exact locations of the equipment at the above-referenced monitoring sites, as well as the specific equipment to be used at each site, will have the approval of the University and TCEQ. As monitoring equipment is installed on a rolling basis, the types of equipment may change to reflect technological advances. TCEQ in coordination with the EPA shall approve any proposed changes in the type of equipment to be used.

Within three (3) months of the effective date of this Project Proposal the University shall form a volunteer Advisory Board comprised of an EPA representative, experts in instrumentation and local air quality issues, community representatives, and other key stakeholders to review project plans and to consult on project implementation, including the selection of the exact monitoring locations, types of equipment, and implementation schedules. Appointment of the Advisory Board members is subject to the approval of TCEQ. The Advisory Board shall meet at least semi-annually

and as frequently as quarterly, at the discretion of the Advisory Board during the term of this Project Proposal. No employee, officer, or director of Flint Hills Resources, LP (formerly known as Koch Petroleum Group, L.P.), nor of any affiliate of Flint Hills Resources, LP, or other refinery, shall be a member of the Advisory Board.

The monitors and cameras will not be moved or disabled without approval from the TCEQ in coordination with the EPA. The TCEQ in coordination with the EPA will provide the specifications for the monitoring instrumentation and video cameras to the University. Additionally, the list of VOCs to be monitored will be agreed upon by the University and the TCEQ in coordination with the EPA prior to the contract bid preparation. For the duration of this Project TCEQ will negotiate leases and/or obtain licenses as necessary to use the above-referenced sites for the monitoring network. TCEQ will assume any costs associated with obtaining said licenses and/or leases and will assign such agreements to the University at no cost to the Project. The University will be responsible for the utilities costs associated with said licenses and/or leases. TCEQ will not assume any such utilities costs.

2. Project Period

The University will install, maintain and operate the air monitoring network and cameras continuously for at least 7 years, or up to 10 years depending on availability of COCP funds and interest earned thereon, and until at least \$6.760 million has been expended on the Project. Once the University receives bids for this Project from vendors and has completed their detailed engineering and budgetary review, if it is clear that the COCP funds and interest projected to be earned on those funds will not be sufficient to install, maintain and operate this network for seven years, the University will notify the TCEQ and the EPA, and the TCEQ, in consultation with the University and the Advisory Board, will scale back the Project so that the network will be operational for at least seven years. COCP funds and interest earned thereon will be spent on monitoring and camera surveillance instrumentation, installation, maintenance and operation of instrumentation, laboratory analysis, data validation, and web server costs. Upon completion of the term of the Project, the University will maintain ownership of the monitoring and camera surveillance instrumentation and any web servers installed at the University. If the Project is terminated early, as provided in section XVII of this Project Proposal, the monitoring and camera surveillance instrumentation shall be given to the registry of the U.S. District Court in Corpus Christi, Texas.

3. Public Access to Data

Data from these monitoring sites will be made available to the public via the Internet as soon as possible after it becomes available electronically, dependant on the type of monitor. The data displayed on the Internet will be reviewed periodically for quality assurance by the University and will be subject to change pending final validation by the University. All continuous monitors and Auto GCs at these sites will be connected to the TCEQ's real-time data system. Specifically, the data will be transmitted to the TCEQ's Corpus Christi regional office hub computer and then transmitted to the TCEQ's central office in Austin for near real-time display on the TCEQ's web site. The University, through its contractor will work with the TCEQ's Monitoring Operations Division staff to obtain the necessary hardware, firmware, software, and licenses for uploading continuous monitoring data and Auto GC data to the TCEQ's MeteoStar system and for validating the data behind the TCEQ's firewall.

Data from the event-triggered monitors will be available to the public on the TCEQ's web site or the University's web site within 30 days. Canister samples from the event-triggered monitors will be capable of being triggered automatically when a pre-set level of total non-methane hydrocarbons is exceeded. Canister analysis data will be provided to the TCEQ in a format mutually agreed upon by the University and the Advisory Board, in consultation with the TCEQ.

Images from the surveillance cameras will be made available to the public on the University's web site. The University will operate the cameras and archive data from the cameras. The University will make the data from the cameras available to the TCEQ.

II. Project Benefits

This Project will provide significant and discernible environmental benefits to the Corpus Christi area by providing measurements of community exposure to pollutants, and providing post-event evaluation of pollutants emitted during a release. The information obtained from this network will provide the community with more knowledge of the types and quantities of pollutants emitted from the industries along the Corpus Christi ship channel. The raw data generated through the Project may be used to aid the University's research, teaching, and service missions through the implementation of additional projects. The University shall be solely responsible for, and shall not use COCP funds to pay for, any such additional Project cost increases resulting from any such research, teaching, or service activities. In addition, data obtained from the monitoring sites and made available to the public may be used by the TCEQ and the EPA to initiate enforcement actions.

Because the primary air quality concern in the Corpus Christi area is health impacts from industrial emissions, this Project is focused on providing air quality data that may be used by the TCEQ and the EPA to investigate and remediate this air quality concern. To improve air quality, emissions of air pollutants must be discovered, the sources must be identified, and the emissions must be reduced to acceptable levels through additional regulations, voluntary activities promoted through public awareness, permitting activities, or enforcement. To achieve these objectives, data from the Project may be used by the TCEQ and the EPA to detect and track hazardous air pollution releases in near real-time to determine air pollution source locations for enforcement actions, permitting and regulatory decisions, and potential future health effects studies. The data also can be used by the TCEQ and the EPA to help determine if additional air quality problems that have not yet been detected exist in the Corpus Christi area.

III. Project Cost

This Project Proposal anticipates \$6,760,000, plus certain accumulated interest, in COCP funds to install, operate, and maintain the air monitoring and surveillance camera network for no less than seven, and up to ten, years. In addition, the University shall maintain and spend the COCP funds, and interest earned thereon, as provided in section V of this Project Proposal for implementation of this Project.

IV. Requirements, Records and Reporting

The expenditure of COCP funds received by the University pursuant to this cause will be limited to the scope of the Project described in this proposal. The Project will be implemented in accordance with the following requirements:

- A. One year from the anniversary date of the University's receipt of the COCP funds and annually thereafter, the representatives of the University and the Advisory Board will appear before the Court to present a status report on the Project, the use of COCP funds, monitoring equipment and/or cameras installed and operated, management actions implemented, plans for additional monitor and/or camera installation (if any), plans for management actions, annual audit report results for the University certified in accordance with the requirements of U.S. Office of Management and Budget Circular A-133 (required for federal research grants), audit report results for the University by TCEQ and EPA (if any), and annual audit report results for the University by all other state or federal agencies which may have audited any activity or expenditure of the University, in accordance with Article XIV of this Project Proposal, during the prior year.
- B. The University will begin implementation of the air monitoring and surveillance camera network project within 30 days of receipt of the COCP funds, unless otherwise stated.
- C. Absent circumstances beyond its control the University will use reasonable best efforts to have the contract(s) for installation, operation, and maintenance of the air monitoring network and surveillance cameras negotiated and executed within six months of receipt of the COCP funds. The University and the Advisory Board, in consultation with the TCEQ and the EPA, shall agree upon a schedule for installation and operation of the monitoring network, which shall occur on a rolling basis. Such schedule shall be provided to the Court, with copies to TCEQ and EPA, in the quarterly reports described below.
- D. Absent circumstances beyond the control of the University, the network described in this Project Proposal shall be installed and fully operational within eighteen months of receipt of the COCP funds.
- E. The University will provide a mechanism whereby TCEQ will be able to contact equipment operators during normal working hours to address data quality or communication issues. All monitoring conducted pursuant to this Project will be covered by a quality assurance projects plan prepared by the University in consultation with its contractor, written in accordance with EPA QA-R5 document format and approved by the Court and TCEQ prior to the commencement of sampling activities. The quality assurance projects plan will contain statements on data quality and completeness necessary to meet Project needs. It will include statements that staff responsible for auto-GC set-up, operation, and trouble-shooting have experience performing those tasks using the equipment specified and that site operators responsible for total non-methane hydrocarbons, sulfur dioxide, and hydrogen sulfide and meteorological equipment have experience operating and calibrating ambient air continuous emission monitors. Such quality assurance projects plan shall be provided to the Court, with copies to TCEQ and EPA, in the quarterly reports described below.

F. The University shall maintain records and submit quarterly reports regarding this COCP Project to the Court, TCEQ, and EPA. Reports are due within sixty (60) days of the end of each quarterly reporting period. The reports shall contain the following information:

Written Report

1. ✓ The total amount of COCP funds and other funds received under this proposal;
2. An itemized description of the activities to which COCP funds were allocated and progress made to date on each of those activities;
3. ✓ A detailed list (in University's standard format and detail) of actual expenditures paid by COCP funds for the quarter;
4. 1 The balance of the COCP account, including interest earned in the quarter;
5. 2 Expected expenditures of COCP funds, for the funds remaining in the account; and
6. Any additional information the University, EPA, or TCEQ believe will demonstrate compliance with this Project Proposal.

G. The University will not be responsible for the failure to perform any terms or provisions of this Project Proposal if its failure is attributable to acts of war, riot, strike, civil disorder or other work stoppage, fire, flood, or any other act not within the control of the University and which, by reasonable diligence, the University is unable to prevent.

H. In the event of any act not within the control of the University and which, by reasonable diligence, the University is unable to prevent, including acts of God (such as hurricanes) or vandalism, resulting in increased equipment maintenance, repair, or replacement costs, the University may adjust the Project budget and/or cash flow, as necessary. The University shall, however, obtain insurance for the equipment against such losses. The University shall notify the Court, EPA, and TCEQ, with copy to the Advisory Board, of any such budget and/or cash flow adjustments in the Quarterly Report filed immediately subsequent to such adjustment pursuant to section IV.F of this Project Proposal.

V. Maintenance of COCP Funds

The University will maintain the funds Koch Petroleum Group, L.P. has paid pursuant to a felony conviction in *U.S. v. Koch Petroleum Group, L.P.* (S. D. Tex.), CR C-00-325, in the following manner. The COCP funds shall be initially invested in the University's minimal investment risk vehicle which is a money market fund. The University will spend approximately \$2.3 million in Year 1 of the Project on equipment capital costs, management (including salaries, fringe benefits, travel), operational and installation expenses. The remainder of the COCP funds will remain invested in the University's money market fund. Approximately \$680,000 will be released in each of Years 2-through 7, (and in years 8, 9, and 10 if funds are available for the Project to

continue for that length) of the Project to the University's money market fund for expenditure on capital costs, management and operational expenses. All earnings on COCP funds will be reinvested as described above.

VI. Use of COCP Funds

The University will expend the COCP funds that it receives, and all interest earnings thereon, solely for the Project described in the Project Description, above. All administrative or other expenses not directly allocable to the implementation of the Project shall be accounted for and charged at a rate of 15% of the Project's total direct costs.

VII. Contracting

The University may subcontract with other parties to implement the Project developed under this contract.

