

Return to:

Anna Wolfe
NYS Dept. Environmental Cons.
50 Wolf Rd.
Albany NY 12233



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**New York State
Department of Environmental Conservation
Division of Hazardous Waste Remediation**

REMEDIAL INVESTIGATION AND FEASIBILITY STUDY WORK PLAN

**ROXY CLEANERS SITE
TOWN OF NORTH GREENBUSH
RENSSELAER COUNTY, NEW YORK
SITE I.D. NO. 4-42-024**

VOLUME I PROJECT MANAGEMENT WORK PLAN

OCTOBER 1991

Prepared By:

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**Bureau of
Program Management**

**M&E Metcalf & Eddy
of New York, Inc.**

303 South Broadway, Tarrytown, New York 10591

REMEDIAL INVESTIGATION AND FEASIBILITY STUDY

WORK PLAN

VOLUME I

PROJECT MANAGEMENT WORK PLAN

Kathryn Eastman
November 15, 1991
APPROVED

William C. [unclear]
11/15/91
APPROVED

ROXY CLEANERS SITE
TOWN OF NORTH GREENBUSH
RENSSELAER COUNTY, NEW YORK

SITE I.D. NO. 4-42-024
STANDBY CONTRACT WORK ASSIGNMENT NO. D002406-11.1

PREPARED FOR

NEW YORK STATE
DEPARTMENT OF ENVIRONMENTAL CONSERVATION

BY

METCALF & EDDY OF NEW YORK, INC.
TARRYTOWN, NEW YORK

OCTOBER 1991

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1.0 INTRODUCTION

As part of the State of New York's program to remediate inactive hazardous waste sites, the New York State Department of Environmental Conservation (NYSDEC) has entered into a contract with the firm of Metcalf & Eddy of New York, Inc., (M&E) to undertake a Remedial Investigation and Feasibility Study (RI/FS) for the Roxy Cleaners Site located in the Hamlet of Wynantskill, Town of North Greenbush, Rensselaer County, New York. On October 25, 1990, NYSDEC issued State Superfund Work Assignment No. D002406-11.1 to M&E to undertake this RI/FS. M&E accepted the work assignment on October 30, 1990. The registry number for this New York State Class 2 Superfund Site is Site Number 4-42-024. The RI/FS for this site is being performed with funds allocated under the New York State Superfund Program.

The purpose of the overall RI/FS process is to perform a Remedial Investigation (RI) to determine the nature, extent and source(s) of contamination at the site, and the risk to public health and the environment, and to perform a Feasibility Study (FS) which will identify, evaluate and recommend a cost-effective, environmentally sound, long-term remedial action plan. As presently conceived, the RI/FS is scheduled to be completed in approximately 18 months.

This document entitled, "Remedial Investigation and Feasibility Study Work Plan, Volume I - Project Management Work Plan," presents the detailed activities comprising the components of a multi-phased RI/FS for the Roxy Cleaners Site prepared in accordance with the Federal Superfund Amendment and Reauthorization Act (SARA) and the NYSDEC Superfund Program. The Project Management Work Plan also includes the work assignment schedule and milestones, the project organization and staffing plan, a description of subcontract work, the MBE/WBE utilization plan, and the total level of effort, cost estimate and final budget (see Appendix A) for the entire project.

sampling of the Wynants Kill (Wynantskill Creek); seep sampling; aquifer permeability/slug testing and packer testing (to aid in the determination of hydrogeologic conditions underlying the site and surrounding area); air monitoring; surveying; investigation of the presence of past and existing stormwater and wastewater collection systems; and performance of a wildlife habitat survey including wetlands delineation (to assist in the development of a habitat based assessment). Based on the results of the Phase I RI field program, a Health Risk and Environmental Assessment will be performed.

At present, it is envisioned that the field program for Phase II of the Remedial Investigation (Phase II RI) will be comprised of: the installation of additional monitoring wells; groundwater sampling of existing and new monitoring wells; a pump test; additional investigation of Stewart's groundwater treatment system; and, possibly, the conductance of an indoor air sampling program. Groundwater modelling and a treatability study may also be performed as part of the Phase II RI. In addition, tissue sampling of organisms from stressed habitats may be performed only if deemed necessary. However, it is important to note that the components of the Phase II RI will be determined based on the results of the Phase I RI. If additional field investigation/sampling is required, an addendum to this Work Plan will be prepared.

2.0 REMEDIAL INVESTIGATION AND FEASIBILITY STUDY TASK PLAN

This section presents an overview of the Remedial Investigation and Feasibility Study (RI/FS) Work Plan. Metcalf and Eddy (M&E) agrees to perform all tasks listed in the accepted Work Assignment (No. D002406-11.1) and under Work Element III (Phased Remedial Investigation/Feasibility Study of the New York State Department of Environmental Conservation (NYSDEC) Superfund Standby Contract. Tasks I through VII of Work Element II are outlined below and are referenced to the task numbering for the Work Assignment as presented by NYSDEC in the letter dated October 25, 1990. The tasks to be undertaken as part of the RI/FS for the Roxy Cleaners Site comprise the following:

2.1 TASK A-I: PROJECT MANAGEMENT WORK PLAN

As part of this Task, M&E prepared an initial Project Management Work Plan (PMWP) which included the following three components:

- A. Preliminary RI/FS Work Plan consisting of:
 - 1. Summary Outline for the Phased RI/FS
 - 2. Draft First Phase RI Work Plan
 - 3. Work Assignment Schedule and Milestones
 - 4. Projected Level of Effort for each task
 - 5. Project Organization and Staffing Plan including resumes
 - 6. Potential Subcontract Work
 - 7. MBE/WBE Utilization Plan
- B. Preliminary Project Cost Estimates to perform entire Work Assignment
- C. Detailed Budget for Task A (Subtasks A-I and A-II) including Schedules 2.11 a,b,c,f,g and h

X

2.2.3 Subtask A-II(C): Public Information Meeting

M&E will assist NYSDEC with the presentation and discussion of the Phase I RI Work Plan at a public informational meeting. This meeting will be scheduled and organized by NYSDEC.

2.3 TASK B-I: SITE CHARACTERIZATION (FIRST PHASE REMEDIAL INVESTIGATION)

Subsequent to NYSDEC review and approval of the site-specific Work Plan, Quality Assurance Project Plan and Health Safety Plan, and upon receiving the notice to proceed with Task B-I from NYSDEC, M&E will initiate the Phase I Remedial Investigation (RI). The Phase I RI will consist of five subtasks:

1. Phase I RI Field Program
2. Phase I RI Data Report
3. Data Validation and Useability
4. Identification of State Promulgated Standards and Guidance Values
5. Health Risk and Environmental Assessment

These subtasks are further described in the following subsections and are described in detail in the Phase I RI Work Plan which is presented in Appendix B (see separate document, Appendix B).

The purpose of this initial investigation, where appropriate, will be to:

1. Where practicable, identify and characterize the source of contamination;
2. Describe the amount, concentration, toxicity, environmental fate and transport (e.g. bioaccumulation, persistence, and mobility), form (e.g. solid, liquid), and other significant characteristics of the substance(s) present;
3. Identify waste mixtures, the media of occurrence, and interface zones between media;
4. Define hydrogeological factors (e.g. depth to groundwater/saturated zone, aquifer permeability and hydraulic gradients, direction of groundwater flow, proximity to aquifer that is a source of drinking supply water, and proximity to floodplains and wetlands.

The five subtasks of the Phase I RI are briefly described below.

2.3.1 Subtask B-I(A): Phase I RI Field Program

The major activities to be performed during the Phase I RI Field Program are listed below. As mentioned earlier, the Phase I RI Work Plan is presented in greater detail in a separate document (Appendix B). Data from the first two activities shown below, the initial groundwater sampling of existing wells and the detailed soil gas survey, will be evaluated and discussed with NYSDEC prior to proceeding with the remainder of the first phase investigation. The results of these two activities will aid in determining the location, depth and placement of new monitoring wells.

1. Initial groundwater sampling of the eight (8) existing monitoring well pairs (total of 16 wells).
2. Detailed soil gas survey consisting of a maximum of 100 soil probes with soil gas samples analyzed using a gas chromatograph configured with an electron capture device and a photoionization detector.
3. Evaluation of results of well sampling and soil gas survey.
4. Installation of four (4) additional well pairs (total of 8 new wells) needed to further define plume.
5. Hydrogeologic testing (Packer and Slug Tests)
6. Groundwater sampling of 24 monitoring wells (16 existing and 8 new wells)
7. Surface water and sediment sampling of the Wynants Kill (Wynantskill Creek)
8. Seep sampling (if present)
9. Surveying of all sampling locations and monitoring wells and preparation of a topographic map of site and study area generated from a recent aerial photograph
10. Investigation/examination of existing stormwater and wastewater collection systems
11. Wildlife habitat survey including identification of regulated wetlands and other special resources

X

The remedial investigation(s) will determine the extent to which SPSPGVs have been exceeded or contravened. In reviewing the draft RI Phase I report, NYSDEC will verify that all SPSPGVs appropriate for this site have been identified. Appropriate detection limits for analysis will be determined in order to compare data collected with these standards, guidelines, and cleanup criteria.

2.3.5 Subtask B-I (E): Health Risk and Environmental Assessment

As part of this RI/FS, a baseline health risk and environmental assessment, as well as a final health risk and environmental assessment, will be undertaken. The data collected in the remedial investigation(s) will be sufficient to perform a detailed health risk and environmental assessment.

In consideration of the fact that residential and commercial communities lie adjacent to the Roxy Cleaners Site, that wildlife is possibly exposed to site contamination, and that the public is aware and concerned about the presence of the site, the exposure assessment component of the site is of considerable importance.

M&E will prepare a scope of work for the performance of the health risk and environmental assessment. The baseline risk assessment will be aided by data obtained in the Phase I RI monitoring program discussed earlier, as well as data obtained as part of the previous Phase I and II Hydrogeologic Investigation conducted by NYSDEC. In a qualitative fashion, the potential of the site's contribution to air, land, water or food chain contamination will be described. An attempt will be made to define on an initial basis the extent to which substances have migrated or are expected to migrate from the area of their original location, or from a new area if they are already perceived to have relocated, and whether such migration poses a potential threat to human health or the environment.

The baseline risk assessment initial phase will be conducted upon completion of the initial sampling program of the Phase I RI to assess the site conditions and determine the severity of the contaminants present and their

2.4.1 Subtask B-II(A): Additional Interim Remedial Measures

Based on the results of the Phase I RI, M&E will determine whether additional Interim Remedial Measures (IRMs) are necessary. If found to be necessary, the IRMs will be described and their need substantiated.

IRMs that are currently in progress are:

1. Soil/Sediment Containment and Treatment (Roxy - WA # D002406-9)
2. Remediation of Private Drinking Water Supplies
(Roxy - WA #D002406-2)

The soil remediation IRM listed above consists of excavation and removal of highly contaminated soil and an in-situ vacuum extraction process which will treat soil in-place.

