Arch Chemicals, Inc.
1200 Lower River Road
P. O. Box 800
Charleston, TN 37310
Tel (423) 780-2724

October 16, 2003

By Federal Express

Mr. Bart Putzig
Division of Environmental Remediation
New York State Department of Environmental Conservation
6274 East Avon-Lima Road
Avon, NY 14414

Re: *Former Olin Corporation Site, Site No. 828018A*
Order on Consent, Index No. B8-0343-90-08
Arch Chemicals, Inc. - Respondent

Dear Mr. Putzig:

In accordance with Item II.B.1 of the referenced Order on Consent, Arch Chemicals, Inc. is providing this Remedial Design/Remedial Action Work Plan for Department review and approval. As required by the Order, this Work Plan describes the procedures for development and implementation of the final plans and specifications for implementing the remedial alternative set forth in the site's Record of Decision, and has been developed in accordance with Exhibit J of the Order.

If you have any questions or comments regarding this Work Plan, please contact Gayle Taylor at (423) 780-2175.

Sincerely,

Gayle M. Taylor / jcb

Gayle M. Taylor
Senior Associate Environmental Specialist
Arch Chemicals, Inc.

cc: Maura C. Desmond
Division of Environmental Enforcement
New York State Department of Environmental Conservation
270 Michigan Avenue
Buffalo, NY 14203

Edward Belmore
Division of Environmental Remediation
New York State Department of Environmental Conservation
625 Broadway
Albany, NY 12233

Gary Litwin
Bureau of Environmental Exposure Investigation
New York State Department of Health
Flanigan Square
547 River Street
Troy, NY 12180

R. Erickson, Arch Chemicals
J. Brandow, MACTEC

REMEDIAL DESIGN / REMEDIAL ACTION WORK PLAN

(As Required by Order on Consent, Index No. B8-0343-90-08)

ARCH CHEMICALS, INC.
ROCHESTER PLANT SITE
ROCHESTER, NEW YORK

NYS Registry No. 828018A

October 16, 2003

REMEDIAL DESIGN / REMEDIAL ACTION WORK PLAN

ARCH CHEMICALS
ROCHESTER PLANT SITE
ROCHESTER, NEW YORK

Prepared by

MACTEC Engineering & Consulting, Inc.
Portland, Maine

for

ARCH CHEMICALS, INC.
Charleston, Tennessee

October 16, 2003

This document meets standards prescribed in project planning documents and has been properly reviewed by qualified professionals.

Stuart Pearson
Project Engineer

Jeffrey E. Brandow, P.E.
Principal Engineer

REMEDIAL DESIGN/REMEDIAL ACTION WORK PLAN

ARCH CHEMICALS ROCHESTER PLANT SITE
ROCHESTER, NY

TABLE OF CONTENTS

TABLE OF CONTENTS (continued)

REMEDIAL DESIGN/REMEDIAL ACTION WORK PLAN

ARCH CHEMICALS ROCHESTER PLANT SITE
ROCHESTER, NY

LIST OF FIGURES

REMEDIAL DESIGN/REMEDIAL ACTION WORK PLAN

ARCH CHEMICALS ROCHESTER PLANT SITE
ROCHESTER, NY

1.0 INTRODUCTION

This Remedial Design/Remedial Action Work Plan (RD/RA Work Plan) has been prepared by MACTEC Engineering and Consulting, Inc. (MACTEC) on behalf of Arch Chemicals, Inc. (Arch), to describe the process for designing and implementing a remedial action at a chemical manufacturing facility in Rochester, New York, owned by Arch. This facility (the Rochester Plant) was identified by the New York State Department of Environmental Conservation (NYSDEC) in 1985 as an inactive hazardous waste disposal site, and was assigned the Site I.D. No. 8-28-018a. The remedy described in this Work Plan was selected from among several alternatives evaluated in a Feasibility Study developed by Arch and approved by the NYSDEC. The remedial action selection was documented in a Record of Decision signed by the NYSDEC on March 29, 2002 (NYSDEC, 2002a).

This RD/RA Work Plan fulfills part of the requirements of the Order on Consent between the NYSDEC and Arch Chemicals, Inc., which went into effect on August 21, 2003 (Index No. B8-0343-90-08). It also incorporates applicable portions of the State of New York guidelines for planning site remediation activities (NYSDEC, 2002b).