VIII. Accounting

The University will account for COCP funds in accordance with established University practices and generally accepted accounting practices and standards. The University will specifically account for the receipt and expenditure of COCP funds, including all interest earned on such funds, and report on the expenditure of those funds in accordance with the reporting requirements set forth above.

IX. Timely Expenditure

The University will ensure the expenditure of COCP funds results in adequate and timely work performed or purchases made in accordance with this Project Proposal. The University will spend the COCP funds in accordance with this Project Proposal and will provide the Court with timely notice and justification for the inability to spend such funds accordingly. The University will spend at least \$6.760 million, the amount of the COCP funds received, on implementation of the Project described herein within 7 to 10 years of receipt of such funds.

X. Other Contributors

Nothing in this Project Proposal shall be construed to prevent the University from accepting funds from charitable contributors or other sources to the extent permitted by law and consistent with the policies of the University for this Project. Further, the University will make a good faith effort to obtain contributions to continue this Project as long as it is beneficial to the community.

XI. Enforcement Actions

The University acknowledges that accepting funds under this Project Proposal will not create any rights on behalf of the University in this cause. The University shall have no role in the enforcement process other than to receive the approved COCP payment according to the terms of this Project Proposal.

XII. Project Performance

The University agrees that the project described herein funded with COCP funds will be performed in accordance with this Project Proposal, all applicable State and Federal laws and regulations.

XIII. Reporting

The University agrees to provide the U.S. District Court in Corpus Christi, Texas, TCEQ and EPA with reports according to the requirements established herein. The timely submittal of complete reports shall be considered an essential element of performance under this Agreement.

XIV. Right to Audit

To the extent permitted by law, the University will provide any further documentation required that is directly pertinent to performance under this Project Proposal. The University will provide to the representatives of the U.S. District Court, TCEQ, or EPA, upon request, access to all financial records, grant documents, invoices and contracts related to the receipt of COCP funds, the expenditure of those funds, and performance of the Project. The University will require that contractors, subcontractors and grantees provide the University or the representative of the U.S. District Court, TCEQ or EPA, upon request, access to the site of any work being financed in whole or in part by COCP funds.

XV. Publicity

The University will not characterize or refer to Koch Petroleum Group, L.P.'s payment to the U.S. District Court of COCP funds as anything other than a condition of probation for a criminal conviction. Any public statement regarding Koch Petroleum Group, L.P.'s payment shall include the following statement or its equivalent: "The company's payment of funds for this Project was a condition of probation for a criminal conviction."

XVI. Term

This agreement will be effective on the date that the funds are disbursed to the recipient and will remain in effect for up to ten years, depending upon availability of funds, unless extended by order of the Court. Within sixty (60) days of the effective date of termination, the University shall make a written accounting to the U.S. District Court, with a copy to the TCEQ and EPA, of all COCP funds received, interest accrued, and expenditures made under this Project Proposal, and shall pay to the registry of the Court any COCP funds not spent in accordance with this Project Proposal, including any interest earned on such funds.

XVII. Early Termination

The University reserves the right to terminate its participation under this Project Proposal with good cause to be interpreted by the Court by giving sixty (60) days written notice to the U.S. District Court, with a copy to the TCEQ and EPA. The Court reserves the right to terminate this agreement at any time by giving sixty (60) days written notice to The University. If the participation

of the University is terminated in this Project by the University, the University will make a good faith effort to find suitable replacement candidates.

Termination of this Project Proposal shall not affect the rights and obligation of the parties accrued prior to termination. Upon termination of this Project Proposal University shall recover all expenses incurred and non-cancelable commitments as of the effective date of termination, including salaries for appointees for the remainder of their appointment, not to exceed one year.

XVIII. Refund of COCP Funds

If at any time the Court determines that the University is not in compliance with the obligations required under the terms of this Project Proposal or that COCP funds have been spent in a manner that has not resulted in compliant and timely work performed or purchases or acquisitions not made in accordance with this Project Proposal or the University terminates its participation under this Project Proposal, the Court may require payment from the University of the total remaining amount of COCP funds, including any interest earned on the COCP funds, and unallowable expenses to the registry of the U.S. District Court in Corpus Christi, Texas. Should the Court determine, after audit of the University's records in accordance with section XIV of this Project Proposal, that funds expended were not in accordance with the terms and conditions of this Project Proposal or that the University was in default of its material obligations under this Project Proposal, the University would be responsible for payment of those funds expended plus interest.

XIX. Designated Contacts

Administrative Contacts

U.S. District Court

Bill Cazalas, Assistant Deputy Chief
U.S. Probation Officer
1133 N. Shoreline
Suite 124
Corpus Christi, TX 78410

The University of Texas at Austin

Mr. Bobby McQuiston, Acting Director
Office of Sponsored Projects
P.O. Box 7726, MC A9000
Austin, TX 78712-7726

Texas Commission on Environmental Quality (TCEQ)

Litigation Division
Attention: SEP Coordinator, MC 175
Texas Commission on Environmental Quality
P.O. Box 13087
Austin, Texas 78711-3087

U.S. Environmental Protection Agency (EPA)

Robert Todd
Air Enforcement Officer
U.S. EPA Region 6
Mail Code 6EN-AA
1445 Ross Avenue
Dallas, Texas 75202

Technical Contacts

The University of Texas at Austin

Dr. David T. Allen
Director, Center for Energy and Environmental Resources
J.J. Pickle Research Campus
10100 Burnet Road, Bldg. 133 (MC R7100)
Austin, Texas 78758

Texas Commission on Environmental Quality

Manager, Laboratory and Mobile Monitoring Section
P.O. Box 13087, Mail Code 165
Austin, Texas 78711-3087

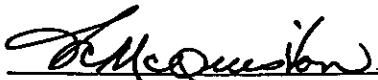
and

Regional Director
Region 14,
6300 Ocean Drive , Suite 1200
Corpus Christi, Texas 78412-5503

Environmental Protection Agency

Robert Todd
Air Enforcement Officer
U.S. EPA Region 6
Mail Code 6EN-AA
1445 Ross Avenue
Dallas, Texas 75202

Submitted on behalf of The University of Texas at Austin



Bobby McQuiston, Acting Director
Office of Sponsored Projects

**IV. Coordination with Existing Monitoring Activities
in the Corpus Christi Area – TCEQ**

[GENERAL PROJECT INFORMATION]

Jan. 16, 2004



Site (1) H.J. Williams Park (City of Corpus Christi - looking N)



Site (3) Huisache CAMS 98 (TCEQ existing - looking N)



Site (3) Huisache CAMS 98 (TCEQ Existing - looking west WNW)



Site (3) Huisache CAMS 98 (TCEQ Existing - looking ENE)

V. New Business

[GENERAL PROJECT INFORMATION]

Jan. 16, 2004

V-a. Establishment of the Advisory Board

[GENERAL PROJECT INFORMATION]

Jan. 16, 2004

Advisory Board of the Corpus Christi Air Monitoring and Surveillance Camera Installation and Operation Project

Advisory Board Member - BIOGRAPHICAL INFORMATION FORM

Name: _____

Organization/Affiliation: _____

Area of representation on the Board: _____

Include a brief biographical sketch below. The biographical sketch should include information about your involvement in other air quality monitoring programs in the Corpus Christi area. If you are involved in other programs include the name of the program, the nature of your involvement and the length of time you have been or will be involved with that program.

The biographical sketch should be appropriate for including in the Corpus Christi Air Monitoring and Surveillance Camera Installation and Operation Project reports that will be submitted to the US District Court. Any information submitted with Project reports including your biographical sketch will be subject to the Texas Public Information Act.

**Corpus Christi COCP Project
Monthly Project Update
Month Ending December 31, 2003**

Prepared by
Vincent M. Torres
The University of Texas at Austin

1.0 Project Schedule

A preliminary project schedule is attached. It reflects the requirements of the contract. As we begin to develop actual schedules for the site installation, this schedule will be updated and additional detail will be added.

2.0 Advisory Board

We have now established the members of the Advisory Board. Attachment I to this Report is a list of the members of the Board. The first meeting of the Advisory Board is scheduled to take place in Corpus Christi on January 16, 2004.

3.0 Acquisition of Sites

Progress continues to be made in completing negotiations for all necessary site agreements. No delay in the schedule is anticipated due to completion of site access agreements. The status of these agreements (keyed to the contract with the US District Court) is as follows.

Contract Ref.	Description of Site Location	Site Agreement Status
1.a	Oak Park Recreation Center	Agreement with TCEQ for signature.
1.b	Grain Elevator @ Port of Corpus Christi	Final language for agreement prepared with POCC. Awaiting final documents for TCEQ signature.
1.c	J. I. Hailey Site @ Port of Corpus Christi	Final language for agreement prepared with POCC. Awaiting final documents for TCEQ signature.
1.d	TCEQ Monitoring Site C199 @ Donna Park	Ready for new equipment as needed.
1.e	Port of Corpus Christi building on west end of CC Inner Harbor	Final language for agreement prepared with POCC. Awaiting final documents for TCEQ signature.
1.f	Off Up River Road on Flint Hills Resources easement	Agreements with FHR signed.
1.g	Solar Estates Park at end of Sunshine Road	Agreements with FHR signed.
Camera 1	One location from 1.d, 1.f, or 1.g	See above for 1.d, 1.f, & 1.g.
Camera 2	One location from 1.d, 1.f, or 1.g	See above for 1.d, 1.f, & 1.g.

4.0 Quality Assurance Project Plan (QAPP)

No activity to report this period.

5.0 Site Installation and Operations

Specifications for requests for best and final bids for site preparation and equipment installation were sent to two potential subcontractors. Those bids have been received and the decision on the selection of a subcontractor for site installation is still expected to be completed in January with execution of the contract to be completed by mid February.