Prior to installation of the vacuum extraction system, a limited amount of highly contaminated soil (approximately 16 yds³) will be excavated to remove the portion of soil having the highest level of contamination by volatile organic compounds (VOCs).

The vacuum extraction process is a technique for the removal of VOCs from the vadose (or unsaturated) zone of soils. An extraction well(s) is installed in the contamination zone and connected by piping to a vacuum pump. The vacuum pump (or blower) induces air flow through the soil, stripping and volatilizing the VOCs from the soil matrix into the air stream. Some water vapor or liquid waste is generally extracted along with the contaminated air, and is removed in a water separator.

The monitoring data from this IRM will be used to supplement the data obtained during the RI/FS. This data will assist in the identification, evaluation and selection of the most appropriate remedial technologies and alternatives.

- X
1. Groundwater Containment/Diversion
 - a. Surface Capping
 - b. Subsurface Barriers (e.g., slurry walls, grout curtains, sheet piling)
 - c. Pumping
 2. Groundwater Treatment
 - a. Air Stripping
 - b. Carbon Adsorption
 - c. Biological Treatment
 3. Groundwater Disposal (After Treatment)
 - a. Recharge to Groundwater
 - b. Discharge to Surface Water/Wynantskill Creek
 - c. Discharge to Sewer
 4. Soil/Sediment Containment
 - a. Surface Capping
 - b. In-situ Grouting
 5. Soil/Sediment Treatment
 - a. Off-site Incineration
 - b. Off-site Disposal
 - c. On-site Soil Vacuuming/Extraction
 - d. Stabilization/Solidification
 6. Alternative Drinking Water Supply
 - a. Extend Troy Municipal Public Water Supply System
 - b. Bottled Water
 - c. Develop Community Water Supply System
 7. Remediation of Drinking Water Supply
 - a. Whole-house granular activated carbon systems
 - b. Point-of-use granular activated carbon units

2.5.4 Subtask B-III(D): Final Phase I RI/FS Report and Phase II RI Work Plan

M&E will address comments to the draft report and finalize the Phase I RI/FS Report. Seven copies of the final Phase I RI/FS Report will be submitted with a comment response document listing each comment with an explanation of how it was addressed in the report.

M&E will address comments to the draft Work Plan and finalize the Phase II RI Work Plan. Any additional, necessary quotes to perform work for the Phase II RI will be obtained.

2.5.5 Subtask B-III(E): Public Information Meeting

M&E will assist NYSDEC with the presentation and discussion of the results of the Phase I RI/FS Report at a public information meeting. NYSDEC will schedule and organize this meeting.

2.6 TASK B-IV: POST-SCREENING FIELD INVESTIGATION (SECOND PHASE REMEDIAL INVESTIGATION)

The Phase I RI (Site Characterization, Task B-I) will provide sufficient information to allow for the preliminary identification of potentially feasible remedial alternatives. Once these preliminary alternatives are identified, additional field investigations which clearly are necessary for further evaluation of alternatives or additional analysis of environmental and health effects will be initiated. These additional field activities will be implemented as part of a Phase II Remedial Investigation (RI) only after making necessary revisions to the work plans and authorization by NYSDEC. Data must be obtained in such a manner to ensure sufficient quality to support subsequent decisions. The results of the Phase II RI will further define boundaries of the RI/FS study area.

X

The New York State Department of Health (NYSDOH) and NYSDEC will be consulted for water quality data from the system, the construction, well depths, pump depth, pumping rate and associated system information.

Also, the Phase II RI may include (if necessary):

6. Tissue sampling of organisms from stressed habitats (only if deemed necessary)
7. Indoor air sampling at selected properties

2.6.2 Subtask B-IV(B): Literature Surveys

Literature surveys will identify existing data on treatment technologies to ascertain if any additional fieldwork and/or laboratory bench/pilot treatability program needs to be implemented.

2.6.3 Subtask B-IV(C): Treatability Tests and Additional Field Work

Bench and pilot scale treatability tests and additional field work will be performed as appropriate in order to obtain additional data to refine and further assess the characterization of the site.

2.6.4 Subtask B-IV(D): Data Analysis

Analysis of the data obtained from the Phase II RI will be performed as appropriate. Data obtained during the Phase II RI will be assessed and integrated into the ongoing evaluation of remedial alternatives for the site.

2.6.5 Subtask B-IV(E): Phase II RI Data Report

Seven copies of the Phase II RI Data Report will be submitted to NYSDEC. Its content will be similar to the Phase I RI Data Report.

3. Satisfy the preference for treatment that significantly and permanently reduces toxicity, mobility, or volume of hazardous substances, pollutants or contaminants as a principal element (or provide an explanation in the ROD as to why it does not)
4. Cost-effectiveness and implementability

Seven evaluation criteria have been developed to address the requirements and considerations listed above. These evaluation criteria serve as the basis for conducting the detailed analysis during the FS and for subsequently selecting an appropriate remedial action. The evaluation criteria are:

1. Short-term impacts and effectiveness
2. Long-term effectiveness and performance
3. Reduction of toxicity, mobility, or volume
4. Implementability
5. Cost
6. Compliance with SPSGVs
7. Overall protection of human health and the environment

2.7.2 Subtask B-V(B): Comparison/Cross Evaluation Alternatives

The alternatives will then be compared to each other using the evaluation factors described above and any other factors appropriate to the site. Among the key comparisons that will be made is an examination of the relationship between protectiveness and costs of remedial alternatives providing similar levels of protection. The remedial alternatives will be developed in sufficient detail and include preliminary cost estimates, for use in preparation of a Proposed Remedial Action Plan (PRAP).

The selection of a remedy will be made considering the preference for alternatives which involve, as a principal element, treatment that significantly and permanently reduces volume, toxicity, or mobility of the hazardous wastes.

M&E will recommend a remedy that satisfies the three criteria above, reflects consideration of the preference for treatment, and represents the best balance across all evaluation criteria and consideration. The most appropriate remedial action will be selected with the concurrence of NYSDEC.

2.8.3 Subtask B-VI(C): Conceptual Plan for Selected Remedy

M&E will design a conceptual plan of the chosen alternative and determine that the selected remedial alternative can be feasibly constructed. This conceptual plan will include cost estimates of the selected remedial alternative and will be developed in sufficient detail to allow NYSDEC to prepare a Proposed Remedial Action Plan (PRAP).

2.8.4 Subtask B-VI(D): Public Information Meeting

A public information meeting will be conducted by NYSDEC to present the PRAP. M&E will assist NYSDEC in the public meeting.

2.8.5 Subtask B-VI(E): Record of Decision

M&E will assist NYSDEC in the Record of Decision (ROD) process specified in TAGM HWR-89-4022, Record of Decisions for Remediation of Class 2 Inactive Hazardous Waste Disposal Sites.

3.0 WORK ASSIGNMENT SCHEDULE AND MILESTONES

The work assignment schedule and milestones are presented in Table 3-1 (Work Assignment Schedule and Milestones Listing), Figure 3-1 (Project Schedule and Milestones-Task A) and Figure 3-2 (Project Schedule and Milestones-Task B).

Key milestones are identified in order to monitor work progress. Specific periods for completion of tasks and subtasks are established throughout the project schedule to ensure timely completion of work. Milestones, as well as the project schedule, may be modified during the course of the RI/FS.

TABLE 3-1
WORK ASSIGNMENT SCHEDULE AND MILESTONES LISTING
ROXY RI/FS

SUBTASK	ACTION	START DATE	DUE OR END DATE
Subtask A-I	Receive Work Assignment		10/25/90
	Review Work Assignment	10/25/90	10/30/90
	* Accept Work Assignment		10/30/90
	Prepare Project Management Work Plan	10/30/90	12/03/90
	Task A Requirement Scoping Session		11/13/90
	Site Visit		11/13/90
	* Deliver Draft Project Management Work Plan (PMWP)		12/03/90
	Performance Evaluation		12/04/90
	Task A Budget Review Session		12/06/90
	NYSDEC Processing Project Management Work Plan	12/04/90	03/15/91
	Finalize Task A-II Detailed Budget (2.11) and PMWP		04/17/91
	* Authorization to Perform Task A-II		05/03/91
Subtask A-II	Prepare Draft RI/FS Scope	05/03/91	05/29/91
	* Deliver Draft RI/FS Scope		05/29/91
	Review and Performance Evaluation	05/29/91	06/05/91
	Revise Draft RI/FS Scope	06/05/91	06/19/91
	Procure Subcontractors	05/29/91	06/25/91
	Public Information Meeting		06/11/91
	* Deliver Final RI/FS Scope		06/19/91
	Review of Final RI/FS Scope	06/19/91	07/01/91
	Task B Budget Review Session		06/26/91
	Performance Evaluation		06/27/91
	* Initial Notice to Proceed with Task B (Soil Gas Survey/Aerial Photography)		09/20/91
	* Final Notice to Proceed with Task B (Remainder of Field Program)		10/31/91

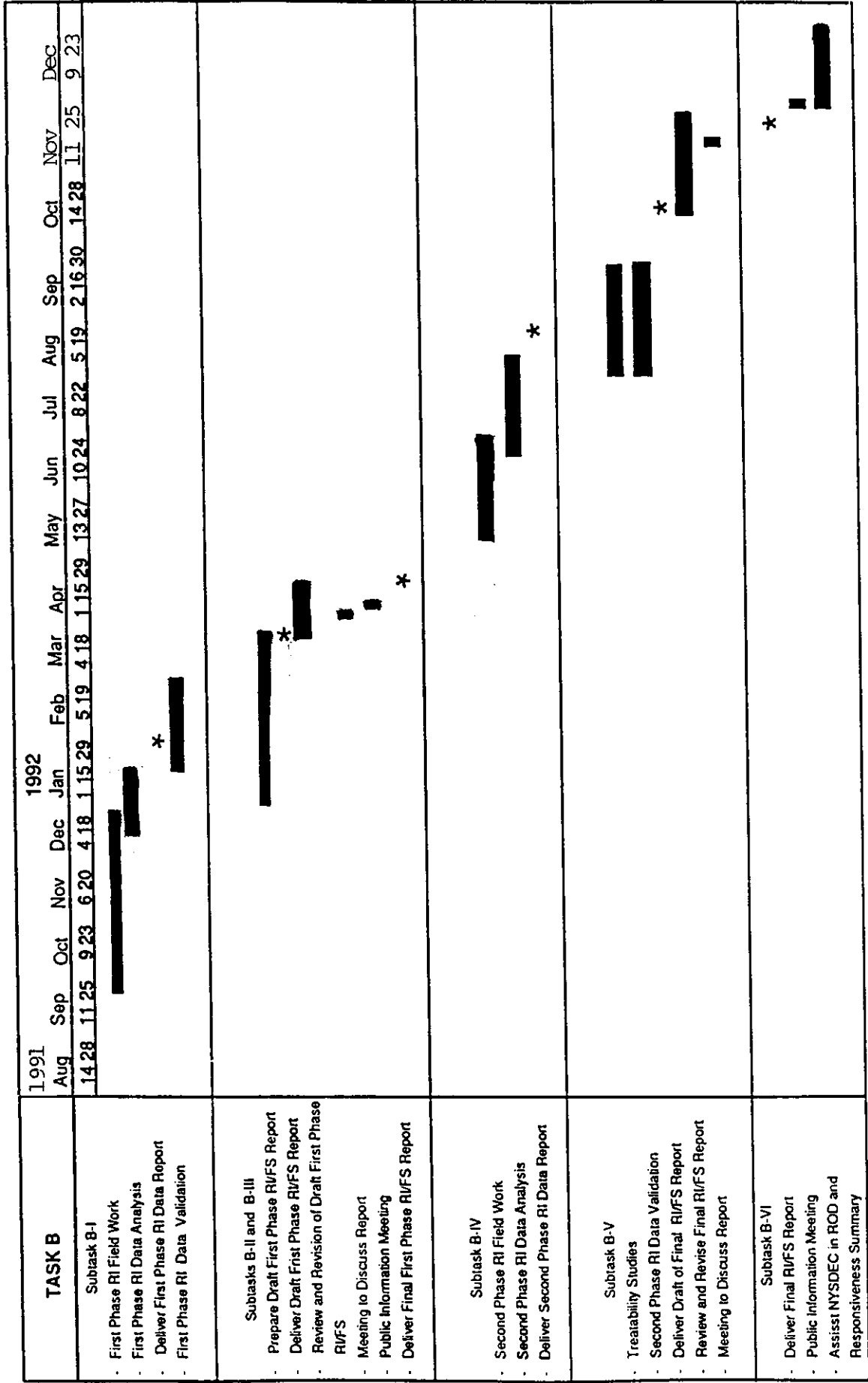
TABLE 3-1 (Continued)