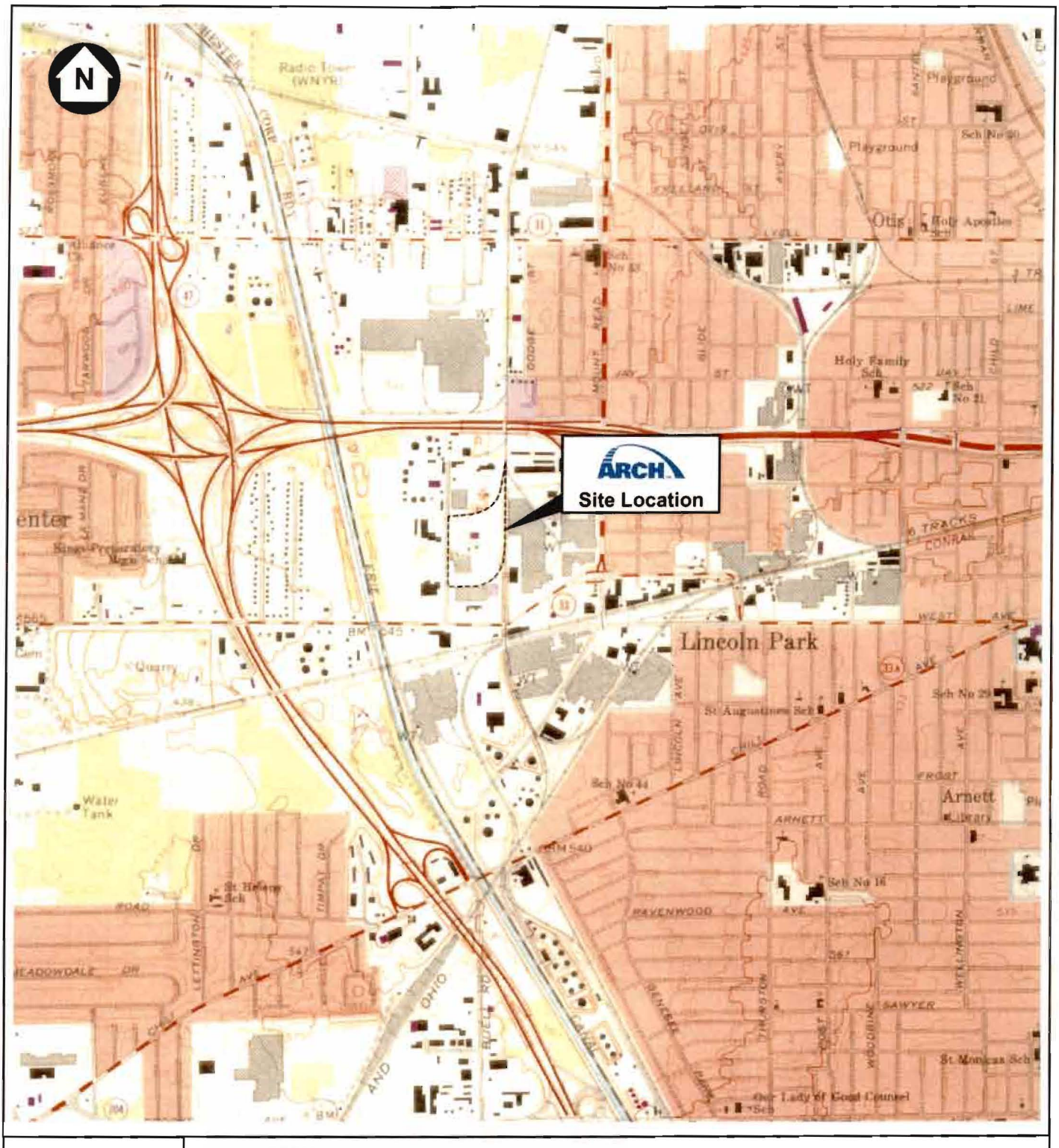
The Work Plan is organized as follows: Section 1.0 provides a description of the site and its regulatory history; Section 2.0 describes the selected remedy; Section 3.0 defines the roles of Arch and MACTEC in the RD/RA process; Section 4.0 presents a summary of regulatory requirements; Section 5.0 describes citizen involvement during the RD/RA process; Sections 6.0 and 7.0 provide a summary of the remedial design and remedial action processes, respectively; Section 8.0 describes activities to take place once remedial construction activities are completed; and Section 9.0 presents a schedule for the RD/RA.

1.1 SITE DESCRIPTION

Arch is the current owner of the Rochester Plant located at 100 McKee Road, a private industrial road in the southwestern section of Rochester, New York (Figure 1-1). The plant property is approximately 15.3 acres. Areas identified as being within the plant boundary are identified as being "on-site", whereas areas outside of the plant boundary are referred to as being "off-site". The entire study area is shown in more detail in Figure 1-2.

The plant is at an elevation of approximately 540 feet above mean sea level (msl). The Arch property is relatively flat, with a maximum relief of approximately 12 feet. There are no surface water bodies on-site. Surface drainage from the plant is collected in storm drains and discharged to the Monroe County Pure Waters publicly-owned treatment works (POTW).

The remainder of the study area is also relatively flat, with surface elevation ranging from approximately 535 to 565 feet above msl. The Dolomite Products Company (Dolomite) quarry, located within the Town of Gates and approximately 4,000 feet west-southwest of the plant, is a man-made depression. The floor of the quarry has an elevation of approximately 440 feet above



Source: USGS Topographic Quadrangle, 7.5 minute Series, Rochester West, N.Y. 1971 (Photorevised 1978).

FIGURE 1-1
SITE LOCATION MAP
ARCH CHEMICALS, INC.
ROCHESTER, NEW YORK

MACTEC

W2003035a.cdr

LEGEND

ARCH PROPERTY

EXTENT OF GROUNDWATER INVESTIGATION

I-390

ERIE BARGE CANAL

FIRTH RIXSON

McKEE ROAD

ARCH

KODAK

AID TO HOSPITALS

58 McKEE

BUFFALO ROAD

CUMBERLAND FARMS PETROLEUM TERMINAL

NESS

GENERAL RAIL SIGNAL CO.

DOLOMITE PRODUCTS QUARRY

HOWARD ROAD

PFAUDLER

I-390

ERIE BARGE CANAL

LETTINGTON ROAD

Scale in Feet

0 500 1000

Source:
USGS Topographic Quadrangle 7.5-Minute Series;
Rochester West, N.Y., 1971 (Photorevised 1978).

MACTEC

ARCH™
ARCH Chemicals, Inc.

FIGURE 1-2
STUDY AREA
ROCHESTER, NEW YORK

M:\Projects\47980\44838F001.dwg Thu, 02 Oct 2003 - 2:43pm bgfurey

msl. The Dolomite quarry has a substantial influence on local groundwater flow, and has been the discharge point for impacted groundwater originating from the plant site.

Most of the on-site areas are covered with buildings or paved for roads, parking lots or spill prevention. The equipment lay down area in the northeast portion of the site is unpaved. Small unpaved areas are also located in the southeast portion of the site, and in the vicinity of the offices.

The nearest major surface water features are the Erie Barge Canal, located approximately 0.3 miles west of the plant and within the groundwater study area, the Genesee River approximately 3 miles south of the plant, and Lake Ontario approximately 7 miles north of the plant.

Manufacturing operations have consisted of organic and inorganic chemical production. The primary products are specialty organic chemicals, many of which are produced in small quantities. Due to the nature of the manufacturing operations at Rochester, a large number of organic raw materials, intermediates, and products have been handled at the plant.

1.2 SITE HISTORY

The original plant has seen commercial activity since 1948. During that year, Genesee Research, a fully-owned subsidiary of the Puritan Company, established a manufacturing facility for automotive specialty products (e.g., brake fluids, polishes, anti-freeze, and specialty organic chemicals). In 1954, Mathieson Chemical Corporation acquired Puritan and merged with Olin Industries to become Olin Mathieson Chemical Corporation. Production of brake fluid and anti-freeze continued for a time, but in the early 1960s, production of specialty organic chemicals including Zinc Omadine™ and chloropyridines began. In 1969, Olin Mathieson changed its name to Olin Corporation (Olin), and in 1999 Olin spun off its specialty chemicals business to form an independent company known as Arch Chemicals, Inc. The Arch Rochester plant is the sole manufacturer of chloropyridines in the United States.