**Attachment 1
Corpus Christi COCP Project
Air Monitoring Station Schedule and Equipment
ADVISORY BOARD MEMBERS**

<u>Last Name</u>	<u>First Name</u>	<u>Affiliation/Organization</u>	<u>Area of Representation on the Board</u>
Arnold	Gretchen (Ms.)	CC Pollution Prevention Partnership Texas A&M University	At-Large
Barnard	Ron (Mr.)	Environmental Specialist City of Corpus Christi	City Representative
Billiot Board	Eugene (Dr.)	Asst. Prof. Analytical Chemistry Texas A&M University	Technical Support to the
Boostrom	Ardys (M.D.)	Physician – Corpus Christi-Nueces County Public Health District	Local Public Health
Coleman Organization	Lena (Ms.)	Community Advisory Council	Neighborhood
Dulip	Vinay (Mr.)	Chemistry Teacher Moody High School	Local Educator
Kost	Glen (Dr.)	Public Health Awareness Group	At-Large
Suter	Pat (Ms.)	Costal Bend Sierra Club	Local Advocacy Group
Ex-Officio Members			
Brymer	David (Mr.)	Texas Commission on Environmental Quality Headquarters	
Kennebeck	David (Mr.)	Texas Commission on Environmental Quality Region 14	
Stanley	C. Buddy (Mr.)	Texas Commission on Environmental Quality Region 14	
Todd	Robert M. (Mr.)	Environmental Protection Agency Region 6	

**Attachment 3
Corpus Christi COCP Project
Air Monitoring Station Schedule and Equipment**

Contract Ref	TCEQ Ref	Latitude	Longitude	Description of Site Location	Monitoring Equipment					Camera
					Auto GC	Event Mon	Sulfur Com	Met Station	Met Station	
1.a	2	27.79861° North	97.43394° West	Oak Park Recreation Center	Yes	Yes		Yes		
1.b	4	27.81837° North	97.42130° West	Grain Elevator @ Port of Corpus Christi		Yes	Yes	Yes		
1.c	5	27.82485° North	97.43227° West	J. I. Hailey Site @ Port of Corpus Christi		Yes	Yes	Yes		
1.d	6	27.81165° North	97.46561° West	TCEQ Monitoring Site C199 @ Donna Park		Yes	Yes			Maybe used as a camera site
1.e	7	27.84418° North	97.52525° West	Port of Corpus Christi building on west end of CC Inner Harbor		Yes	Yes	Yes		
1.f	8	27.82769° North	97.52952° West	Off Up River Road on Flint Hills Resources easement		Yes	Yes	Yes		Maybe used as a camera site
1.g	9	27.82906° North	97.54322° West	Solar Estates Park at end of Sunshine Road	Yes	Yes		Yes		Maybe used as a camera site
Cam 1	6, 8 or 9	TBD	TBD	One location from 1.d, 1.f, or 1.g						
Cam 2	6, 8 or 9	TBD	TBD	One location from 1.d, 1.f, or 1.g						

Rev. 11/03

**V-b. Information on Location and Equipment
at Monitoring Sites**

[GENERAL PROJECT INFORMATION]

Jan. 16, 2004

Sites and Equipment

1/16/2004

**Corpus Christi COCP Project
Air Monitoring Station Schedule and Equipment**

Contract Ref	TCEQ Ref	Latitude	Longitude	Description of Site Location	Monitoring Equipment				Camera
					Auto GC	Event Mon	Sulphur Com	Met Station	
1.a	2	27.79861° North	97.43394° West	Oak Park Recreation Center	Yes	Yes		Yes	
1.b	4	27.81837° North	97.42130° West	Grain Elevator @ Port of Corpus Christi		Yes	Yes	Yes	
1.c	5	27.82485° North	97.43227° West	J. I. Hailey Site @ Port of Corpus Christi		Yes	Yes	Yes	
1.d	6	27.81165° North	97.46561° West	TCEQ Monitoring Site C199 @ Dona Park		Yes	Yes		Maybe used as a camera site
1.e	7	27.84418° North	97.52525° West	Port of Corpus Christi building on west end of CC Inner Harbor		Yes	Yes	Yes	
1.f	8	27.82769° North	97.52952° West	Off Up River Road on Flint Hills Resources easement		Yes	Yes	Yes	Maybe used as a camera site
1.g	9	27.82906° North	97.54322° West	Solar Estates Park at end of Sunshine Road	Yes	Yes	Yes	Yes	Maybe used as a camera site
Cam 1	6, 8 or 9	TBD	TBD	One location from 1.d, 1.f, or 1.g					
Cam 2	6, 8 or 9	TBD	TBD	One location from 1.d, 1.f, or 1.g					

1/16/2004

Site related issues

- Placement of Auto-GCs
- Placement of cameras
- Highest priorities for additional sites

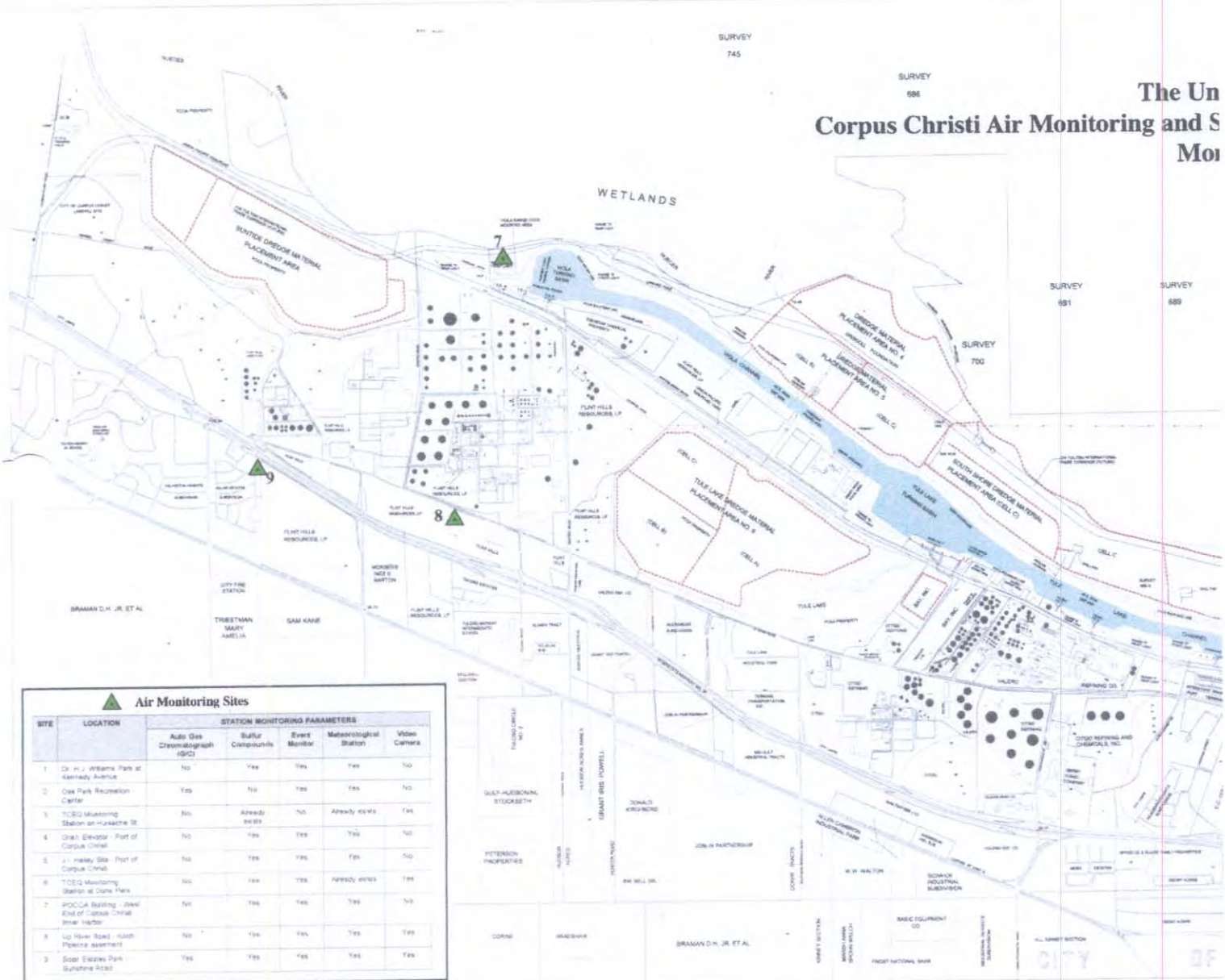
**V-b. Information on Location and Equipment
at Monitoring Sites**

Site Map of Corpus Christi / Nueces Bay Area

[GENERAL PROJECT INFORMATION]

Jan. 16, 2004

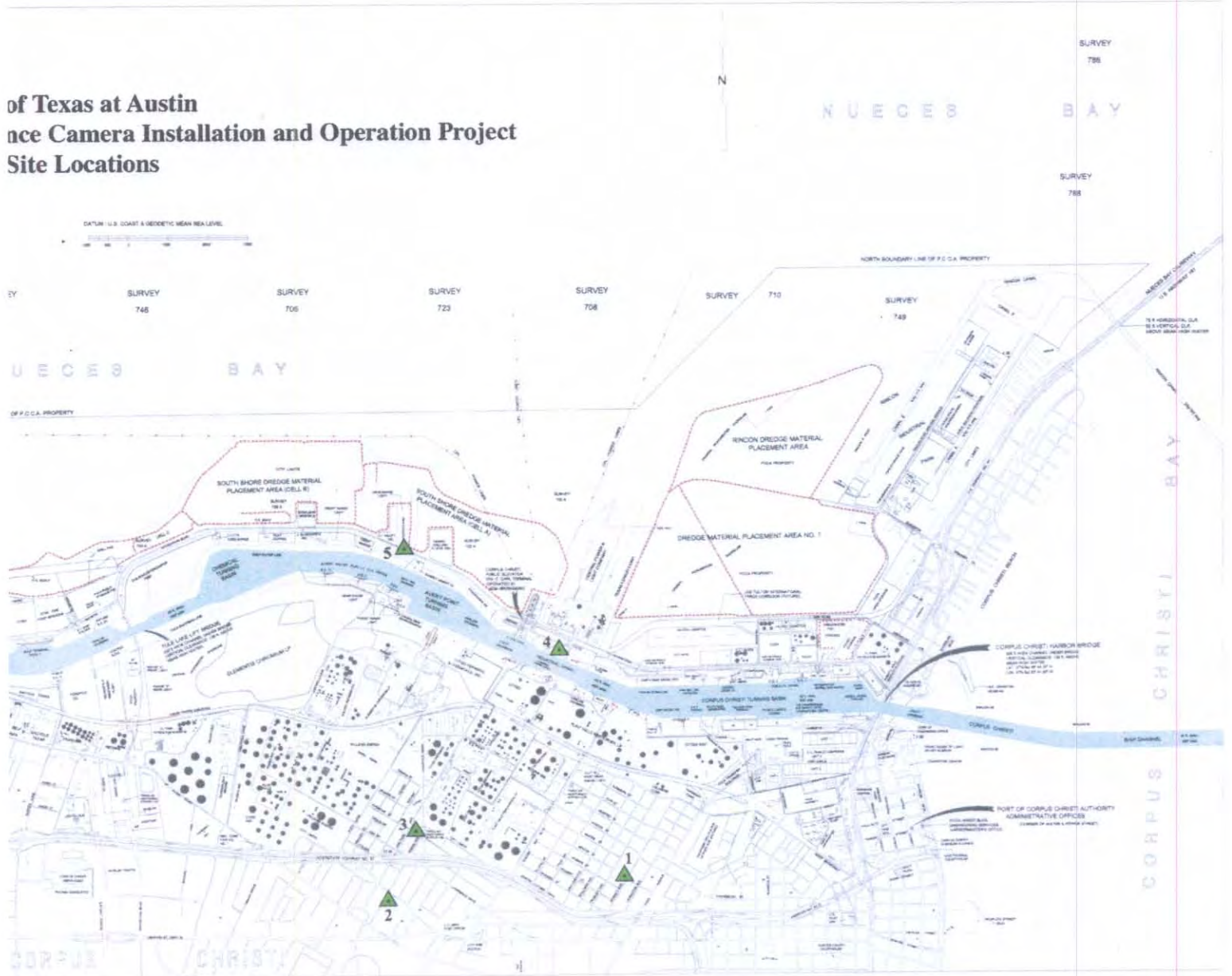
The Un Corpus Christi Air Monitoring and S Mo