SUBTASK	ACTION	START DATE	DUE OR END DATE
Subtask B-I	First Phase RI Field Work (Soil Gas Survey/Aerial Photography)	09/25/91 10/18/91	10/03/91 10/28/91
	First Phase RI Field Work (Remainder of Field Program)	10/31/91	12/20/91
	First Phase RI Data Analysis	12/13/91	01/17/92
	* Deliver First Phase RI Data Report		01/31/92
	First Phase RI Data Validation	01/17/92	02/28/92
SUBTASKS B-II and B-III	Prepare Draft First Phase RI/FS Report	12/20/91	03/20/92
	* Deliver Draft First Phase RI/FS Report		03/20/92
	Review and Revision of Draft First Phase RI/FS Report	03/20/92	04/24/92
	Meeting to Discuss Report		04/02/92
	Public Information Meeting		04/09/92
	* Deliver Final First Phase RI/FS Report		04/24/92
Subtask B-IV	Second Phase RI Field Work	05/04/92	06/26/92
	Second Phase RI Data Analysis	06/19/92	07/31/92
	* Deliver Second Phase RI Data Report		08/14/92
Subtask B-V	Treatability Studies	07/31/92	09/11/92
	Second Phase RI Data Validation	07/31/92	09/11/92
	* Deliver Draft of Final RI/FS Report		10/16/92
	Review and Revise Final RI/FS Report	10/16/92	11/25/92
	Meeting to Discuss Report		11/18/92
Subtask B-VI	* Deliver Final RI/FS Report		11/25/92
	Public Information Meeting		12/02/92
	Assist NYSDEC in ROD and Responsiveness Summary	12/02/92	12/30/92
* Milestone			

[illegible]

*** Milestone**

FIGURE 3-2
PROJECT SCHEDULE AND MILESTONES-TASK B
ROXY CLEANERS SITE RI/FS



* Milestone

4.0 PROJECT ORGANIZATION AND STAFFING PLAN

The overall organizational structure of the project is depicted in Figure 4-1. The staff organization for this project is illustrated in Figure 4-2, and the staff assignments are shown in Table 4-1. Any staffing changes will first be approved by NYSDEC. Job titles and assignments are described below:

- M&E PROJECT MANAGEMENT

Project Manager - Manages all aspects of the work assignment, including contact with NYSDEC Project Manager, scheduling, staffing, oversight, report review, and budget management.

- TECHNICAL ADVISORY TEAM (TAT)

TAT - A group of senior staff which reviews deliverables for the highest level of professional and technical standards.

- PROJECT SUPPORT

HAS Coordinator - Responsible for production of the site Health and Safety Plan and for site health and safety issues.

QA Technical Advisor - Responsible for developing site QAPP in conjunction with the Project Manager. Oversees technical aspects of QAPP and approves QAPP (see QAPP for further discussion of QA project management responsibilities).

QA Data Coordinator - Responsible for production of the site QAPP in conjunction with the QA Technical Advisor and Project Manager. Interfaces with the laboratory and QA/QC subcontractors (see QAPP for further discussion of QA project management responsibilities).

PE/Field Support - Monitors and assists on all aspects of the field tasks in coordination with the Project Manager.

- SUBCONTRACT ADMINISTRATION

Under the direction of the Project Manager, the Subcontract Administrator (SA) oversees and conducts the preparation of bids, selection of subcontractor, preparation and execution of subcontracts and performance of subcontracted work.