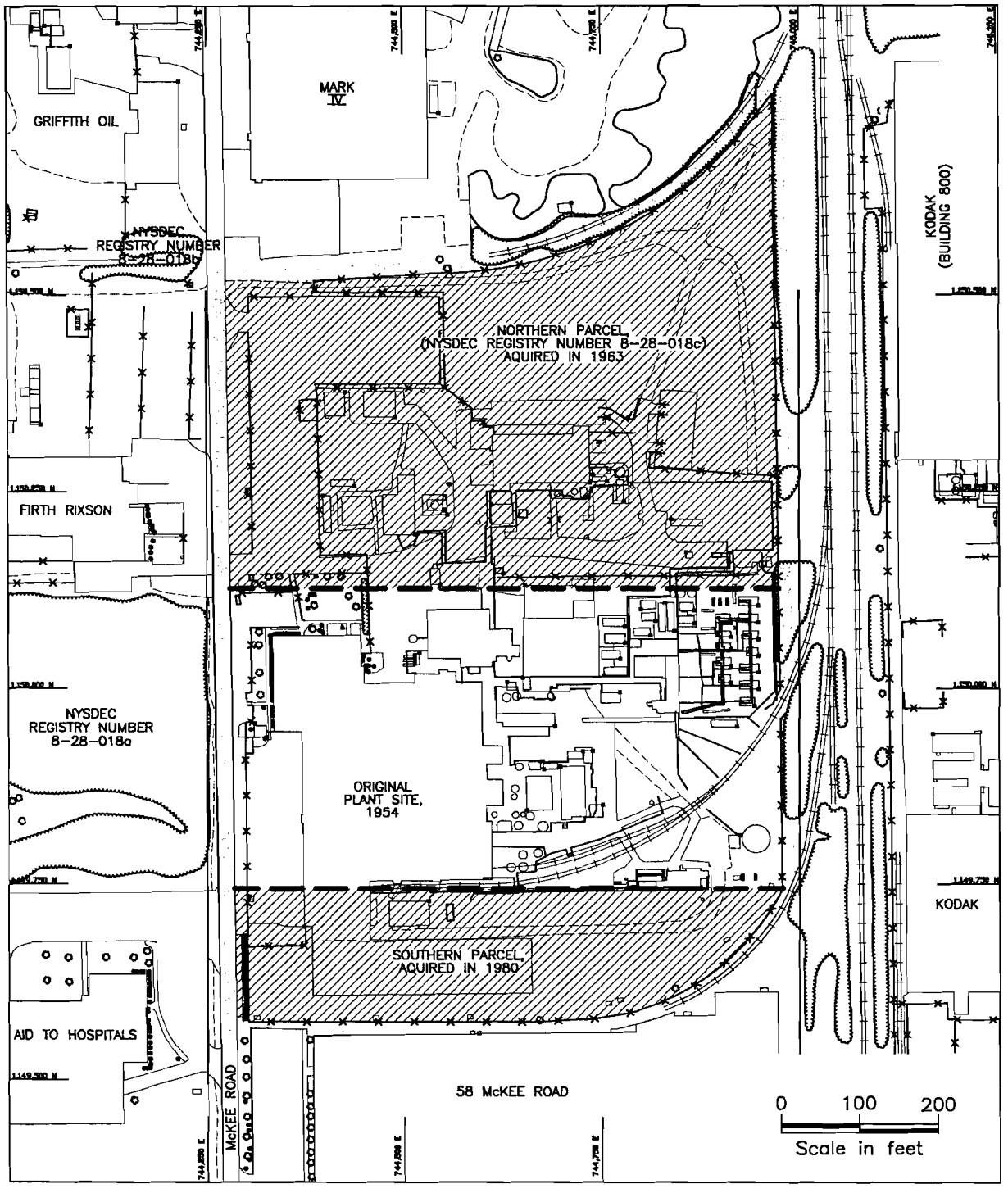
After 1954, additional property was purchased to the north and south of the original plant property (Figure 1-3). Prior to Olin's acquisition of the northern parcel in 1963, the Asphaltic Concrete Company operated a facility on the parcel and, over a number of years, had disposed of asphalt and concrete debris on the parcel. After acquiring the property, Olin removed the debris. This removal resulted in the surface of the parcel being uneven and lower in elevation than the adjacent areas of the plant. The northern parcel was subsequently filled and graded to approximately the same grade as the main plant site. The southern parcel was purchased as undeveloped flat ground and remained in that condition until 1995, when construction of additional warehouse space was initiated.

1.3 REGULATORY HISTORY

The Rochester Plant was identified by the NYSDEC in 1985 as a Class 2 inactive hazardous waste disposal site, and was assigned the Site I.D. No. 8-28-018a.

The Rochester Plant has been the subject of various environmental investigations since the early 1980s, including a two-phased RI conducted in 1994-1996 (ABB-ES, 1995, 1996a and 1996b).

M:\Projects\47980\44838F002.dwg Thu, 02 Oct 2003 - 3:04pm bgfurey



LEGEND

—x——x— OUTLINE OF ARCH PROPERTY BOUNDARY

— — — BOUNDARY OF PURCHASED PARCEL

MACTEC

ARCH Chemicals, Inc.

FIGURE 1-3
ARCH PLANT
PROPERTY AQUISITION
ROCHESTER, NEW YORK

These investigations have documented the presence of site-related chemicals in soil and groundwater at the site.

A Feasibility Study (FS) was completed in January 2000 (HLA, 2000), in which a range of possible site remedial actions were evaluated. The FS was performed to fulfill part of the requirements of the previous Order on Consent between the NYSDEC and Olin, dated August 23, 1993.

On March 29, 2002, the NYSDEC issued a Record of Decision (NYSDEC, 2002a) that selected a remedial action for addressing impacted groundwater beneath and downgradient of the site. This portion of the overall site remedy, contaminated groundwater, is referred to as Operable Unit No. 2 (OU-2). Contaminated soil and bedrock onsite (i.e., source areas) may be addressed separately in the future as Operable Unit No. 1 (OU-1).

On August 21, 2003, Arch and the NYSDEC entered into a new Order on Consent covering the development and implementation of the selected remedial action for OU-2. This Order defines the required actions and schedule for completing the remedial action.

2.0 OVERVIEW OF SELECTED REMEDY

This section presents the remedial objectives for the Rochester Plant, a summary of the components of the OU-2 remedy, and a description of each of the remedial activities planned.

