

OSWERTIO1996

# Common Sense Initiative (CSI)

PETROLEUM REFINING SECTOR

ONE-STOP REPORTING AND PUBLIC  
ACCESS PROJECT

EXECUTIVE  
SUMMARY

SEPTEMBER  
1996

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PUBLIC ACCESS PROJECT,  
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## SUMMARY

IN JULY 1994, THE UNITED STATES (U.S.) ENVIRONMENTAL PROTECTION Agency (EPA) announced the creation of the Common Sense Initiative (CSI). Six industry sectors were chosen to begin the initial phase of the initiative. In the petroleum refining sector, the One-Stop Reporting and Public Access Project Team has completed its project. This Executive Summary describes the project team objectives, membership, the approach taken, the results obtained, and the recommendations developed.

This Executive Summary was prepared by the project consultant, PRC Environmental Management, Inc. (PRC), and reflects PRC's observations. This document also is the product of successful consensus-building and cooperation among a wide variety of stakeholders representing government, environmental and environmental justice organizations, community, industry and labor, and other stakeholders. Project team members believe that much can be learned from the process they adopted, and that their findings, conclusions, and recommendations can lead to real "common sense" changes that result in cleaner, cheaper, and smarter environmental protection.

Additional information on the One-Stop Reporting and Public Access Project, including the final report, can be obtained from the resources identified on the inside front cover of this document.

## PROJECT TEAM

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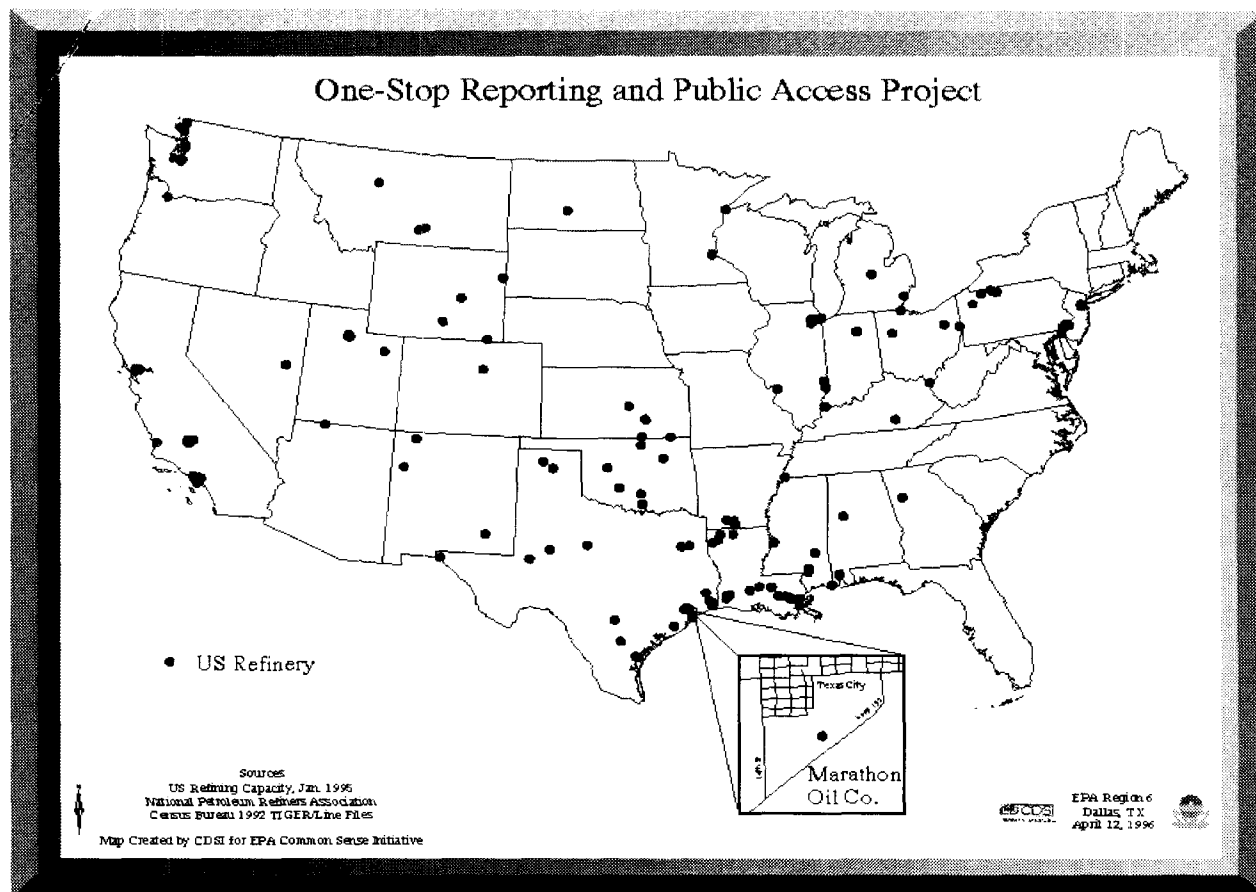
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## COMMON SENSE INITIATIVE PETROLEUM REFINING SECTOR ONE-STOP REPORTING AND PUBLIC ACCESS PROJECT