FIGURE 4-1

ROXY RI/FS
WA # D002406-11.1

PROJECT ORGANIZATION

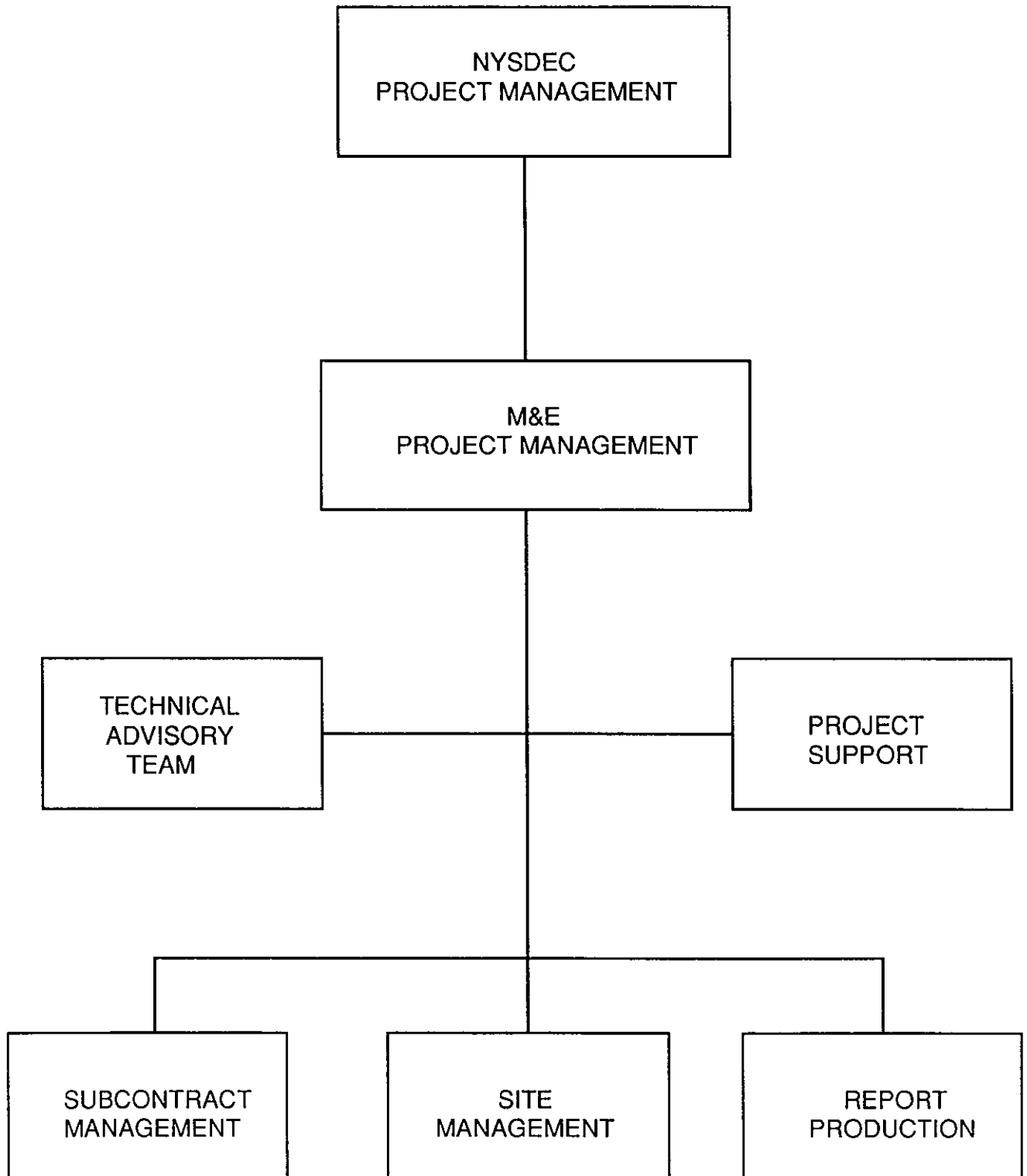


FIGURE 4-2

ROXY RI/FS
WA # D002406-11.1

STAFFING ORGANIZATION

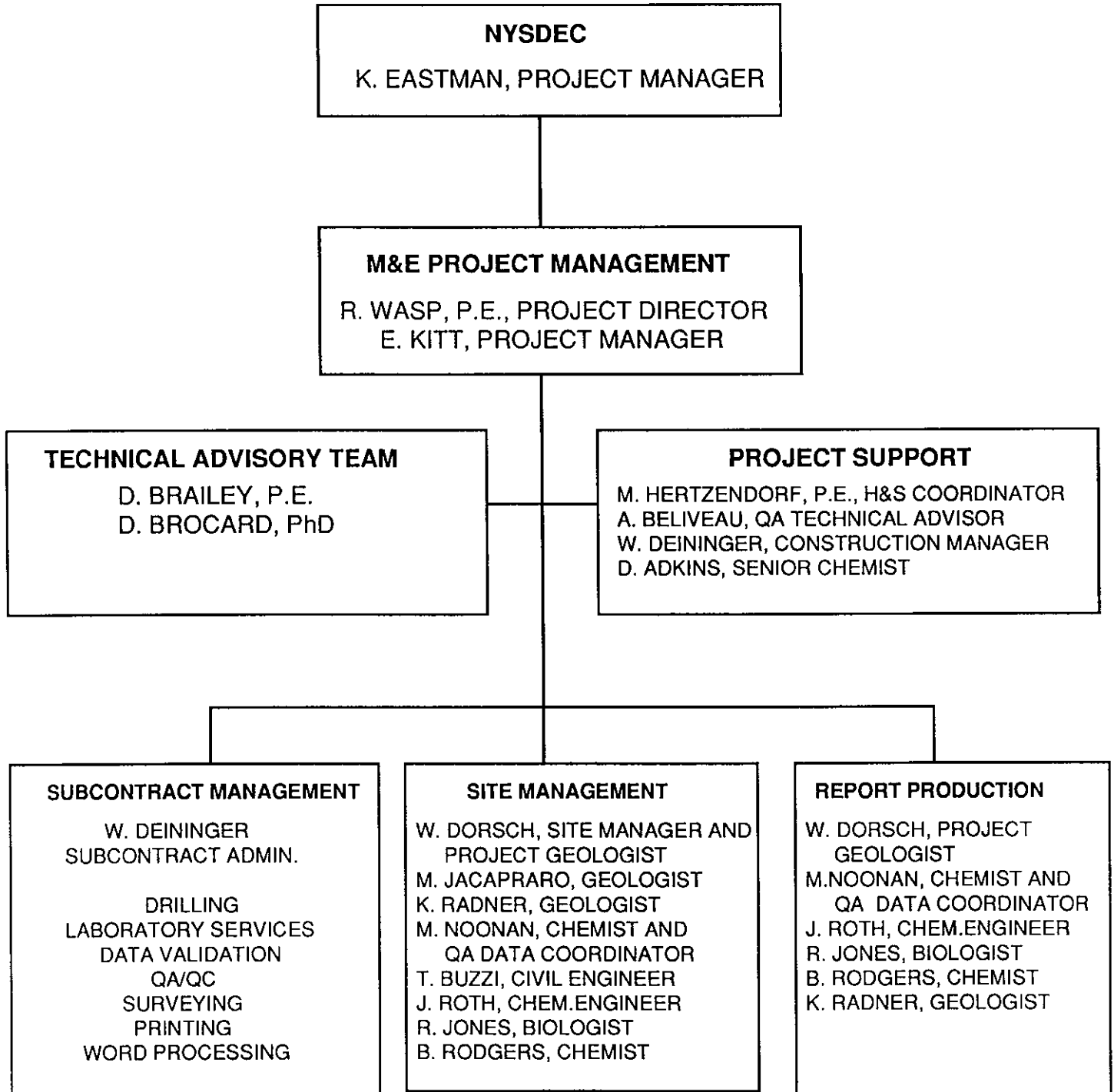


TABLE 4-1
STAFF ASSIGNMENTS
ROXY RI/FS
WA # D002406-11.1

<u>STAFF</u>	<u>ASSIGNMENT</u>
Robert G. Wasp	Project Director (PD)
Donald M. Brailey Dominique N. Brocard	Staff Consultants (SC)
Martin S. Hertzendorf Andrew F. Beliveau	Technical Specialists (TSI)
Errol S. Kitt	Project Manager (PM)
William H. Deininger	Construction Manager (CM) and Subcontract Administrator (SA)
William Dorsch	Project Geologist (PG) and Site Manager (SM)
Karen Radner	Geologist (GE)
Michael Jacapraro	Geologist (GE)
Andrew F. Beliveau	QA Technical Advisor
Michael Noonan	QA Data Coordinator
Martin S. Hertzendorf	Health and Safety Coordinator
Thomas Buzzi	Civil Engineer (EN)
Joan Roth	Chemical Engineer (EN)
Dale Adkins	Senior Chemist
Michael Noonan	Chemist (CH)
Brad Rodgers	Chemist (CH)
Rick Jones	Project Biologist (PB)
Valli Wasp	Word Processing Supervisor (WP)
Joseph Jelisavcic	Drafter (DR)

- SITE MANAGEMENT

Site Manager - Under the direction of the Project Manager, the Site Manager is responsible for all activities and subcontractors at the site. Site control, personnel and equipment logistics, office contact and field decisions are some aspects of this function.

Field staff - Field staff specialized in the areas of geology, chemistry, QA/QC, engineering and equipment operations are assigned to tasks according to qualification and experience relative to the tasks at hand.

- REPORT PRODUCTION

Under the direct control of the Project Manager, qualified staff will organize field data, assess the data, and produce different sections of the reports.

5.0 SUBCONTRACT WORK

There are seven areas of work in this work assignment which will require subcontracting:

<u>Work Areas</u>	<u>Work Description</u>
1. Drilling	- Monitoring Well Installation
2. Laboratory Services	- Sample Analysis
3. Data Validation	- Contract Objectives and Compliance
4. QA/QC	- Data Useability and QA/QC Service
5. Surveying/Aerial Photography/ Topographic Mapping	- Surveying of Monitoring Well Locations and Sampling Points, Aerial Photo and Topographic Map of Site and Study Area
6. Office Temporaries	- Word Processing
7. Reproduction	- Document Printing

At present, Reinhard Temps, Ltd. (WBE) will be contracted to perform word processing and D&D Printing (MBE) will perform document printing and other reproduction services. Gradient will be contracted to perform data useability and provide additional QA/QC services, and it is anticipated that C.C. Johnson & Malhotra, P.C. (MBE) will be selected to provide data validation services. YEC, Inc. (MBE) will be contracted to provide surveying services and related work. It is anticipated that H2M Labs, Inc. will be selected to provide analytical laboratory services and General Borings, Inc. (GBI) will perform drilling and related services.

6.0 MBE/WBE UTILIZATION PLAN

M&E is committed to attaining the respective 15% and 5% Minority Business Enterprise and Women Business Enterprise (MBE/WBE) participation goals of the NYSDEC State Superfund Standby Contract.

6.1 METHODS OF ACHIEVING CONTRACT GOALS

Recognizing the importance of identifying subcontracting tasks as well as capable MBE/WBEs during work assignments, M&E has compiled a list of qualified MBE/WBE firms certified by New York State. From this list and other sources, M&E has identified firms capable of providing services and/or equipment for the NYSDEC Superfund Standby Contract Work Assignment for the Roxy Cleaners Site. A list of MBE/WBE subcontractors anticipated for this project is provided in Table 6-1.

In addition, the names of professional engineering MBE/WBE firms listed for survey work may be utilized throughout the work assignment for additional engineering services.

As the project progresses, M&E's approach will be to expand the list of types of services and qualified firms, as needed, and to work closely with the NYSDEC Bureau of Affirmative Action (BAA). M&E will continuously identify subcontracting tasks and qualified interested MBE/WBEs. To ensure that the most up-to-date information and procedures are being followed, M&E will prequalify newly identified firms. M&E will also make use of the BAA's data base and knowledge of newspapers and trade publications for identifying firms.

Both initially and as work progresses and new areas of potential MBE/WBE participation are identified, M&E will produce specific requests for quotations, receive and evaluate quotations and make recommendations to NYSDEC for award of subcontracts to MBE/WBE subcontractors.

TABLE 6-1
PROPOSED MBE/WBE SUBCONTRACTORS
ROXY RI/FS

<u>Work Areas</u>	<u>Firms</u>
Surveying/Topographic Mapping	YEC, Inc. (MBE) (Already selected under blanket contract)
Printing	D&D Printing (MBE) (Already selected under blanket contract)
Data Validation	CC Johnson & Malhotra, PC (MBE)
Word Processing	Reinhard Temps, Ltd. (WBE) (Already selected under blanket contract)

Engineer: Metcalf & Eddy, Inc.
 Project Name: Roxy RI/FS
 Work Assignment No.: D002406-11.1

Schedule 2.11 (b)
 Direct Labor Hours Budgeted
 Task Summary

Date Prepared: 10/25/91

Labor Classification	PD/SC	SA/CM	TSI/PHII	QA	PM	PE	PG/SM	PB	SE	GE II	CH II/EN II	OAC	WP	DR	EN	Total
Title	IX	VIII	VII	VII	VII	VI	V	V	IV	III	III	III	III	III	II	DL Hours
Average Salary 1991	\$40.02	\$32.16	\$27.85	\$27.85	\$27.85	\$24.31	\$21.41	\$21.41	\$19.92	\$17.41	\$17.41	\$17.41	\$17.41	\$17.41	\$15.35	
Average Salary 1992	\$42.02	\$33.77	\$29.24	\$29.24	\$29.24	\$25.53	\$22.48	\$22.48	\$20.42	\$18.28	\$18.28	\$18.28	\$18.28	\$18.28	\$16.11	
																DL Cost
B I Site Characterization *																
TASK B-I LABOR HOURS	17	111	64	27	345	48	430	100	200	401	927	66	20	101	182	3,039
TASK B-I DIRECT LABOR COST	\$680.34	\$3,569.76	\$1,782.40	\$751.95	\$9,608.25	\$1,166.88	\$9,206.30	\$2,141.00	\$3,984.00	\$6,981.41	\$16,139.07	\$1,149.06	\$348.20	\$1,758.41	\$2,793.70	\$62,060.73
B II Development of Alternatives																
TASK B-II LABOR HOURS	4	18	36	4	100	38	32						10	14	24	280
TASK B-II DIRECT LABOR COST	\$168.08	\$607.86	\$1,052.64	\$116.96	\$2,924.00	\$970.14	\$719.36	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$182.80	\$255.92	\$386.64	\$7,384.40
B III Preliminary Screening of Alternatives																
TASK B-III LABOR HOURS	16	18	134	4	114	38	84	4	30	12	8	10	14	34		520
TASK B-III DIRECT LABOR COST	\$672.32	\$607.86	\$3,918.16	\$116.96	\$3,333.36	\$970.14	\$1,888.32	\$89.92	\$612.60	\$219.36	\$146.24	\$182.80	\$255.92	\$621.52	\$0.00	\$13,635.48
B IV Post Screening Field Investigation																
TASK B-IV LABOR HOURS	4	46	50	10	88	40	220		50	330	252	36		12	102	1,240
TASK B-IV DIRECT LABOR COST	\$168.08	\$1,553.42	\$1,462.00	\$292.40	\$2,573.12	\$1,021.20	\$4,945.60	\$0.00	\$1,021.00	\$6,032.40	\$4,606.56	\$658.08	\$0.00	\$219.36	\$1,643.22	\$26,196.44
B-V Detailed Analysis of Alternatives																
TASK B-V LABOR HOURS	28		96		176	110	14		24		24	2	12	14		500
TASK B-V DIRECT LABOR COST	\$1,176.56	\$0.00	\$2,807.04	\$0.00	\$5,146.24	\$2,808.30	\$314.72	\$0.00	\$490.08	\$0.00	\$438.72	\$36.56	\$219.36	\$255.92	\$0.00	\$13,693.50
B-VI Selection of Remedy																
TASK B-VI LABOR HOURS	8	6	60		70	102			26				6	12		290
TASK B-VI DIRECT LABOR COST	\$336.16	\$202.62	\$1,754.40	\$0.00	\$2,046.80	\$2,604.06	\$0.00	\$0.00	\$530.92	\$0.00	\$0.00	\$0.00	\$109.68	\$219.36	\$0.00	\$7,804.00
TASK B LABOR HOURS																
TASK B DIRECT LABOR COST	\$3,201.54	\$6,541.52	\$12,776.64	\$1,278.27	\$25,631.77	\$9,540.72	\$17,074.30	\$2,230.92	\$6,638.60	\$13,233.17	\$21,330.59	\$2,026.50	\$1,115.96	\$3,330.49	\$4,823.56	\$130,774.55

* Task B1 cost based on 1991 average salary rates.