2.1 REMEDIAL OBJECTIVES

Goals for the remedial program were established through the remedy selection process as presented in 6 NYCRR Part 375-1.10. The overall remedial goal is to meet all standards, criteria, and guidance (SCGs) and be protective of human health and the environment. At a minimum, the remedy will eliminate or mitigate all significant threats to public health and/or the environment presented by site-related chemicals in groundwater at the Rochester Plant. The remedial objectives selected for OU-2 are:

- Eliminate, to the extent practicable, off-site migration of groundwater above NYSDEC Class GA Ambient Water Quality Criteria;
- Eliminate, to the extent practicable, human exposure to contaminated surface water at the Gates Dolomite quarry, the quarry discharge channel, and the Erie Canal, even though the risk assessment indicates existing conditions pose no unacceptable current risk;
- Restore, to the extent practicable, off-site groundwater to NYSDEC Class GA Ambient Water Quality Criteria;
- Eliminate, to the extent practicable, potential human exposure associated with possible future use of contaminated groundwater;
- Eliminate, to the extent practicable, exceedances of applicable environmental quality standards related to releases of contaminants to the waters of the state; and
- Eliminate, to the extent practicable, the exposure of fish and wildlife to levels of chloropyridines above standards/guidance values.

2.2 COMPONENTS OF THE REMEDIAL ACTION

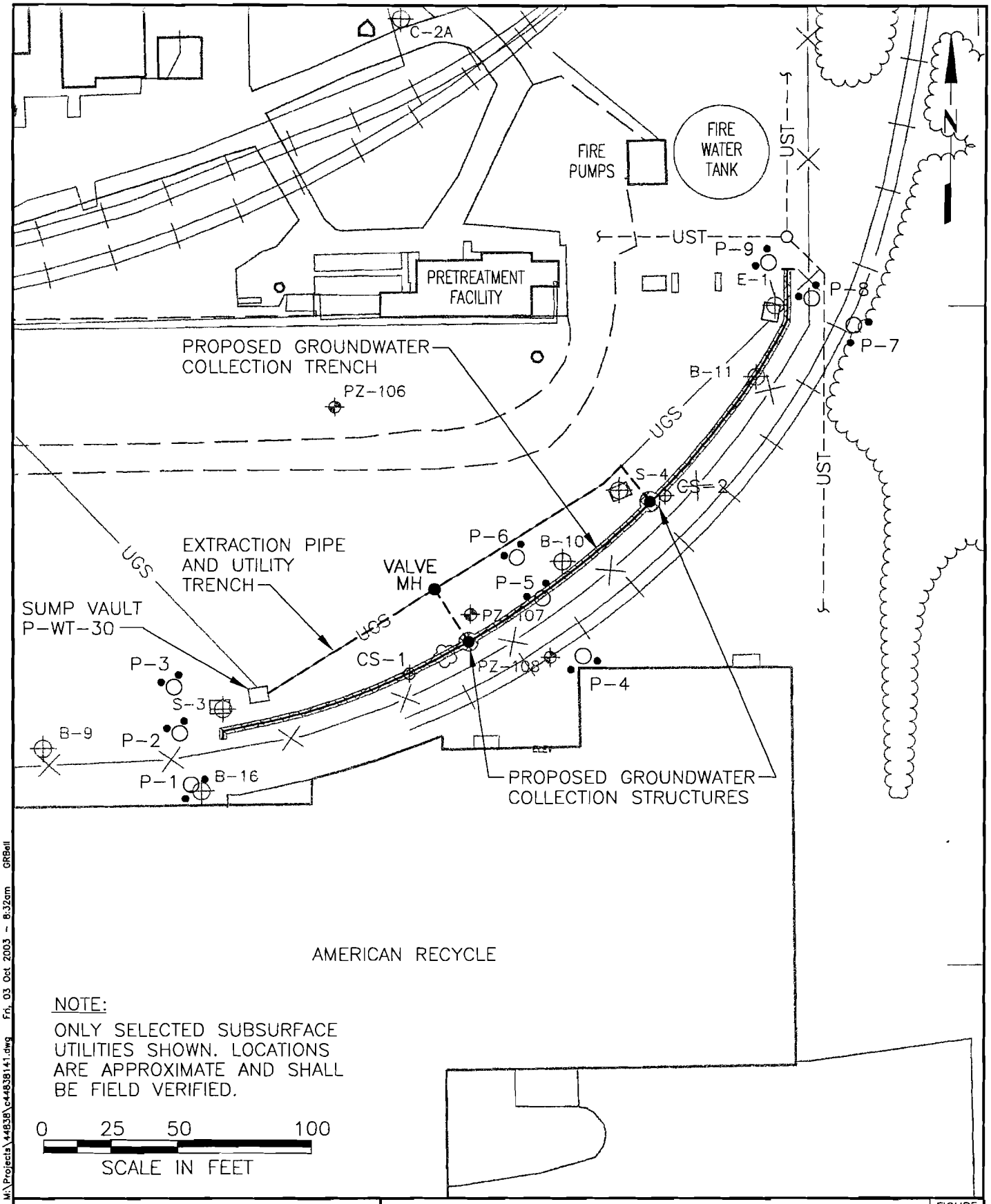
The following is a list of the components of the proposed remediation for the Rochester Plant including those already in place:

- continued operation and maintenance of the existing groundwater extraction and treatment system;
- continued groundwater and surface water monitoring to assess trends in contaminant concentrations and groundwater levels over time and confirm interception of groundwater contaminants at the site perimeter;
- continued adherence to the Plant's health and safety policies for any intrusive activities at the site;
- annual notification of all property owners within the area of the off-site contaminant plume;
- deed restrictions on future property use and on-site groundwater use including annual certifications by the site owner that the deed restrictions are in effect and that annual notifications were completed for property owners within the off-site area of groundwater contamination;
- natural attenuation of contaminated groundwater on-site and off-site (natural processes, such as, biodegradation, volatilization, and sorption which help to reduce/attenuate contamination);
- installation and operation of an overburden groundwater interceptor trench on the southeast/south perimeter of the plant property (see Figure 2-1) to be discharged to the existing on-site groundwater treatment system;
- installation and sampling of downgradient/off-site groundwater monitoring wells in the overburden and bedrock near the interceptor trench;
- installation and operation of a bedrock pumping well on the western site perimeter between existing groundwater monitoring wells PW-11 and PW-7 (see Figure 2-2) to be discharged to the existing on-site groundwater treatment system; and
- installation and operation of an off-site bedrock pumping well adjacent to the southeast corner of the Gates Dolomite quarry (see Figure 2-3), with treatment if necessary to meet discharge requirements.

The principal elements of the selected remedy are described in greater detail in the following sections.