### OVERVIEW OF THE COMMON SENSE INITIATIVE

IN JULY 1994, UNITED STATES (U. S.) ENVIRONMENTAL PROTECTION AGENCY (EPA) Administrator Carol Browner announced the creation of the Common Sense Initiative (CSI). CSI is EPA's highest-priority effort to implement the President's regulatory reinvention mandate. CSI reflects EPA's commitment to setting strong environmental standards, while encouraging common sense, innovation, and flexibility in how standards are achieved. The goal of CSI is cleaner and cheaper environmental protection, which may be achieved by modifying existing environmental statutes, regulations, and policies or by developing entirely new options. The approach is tailored to the specific concerns within an industry and among stakeholders associated with that industry, in contrast to the "one-size-fits-all" approach to environmental regulation that has been the norm in the past.

The objective in establishing CSI is to bring together representatives of federal agencies; state and local governments; environmental and environmental justice organizations; community, industry, and labor; and other stakeholders to examine the full range of environmental requirements affecting industry. The six industry sectors that EPA has chosen to begin the initial phase of this initiative are listed below:

- |                              |                       |
|------------------------------|-----------------------|
| 1. Auto assembly             | 4. Metal finishing    |
| 2. Computers and electronics | 5. Petroleum refining |
| 3. Iron and steel            | 6. Printing           |

For each industry sector, EPA formed a team of representatives from numerous stakeholder groups. Teams are co-chaired by EPA Assistant Administrators and Regional Administrators.

Elliott P. Laws, EPA Assistant Administrator for Solid Waste and Emergency Response, and A. Stanley Meiburg, Deputy Regional Administrator for EPA Region IV, are the current co-chairs of the Petroleum Refining Sector Subcommittee. The subcommittee has 23 members, all of whom are appointed by Administrator Browner.

The Petroleum Refining Sector Subcommittee at present has formed two project teams:

- The Equipment Leaks Project Team addresses issues related to loss of process fluids/vapors through equipment leaks.
- The One-Stop Reporting and Public Access Project Team addresses regulatory reporting requirements that govern air emissions and the public's access to and understanding and use of the information provided in those reports.

This document focuses on the findings of the One-Stop Reporting and Public Access Project.

**THE ONE-STOP  
REPORTING AND  
PUBLIC ACCESS  
PROJECT**

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THE PROJECT TEAM CONDUCTED A PILOT PROJECT TO FACILITATE ANALYSIS OF A "real world" scenario. The pilot facility was identified by soliciting volunteers based on criteria developed by the project team. The Marathon Refinery in Texas City, Texas was selected as the pilot facility for this project.

The Marathon Refinery is a medium-sized (capacity of 70,000 barrels per day [BPD]) and middle-aged (1930s) petroleum refinery. It is located in an area where the public had shown a willingness to participate in the project: the Texas City/LaMarque, Texas area has an existing Community Advisory Panel (CAP) of local residents that serves seven facilities in the Texas City area, including the Marathon Refinery.

The goals of the pilot project are threefold:

■ Eliminate redundancy, duplication, and obsolescence in the reports of air emissions.

■ Facilitate the access to and understanding and use of reported data among the affected community.

■ Translate the results of the pilot project into issues to be considered further and recommendations to the CSI Council.

The project focused on selected federal environmental (EPA) and Occupational Safety and Health Administration (OSHA) and state (Texas) air emissions reporting requirements (there were no applicable local requirements).

The project team was made up of representatives of many stakeholder groups, including representatives of refining companies, staff members of state and local environmental regulatory agencies, and members of local and national public interest and community groups.