Engineer/Contractor: Metcalf & Eddy
 Project Name: Roxy RI/FS
 Work Assignment No. D002406-11.1

Schedule 2.11 (c)
 Non-Labor Direct Cost Breakdown by Task
 Travel and Subsistence

Date Prepared: 10/25/91

Task	Lodging		Meals		Transportation						Total
					Personal Vehicle		Rental Vehicle		Airfare		
	Units	Cost [1]	Units	Cost [2]	Units	Cost [3]	Units	Cost [4]	Units	Cost [5]	
A - I	0	\$0	0	\$0	350	\$81	0	\$0	0	\$0	\$81
A - II	2	\$114	2	\$52	700	\$161	0	\$0	0	\$0	\$327
B - I	140	\$7,980	140	\$3,640	5300	\$1,219	9	\$2,880	4	\$2,000	\$17,719
B - II	0	\$0	0	\$0	600	\$138	1	\$320	0	\$0	\$458
B - III	0	\$0	0	\$0	600	\$138	1	\$320	0	\$0	\$458
B - IV	40	\$2,280	40	\$1,040	2500	\$575	4	\$1,280	2	\$1,000	\$6,175
B - V	0	\$0	0	\$0	600	\$138	1	\$320	0	\$0	\$458
B - VI	0	\$0	0	\$0	600	\$138	1	\$320	0	\$0	\$458
Total	182	\$10,374	182	\$4,732	11250	\$2,588	17	\$5,440	6	\$3,000	\$26,134

- [1] Cost based on Standby Contract unit rate of \$57.00 per day.
 [2] Cost based on Standby Contract unit rate of \$26.00 per day.
 [3] Cost based on Standby Contract unit rate of \$0.23 per mile.
 [4] Cost based on unit rate of \$320.00 per week and \$70.00 per day.
 [5] Cost based on round trip rate of \$500.00 between New York & Cleveland.

Engineer/Contractor: Metcalf & Eddy
 Project Name: Roxy RI/FS
 Work Assignment No. D002406-11.1

Schedule 2.11 (d)
 Non-Labor Direct Cost Summary by Task
 Equipment and Miscellaneous

Date Prepared: 10/25/91

Task	Equipment		Vend. Rental	Consumables	Telephone Toll Calls [1]	Shipping		Total
	Purchased	Dedicated				Units	Cost [2]	
A - I	\$0	\$0	\$0	\$0	\$0	0	\$0	\$0
A - II	\$0	\$0	\$0	\$0	\$0	0	\$0	\$0
B - I	\$21,026	\$2,313	\$15,454	\$17,512	\$500	10	\$1,000	\$57,805
B - II	\$0	\$0	\$0	\$0	\$20	0	\$0	\$20
B - III	\$0	\$0	\$0	\$0	\$20	0	\$0	\$20
B - IV	\$0	\$0	\$4,229	\$2,503	\$20	5	\$500	\$7,252
B - V	\$0	\$0	\$0	\$0	\$20	0	\$0	\$20
B - VI	\$0	\$0	\$0	\$0	\$20	0	\$0	\$20
Total	\$21,026	\$2,313	\$19,683	\$20,015	\$600	15	\$1,500	\$65,137

[1] Estimated cost of \$2.50 per toll call.

[2] Cost based on Federal Express unit rate of \$100.00 per 50 lb. container for shipment of samples to laboratory.

Schedule 2.11(d)1
Equipment Purchased Under the Contract

Engineer: Metcalf & Eddy
Project Name: Roxy RI/FS
Work Assignment No: D002406-11.1
Task B-I

Date Prepared: 10/25/91

Item	Estimated Quantity	Estimated Purchase Price ea.	O&M Rate (per Month)	Term of Usage (Months)	Total
Electric Hook-up	1	\$1,750.00			\$1,750.00
Phone Hook-up	1	\$165.00			\$165.00
Sump Pump	1	\$156.00			\$156.00
Computer & Workstation	1	\$8,751.89			\$8,751.89
Transfer Pump w/Base	1	\$282.74			\$282.74
Well Development Pump (Submersible)	1	\$549.90			\$549.90
1,100 Gallon Holding Tank	1	\$1,170.00			\$1,170.00
3,500 Gallon Holding Tank	1	\$2,500.00			\$2,500.00
Generator (6 kw)	1	\$2,500.00			\$2,500.00
Oxygen Regulator (HP270C-540)	1	\$225.00			\$225.00
Helium Gas Regulator	1	\$225.00			\$225.00
Nitrogen Gas Regulator	1	\$225.00			\$225.00
Regulators (HPT270B-590)	2	\$231.25			\$462.50
Syringes (1701 RN, 10uL)	10	\$42.00			\$420.00
GC Column (30m, 0.53mm, SPB-5)	1	\$523.80			\$523.80
GC Column (30m, 0.53mm, VOCOL)	1	\$626.40			\$626.40
GC Splitter	1	\$400.00			\$400.00
Tedlar Bags	4	\$23.20			\$92.80

Task B-I Total: \$21,026.03

Schedule 2.11(d)3
Rented Equipment

Engineer: Metcalf & Eddy
Project Name: Roxy RI/FS
Work Assignment No: D002406-11.1
Task B-I

Date Prepared: 10/25/91

Item	Maximum Reimbursement Rate	Estimated Usage (period of time)	Estimated Rental Cost (Col. 2 x 3)
Office Trailer - Soil Gas	\$283.15	1 month	\$283.15
Office Trailer	\$283.15	3 months	\$849.45
Port-O-John	\$118.00	3 months	\$354.00
Water Cooler/Drinking Water	\$46.00	3 months	\$138.00
HP 5890 GC	\$1,760.00	1 month	\$1,760.00
GC Regulators (3)	\$565.00	1 month	\$565.00
HW 101 (10.2 eV)	\$700.00	1 month	\$700.00
Gillibrator	\$540.00	1 month	\$540.00
Purge Pump	\$109.95	3 weeks	\$329.85
OVA	\$900.00	2 months	\$1,800.00
PID	\$800.00	2 months	\$1,600.00
Explosimeter	\$275.00	2 months	\$550.00
Generator for Pumps	\$788.25	3 months	\$2,364.75
pH Meter	\$200.00	2 months	\$400.00
Conductivity Meter	\$200.00	2 months	\$400.00
Turbidity Meter	\$261.00	2 months	\$522.00
Water Level Indicator	\$200.00	2 months	\$400.00
Dissolved Oxygen Meter	\$109.95	2 weeks	\$219.90
Tools	\$48.00	2 months	\$96.00
Rotary Drill w/Bits, Cords	\$624.00	1 month	\$624.00
Generator for Drill (6 kw)	\$795.20	1 month	\$795.20
Trailer Hitch	\$163.10	1 month	\$163.10

Task B-I Subtotal: \$15,454.40

Task B - IV

Office Trailer	\$283.15	1 month	\$283.15
Port-O-John	\$118.00	1 month	\$118.00
Water Cooler/Drinking Water	\$46.00	1 month	\$46.00
OVA	\$900.00	1 month	\$900.00
PID	\$800.00	1 month	\$800.00
Explosimeter	\$275.00	1 month	\$275.00
Generator for Pumps	\$788.25	1 month	\$788.25
pH Meter	\$200.00	1 month	\$200.00
Conductivity Meter	\$200.00	1 month	\$200.00
Turbidity Meter	\$261.00	1 month	\$261.00
Water Level Indicator	\$200.00	1 month	\$200.00
Dissolved Oxygen Meter	\$109.95	1 week	\$109.95
Tools	\$48.00	1 month	\$48.00

Task B-IV Subtotal: \$4,229.35

Schedule 2.11(d)4
Site-Dedicated Equipment

Engineer: Metcalf & Eddy
Project Name: Roxy RI/FS
Work Assignment No: D002406-11.1
Task B-I

Date Prepared: 10/25/91

Item	Estimated Quantity	Unit Cost	Total Budgeted Cost (Col. 2x3)
Extension Cord	1	\$25.00	\$25.00
Decon Sprayer	1	\$57.00	\$57.00
Thermometer (Outdoor)	1	\$23.55	\$23.55
Office Supplies	1	\$50.00	\$50.00
Soil Gas Probes & Tips	100	\$19.27	\$1,927.00
Field Log Books	24	\$7.75	\$186.00
Teflon Coated Steel Leader (Suspension Cord)	1	\$54.60	\$54.60

Task B-I Total: \$2,323.15

Schedule 2.11(d) 5
Consumable Supplies

Engineer: Metcalf & Eddy
Project Name: Roxy RI/FS
Work Assignment No: D002406-11.1
Task B-I

Date Prepared: 10/25/91

Item	Estimated Quantity	Unit Cost	Total Budgeted Cost
55 Gal. Drum	12	\$70.33	\$843.96
Trash Barrel	3	\$21.95	\$65.85
Plastic Sheeting	1,000 s.f.	\$0.10	\$100.00
Cotton Coveralls	3	\$31.55	\$94.65
Helium Gas	7	\$179.52	\$1,256.64
Nitrogen Gas	1	\$92.72	\$92.72
Rare/Specialty Gas (80CF, 1ppm)	1	\$1,400.00	\$1,400.00
Rare/Specialty Gas (80CF, 50ppm)	1	\$1,000.00	\$1,000.00
Oxyclear Trap	1	\$115.00	\$115.00
Thermogreen Septas	2	\$67.20	\$134.40
Liquid Standards	26	\$45.00	\$1,170.00
Calibration Gases (TCE, BTEX)	2	\$281.00	\$562.00
Calibration Gas (PCE)	1	\$980.00	\$980.00
Tygon Tubing	1	\$20.00	\$20.00
Valves & Clamps	1	\$20.00	\$20.00
Disposable HDPE Bailers	3 cases	\$163.00	\$489.00
Endeflex Hose	900 ft.	\$0.40	\$360.00
pH Standards	1	\$35.90	\$35.90
Conductivity Standards	4	\$18.00	\$72.00
Methane Gas	2	\$50.15	\$100.30
* PPE for 4-6 Men @ 12 Weeks	300	\$26.00	\$7,800.00
Miscellaneous			\$800.00

Task B-I Subtotal: \$17,512.42

Task B-IV

Calibration Gases	1	\$500.00	\$500.00
55 Gal. Drum	4	\$60.70	\$242.80
* PPE for 3 Men @ 4 Weeks	60	\$26.00	\$1,560.00
Miscellaneous			\$200.00

Task B-IV Subtotal: \$2,502.80

Schedule 2.11(e)
Cost-Plus-Fixed-Fee Subcontracts
Roxy RI/FS Work Assignment No. D002406-11.1