Air Monitoring Sites

SITE	LOCATION	STATION MONITORING PARAMETERS				
		Auto Gas Cylindergraph (G/C)	Sulfur Compounds	Event Monitor	Meteorological Station	Video Camera
1	Dr. H. J. Williams Park at Kennedy Avenue	No	Yes	Yes	Yes	No
2	Oak Park Recreation Center	Yes	No	Yes	Yes	No
3	TCEQ Monitoring Station on Huachuca St.	Yes	Already exists	No	Already exists	Yes
4	Crain Elevator - Part of Corpus Canal	No	Yes	Yes	Yes	No
5	1st Holey Site - Part of Corpus Canal	No	Yes	Yes	Yes	No
6	TCEQ Monitoring Station at Crane Park	Yes	Yes	Yes	Already exists	Yes
7	POCCA Building - 2nd End of Corpus Canal Inner Harbor	Yes	Yes	Yes	Yes	No
8	Up River Road - 4000 Pipeline easement	No	Yes	Yes	Yes	Yes
9	Boat Elevator Park Sylvan Road	Yes	Yes	Yes	Yes	Yes

of Texas at Austin nce Camera Installation and Operation Project Site Locations

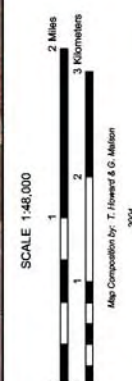


Existing and Proposed 10 Year Corpus Christi Air Monitoring Sites



Pan-Sharpened Landsat 7 Image Map
 Image Source: Landsat 7 ETM+
 SPOUT USA Swieth
 ETM+ Collection Date: March 30, 2003
 SPOUT Collection Date: November 13, 1999
 Nominal Pixel Size: 10 meters
 Projection: UTM Zone 14 North
 Datum: NAD83

Note: Site locations are approximate.



- Corpus Christi Air Monitoring Sites**
- ▲ Proposed Air Monitoring Site
 - Existing TCEQ CAMS Site
 - Existing Industrial Air Monitoring Site

**V-b. Information on Location and Equipment
at Monitoring Sites**

Close-up Site Location Maps

Site Photos

Status of Site Access Agreements

[GENERAL PROJECT INFORMATION]

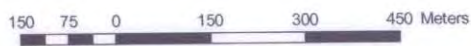
Jan. 16, 2004

Proposed 10 Year Corpus Christi Air Monitoring: Site A



Buffer Radius = 1 km

SCALE 1:12,000



Note: Relative structure height can be estimated with dark shadow length. Site locations are approximate.

Map Composition by: G. Malson

2004

Digital Orthophoto Quarter
Quadrangle (DOQQ)

Image Source: USGS NAPP Color

Infrared Photography

Collection Dates: February 8, 2002,
February 9, 2002, and
February 24, 2002

Pixel Size: 1 meter
Projection: UTM Zone 14 North
Datum: NAD83



Site 1b Grain Elevator at POCC



Proposed 10 Year Corpus Christi Air Monitoring: Site B



Buffer Radius = 1 km

SCALE 1:12,000

150 75 0 150 300 450 Meters



Note: Relative structure height can be estimated with dark shadow length. Site locations are approximate.

Map Composition by: G. Malson

2004

Digital Orthophoto Quarter
Quadrangle (DOQQ)

Image Source: USGS NAPP Color

Infrared Photography
Collection Dates: February 8, 2002,
February 9, 2002, and
February 24, 2002

Pixel Size: 1 meter
Projection: UTM Zone 14 North
Datum: NAD83

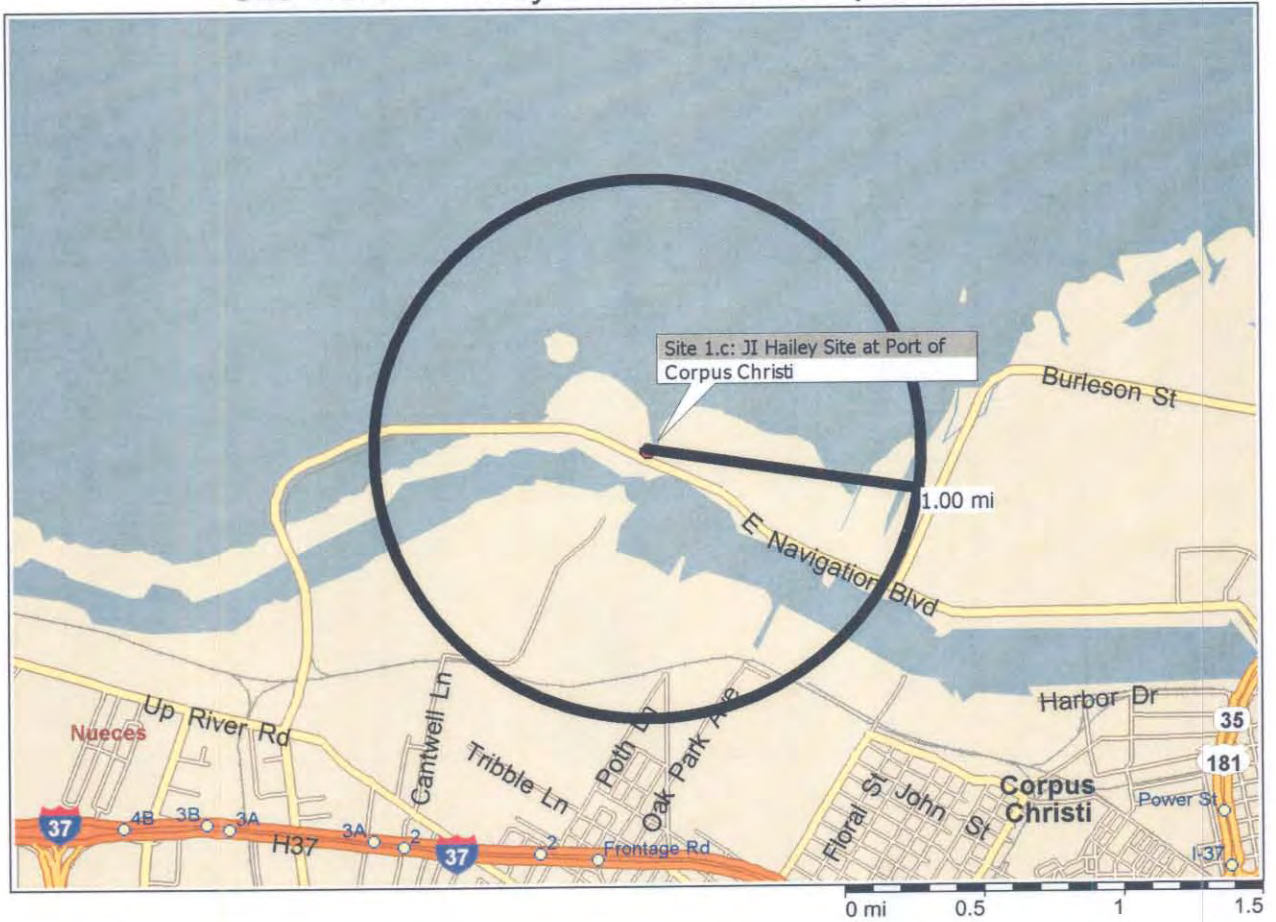


Site 1.a. Oak Park Recreation Center (City of Corpus Christi – looking N)



Site 1.b. Grain Elevator (Port of Corpus Christi – looking WSW)

Site 1.c: J. I. Hailey Site at Port of Corpus Christi

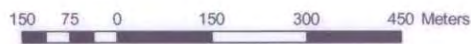


Proposed 10 Year Corpus Christi Air Monitoring: Site C



Buffer Radius = 1 km

SCALE 1:12,000



Digital Orthophoto Quarter
Quadrangle (DOQQ)

Image Source: USGS NAPP Color
Infrared Photography
Collection Dates: February 9, 2002 and
February 24, 2002

Pixel Size: 1 meter
Projection: UTM Zone 14 North
Datum: NAD83



Note: Relative structure height
can be estimated with
dark shadow length. Site
locations are approximate.

Map Composition by: G. Malson

2004

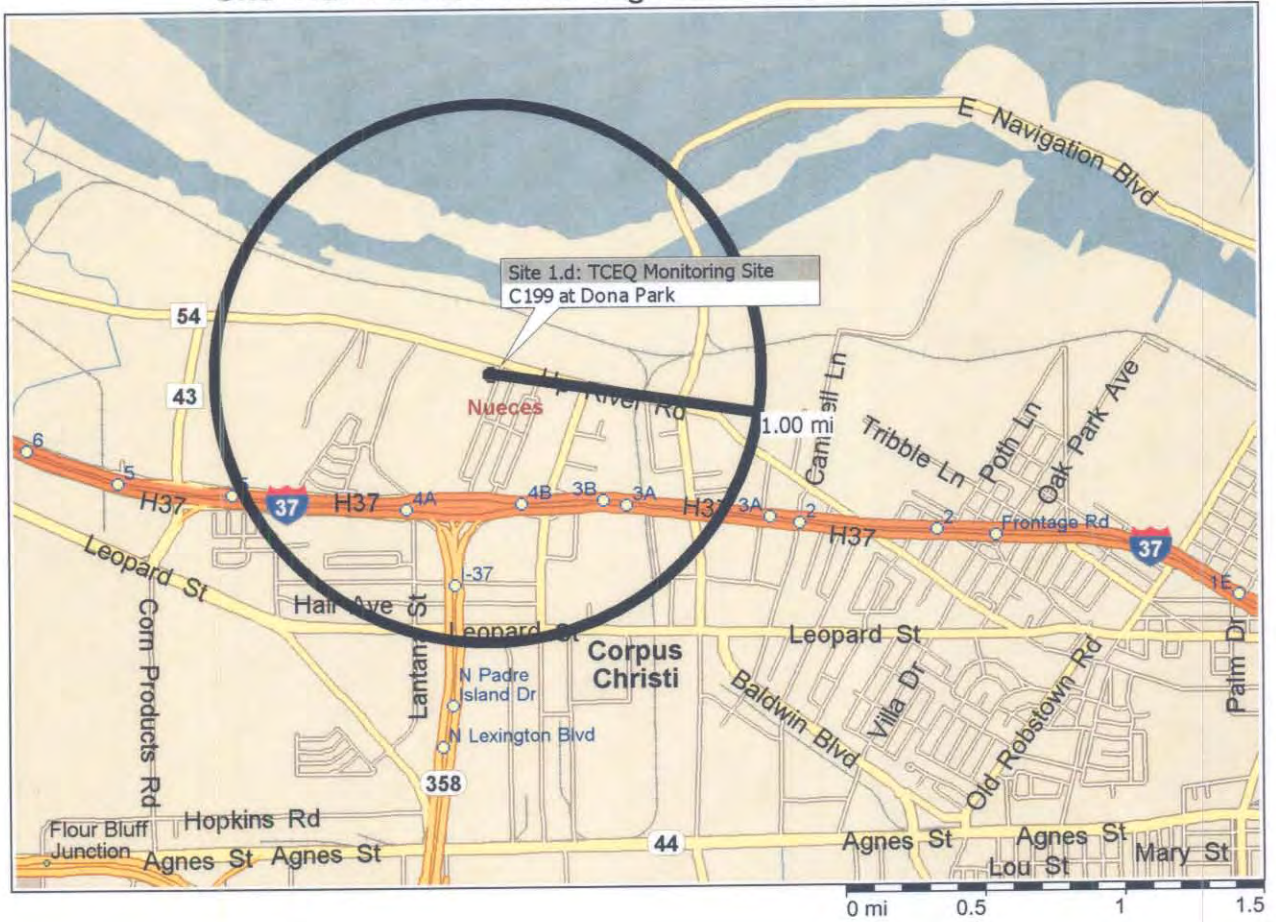


Site 1.c. J.I. Haley Site (Port of Corpus Christi – looking ENE)



Site 1.c. J.I. Haley Site (Port of Corpus Christi – looking SSW)

Site 1.d: TCEQ Monitoring Site C199 at Dona Park



Proposed 10 Year Corpus Christi Air Monitoring: Site D



Buffer Radius = 1 km

SCALE 1:12,000

150 75 0 150 300 450 Meters



Note: Relative structure height can be estimated with dark shadow length. Site locations are approximate.