In addition to the members of the project team, several other groups of individuals provided their advice and viewpoints during this project. Information was sought from all those individuals, in addition to the project team, so that the observations could be developed fully into options acceptable to most, if not all, stakeholders. Those parties include:

- Staff of the Marathon Refinery
- The Texas City/LaMarque CAP and its facilitator
- Regulatory personnel of the Texas Natural Resource Conservation Commission (TNRCC)
- Staff of EPA Headquarters, EPA Region VI, and the EPA Office of Air Quality Planning and Standards
- Staff of the American Petroleum Institute (API)
- Members of the Texas City/LaMarque community

  
**PROJECT  
APPROACH**

IN LATE NOVEMBER 1995, PRC (THE PROJECT CONSULTANT) BEGAN TO ASSIST THE project team in implementing the One-Stop Reporting and Public Access Project. To achieve the goals of the project, the project team identified and implemented the following general approach:

- Solicit project team members who are representative of the stakeholder community.
- Scope a narrow focus for the project and project approach.
- Enlist a pilot facility and communicate to that refinery the incentives and parameters of the project and how EPA would apply policies (such as enforcement) during the project period.
- Identify the members of the existing CAP and enhance, if necessary, the membership to cover additional interested groups to ensure that, to the extent possible, the representatives of the community reflect the diversity of issues and needs in the community.
- Meet with community representatives in the vicinity of the Marathon Refinery to obtain their views on their information needs and the degree to which they have access to and understand and use the reported air emissions information.
- Conduct research on federal and state regulations that establish reporting parameters for air emissions that are applicable to refineries in general and to the pilot refinery in particular.
- Work closely with the Marathon Refinery to verify applicable reporting requirements and obtain information on the practices of and burden of fulfilling the reporting requirements.
- Develop a database to help organize, analyze, and classify the reporting requirements for air emissions.
- Prepare and present status briefings to the community and members of the CSI Subcommittee and Council.
- Document the procedures and processes applied throughout the project to facilitate transfer to future endeavors.
- Develop observations and formulate recommendations that incorporate information from the project team, the Marathon Refinery, regulatory agencies, and representatives of the community.
- Prepare briefings and a final report.



## **SOLICITING PUBLIC INPUT**

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ALTHOUGH THE REGULATORY ANALYSIS COULD BE CONDUCTED ACADEMICALLY TO identify the areas of redundancy and overlap in the regulations, the project team determined that the only way to identify public information needs and the accessibility of the information that is currently available is to ask the community. The project team benefited from the availability of the CAP as a means of communicating with the community.

Consequently, with the assistance of the professional facilitator already associated with it, the Texas City/LaMarque CAP was consulted about its information use and needs with respect to air emissions reporting requirements. The CAP is composed of both members of the community who work or have worked at the local refineries and chemical plants and those who work or have worked in other local businesses. The members include health professionals, financiers, engineers, teachers, ministers, and representatives of many other groups. The CAP meets monthly with several industry liaisons (facility management) to discuss issues of interest to the local community that are directly affected by industry.

In March 1996, members of the project team attended a meeting of the CAP to which several other individuals had been invited. For this project, the project team realized that it was advantageous to include persons in the community who were not currently serving as members of the CAP. That group was called the Community Advisory Panel Plus (CAP+). The other individuals invited included local emergency response personnel, state enforcement officials, representatives of labor, representatives of local churches, and local environmental officials. (However, representatives of labor and of local churches were not able to attend the meeting.) At that March 1996 meeting, the project team discussed the access of the CAP+ to air emissions reports and its understanding and use of that information. Because the project was new to the CAP+, follow-up telephone calls were placed to all who attended. From that information, combined with the information gathered during the meeting, a set of preliminary observations about community access to and understanding and use of air emissions reporting information was developed.

The preliminary observations then were presented to a larger group at a public meeting hosted by the CAP+ in early June 1996. The opportunity to participate in this project through the June meeting was advertised in local newspapers - both Spanish and English; posted in flyers throughout the community; posted in the pilot facility's newspaper and on bulletin boards; distributed by direct mailings to community environmental groups; and offered in person, as flyers were distributed door-to-door. In addition to the 15 to 20 CAP+ members, another four members of the public who are not members or regular observers of the CAP attended the June meeting. Their views were considered by the project team as findings and recommendations were developed.