1. NAME OF SUBCONTRACTOR		SERVICES TO BE PERFORMED			SUBCONTRACT PRICE	
Gradient Corporation		QA/QC in Task B-I			\$17,523.62	
A. Direct Salary Costs						
Professional Responsibility Level	Labor Classification	Average Reimbursement Rate (\$/Hr)	Maximum Reimbursement Rate (\$/Hr.)	Estimated Number of Hours	Total Estimated Direct Salary Cost (aver rate x hr)	
<u>Initial Lab Audit</u>						
PL4 (D. Wait)	Prin VIII	\$34.38	\$37.13	32	\$1,100.16	
PL3 (S. Chapnick)	Sr Pr Ch VI	\$24.04	\$26.44	14	\$336.56	
<u>Second Lab Audit</u>						
PL4 (D. Wait)	Prin VIII	\$34.38	\$37.13	32	\$1,100.16	
<u>Initial Field Audit</u>						
PL4 (D. Wait)	Prin VIII	\$34.38	\$37.13	12	\$412.56	
PL2 (L. Daly)	Chem III	\$17.31	\$19.21	28	\$484.68	
<u>Second Field Audit</u>						
PL2 (L. Daly)	Chem III	\$17.31	\$19.21	16	\$276.96	
<u>Data Completeness</u>						
PL3 (P. Doherty)	Proj Mgr VII	27.40	\$29.87	4	\$109.60	
PL3 (S. Chapnick)	Sr Chem VI	24.04	\$26.44	4	\$96.16	
<u>Data Usability</u>						
PL4 (D. Wait)	Prin VIII	\$34.38	\$37.13	40	\$1,375.20	
PL1 (P. Sanborn)	Tech II	\$13.65	\$15.29	12	\$163.80	
TOTAL DIRECT SALARY COST					\$5,455.84	

Footnotes:

- 1) These rates will be held firm.
- 2) Reimbursement will be limited to the lesser of either the individuals actual hourly rate or the maximum rate for each labor category.

- 2) Reimbursement will be limited to the lesser of either the individuals actual hourly rate or the maximum rate for each labor category.
- 3) Reimbursement will be limited to the maximum reimbursement rate for the professional responsibility level of the actual work performed.
- 4) Only those labor classifications indicated with an asterisk will be entitled to overtime.
- 5) Reimbursement for technical time of principals, owners and officers will be limited to the maximum reimbursement rate of that labor category, the actual hourly labor rate paid, or the Federal GS-18 rate, whichever is lower.
- 6) The maximum rates in each labor category can be modified only by mutual written agreement and approved by both the Department and the Comptroller.

B. Indirect Costs

Indirect costs shall be paid based on a percentage of direct salary costs incurred which shall not exceed a maximum of 154.5 %.

Amount budgeted for indirect costs \$8,429.27

C. Direct Non-Salary Costs

1. Travel	\$2,130.00
	\$120.00
2. Supplies	<u> </u>
Total Direct Non-Salary Costs	<u>\$2,250.00</u>

D. Fixed Fee at 10 % of direct salary plus overhead	\$1,388.51
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TOTAL SUBCONTRACT COSTS	<u>\$17,523.62</u>
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SCHEDULE 2.11 (e)
COST-PLUS-FIXED-FEE SUBCONTRACTS
ROXY RI/F'S WORK ASSIGNMENT NUMBER D002406-11.1

SITE NAME : Roxy Cleaners Site
CONTRACTOR: YEC, INC.

ESTIMATED HOURS OF DIRECT LABOR

PHASE I Task B-1 REMEDIAL INVESTIGATION TASK DESCRIPTION	PRINCIPAL		SENIOR		LICENSED		STAFF		SEN. DRAFTSMAN		TECHNICIAN		TOTAL HOURS	TOTAL COST (\$)
	NSPE VIII	\$33.58/hr	ENG/SCI/GEO NSPE VI	\$26.42/hr	NSPE IV	\$22.08/hr	ENG/SCI/GEO NSPE III	\$16.56/hr	NSPE II	\$13.29/hr	NSPE I	\$10.67/hr		
(1991)														
1. Project Management		16.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	16.00	537.28
2. Records Research		0.00	0.00	0.00	0.00	0.00	0.00	0.00	12.00 *	0.00	0.00	0.00	12.00	159.48
**3. Stage I Field Survey		0.00	0.00	0.00	45.00 *	0.00	0.00	0.00	45.00 *	0.00	45.00 *	0.00	135.00	2,071.80
***4. Stage II Field Survey		0.00	0.00	0.00	25.00 *	0.00	0.00	0.00	25.00 *	0.00	0.00	0.00	50.00	884.25
5. Data Reduction/Computation		0.00	0.00	0.00	48.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	48.00	1,059.84
6. Drafting/Revision		0.00	0.00	0.00	0.00	0.00	0.00	0.00	32.00	0.00	0.00	0.00	32.00	425.28
Total Labor Hours:		16.00	0.00	0.00	0.00	118.00	0.00	0.00	114.00	0.00	45.00	0.00	293.00	5,137.93
Direct Labor Cost (\$)		537.28	0.00	0.00	0.00	2605.44	0.00	0.00	1515.06	0.00	480.15	0.00	6,422.41	6,422.41
Indirect Labor(factor 1.25)		671.60	0.00	0.00	0.00	3256.80	0.00	0.00	1893.83	0.00	600.19	0.00	1,284.35	1,284.35
Fixed Fee (11.11%)		134.31	0.00	0.00	0.00	651.29	0.00	0.00	378.73	0.00	120.03	0.00	12,844.70	12,844.70
Total Labor Cost		1343.19	0.00	0.00	0.00	6513.53	0.00	0.00	3787.61	0.00	1200.36	0.00		

EXPENSES:

- Equipment Rental (\$65/day x 6 days)
- Mileage (\$0.23/mile x 1500 miles)
- Per Diem (\$87/day/man x 19 man-days)
- Misc./Reproduction/Telephone/Deeds

Total Expenses:

Total YEC Project Cost:

390.00
345.00
1,653.00
200.00
2,588.00
\$15,432.70

* Estimates include travel time
** Stage I Survey includes vertical/horizontal controls plus 16 existing well locations/elevations and buildings/structures;
*** Stage II Survey includes 8 new wells and 6 sampling locations.

SCHEDULE 2.11 (e)
COST-PLUS-FIXED-FEE SUBCONTRACTS
ROXY RI/FS WORK ASSIGNMENT NUMBER D002046-11.1

SITE NAME : Roxy Cleaners Site
CONTRACTOR: YEC, INC.

Task B-1

SUBCONTRACTOR QUOTATIONS (ADR)

(A) Aerial Photos for Vegetation Maps (1/2 mile radius)

(1) Color Spot Vertical, 1" = 800' Negative Scale	1,220.00
(2) 27" x 27" Color Enlargement @ 1" = 200'	450.00
Subtotal (A):	1,670.00

(B) Aerial Photo (refly) for Topo Maps

(1) Refly, 2' Contour Topo at 1" = 50'	2880.00
(2) AutoCAD	2880.00
Subtotal (B):	2880.00

TOTAL SUBCONTRACTOR COSTS (A) + (B):
\$4,550.00

SCHEDULE 2.11 (e)
 COST-PLUS-FIXED-FEE SUBCONTRACTS
 ROXY RI/FS WORK ASSIGNMENT NUMBER D002406-11.1

SITE NAME : Roxy Cleaners Site
 CONTRACTOR: YEC, INC.

ESTIMATED HOURS OF DIRECT LABOR

PHASE II Task BIV REMEDIAL INVESTIGATION TASK DESCRIPTION	PRINCIPAL NSPE VIII	SENIOR ENG/SCI/GEO NSPE VI	LICENSED SURVEYOR NSPE IV	STAFF ENG/SCI/GEO NSPE III	SEN. TECHNICIAN SEN. DRAFTSMAN NSPE II	TECHNICIAN NSPE I	TOTAL HOURS	TOTAL COST (\$)
(1992)	\$35.59/hr	\$28.00/hr	\$23.40/hr	\$17.55/hr	\$14.09/hr	\$11.31/hr		
1. Project Management	8.00	0.00	0.00	0.00	0.00	0.00	8.00	284.72
2. Records Research	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
**3. Field Survey	0.00	0.00	25.00 *	0.00	25.00 *	0.00	50.00	937.25
4. Data Reduction/Computation	0.00	0.00	20.00	0.00	0.00	0.00	20.00	468.00
5. Drafting/Revision	0.00	0.00	0.00	0.00	16.00	0.00	16.00	225.44
Total Labor Hours:	8.00	0.00	45.00	0.00	41.00	0.00	94.00	1,807.13
Direct Labor Cost (\$)	268.64	0.00	993.60	0.00	544.89	0.00		2,258.91
Indirect Labor (factor 1.25)	335.80	0.00	1242.00	0.00	681.11	0.00		451.74
Fixed Fee (11.11%)	67.15	0.00	248.38	0.00	136.21	0.00		
Total Labor Cost	671.59	0.00	2483.98	0.00	1362.21	0.00		4,517.78

EXPENSES:

1. Equipment Rental (\$65/day x 2 days)
2. Mileage (\$0.23/mile x 600 miles)
3. Per Diem (\$87/day/man x 4 man-days)
4. Misc./Reproduction/Telephone/Deeds

Total Expenses:

Total YEC Project Cost:

\$5,333.78

* Estimates include travel time
 ** Survey includes 6 new wells

Schedule 2.11(f)
Unit Price Subcontractors
Roxy RI/FS Work Assignment No. D002406-11.1

NAME OF SUBCONTRACTOR		SERVICES TO BE PERFORMED			SUBCONTRACT PRICE
General Borings, Inc.		Drilling			\$49,035.00
Item	Max Reimb Rate (\$/unit)	Units	Est. No. of Units	Total Estimated Cost	
Mob/Demob	\$4,000.00	1s	1	\$4,000.00	
Soil Borings	\$19.00	1f	450	\$8,550.00	
NX Rock Core	\$40.00	1f	110	\$4,400.00	
Split Spoon Sample	\$18.00	each	200	\$3,600.00	
Standby per hr (directed)	\$120.00	hr	10	\$1,200.00	
Standby per hr (weather)	\$150.00	hr	4	\$600.00	
Decon rig	\$120.00	hr	20	\$2,400.00	
Level "C" Charge	\$20.00	hr	20	\$400.00	
Level "B" Charge	\$50.00	hr	4	\$200.00	
Grout wells	\$5.00	1f	375	\$1,875.00	
Install well screen	\$450.00	each	4	\$1,800.00	
Install well riser	\$20.00	1f	160	\$3,200.00	
Well development	\$120.00	hr	30	\$3,600.00	
Haul water	\$120.00	hr	30	\$3,600.00	
Install protective casing	\$100.00	each	4	\$400.00	
Steel casing left in well	\$22.00	1f	225	\$4,950.00	
Install Royer locking cap	\$40.00	each	4	\$160.00	
Supply 55 gallon drum	\$60.00	each	15	\$900.00	
Sieve analysis	\$100.00	each	8	\$800.00	
Packer test	\$120.00	hr	20	\$2,400.00	
					\$49,035.00

6.2 CRITERIA FOR SELECTION

To assure that only qualified MBE/WBEs capable of completing subcontract work are considered under this contract, M&E continues to develop a portfolio of MBE/WBE firms recognized by NYSDEC including staff credentials and project histories. In addition, wherever possible, M&E solicits quotes from prequalified MBE/WBE firms with whom we have an effective working relationship. Prior to solicitation, all potential MBE/WBE subcontractor qualifications are carefully reviewed with respect to professional staff and company experience as related to the specific subcontract scope of work.