Map Composition by: G. Malson

2004

Digital Orthophoto Quarter
Quadrangle (DOQQ)

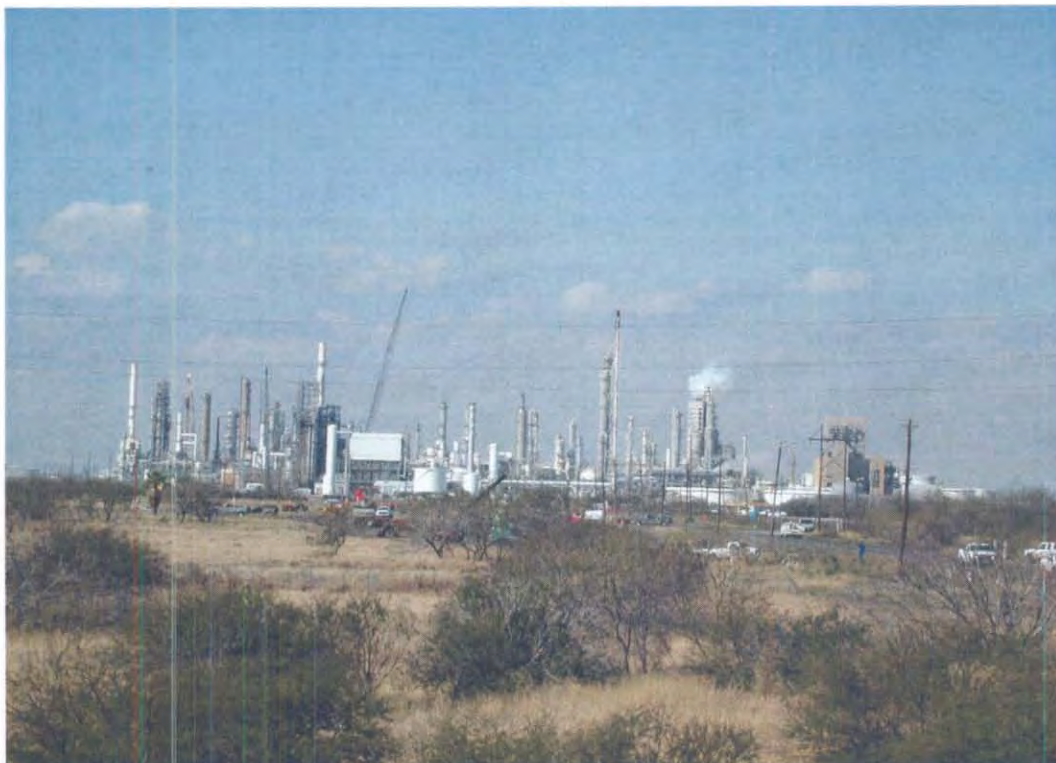
Image Source: USGS NAPP Color

Infrared Photography
Collection Dates: February 8, 2002,
February 9, 2002, and
February 24, 2002

Pixel Size: 1 meter
Projection: UTM Zone 14 North
Datum: NAD83



Site 1.d. Dona Park (City of Corpus Christi – looking WNW)



Site 1.d. Dona Park (City of Corpus Christi – looking WNW)



Site 1.d. Dona Park (City of Corpus Christi – looking ENE)

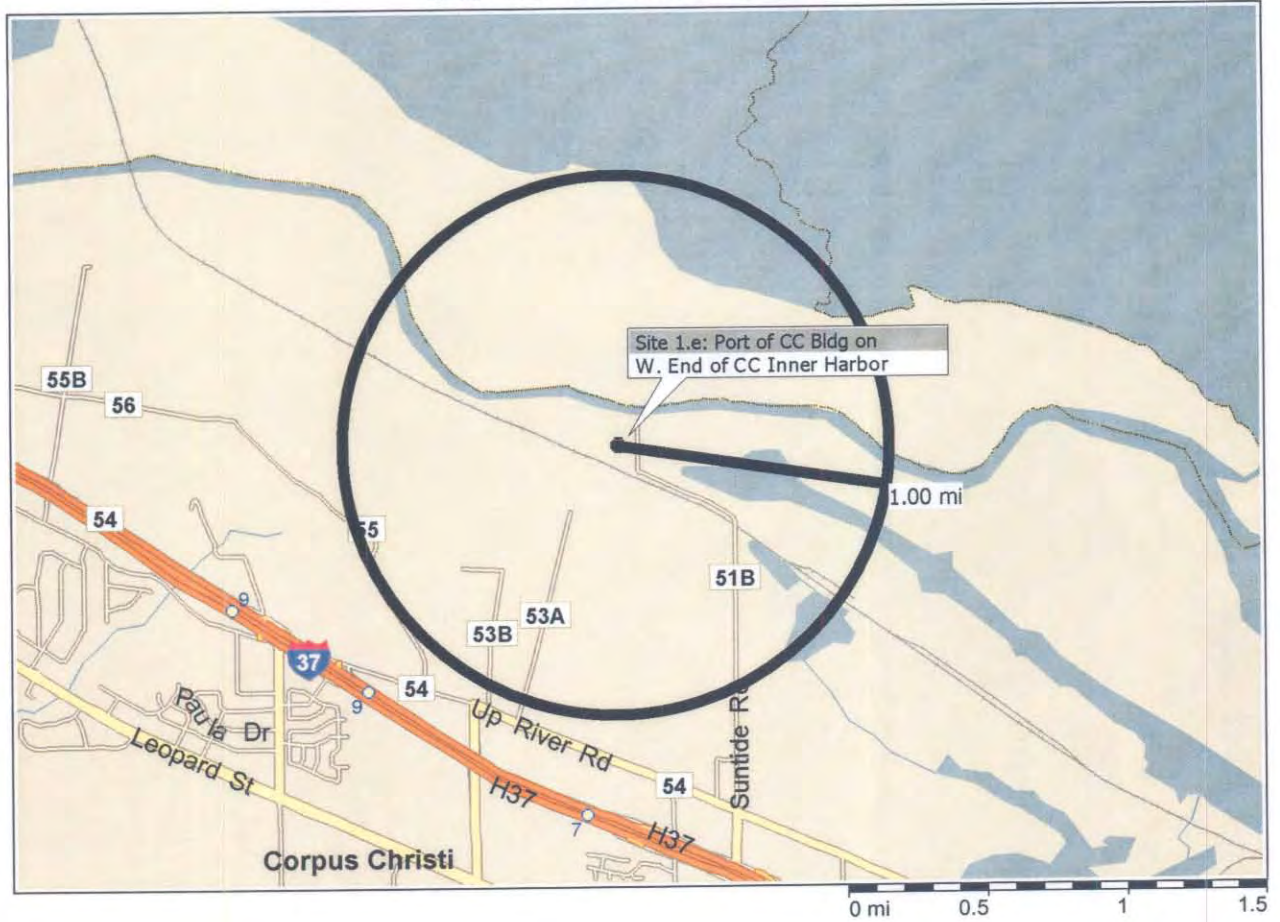


Site 1.d. Dona Park (City of Corpus Christi – looking ENE)

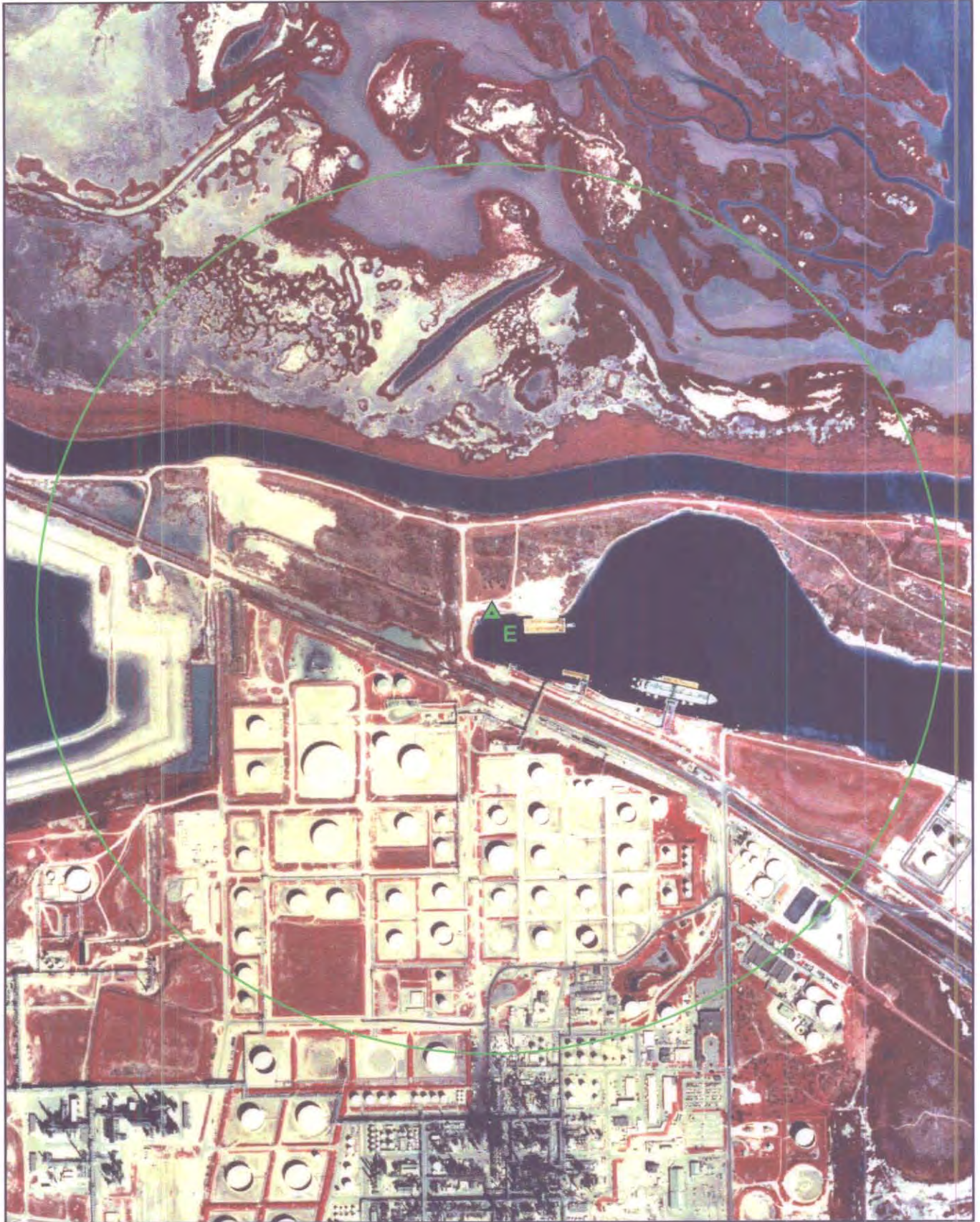


Site 1.d Dona Park CAMS 199 (TCEQ existing - looking ENE toward the site)