## **PROJECT SCOPE**

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THE FOCUS OF THE PROJECT DELIBERATELY HAS BEEN KEPT NARROW. THE PROJECT TEAM made a distinction between "reporting" and "recordkeeping" requirements related to air emissions. Although some of the reporting requirements are met by drawing on records that must be kept regularly, many more records must be kept at the facility. Because the goals of reporting and recordkeeping differ, the participants agreed that the pilot project would focus only on reporting requirements.

The project team decided to identify and analyze not only environmental (EPA and state) regulations that require air emissions reports to regulatory agencies, but also applicable air emissions regulations promulgated by OSHA. These regulatory reporting requirements include reports made to employees, as well as those made to the appropriate OSHA authorities. Further, the analysis included only those regulations that were determined to be applicable to the Marathon Refinery on December 31, 1995.

The project team discussed the difference between required air emissions reports and required notifications (such as notification of startup). The group agreed that the scope of the project would include notifications, in addition to periodic reports, because the notifications contribute to the volume of paperwork submitted to regulatory agencies.

The project team also agreed to categorize as reporting requirements tools developed by state or local agencies, such as the Inspection Protocol Guidance (IPG) report required by the TNRCC. Therefore, the three areas under review were statutes, regulations, and guidance.

The project team agreed to the following exclusions: 1) accidental release reporting under sections 311 (the Material Safety Data Sheet [MSDS]) and 312 (Emergency and Hazardous Chemical Inventory Forms) of the Superfund Amendments and Reauthorization Act (SARA), and notifications required under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) section 103(c) because they were beyond the scope of this effort; 2) the asbestos National Emissions Standards for Hazardous Air Pollutants (NESHAP) (40 CFR Part 61, Subpart M) because of its unique nature; and 3) the requirements under development under CAA section 112(r), risk management reporting, because the proposed regulation was expected to change during the project.

## SUMMARY OF KEY FINDINGS AND RECOMMENDATIONS

### KEY FINDINGS

FOLLOWING IS A SUMMARY OF THE KEY FINDINGS AND RECOMMENDATIONS DEVELOPED by the One-Stop Reporting and Public Access Project Team. These findings and recommendations are based on the Marathon Refinery pilot project that addressed specific federal and state environmental air emissions reporting requirements and on input from the Texas City/LaMarque community where the Marathon Refinery is located. The findings are presented in conjunction with the project goals to which they are related.

#### GOAL

ELIMINATE REDUNDANCY, DUPLICATION, AND OBSOLESCENCE IN THE REPORTS OF AIR EMISSIONS.

Air emissions reports are required by statute and regulation for a number of purposes, and stakeholders have different uses for the reported data. Purposes of reporting air emissions data include:

- Demonstrate compliance with federal, state, and local statutory mandates to ensure the protection of human health and the environment
- Provide information to the public
- Provide information necessary to ensure proper and adequate federal, state, and local emergency prevention, preparedness, and response

Air emissions reports are used by 1) industry, 2) regulators, 3) environmental organizations, and 4) citizens. Uses of air emissions reports include demonstrating progress in emissions reduction and providing facility performance information.

The regulatory environment affecting air emissions reporting in the petroleum refining industry is complex. To conduct the regulatory analysis portion of the project, a database was designed using Microsoft Access software. The database was constructed by identifying 445 separate reporting tasks or reporting requirements\* that are outlined in federal environmental and OSHA and in state of Texas air emissions regulations. (There are no local air emissions reporting regulations for this refinery.)

It is important to note that while a "universal" list of 445 reporting requirements was developed:

- Not all of those reporting requirements are applicable to any one refinery, because requirements are contingent upon the type and age of equipment used, and the types of processes undertaken at a facility
- Statements regarding the number of reports prepared cannot be made because the relationship between the number of reporting requirements and the number of reports produced was not examined

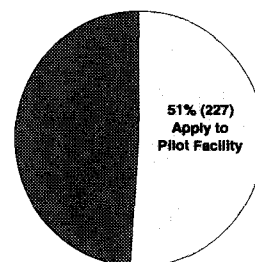
Once the "universal" database was developed, PRC worked closely with the Marathon Refinery to identify and verify the reporting tasks that were applicable to the refinery and a subset of reporting tasks was identified as applicable to the Marathon Refinery. All subsequent analyses were conducted by using the database of reporting tasks that apply to the Marathon Refinery.