7.0 LEVEL OF EFFORT, PROJECT COST ESTIMATE, AND FINAL BUDGET

The projected level of effort for all of the RI/FS tasks is given in Table 7-1. Table 7-2 provides the cost estimates for the entire work assignment. Cost estimates for work plan development tasks (Tasks A-I and A-II) and phased remedial investigation and feasibility tasks (Tasks B-I through B-VI) are supported by Schedules 2.11(a) through (i) enclosed in Appendix A.

TABLE 7-1
PROJECTED LEVEL OF EFFORT
ROXY RI/FS
WA # D002406-11.1

<u>MAJOR TASKS</u>	<u>DESCRIPTION</u>	<u>LOE ESTIMATE (STAFF HOURS)</u>
TASK A WORK PLAN DEVELOPMENT		
TASK A-I	Project Management Plan	217
TASK A-II	Scoping of RI/FS	<u>356</u>
	TASK A Subtotal	573
TASK B PHASED REMEDIAL INVESTIGATION AND FEASIBILITY STUDY		
TASK B-I	Site Characterization	3,039
TASK B-II	Development of Alternatives	280
TASK B-III	Preliminary Screening of Alternatives	520
TASK B-IV	Post Screening Field Investigation	1,240
TASK B-V	Detailed Analysis of Alternatives	500
TASK B-VI	Selection of Remedy	<u>290</u>
	TASK B Subtotal	5,869
	WORK ASSIGNMENT TOTAL	6,442

TABLE 7-2
PROJECT COST ESTIMATE
ROXY RI/FS
WA # D002406-11.1

<u>MAJOR TASKS</u>	<u>DESCRIPTION</u>	<u>COST ESTIMATE (DOLLARS)</u>
TASK A WORK PLAN DEVELOPMENT		
TASK A-I	Project Management Plan	15,228.15
TASK A-II	Scoping of RI/FS	<u>27,264.86</u>
	TASK A Subtotal	42,493.01
TASK B PHASED REMEDIAL INVESTIGATION AND FEASIBILITY STUDY		
TASK B-I	Site Characterization	342,248.67
TASK B-II	Development of Alternatives	23,198.42
TASK B-III	Preliminary Screening of Alternatives	38,480.65
TASK B-IV	Post Screening Field Investigation	91,589.99
TASK B-V	Detailed Analysis of Alternatives	40,268.66
TASK B-VI	Selection of Remedy	<u>25,150.16</u>
	TASK B Subtotal	560,936.55
	WORK ASSIGNMENT TOTAL	603,429.56

APPENDIX A

FINAL BUDGET - TASKS A AND B

Schedule 2.11 Table of Contents

Engineer/Contract # : Metcalf & Eddy
 Project Name: Roxy RI/FS
 Work Assignment No. D002406-11.1
 Project Budget Summary-Table of Contents
 Date Prepared: 10/25/91

Item	Subject	No. of Pages
Schedule 2.11(a)	Work Assignment Summary	1
Schedule 2.11(b)	Detailed Direct Labor Breakdown	5
Schedule 2.11(c)	Direct Non-Salary Travel & Subsistence	1
Schedule 2.11(d)	Direct Non-Salary Equipment & Miscellaneous Summary	1
Schedule 2.11(d)1	Equipment Purchased Under the Contract	1
Schedule 2.11(d)3	Direct Non-Salary Equipment Costs for Rental Equipment	1
Schedule 2.11(d)4	Site Dedicated Equipment	1
Schedule 2.11(d)5	Consumable Supplies	1
Schedule 2.11(e)	CPFF Subcontractors	5
Schedule 2.11(f)	Unit Price Subcontractors	5
Schedule 2.11(g)	Monthly Cost Control Report-Summary of Fiscal Information	9
Schedule 2.11(h)	Monthly Cost Control Report-Summary of Labor Hours	1

Schedule 2.11(f)
Unit Price Subcontractors
Roxy RI/FS Work Assignment No. D002406-11.1

NAME OF SUBCONTRACTOR	SERVICES TO BE PERFORMED		SUBCONTRACT PRICE
Irene Cohen or Reinhard	Bulk Word Processing		\$12,129.75
Task	Maximum Reimbursement Rate (\$/Hour)	Est. No. of Hours	Total Estimated Cost
A-I & A-2	\$20.25	183	\$3,705.75
B-I	\$20.25	48	\$972.00
B-II	\$20.25	80	\$1,620.00
B-III	\$20.25	40	\$810.00
B-IV	\$20.25	80	\$1,620.00
B-V	\$20.25	96	\$1,944.00
B-VI	\$20.25	72	\$1,458.00
TOTALS		599	\$12,129.75

Schedule 2.11(g)

Contract No: D002406-11.1

Project Name: ROXY RI/FS

Task No./Name: A I

Task No. / Name	% Complete
1	100%

M & E No. 005089

Schedule 2.11(g)
MONTHLY COST CONTROL REPORT
SUMMARY OF FISCAL INFORMATION

Date 10/25/91

[illegible]

Schedule 2.11(g)
MONTHLY COST CONTROL REPORT
SUMMARY OF FISCAL INFORMATION

Date 10/25/91

[illegible]

Schedule 2.11 (a)
Summary of Work Assignment Price

Engineer Contract #: Metcalf & Eddy, Inc.
Project Name: Roxy RI/FS
Work Assignment No. D002406-11.1
Date Prepared: 10/25/91

Item	Price															
1. Direct salary costs (Schedule 2.11(b))	\$144,894.38															
2. Indirect salary costs	\$204,735.76															
3. Direct non-salary costs (Schedule 2.11(c))	\$91,272.00															
4. Subcontractor costs	\$145,391.35															
Cost-Plus-Fixed-Fee Subcontracts:	\$42,840.10															
<table><tr><th>Name of Subcontractor</th><th>Services To Be Performed</th><th>Subcontract Price</th></tr><tr><td>YEC, Inc. Gradient</td><td>Survey Data Usability & Audits</td><td>\$25,316.48 \$17,523.62</td></tr><tr><td colspan="2">Unit Price Subcontracts:</td><td>\$102,551.25</td></tr><tr><th>Name of Subcontractor</th><th>Services To Be Performed</th><th>Subcontract Price</th></tr><tr><td>General Borings, Inc. CCJM D & D Printing H2M Irene Cohen or Reinhard</td><td>Drilling Data Validation Printing Sample Analysis Bulk Word Processing</td><td>\$49,035.00 \$4,061.50 \$10,400.00 \$26,925.00 \$12,129.75</td></tr></table>		Name of Subcontractor	Services To Be Performed	Subcontract Price	YEC, Inc. Gradient	Survey Data Usability & Audits	\$25,316.48 \$17,523.62	Unit Price Subcontracts:		\$102,551.25	Name of Subcontractor	Services To Be Performed	Subcontract Price	General Borings, Inc. CCJM D & D Printing H2M Irene Cohen or Reinhard	Drilling Data Validation Printing Sample Analysis Bulk Word Processing	\$49,035.00 \$4,061.50 \$10,400.00 \$26,925.00 \$12,129.75
Name of Subcontractor	Services To Be Performed	Subcontract Price														
YEC, Inc. Gradient	Survey Data Usability & Audits	\$25,316.48 \$17,523.62														
Unit Price Subcontracts:		\$102,551.25														
Name of Subcontractor	Services To Be Performed	Subcontract Price														
General Borings, Inc. CCJM D & D Printing H2M Irene Cohen or Reinhard	Drilling Data Validation Printing Sample Analysis Bulk Word Processing	\$49,035.00 \$4,061.50 \$10,400.00 \$26,925.00 \$12,129.75														
5. Fixed fee	\$34,963.01															
Total Work Assignment	\$621,256.50															

Labor Classification Key

IX	PD	Project Director	IV	PB	Project Biologist
VIII	TSII	Technical Specialist II	III	CHE	Chemical Engineer
VIII	PM	Project Manager (p.Giovanelli)	II	GE	Geologist
VIII	SA	Subcontract Administrator	II	CE/EI	Civil Engr/Engineer I
VII	PM	Project Manager (E.Kitt)	II	CM	Chemist
VI	PE/PG	Proj Engineer/Proj Geologist	II	WP	Word Processing Supervisor
V	SG/SE	Sr Geologist/Sr Engineer	I	DR	Drafter

Schedule 2.11(f)
Unit Price Subcontractors
Roxy RI/FS Work Assignment No. D002406-11.1

NAME OF SUBCONTRACTOR	SERVICES TO BE PERFORMED		SUBCONTRACT PRICE
CCJM	Data Validation		\$4,061.50
Item	Maximum Reimbursement Rate (Price \$/sample)	Est. No. of Units	Total Estimated Cost
VOC - Soil	33.00	3	99.00
TOC - Soil	18.00	4	72.00
VOC - Water	31.50	45	1,417.50
SVOC - Water	38.00	6	228.00
Metals - Water	49.00	6	294.00
Pest/PCB - Water	31.50	6	189.00
VOC - Sediment	33.00	3	99.00
TOC - Sediment	23.00	3	69.00
VOC - Duplicate	31.50	7	220.50
SVOC - Duplicate	38.00	1	38.00
Metals - Duplicate	49.00	1	49.00
Pest/PCB - Duplicate	31.50	1	31.50
TOC - Duplicate	18.00	2	36.00
VOC - Trip Blank	20.00	18	360.00
VOC - Equipment Blank	24.00	4	96.00
SVOC - Equipment Blank	30.00	1	30.00
Metals - Equipment Blank	40.00	1	40.00
Pest/PCB - Equipment Blank	24.00	1	24.00
TOC - Equipment Blank	9.00	2	18.00
VOC - QA/QC (MS/MSD/DS)	63.00	6	378.00
SVOC - QA/QC (MS/MSD/DS)	76.00	1	76.00
Metals - QA/QC (MS/MSD/DS)	98.00	1	98.00
Pest/PCB - QA/QC (MS/MSD/D	63.00	1	63.00
TOC - QA/QC (MS/MSD/DS)	18.00	2	36.00
			\$4,061.50

Schedule 2.11(f)
Unit Price Subcontractors
Roxy RI/FS Work Assignment No. D002406-11.1