2.2.1 Overburden Groundwater Collection Trench with Discharge to Existing Extraction/Treatment System

The existing on-site groundwater extraction, treatment, and discharge system includes seven bedrock extraction wells (pumping at a total of approximately 35 gallons per minute [gpm]) to extract contaminated groundwater and prevent further migration of site-related contaminants



M:\Projects\44838\c44838141.dwg Fri, 03 Oct 2003 - 8:32am GRBell

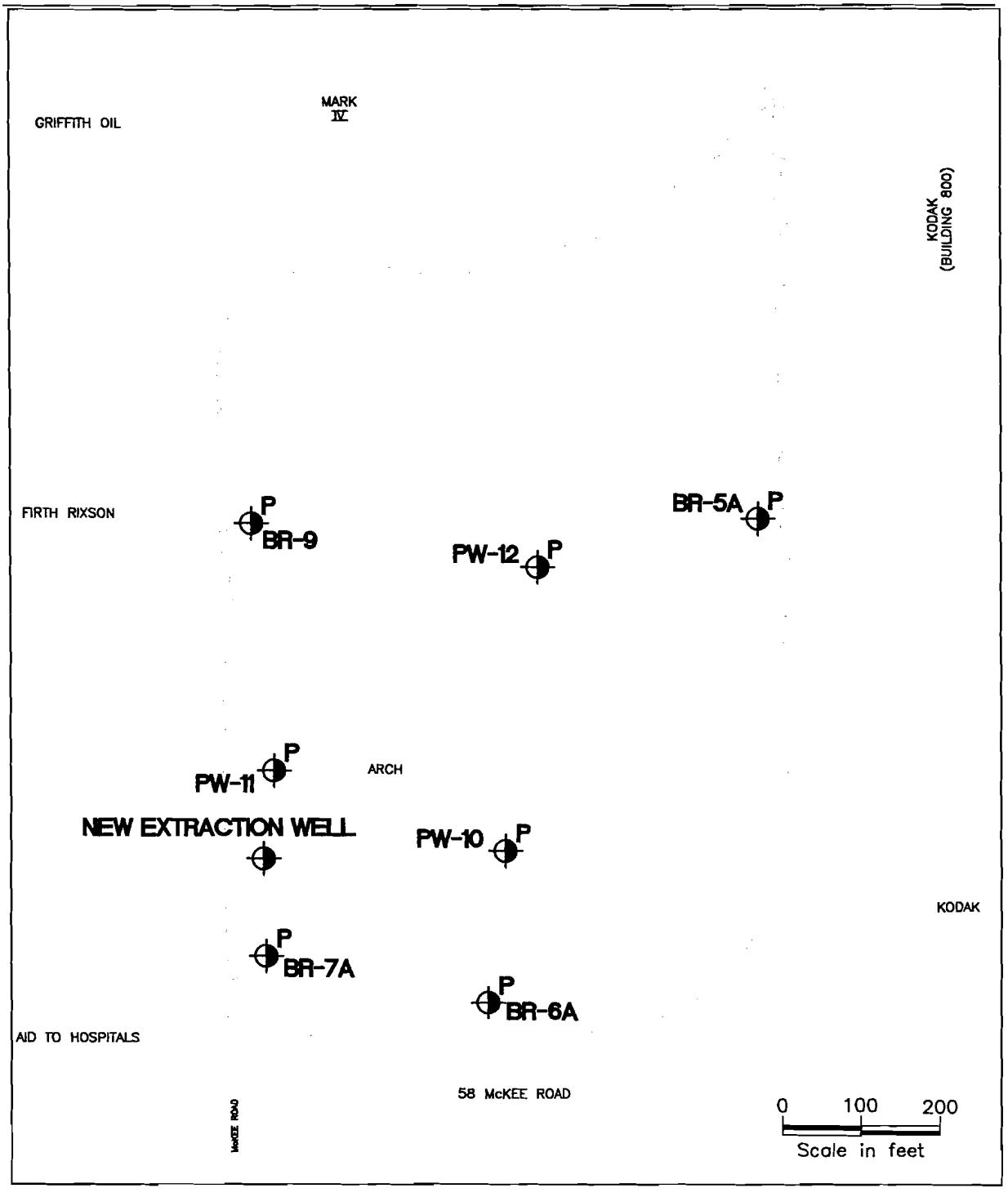
MACTEC

LOCATION OF OVERBURDEN GROUNDWATER COLLECTION TRENCH
ARCH CHEMICALS INC.
ROCHESTER, NEW YORK

FIGURE 2-1

DRAWN	PROJECT NUMBER	APPROVED	DATE	REVISED DATE
EJL	44838-0731152		9/20/01	10/02/03

M:\Projects\47980\44838F003.dwg Thu, 02 Oct 2003 - 3:15pm bgfurey



LEGEND

BEDROCK PUMPING WELL

OUTLINE OF ARCH PROPERTY BOUNDARY

MACTEC

ARCH Chemicals, Inc.

FIGURE 2-2
GROUNDWATER EXTRACTION WELL NETWORK
ROCHESTER, NEW YORK

LEGEND

ARCH PROPERTY

P PROPOSED BEDROCK EXTRACTION WELL

N

I-390

ERIE BARGE CANAL

BUFFALO ROAD

FIRTH RIXSON

McKEE ROAD

ARCH

KODAK

AID TO HOSPITALS

58 McKEE

CUMBERLAND FARMS PETROLEUM TERMINAL

NESS

GENERAL RAIL SIGNAL CO.

DOLOMITE PRODUCTS QUARRY

HOWARD ROAD

MAIN EXTENT OF WATER-BEARING FRACTURE IN QUARRY WALL

D

P

PROPOSED EXTRACTION WELL

PFAUDLER

I-390

ERIE BARGE CANAL

LETTINGTON ROAD

Scale in Feet

0 500 1000

Source:
USGS Topographic Quadrangle 7.5-Minute Series;
Rochester West, N.Y., 1971 (Photorevised 1978).

MACTEC

ARCH™
ARCH Chemicals, Inc.

FIGURE 2-3
LOCATION OF PROPOSED
OFF-SITE EXTRACTION WELL
ROCHESTER, NEW YORK

M:\Projects\47980\44838F004.dwg Thu, 02 Oct 2003 - 3:24pm bgfurey

beyond the Rochester Plant boundary. As part of the proposed remedial action, an overburden groundwater recovery trench system will be installed in the southeast corner of the plant property to ensure that impacted groundwater does not migrate beyond the property boundary in that area. The overburden groundwater recovery system will consist of a 300-foot long trench along the curved property boundary, extending approximately from existing monitoring well E-1 to well S-3 (see Figure 2-1). The trench will be excavated to the top of bedrock, to intercept the entire thickness of saturated overburden. Due to the low hydraulic conductivity of the overburden soils, it is estimated that the long-term yield of this trench will be approximately 1.5 gpm. Based on the anticipated contaminant concentrations in the overburden groundwater in this area, total contaminant mass removal will be minimal; therefore, the main purpose of this component of the extraction system will be to ensure hydraulic capture of overburden groundwater in the southeast corner of the plant.