\* For example, a quarterly report, required under the New Source Performance Standards (NSPS), Subpart J, 40 Code of Federal Regulations (CFR) Part 60.107 (c) (1) through (6), mandates completion of such reporting tasks as: report any 7-day period when the average emissions rate of sulfur dioxide emission standards were not met and report any 30-day period when sulfur oxides data collection requirements were not met. Such reporting tasks are counted separately in the database and in the analysis because they are distinct actions.

Analysis of this database resulted in the following general observations:

- Approximately 51 percent (227) of the air emissions reporting requirements contained in the "universal" database are applicable to the Marathon Refinery, which is a medium-sized, middle-aged facility.

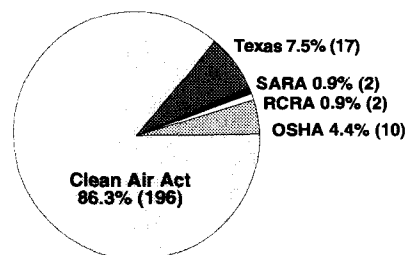
### Air Emissions Reporting Requirements That Apply to Pilot Facility



Total = 445

- Approximately 86.3 percent (196) of the air emissions reporting requirements applicable to the Marathon Refinery are required under the Clean Air Act. The remaining legislative drivers are: state of Texas, 7.5 percent (17); SARA, 0.9 percent (2); the Resource Conservation and Recovery Act (RCRA), 0.9 percent (2); and OSHA, 4.4 percent (10).

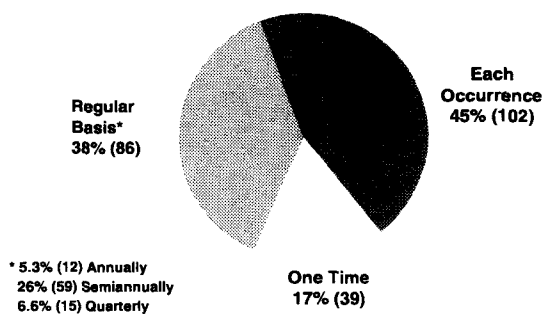
### Legislative Drivers for Pilot Facility



Total = 227

- Approximately 45 percent (102) of the air emissions reporting requirements applicable to the Marathon Refinery are reported on a per-occurrence basis. Approximately 38 percent (86) of the requirements are reported on a regular basis (5.3 percent annually, 26 percent semiannually, and 6.6 percent quarterly), and approximately 17 percent (39) are reported on a one-time basis.

### Report Frequency for Pilot Facility



Total = 227

\* 5.3% (12) Annually  
26% (59) Semiannually  
6.6% (15) Quarterly

Many of these reports are submitted to demonstrate compliance. However, if a facility is in compliance, such reporting may be viewed as unnecessary. Alternatives should be explored to identify other options for demonstrating compliance and goodwill. Other findings regarding the process of regulatory reporting include the following, which have not been prioritized:

In the opinion of the Marathon Refinery environmental coordinator, three main environmental air emissions reports are the most time-consuming to prepare: the annual TRI, the annual report prepared in response to the TNRCC Inspection Preparation Guidance (IPG), and the annual state emissions inventory. Two of these three most time-consuming reports appear to be used by regulators, and the TRI is used by the public (but to a limited extent by the Texas City public). The project team noted the inverse relationship between the relative percentage of requirements imposed on the pilot facility under SARA Title III (0.9 percent) and under the Clean Air Act (86.3 percent) and their respective use by the public.

The EPA project consultant and refinery were unable to easily conduct a comparative analysis of the cost (regulatory burden) of completing environmental air emissions reporting requirements, using EPA estimates developed when the regulations were established and estimates of actual experience provided by Marathon Refinery staff. Therefore, this pilot project demonstrates that it would be extremely difficult to compare with any degree of accuracy the actual regulatory burden with EPA estimates.

There is vast inconsistency regarding timing and frequency of reports, which leads to confusion on the part of the pilot facility and additional time and resources expended to comply with the varying frequency of report requirements.

The age of equipment currently contributes to the regulatory requirements that apply. (For example, over time, separate regulations were developed to address tanks having different construction dates, which is confusing for facilities that have numerous tanks of various ages.) It is not apparent why this age issue needs to continue to be addressed through separate regulations.

The analysis of air emissions reporting regulations led to the conclusion that the air emissions regulatory reporting requirements exhibit less redundancy and more complexity than originally anticipated. However, it should be pointed out that a thorough analysis and review of the Marathon Refinery's files was not conducted to identify all cases of redundancy.