Site 1.e: CC Inner Harbor



Proposed 10 Year Corpus Christi Air Monitoring: Site E



Buffer Radius = 1 km

SCALE 1:12,000

150 75 0 150 300 450 Meters

Map Composition by: G. Malson

2004

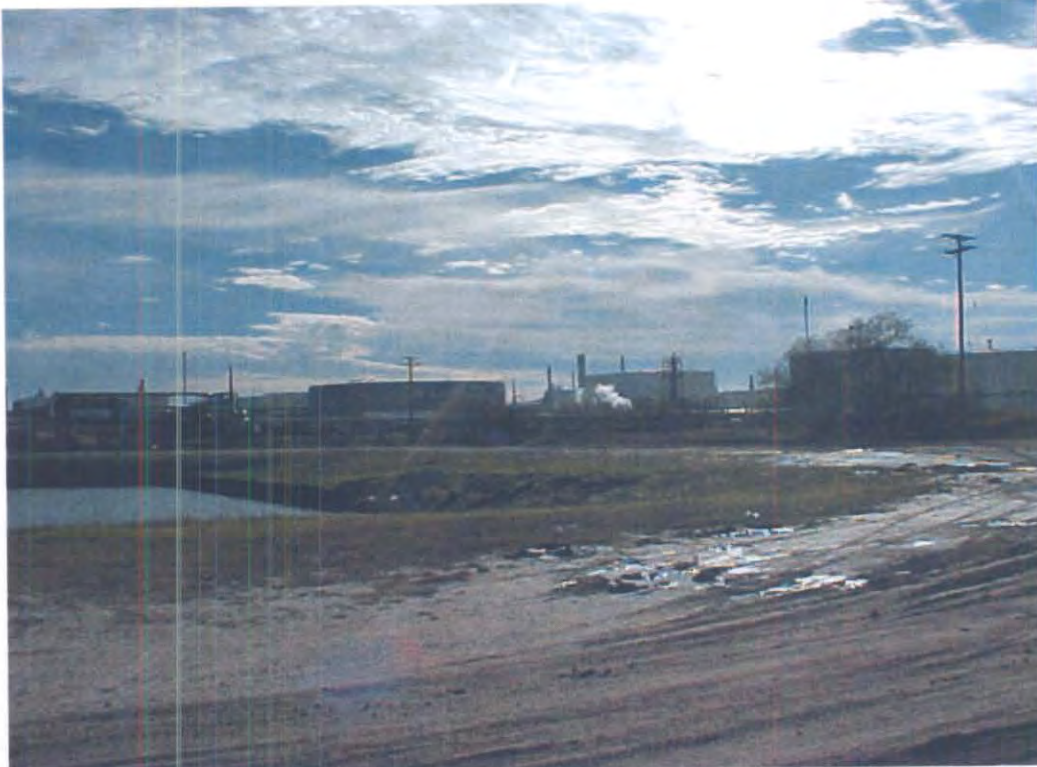
Digital Orthophoto Quarter
Quadrangle (DOQQ)

Image Source: USGS NAPP Color
Infrared Photography
Collection Dates: February 9, 2002 and
February 24, 2002

Pixel Size: 1 meter
Projection: UTM Zone 14 North
Datum: NAD83



Note: Relative structure height
can be estimated with
dark shadow length. Site
locations are approximate.

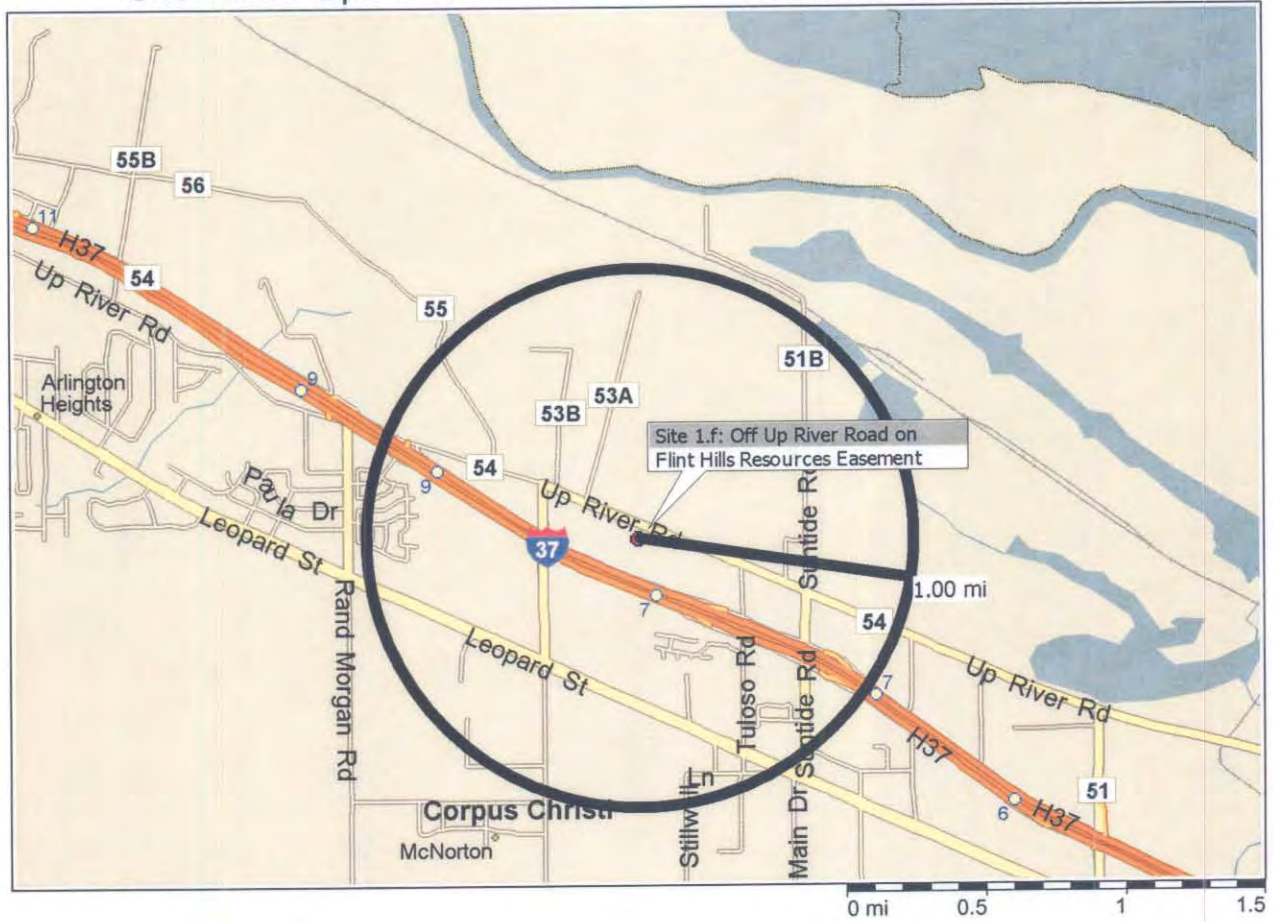


Site 1.e. Building on west end of Corpus Christi Inner Harbor – looking SW)



Site 1.e. Building on west end of Corpus Christi Inner Harbor – looking SSW)

Site 1f: Off Up River Road on Flint Hills Resources Easement



Proposed 10 Year Corpus Christi Air Monitoring: Site F



Buffer Radius = 1 km

SCALE 1:12,000

150 75 0 150 300 450 Meters



Note: Relative structure height can be estimated with dark shadow length. Site locations are approximate.

Map Composition by: G. Malson

2004

Digital Orthophoto Quarter
Quadrangle (DOQQ)

Image Source: USGS NAPP Color
Infrared Photography
Collection Dates: February 9, 2002 and
February 24, 2002
Pixel Size: 1 meter
Projection: UTM Zone 14 North
Datum: NAD83



Site 1.f. Up River Road (Flint Hills Easement– looking ENE from the proposed location)



Site 1.f. Up River Road (Flint Hills Easement– looking NE from the proposed location)



Site 1.f. Up River Road (Flint Hills Easement– looking NNE from the proposed location)



Site 1.f. Up River Road (Flint Hills Easement– looking S toward the proposed location)

Site 1.g: Solar Estates Park at End of Sunshine Road



Proposed 10 Year Corpus Christi Air Monitoring: Site G



Buffer Radius = 1 km

SCALE 1:12,000

150 75 0 150 300 450 Meters

Map Composition by: G. Malson

2004

Digital Orthophoto Quarter
Quadrangle (DOQQ)

Image Source: USGS NAPP Color
Infrared Photography
Collection Dates: February 9, 2002 and
February 24, 2002

Pixel Size: 1 meter
Projection: UTM Zone 14 North
Datum: NAD83



Note: Relative structure height
can be estimated with
dark shadow length. Site
locations are approximate.



Site 1.g. Solar Estates Park – Sunshine Road - looking E)



Site 1.g. Solar Estates Park – Sunshine Road - looking E)

SITE AGREEMENT STATUS

Contract Ref.	Description of Site Location	Site Agreement Status
1.a	Oak Park Recreation Center	Agreement with TCEQ for signature.
1.b	Grain Elevator @ Port of Corpus Christi	Final language for agreement prepared with POCC. Awaiting final documents for TCEQ signature.
1.c	J. I. Hailey Site @ Port of Corpus Christi	Final language for agreement prepared with POCC. Awaiting final documents for TCEQ signature.
1.d	TCEQ Monitoring Site C199 @ Donna Park	Ready for new equipment as needed.
1.e	Port of Corpus Christi building on west end of CC Inner Harbor	Final language for agreement prepared with POCC. Awaiting final documents for TCEQ signature.
1.f	Off Up River Road on Flint Hills Resources easement	Agreements with FHR signed.
1.g	Solar Estates Park at end of Sunshine Road	Agreements with FHR signed.
Camera 1	One location from 1.d, 1.f, or 1.g	See above for 1.d, 1.f, & 1.g.
Camera 2	One location from 1.d, 1.f, or 1.g	See above for 1.d, 1.f, & 1.g.