NAME OF SUBCONTRACTOR	SERVICES TO BE PERFORMED		SUBCONTRACT PRICE
H2M	Sample Analysis		\$26,925.00
Item	Maximum Reimbursment Rate (Price \$/sample)	Est. No. of Units	Total Estimated Cost
VOC - Soil	205.00	3	615.00
TOC - Soil	55.00	4	220.00
VOC - Sediment	205.00	3	615.00
TOC - Sediment	55.00	3	165.00
VOC - Water	195.00	45	8,775.00
SVOC - Water	420.00	6	2,520.00
Metals - Water	195.00	6	1,170.00
Pest/PCB - Water	190.00	6	1,140.00
VOC - Duplicate aqueous	195.00	5	975.00
VOC - Duplicate soil	205.00	1	205.00
VOC - Duplicate sediment	205.00	1	205.00
SVOC - Duplicate aqueous	420.00	1	420.00
Metals - Duplicate aqueous	195.00	1	195.00
Pest/PCB - Duplicate aqueous	190.00	1	190.00
TOC - Duplicate soil	55.00	1	55.00
TOC - Duplicate sediment	55.00	1	55.00
VOC - Trip Blank aqueous	195.00	18	3,510.00
VOC - Equip Blank aqueous	195.00	4	780.00
SVOC - Equip Blank aqueous	420.00	1	420.00
Metals - Equip Blank aqueous	195.00	1	195.00
Pest/PCB - Equip Blank aqueous	190.00	1	190.00
TOC - Equip Blank soil	50.00	1	50.00
TOC - Equip Blank sediment	50.00	1	50.00
VOC - QA/QC (MS/MSD/DS) aq	390.00	4	1,560.00
SVOC - QA/QC (MS/MSD/DS) aq	840.00	1	840.00
Metals - QA/QC (MS/MSD/DS) aq	390.00	1	390.00
Pest/PCB - QA/QC (MS/MSD/DS) aq	380.00	1	380.00
VOC - QA/QC (MS/MSD/DS) soil	410.00	1	410.00
VOC - QA/QC (MS/MSD/DS) sed	410.00	1	410.00
TOC - QA/QC (MS/MSD/DS) soil	110.00	1	110.00
TOC - QA/QC (MS/MSD/DS) sed	110.00	1	110.00
			\$26,925.00

Schedule 2.11(f)
Unit Price Subcontractors
Roxy RI/FS Work Assignment No. D002406-11.1

NAME OF SUBCONTRACTOR	SERVICES TO BE PERFORMED		SUBCONTRACT PRICE
D & D Printing	Printing		\$10,400.00
Task	Maximum Reimbursement Rate (\$/page)	Est. No. of Pages	Total Estimated Cost
A-I & A-2	\$0.05	18000	\$900.00
B-I	\$0.05	40000	\$2,000.00
B-II	\$0.05	30000	\$1,500.00
B-III	\$0.05	20000	\$1,000.00
B-IV	\$0.05	20000	\$1,000.00
B-V	\$0.05	30000	\$1,500.00
B-VI	\$0.05	50000	\$2,500.00
TOTALS		208000	\$10,400.00

Engineer: Metcalf & Eddy, Inc.
Contract No: D002406-11.1
Project Name: Roxy RI/FS
Task No./Name: B I

Schedule 2.11(g)
MONTHLY COST CONTROL REPORT
SUMMARY OF FISCAL INFORMATION

Date 10/25/91

% Complete:

M & E No.	A	B	C	D	E	F	G	H
	Cost Claimed This Period	Paid To Date	Total Disallowed To Date	Total Costs Incurred To Date(A+B+C)	Estimated Costs To Completion	Estimated Total Work Assignment Price (A+B+E)	Approved Budget	Estimated Under/Over (G-F)
1. Direct Salary							62,060.73	
2. Indirect							87,691.81	
3. Subtotal							149,752.54	
4. Direct Salary Costs & In-								
5. direct Costs								
6. Travel							17,719.00	
7. Other Non-							57,805.00	
8. Salary Costs							75,524.00	
9. Subtotal Other							120,499.82	
10. Non-Salary							345,776.36	
Costs								
Subcontractors								
Total Work								
Assignment								
Cost								
Fixed Fee (10%)							14,975.25	
Total Work							360,751.61	
Assignment								
Price								

Engineer: Metcalf & Eddy, Inc.
Contract No: D002406-11.1
Project Name: Roxy RI/FS
Task No./Name: B II
% Complete:

Schedule 2.11(g)
MONTHLY COST CONTROL REPORT
SUMMARY OF FISCAL INFORMATION

Date 10/25/91

M & E No.

	A	B	C	D	E	F	G	H
	Cost Claimed This Period	Paid To Date	Total Disallowed To Date	Total Costs Incurred To Date(A+B+C)	Estimated Costs To Completion	Estimated Total Work Assignment Price (A+B+E)	Approved Budget	Estimated Under/Over (G-F)
1. Direct Salary							7,384.40	
Cost								
2. Indirect							10,434.16	
Cost (1.413%)								
3. Subtotal							17,818.56	
Direct Salary								
Costs & In-								
direct Costs							458.00	
4. Travel							20.00	
5. Other Non-								
Salary Costs							478.00	
6. Subtotal Other								
Non-Salary								
Costs							3,120.00	
7. Subcontractors							21,416.56	
8. Total Work								
Assignment								
Cost								
9. Fixed Fee (10%)							1,781.86	
10. Total Work							23,198.42	
Assignment								
Price								

Engineer: Metcalf & Eddy, Inc.
Contract No: D002406-11.1
Project Name: Roxy RI/FS
Task No./Name: B III
% Complete:

Schedule 2.11(g)
MONTHLY COST CONTROL REPORT
SUMMARY OF FISCAL INFORMATION

Date 10/25/91

M & E No.	A	B	C	D	E	F	G	H	
	Expenditure Category	Cost Claimed This Period	Paid To Date	Total Disallowed To Date	Total Costs Incurred To Date(A+B+C)	Estimated Costs To Completion	Estimated Total Work Assignment Price (A+B+E)	Approved Budget	Estimated Under/Over (G-F)
1.	Direct Salary							13,635.48	
	Cost								
2.	Indirect							19,266.93	
	Cost (1.413%)								
3.	Subtotal							32,902.41	
	Direct Salary								
	Costs & In-								
	direct Costs								
4.	Travel							458.00	
5.	Other Non-							20.00	
	Salary Costs								
6.	Subtotal Other							478.00	
	Non-Salary								
	Costs								
7.	Subcontractors							1,810.00	
8.	Total Work							35,190.41	
	Assignment								
	Cost								
9.	Fixed Fee (10%)								
10.	Total Work							3,290.24	
	Assignment							38,480.65	
	Price								

Schedule 2.11(g)
MONTHLY COST CONTROL REPORT
SUMMARY OF FISCAL INFORMATION

Contract No: D002406-11.1

Project Name: Roxy RI/FS

Task No./Name: B IV

% Complete:

M & E No.

Schedule 2.11(g)

MONTHLY COST CONTROL REPORT
SUMMARY OF FISCAL INFORMATION

Date 10/25/91

[illegible]

Schedule 2.11(g)

MONTHLY COST CONTROL REPORT

SUMMARY OF FISCAL INFORMATION

Date 10/25/91

[illegible]

Engineer: Metcalf & Eddy, Inc.
Contract No: D002406-11.1
Project Name: Roxy RI/FS
Task No./Name: B VI
% Complete:

Schedule 2.11(g)
MONTHLY COST CONTROL REPORT
SUMMARY OF FISCAL INFORMATION

Date 10/25/91

M & E No.									

A	B	C	D	E	F	G	H		

Expenditure Category	Cost Claimed This Period	Paid To Date	Total Disallowed To Date	Total Costs Incurred To Date(A+B+C)	Estimated Costs To Completion	Estimated Total Work Assignment Price (A+B+E)	Approved Budget	Estimated Under/Over (G-F)	

1. Direct Salary Cost							7,804.00		
2. Indirect Cost (1.413%)							11,027.05		
3. Subtotal Direct Salary Costs & In-							18,831.05		
direct Costs									
4. Travel							458.00		
5. Other Non-Salary Costs							20.00		
6. Subtotal Other Non-Salary Costs							478.00		
7. Subcontractors									
8. Total Work Assignment Cost							3,958.00		
							23,267.05		
9. Fixed Fee (10%)									
10. Total Work Assignment Price							1,883.11		
							25,150.16		

Engineer: Metcalf & Eddy, Inc.
 Project Name: Roxy Cleaners RI/FS
 Work Assignment No.: D002406-11.1

Summary of Labor Hours
 Schedule 2.11 (h)

Date Prepared: 09/05/91

NSPE Class	IX	VIII	VII	VI	V	IV	III	II	I	TOTAL DIRECT
	EXP /EST	EXP /EST	EXP /EST	EXP /EST	EXP /EST	EXP /EST	EXP /EST	EXP /EST	EXP /EST	LABOR HOURS
1990 Average	\$38.12	\$30.63	\$26.52	\$23.15	\$20.39	\$18.97	\$16.58	\$14.62	\$11.38	
1991 Average	\$40.02	\$32.16	\$27.85	\$24.31	\$21.41	\$19.92	\$17.41	\$15.35	\$11.95	
1992 Average	\$42.02	\$33.77	\$29.24	\$25.53	\$22.48	\$20.42	\$18.28	\$16.11	\$12.55	
Task A I	/ 0.0	/ 89.0	/ 18.0	/ 49.0	/ 54.0	/ 0.0	/ 0.0	/ 4.0	/ 3.0	/ 217.0
Task A II	/ 7.0	/ 66.0	/ 111.0	/ 48.0	/ 0.0	/ 4.0	/ 16.0	/ 96.0	/ 8.0	/ 356.0
Task B I	/ 17.0	/ 111.0	/ 436.0	/ 48.0	/ 530.0	/ 200.0	/ 1,515.0	/ 182.0	/ 0.0	/ 3,039.0
Task B II	/ 4.0	/ 18.0	/ 140.0	/ 38.0	/ 32.0	/ 0.0	/ 24.0	/ 24.0	/ 0.0	/ 280.0
Task B III	/ 16.0	/ 18.0	/ 252.0	/ 38.0	/ 88.0	/ 30.0	/ 78.0	/ 0.0	/ 0.0	/ 520.0
Task B IV	/ 4.0	/ 46.0	/ 148.0	/ 40.0	/ 220.0	/ 50.0	/ 630.0	/ 102.0	/ 0.0	/ 1,240.0
Task B V	/ 28.0	/ 0.0	/ 272.0	/ 110.0	/ 14.0	/ 24.0	/ 52.0	/ 0.0	/ 0.0	/ 500.0
Task B VI	/ 8.0	/ 6.0	/ 130.0	/ 102.0	/ 0.0	/ 26.0	/ 18.0	/ 0.0	/ 0.0	/ 290.0
Total Hours	0.0 / 84.0	0.0 / 354.0	0.0 / 1,507.0	0.0 / 473.0	0.0 / 938.0	0.0 / 334.0	0.0 / 2,333.0	0.0 / 408.0	0.0 / 11.0	/ 6,442.0