The effectiveness of the extraction system in maintaining hydraulic control of on-site groundwater will be monitored by recording groundwater levels in monitoring wells in the vicinity of the plant. Water level measurements will be used to generate piezometric contours. Groundwater quality will continue to be monitored under the on-going monitoring program; monitoring results will be used to evaluate constituent reduction. Arch will continue to report monitoring results to the NYSDEC on an ongoing basis, including analytical results to evaluate constituent reduction, and piezometric plots to evaluate the effectiveness of the on-site groundwater containment.

Groundwater extracted from the trench will be treated in the existing groundwater treatment system to prescribed discharge criteria prior to discharge to the Monroe County Pure Water Authority's Publicly-Owned Treatment Works (POTW).

The current treatment system utilizes GAC to treat extracted groundwater along with plant process water prior to POTW discharge. Arch will maintain and operate the existing GAC system, or an equivalent system capable of meeting prescribed discharge criteria.

Adherence to Arch's health and safety policies will be continued to prevent exposure to contaminated on-site groundwater. The policies outline procedures for conducting invasive activities within the plant, including procedures for use of protective equipment to prevent exposure to contaminated media on-site.

2.2.2 Additional On-site Shallow Bedrock Extraction Well with Discharge to Existing Treatment System

As part of the proposed remedial action, a shallow bedrock groundwater recovery well will be installed on the western site perimeter, between existing groundwater monitoring wells PW-11 and BR-7A (see Figure 2-2). The recovery well will act to ensure that impacted groundwater does not migrate beyond the property boundary to the west. The discharge of the well will be connected to the existing groundwater recovery system for treatment by the existing GAC system.

2.2.3 Off-site Bedrock Extraction Well and Discharge to Canal

Based on observations of groundwater discharging from the eastern quarry wall and analytical results for samples collected from this discharge, a relatively thin zone within the bedrock is transmitting most of the groundwater containing chloropyridines near the quarry. This zone is interpreted to be roughly horizontal and to reside at an elevation between 487 and 490 feet above mean sea level (msl). Groundwater discharging from this zone is evident across most of the eastern wall of the quarry, and sampling results have indicated that high chloropyridine concentrations are limited to a relatively narrow (less than 100 feet long) section near the southerly end of the wall. No significant discharge of groundwater is evident along the eastern portion of the south quarry wall.

A single proposed groundwater recovery well, located approximately 200 feet upgradient from the quarry, will intercept the chloropyridine-containing groundwater currently discharging to the quarry. Figure 2-3 shows the proposed location for the recovery well, which is interpreted to be directly upgradient from the quarry seep sampling location (QS-4) where the highest discharging chloropyridine concentrations have been detected. Although the convergence of groundwater flow near the quarry suggests that the chloropyridine plume is likely narrower near the quarry wall, locating the well 200 feet upgradient of the quarry will provide a larger available water level drawdown for the well, which will increase the well's area of influence.

Although no measurements of hydraulic conductivity for the targeted zone of rock are available from wells near the quarry, measurements from wells located near the Rochester Plant indicate a range of values for this zone of between 8.5 and 20 feet per day (ft/d). Based on the relatively high rate of flow from the eastern quarry wall, the upper end of this range is assumed to be most representative of near-quarry conditions. Using a hydraulic conductivity of 20 ft/d and an assumed thickness of 10 feet for the target zone, the Theis (1935) model for transient flow to a well predicts that a pumping rate of 5 gpm would be sustainable from a single well. At this pumping rate, and assuming a hydraulic gradient of 0.004 (based on May 2003 well water levels), a single well would capture the entire chloropyridine plume adjacent to the quarry.

Extracted groundwater will be treated, if necessary, to attain discharge criteria. The discharge location and need for treatment will be determined based on the discharge requirements established by the State of New York (or, if applicable, the POTW). Based on the quarry seep data from the past three years, the concentration of total chloropyridines in the extracted groundwater is expected to be less than 500 ug/L.

2.2.4 Additional Monitoring Wells beyond Southwest Plant Property Boundary

The existing monitoring well system will be supplemented through the installation of off-site monitoring wells in overburden and bedrock, downgradient of the recovery trench. The wells will be used to monitor the effectiveness of the groundwater recovery system. Locations for the additional monitoring wells will be proposed in the draft Design Submittal.

2.2.5 Property Owner Notifications/Institutional Controls

There are currently several industrial/commercial properties in the affected area downgradient of the Rochester Plant. None are currently known to be using groundwater for any purpose. Groundwater is not used as a drinking water source in the vicinity of the site due to high natural iron and sulfur content and the availability of a public water supply.

An affected property owner notification program will be developed and implemented. The program will include the yearly notification of all property owners within the affected groundwater area of the on-going status of the off-site contaminant plume. Arch will maintain a record of these notifications and will supply the State with a yearly certification that the notifications have been made.

Institutional controls will be established to assure that potentially unacceptable exposure scenarios will not occur in the future for as long as concentrations of site-related compounds remain above groundwater criteria. Institutional controls for the Plant Site property will include restrictions on future property use and on-site groundwater use including annual certifications by the site owner that the land use restrictions are in effect. These controls will prohibit unacceptable uses or exposures to groundwater, unless testing confirms that site-related chemicals are not present at concentrations of concern. In addition, restrictions on future use of the site proper will be implemented if the facility is transferred or sold, or if the Rochester Plant becomes inactive.

2.2.6 Long-term Groundwater Monitoring

On-site and off-site groundwater quality will continue to be monitored under the program currently being conducted at the site. Arch will continue to report the results from the monitoring program to the NYSDEC on an ongoing basis, including analytical results to evaluate contaminant reduction, and piezometric plots to evaluate the effectiveness of the on-site groundwater containment. As part of the reporting of monitoring data, Arch will make periodic recommendations to the NYSDEC as to continuing, modifying, or discontinuing operation of the groundwater extraction and treatment system.

The duration of operation of the extraction and treatment system is unknown. Based on the geologic and hydrogeologic conditions at the site, it is anticipated that the groundwater extraction, treatment, and discharge system may be in operation for the duration of the 30-year period used in feasibility study evaluations.