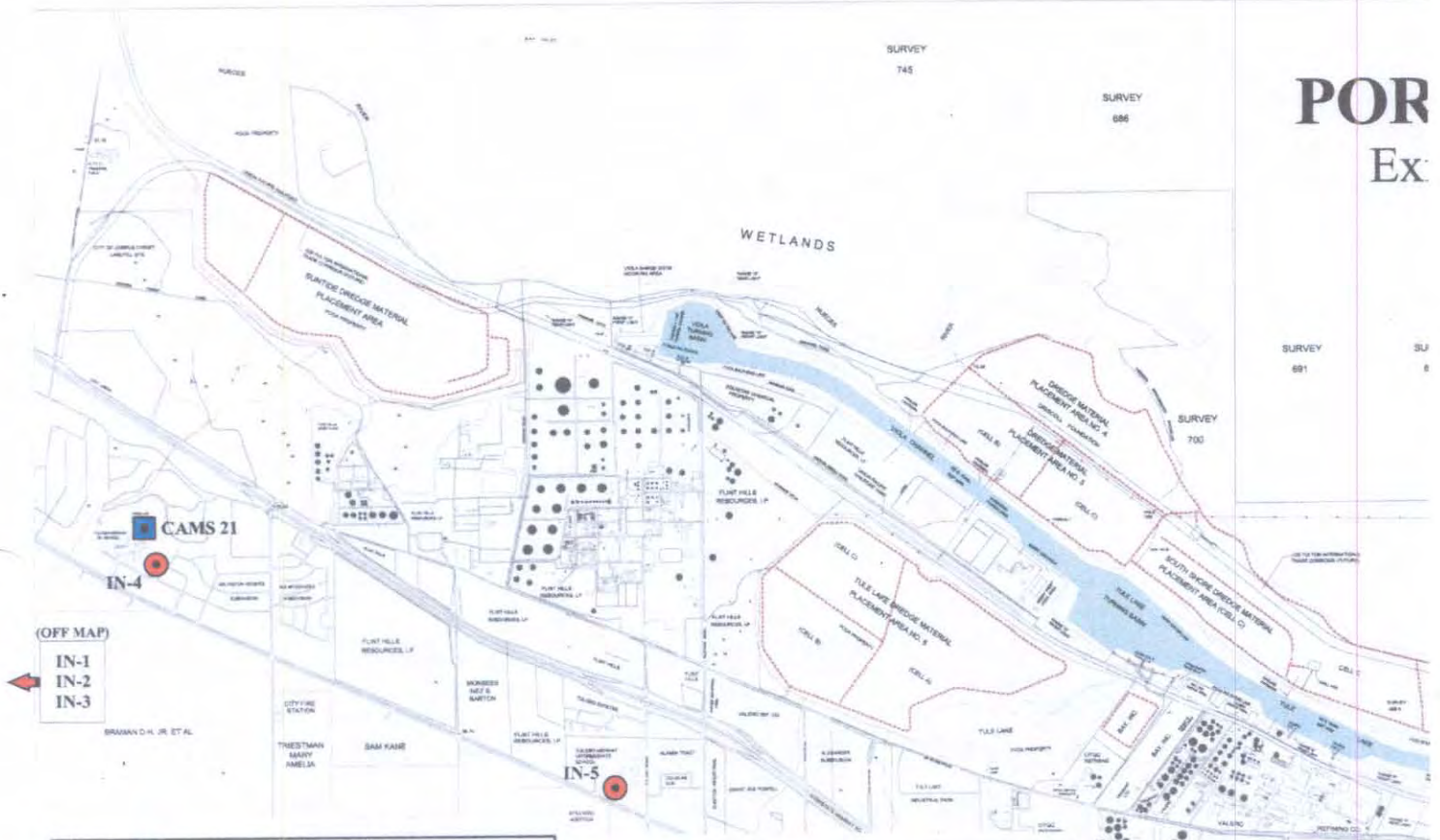
**V-b. Information on Location and Equipment
at Monitoring Sites**

Map of Existing Corpus Christi Air Monitoring Sites

[GENERAL PROJECT INFORMATION]

Jan. 16, 2004

SURVEY 745
SURVEY 686
SURVEY 691
SURVEY 700



EXISTING CORPUS CHRISTI AIR MONITORING - INDUSTRIAL

THREE INDUSTRIAL NETWORKS (IN)		STATION MONITORING PARAMETERS	
Site and Sponsor	Location	Selected VOC's (Volatile Organic Compounds)	Meteorological Station
IN-1 Euler	Cavalier Elementary School Not on map	Yes	No
IN-2 Euler	Tubao-Mohrly High School Not on map	Yes	Yes
IN-3 Euler	Rockers Bank Not on map	Yes	No
IN-4 Flat Hills Res.	Tubao-Mohrly Jr. High School 1783 La Branch Rd	Yes	Yes
IN-5 Flat Hills Res.	Tubao-Mohrly Intermediate School 1825 Tubao Rd	Yes	No
IN-6 Various*	Up River Road, Cr. Rd. 33 A between Duro-Mohrly and Lantana Rd.	Yes	Yes
IN-7	Oak Park Elementary School 2771 Mueller St	Yes	No
IN-8 Various	Crosby Elementary School 2512 Klepper St	Yes	No

* Various sponsors are Celge Chemical and Refining Company, Valero Energy Corp. and Flat Hills Resources

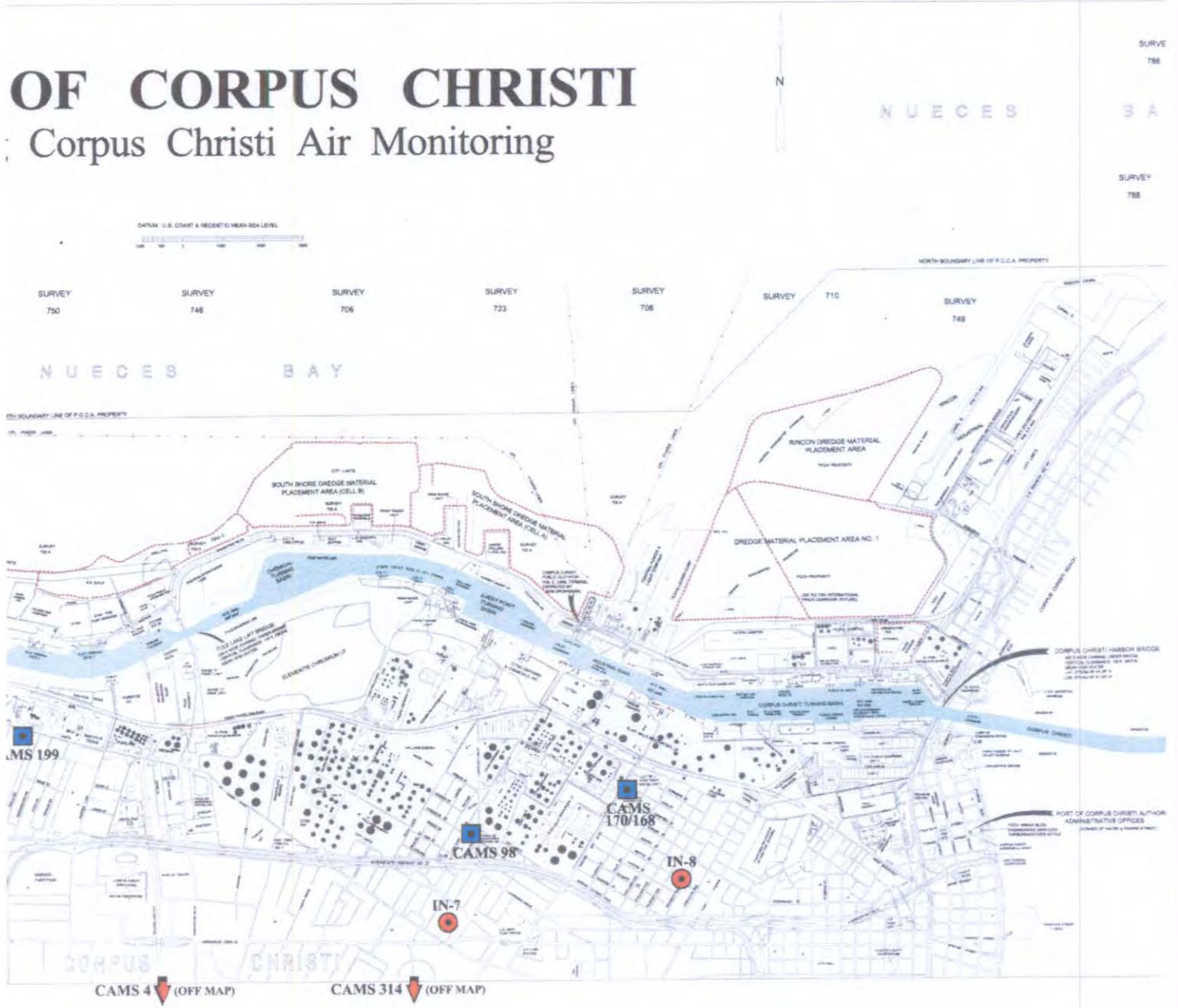
EXISTING CORPUS CHRISTI AIR MONITORING - TCEQ

TCEQ CONTINUOUS AIR MONITORING STATIONS (CAMS)		STATION MONITORING PARAMETERS					
CAMS Site	Location	Ozone (O3)	PM	Sulfur Compounds	VOC Monitor	Meteorological Station	Video Camera
4	902 Airport Blvd Not on map	Yes	Yes 2.5	Yes SO ₂	No	Yes	No
21	Tubao-Mohrly Jr. High School 1890 La Branch Rd	Yes	No	Yes SO ₂	No	Yes	No
28	1610 Huasteca Dr	No	No	Yes SO ₂ and H ₂ S	Yes	Yes	Yes
166	1402 Nueces Bay Blvd (Near John St intersection)	Yes	No	No	Every 9 days	Yes	No
170	1402 Nueces Bay Blvd (Near John St intersection)	No	No	No	Manual Trigger	Yes	No
199	5707 Up River Rd	No	Yes 2.5	No	Every 2 days	Yes	No
214	National Seawater 20420 Park Rd. Not on map	No	Yes 2.5	No	No	Yes	No



OF CORPUS CHRISTI

Corpus Christi Air Monitoring



VI. Other Issues

[GENERAL PROJECT INFORMATION]