**GOAL**

FACILITATE THE ACCESS TO AND UNDERSTANDING AND USE OF  
REPORTED DATA AMONG THE AFFECTED COMMUNITY.

Presented below are comments gathered from the CAP+ meeting and the community meeting held in Texas City, Texas. During the two community meetings, some members of the community expressed the following views, which have not been prioritized:

- The Texas City/LaMarque CAP, with its neutral facilitator, may be able to help the public understand and have access to air emissions data reported by the refinery. For example, the annual TRI data summary report is prepared by local industries and presented to the CAP.
- Some members of the community have a desire to receive air emissions information in terms of how such emissions affect their health.

The current regulatory reporting system does not provide a comprehensive view of air reporting at the facility. There appears to be a great deal of information on air emissions from specific units, but the system does not require comprehensive and consistent reporting on the entire facility.

The air emissions information currently reported may not be in a form understood by and readily available to the public.

Some members of the community are generally more interested in episodic events that impact the community. However, the public may not be aware of all episodic events that have occurred.

Some members of the community are interested in obtaining release information that currently is reported to regulatory agencies but is not part of the Toxics Release Inventory (TRI).

**GOAL**

TRANSLATE THE RESULTS OF THE PILOT PROJECT INTO ISSUES TO BE CONSIDERED FURTHER AND RECOMMENDATIONS TO THE CSI COUNCIL.

The project team developed the following recommendations, which have not been prioritized:

Test the Microsoft Access "universal" database of air emissions reporting requirements with interested parties. Issues to be resolved in implementing the pilot project include:

- Maintaining current regulatory data
- Offering electronic access on the Internet
- Developing an appropriate designation for the tool, such as guidance

Develop and test at a pilot facility a new air emissions reporting system that is sector-based. Such a new system would be based upon a semiannual status report that would record accomplishments over the past six months and project planned activities for the coming six months. Issues to be resolved in implementing the pilot include:

- Formats (the report could be broken down in different ways, such as by tanks or fugitive emissions, or could be in checklist or "fill-in" format similar to that of tax forms)
- Types of report requirements (such as separate reports for routine or periodic reports and episodic reports, as designated)
- Schedule (to ease the regulatory agency's burden of review, a revolving schedule could be developed for industries so that different six-month intervals are assigned to different refineries)

- Public accessibility (solicit public input on the format and content of the report and identify ways to make the information accessible, such as on the Internet)

Develop a pilot project that addresses multi-media regulatory reporting requirements for a petroleum refinery.

## FUTURE ACTION IDEAS

During this project, the project team identified several logical follow-on efforts, which have not been prioritized:

- Create consolidated reporting requirements for refineries to ease the burden on industry while providing the same level of environmental protection and needed information to regulators and the general public.
- Address the inability to compare the EPA estimates with the actual reporting burden.
- Evaluate whether there could be better indicators (or one indicator per facility) of health effects for the public.
- Improve the way new regulatory requirements are established: do not write regulations in a vacuum, and consider the results of the pilot project to avoid creating an even more complex regulatory structure.
- Provide the CSI Council a list of lessons learned on this pilot project to facilitate information transfer to other groups and efforts. (Lessons learned include involving multiple stakeholders, using a real facility in an evaluation, and keeping the approach and scope simple).
- Consider selecting one electronic format that does not change from year to year. Facilities invest in changing formats and systems, and then the requirements are altered by regulatory agencies.
- Evaluate whether there are other ways to make regulatory agencies comfortable with the compliance status of facilities. Assess programs and approaches such as the Environmental Leadership Pilot (ELP) Program and self-audits.

## 1995/1996 PROJECT SCHEDULE\*

December	January	February
Hold Kick-off Meeting with Marathon Refinery Staff	Begin Data Collection and Analysis	Continue Data Collection and Analysis
March	April	May
Meet with Community Advisory Panel	Present Preliminary Findings	Refine Preliminary Report
June	July	August
Refine Findings and Draft Report, Obtain Input from Expanded Audience	Present Findings to Petroleum Refining Sector Subcommittee	Revise Draft Report, Prepare Draft Executive Summary
September	October	November
Finalize Report and Executive Summary, Present Findings to CSI Council	Implement Recommendations	Implement Recommendations

\* The project team met all deadlines, and plans to implement recommendations in late 1996 and in 1997.