3.0 PROJECT EXECUTION

This section defines the roles and responsibilities of Arch, MACTEC, and the construction subcontractor during the remedial design and remedial action phases of the project.

3.1 ARCH ROLES AND RESPONSIBILITIES

Arch Chemicals, Inc., is the current owner and operator of the Rochester Plant, and has entered into a Consent Order with the NYSDEC to implement the selected remedy for the site. The Consent Order establishes specific requirements that Arch must satisfy in accordance with Article 27, Title 13 of the Environmental Conservation Law of the State of New York.

Arch has designated a Project Manager to be the company's lead point of contact for this project. Arch's Project Manager will have primary responsibility for meeting the requirements of the Consent Order. Under the Project Manager's direction, Arch will provide all required communications to the NYSDEC, procure the necessary consultants, contractors, and vendors necessary for designing and implementing the selected remedy, and supervise all aspects of the

implementation of the selected remedy. In addition, Arch will submit progress reports to the NYSDEC as required by Paragraph III of the Order. Arch recommends a reporting frequency of quarterly (i.e., every 3 months) until the completion of remedial action, and semi-annually thereafter.

In support of the Arch Project Manager, who is located in Charleston, Tennessee, personnel at the Rochester Plant will assist in the implementation of the selected remedy by arranging all necessary site access, identifying locations of underground structures, pipelines, and utilities, and providing other local support from the facility. The primary point of contact at the Rochester Plant will be the Plant Manager.

3.2 MACTEC ROLES AND RESPONSIBILITIES

Arch has hired MACTEC to design and implement the selected remedy under Arch's direction. MACTEC is licensed to provide engineering services in the State of New York, and will provide RD/RA services from its Portland, Maine office. MACTEC will designate a professional engineer licensed in the State of New York to supervise the RD/RA project for MACTEC on behalf of Arch. The MACTEC Project Manager will provide the overall day-to-day technical administration of the project and is responsible for the following:

- initiation of project activities;
- identification of project staff, equipment, and other resource requirements;
- technical direction, review and approval of the RD/RA tasks;
- interfacing with Arch on costs, contractual, personnel, and other administrative matters;
- monitoring of project schedule and budget; and
- implementation of subcontracting as required.

In addition, and under the direction of the MACTEC Project Manager, Task Leaders will be responsible for all technical activities on the project including interfacing with Arch concerning technical matters, and supervising the performance of the project staff and field subcontractors. Individual Task Leaders will be designated for the Remedial Design component and the Remedial Action component.

Remedial Design. The RD Task Leader has primary technical responsibility for remedial design. In this role, and under the direct supervision of the MACTEC PM, he will be responsible for preparation of the design, including CAD coordination and any other efforts involved for project deliverables. He will act as the technical interface and point of contact for communications between the design staff, Arch, and the NYSDEC.

Remedial Action. The RA Task Leader has primary technical responsibility for implementing the remedial action. In this role, he will provide management and oversight of the construction contract. Included are attendance at preconstruction and project status meetings, oversight of remedial construction, coordination of subcontractor submittals, monitoring of conformance to contractor quality control, and preparation of a final remediation report.

3.3 SUBCONTRACTOR ROLES AND RESPONSIBILITIES

MACTEC will employ one or more subcontractors to construct the remediation project on Arch's behalf. The subcontractors will be responsible for constructing the project in accordance with the drawings, specifications, and other contract documents prepared by MACTEC and approved by Arch and the NYSDEC. The subcontractors will be required to conform to all laws and ordinances concerning job safety, licensing, employment of labor, insurance, building codes, and other aspects of the work. The subcontractors will be held responsible for and will guarantee all work and materials on the project.

MACTEC's PM and RA Task Leader will be involved in project oversight, quality assurance, coordination, and review of the construction subcontractors' activities. In addition, Arch has full authority to communicate directly with subcontractor personnel if a subcontractor activity is not being performed in compliance with design plans and/or with worker safety requirements.

4.0 REGULATORY REQUIREMENTS

The selected groundwater OU-2 remedy will comply with applicable New York State SCGs. Because groundwater is the focus of the remedy, the most significant SCGs are the groundwater standards defined in 6NYCRR Part 703 - Surface Water and Groundwater Quality Standards and Groundwater Effluent Limitations, and in NYSDEC Technical and Operational Guidance Series (TOGS) 1.1.1 -Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations.

Standards, Criteria, and Guidance. Achievement of SCGs will be made possible by the groundwater extraction systems associated with the proposed remedy, because: (1) contaminants will be hydraulically controlled at the site perimeter, and (2) the existing off-site contaminant plume will be captured at the quarry perimeter and mitigated through natural attenuation processes. On site, groundwater will continue to exceed SCGs until contaminants in soil and bedrock (such as residual dense non-aqueous phase liquids [DNAPL]) are gradually removed through groundwater partitioning and subsequent extraction. Until such time that SCGs are achieved, groundwater quality will continue to be assessed under the ongoing groundwater monitoring program established for the site.

Discharge Permit. A permit for discharge of water from the proposed off-site extraction well to the Barge Canal will be required to meet provisions of the Clean Water Act (CWA). The 1987 CWA amendments identify the types of discharges requiring permit authorization, and establish deadlines for their achievement. New York State administers its State Pollutant Discharge Elimination System (SPDES) program, which serves as the authorizing mechanism for activities in the State to comply with the national program. A SPDES permit satisfies the federal National Pollutant Discharge Elimination System (NPDES) requirements.

The SPDES permit will establish discharge criteria for the off-site extraction well. Information to be submitted to the NYSDEC to support the SPDES permit include discharge rate, discharge location, available wastewater monitoring data, and schedule and duration of the proposed discharge.

In the event that discharge to the local POTW becomes an option, discharge criteria will be negotiated with the Monroe County Pure Waters Authority.

5.0 CITIZEN PARTICIPATION

A Citizen Participation (CP) Plan has been previously prepared for this site by NYSDEC, and several CP activities have already been undertaken to inform and educate the public about conditions at the site and the planned remediation. These activities began during the remedial investigation and will continue throughout the RD/RA phase. The NYSDEC takes the lead on CP activities in accordance with its published guidebook, "Citizen Participation in New York's Hazardous Waste Site Remediation Program" (NYSDEC, 1998). An excerpt from the guidebook describing CP activities during the RD/RA phase is included in Appendix A.