Jan. 16, 2004

JUNE 2004



THE TEXAS UNION

SUNDAY MONDAY TUESDAY WEDNESDAY THURSDAY FRIDAY SATURDAY

MAY		JULY		1	2	3	4	5											
S	M	T	W	T	F	S	S	M	T	W	T	F	S						
2	3	4	5	6	7	8	1	2	3	4	5	6	7						
9	10	11	12	13	14	15	8	9	10	11	12	13	14						
16	17	18	19	20	21	22	15	16	17	18	19	20	21						
23	24	25	26	27	28	29	22	23	24	25	26	27	28						
30	31						29	30											
6							8	9	10	11	12								
13							15	16	17	18	19								
20							22	23	24	25	26								
							29	30											
27							28												

Informal Classes - classes begin (Summer)
 Summer session registration
 Classes begin

Summer session registration
 Last day to add a course or drop a course for possible refund
 Payment for added courses due.
 Last day to apply for a graduate degree
 Last day to drop a course without academic penalty

20 FATHER'S DAY

First day of summer



JULY 2004



THE TEXAS UNION

SUNDAY MONDAY TUESDAY WEDNESDAY THURSDAY FRIDAY SATURDAY

SUNDAY MONDAY TUESDAY WEDNESDAY THURSDAY FRIDAY SATURDAY

JUNE			AUGUST																																				
S	M	T	W	T	F	S	S	M	T	W	T	F	S																										
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31									
4	INDEPENDENCE DAY	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31											

SEPTEMBER 2004



THE TEXAS UNION

SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
			1	2	3	4
5	6 LABOR DAY Staff holiday	7	8	9	10	11
12	13	14	15 ROSH HASHANAH begins at sundown	16 ROSH HASHANAH	17	18
19	20	21	22	23	24 YOM KIPPUR begins at sundown	25 YOM KIPPUR
26	27	28	29 First day of autumn	30		

AUGUST							OCTOBER						
S	M	T	W	T	F	S	S	M	T	W	T	F	S
1	2	3	4	5	6	7	3	4	5	6	7	8	9
8	9	10	11	12	13	14	10	11	12	13	14	15	16
15	16	17	18	19	20	21	17	18	19	20	21	22	23
22	23	24	25	26	27	28	24	25	26	27	28	29	30
29	30	31					31						

OCTOBER 2004



THE TEXAS UNION

SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
SEPTEMBER S M T W T F S 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30	NOVEMBER S M T W T F S 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30				1	2
3	4	5	6	7	8	9
10	11 COLUMBUS DAY	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
HALLOWEEN Longhorn Halloween Daylight Saving Time ends 31						

APPENDIX C

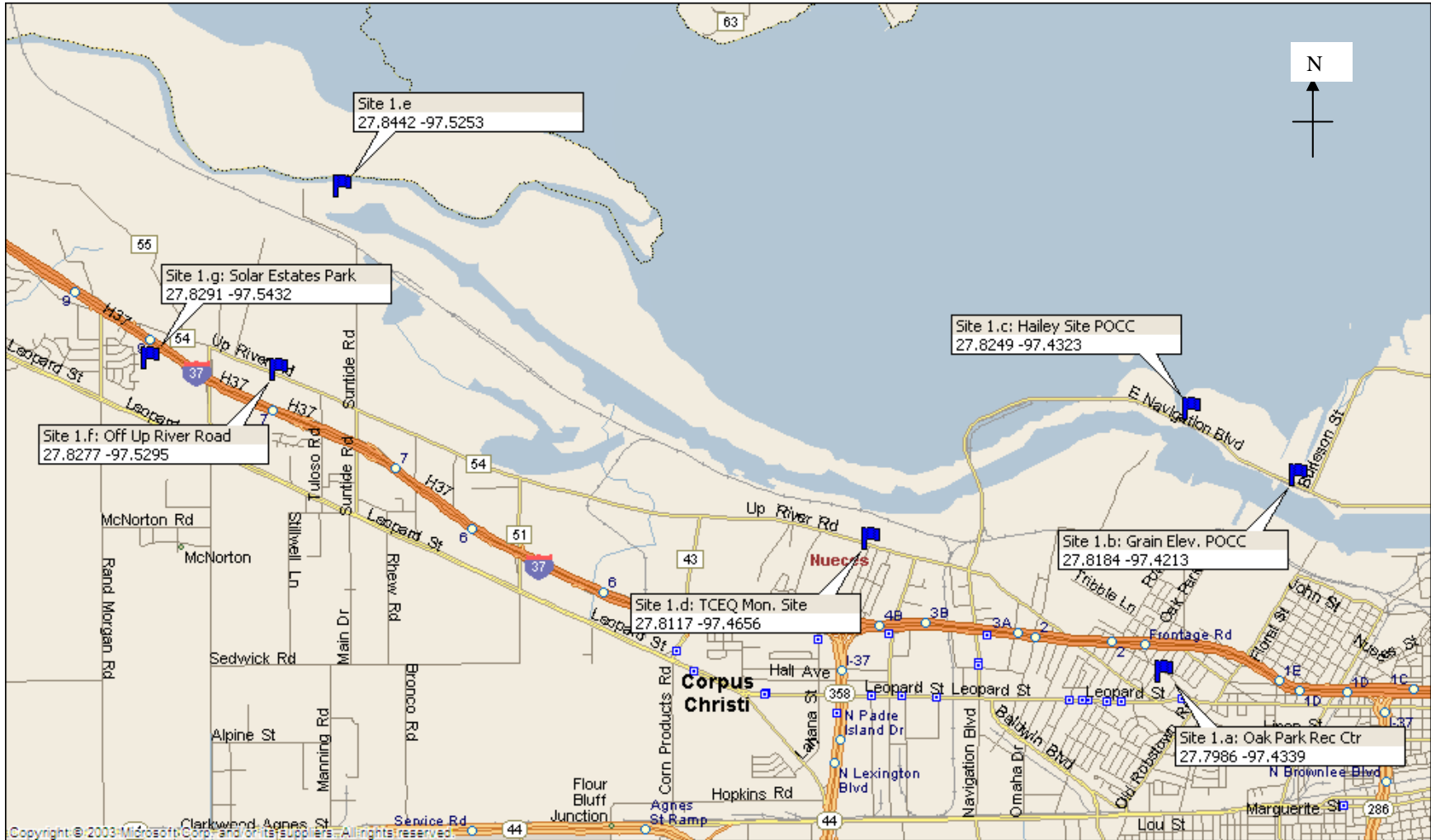
Corpus Christi Air Monitoring and Camera Surveillance – Project Schedule and Site Map

Corpus Christi COCP Schedule for First Two Years

Activity Name	Contract Ref	Start Date	Finish Date	% Complete	2003			2004												2005															
					O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N					
Receipt of Project Funds		10/2/03	10/2/03	100%	▶																														
Project Implementation	IV.B, p. 5	10/2/03	10/2/03	100%	▶																														
Advisory Board Formed (w/in 3 months of receipt of funding, ROF)	I.A.1, p. 2	10/2/03	1/2/04	100%	▶			◆																											
Execute Site Access Agreements (TCEQ responsibility)	1.0	10/2/03	3/2/04	100%	▶			◆																											
Advisory Board Meetings (Minimum 2 per year)	I.A.1, p. 2	1/16/04	1/16/04	100%				◆																											
		5/25/04	5/25/04	0%								◆																							
		10/25/04	10/25/04	0%																															
		6/1/05	6/1/05	0%																															
Execute Contract w/ Contractor for Site Installation, 7 AMS & 2 SC, (w/in 6 months ROF)	I.A, p. 1 IV.C, p. 5	10/1/03	4/1/04	100%	▶			◆																											
		10/1/03	4/1/04	100%	▶			◆																											
Execute Contract w/ Contractor for Operations & Maintenance (w/in 6 months ROF)	IV.D, p. 5	2/2/04	8/30/04	43%				◆	▶			◆																							
Preparation & Approval of QAPP (Must be approved prior to commencement of sampling)	IV.E, p. 5	4/2/04	8/30/04	0%					◆	▶			◆																						
Site Installations Complete and Operational (w/in 18 months ROF)	IV.D, p. 5	4/2/04	2/1/05	0%					◆	▶												◆													
Cameras Installed & Operational and Sampling Coimmences & Continues @ AMS	IV.D, p. 5	11/1/04	2/1/05	0%														◆	▶		◆														
Quarterly Reports	IV.F, p. 6	2/2/04	3/2/04	100%																															
		5/2/04	6/3/04	0%																															
		8/3/04	9/3/04	0%																															
		2/1/05	3/1/05	0%																															
		5/3/05	6/3/05	0%																															
		8/3/05	9/5/05	0%																															
Annual Reports	IV.A, p. 5	8/2/04	10/2/04	0%																															
		8/2/05	10/2/05	0%																															

The blue line represents the date of this report. The red bars indicate the percent of progress on each task.

Air Monitoring and Surveillance Camera Site Locations



APPENDIX D

**Financial Report of Expenditures
Financial Report of Interest Earned**

Corpus Christi Air Monitoring and Surveillance Camera Installation and Operation Project

**Accounting Report for the Quarter
01/01/04-03/31/04**

A. Total Amount of COCP Funds and Other Funds Received Under This Proposal

Total Grant Amount: \$6,761,718.02
 Total Interest Earned: \$33,003.09
 Total Funds Received: \$6,794,721.11

B. Summary of Expenditures Paid by COCP Funds

	Prior Yr. Carryover	Yr. 1 Budget	Yr. 1 Adjustments	Prior Activity <10/2/03	Current Activity 01/01/04-03/31/04	Remaining Balance 12/31/2003
Salaries	\$0.00	\$76,374.00	-\$4,800.00	-\$27,645.97	(\$42,303.43)	\$1,624.60
Fringe	\$0.00	\$19,094.00	\$0.00	-\$5,830.44	(\$9,892.90)	\$3,370.66
Ceer Admin.	\$0.00	\$0.00	\$4,800.00	\$0.00	\$0.00	\$2,091.21
Supplies	\$0.00	\$90,000.00	\$0.00	\$0.00	\$0.00	\$90,000.00
Other	\$0.00	\$7,532.00	\$0.00	-\$60.92	(\$1,136.85)	\$6,334.23
Subcontract	\$0.00	\$1,800,000.00	\$0.00	\$0.00	\$0.00	\$1,800,000.00
Travel	\$0.00	\$2,000.00	\$0.00	\$0.00	(\$445.99)	\$1,554.01
Equipment	\$0.00	\$5,000.00	\$0.00	\$0.00	\$0.00	\$5,000.00
Indirect Costs	\$0.00	\$300,000.00	\$0.00	-\$5,030.60	(\$6,475.39)	\$288,494.01
TOTALS	\$0.00	\$2,300,000.00	\$0.00	(\$38,567.93)	(\$60,254.56)	\$2,198,468.72

C. Interest Earned by COCP Funds as of 12/31/03

Prior Interest Earned: \$16,549.96
 Interest Earned This Quarter: \$16,453.13
 Total Interest Earned to Date: \$33,003.09

D. Balance of COCP Funds as of 12/31/03

Total Grant Amount: \$6,761,718.02
 Total Interest Earned: \$33,003.09
 Total Expenditures: (\$60,254.56)
 Remaining Balance: \$6,734,466.55

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


 Accounting Certification