Since 1993, public participation activities conducted for the site have included establishment of a repository for site documents and a mailing list for interested parties, preparation of four fact sheets describing site investigation and plans for remediation, and two public meetings during which results of investigations and remediation options were presented. CP activities during the RD/RA phase of the project are expected to consist of the following:

- Fact sheets to be distributed to interested parties prior to the remedial design phase and prior to initiating remedial construction; and,

- An availability session, held before remedial actions occur, to explain the upcoming remedial actions and to address public questions and concerns. Public notification of the meeting will be accomplished using the fact sheets described above. An availability session is an informal gathering of NYSDEC staff and Arch representatives in a setting generally more casual than a public meeting. The session provides an opportunity for people to meet individually to discuss questions and concerns.

Arch Chemicals will continue to support the NYSDEC in its CP activities related to this site.

6.0 REMEDIAL DESIGN

The components of the remedial action are not complex and, therefore, do not require comprehensive engineering drawings and specifications for construction. Arch and its consultants will prepare a Design Basis Report and Bid Documents in sufficient detail to describe the portions of the selected remedy that require field construction activities, and to allow prospective contractors to submit responsive bids for construction. Arch will provide the Design Basis Report and Bid Documents to the NYSDEC in draft form for review and comment, before finalizing the documents and bidding the project. The contents of these documents are described in greater detail in the following sections.

6.1 DESIGN BASIS REPORT

A Design Basis Report will be prepared to summarize design criteria and calculations in support of the design. The Design Basis Report will include the following items:

- Narrative description of the project and of the remedial components requiring construction in the field;

- Figures showing plan views, sections and details as necessary to define the nature and location of the construction work;

- Requirements for site access and easements (for off-site construction locations);

- Hydrogeologic analysis to support the location and/or sizing of groundwater extraction wells, the recovery trench, and monitoring wells;

- Hydraulic calculations in support of sizing of pipes and equipment;

- Requirements for construction methods, materials, testing, erosion and sedimentation control, etc.;

- State and local permitting requirements;

- Construction Quality Assurance Plan;

- Preliminary construction schedule;

- Project Health & Safety Plan; and

- Institutional Controls Plan.

The Design Basis Report will be prepared and submitted to the NYSDEC in draft form for review and comment. Once comments have been received and addressed, the Design Basis Report will be issued in final form, signed and sealed by a Professional Engineer licensed in the State of New York.

6.2 BID DOCUMENTS

The Bid Documents will provide the technical and administrative requirements for prospective bidders, and will include at a minimum:

- Instructions to Bidders;

- Bid Form;

- Technical and administrative requirements for the Contractor, including: Health & Safety requirements, Construction Quality Assurance / Quality Control, shop drawings & submittals, contract terms and conditions, and Measurement & Payment; and

- Specifications, drawings, and performance standards as necessary to define the scope of the construction work (it is anticipated that the Design Basis Report will provide most, if not all of this required information)

The Bid Documents will be prepared in draft form and included with the Design Basis Report in the draft submittal to the NYSDEC for review and comment. Once comments have been

received and addressed, the Bid Documents will be signed and sealed by a Professional Engineer licensed in the State of New York, and issued for Bid.

6.3 OM&M Plan for Remedial Systems

As part of the Final Remediation Report, an Operation, Maintenance and Monitoring (OM&M) Plan will be prepared for the groundwater extraction and treatment system. The OM&M plan will:

- Be a complete, stand-alone document;
- Be updated periodically during use to reflect changes in site conditions;
- Incorporate the relevant portions of documents such as manufacturer operation and maintenance manuals, shop drawings, and as-built drawings; and
- Include a monitoring plan for surface and groundwater, a contingency plan, and a list of appropriate records and references.

The OM&M Plan will be supplemented by an Operation and Maintenance Manual, which will be provided by the remediation contractor specific to the equipment installed.

6.4 Construction Quality Assurance Plan

As part of the design submittal, a Construction Quality Assurance (CQA) Plan will be developed. The plan will describe the site-specific components of the quality assurance program, with the intention of assuring that the completed project meets or exceeds all design criteria, plans, and specifications. At a minimum the CQA Plan will address:

- Responsibilities and authorities of organizations and key personnel involved in the construction of the site remedy;
- Qualifications of the quality assurance personnel;
- Observations and tests that will be used to monitor construction, and the frequency of testing;
- Sampling activities, sample size, sample locations, frequency of testing, acceptance and rejection criteria, and plans to assure corrective measures are implemented;
- Description of the reporting requirements for quality assurance activities such as daily summary reports, inspection sheets, problem identifications and corrective measure reports; evaluation reports, acceptance reports, and final documentation; and
- Provisions for the storage of records consistent with the requirements of the consent order.

6.5 Institutional Controls Plan

The design submittal will include an Institutional Controls Plan. This plan will summarize the process for implementing and documenting the institutional control measures that are included in the selected remedy. Institutional control measures are expected to include:

- Deed restrictions for the Arch Chemicals plant property that limit future use of the property to industrial activities and prevent the use of groundwater for drinking water purposes;

- Continued implementation of site access restrictions and health & safety policies on the plant property to control direct exposure risks;
- Annual notification of property owners within the area of the off-site contaminated groundwater plume; and
- An annual certification process to document to the NYSDEC that institutional controls remain in effect.

7.0 REMEDIAL ACTION IMPLEMENTATION

Upon receipt of NYSDEC approval of the final Design Basis Report and Bid Documents, MACTEC will put the project out for bids on Arch's behalf. Only pre-approved construction contractors with demonstrated experience in the specified types of remedial construction activities will be invited to bid. The successful bidder will be selected on the basis of responsiveness and cost.

This following sections describe how the remedial construction will be implemented, managed, and documented.

7.1 CONTRACTOR SUBMITTALS

Contractor submittals will be reviewed by the design engineer. Submittals will include operating plans, health and safety plans, shop drawings, material tests, erosion & sedimentation control plans, and record drawings.

7.1.1 Health and Safety Plan

The Contractor will be required to submit its own Health & Safety Plan that satisfies the requirements of the Project HASP included in the Design Basis Report. The Contractor will be responsible for the health and safety of its employees. In addition, the Contractor's HASP will be required to incorporate appropriate perimeter air monitoring during invasive activities to ensure protection for occupants of adjacent property and the local community.

7.1.2 Shop Drawings

Any shop drawings required by the contract documents will be submitted by the contractor and reviewed by MACTEC for conformance to the requirements of the design.

7.1.3 Contractor's Schedule

The contractor will be required to provide a construction schedule to MACTEC for review and approval.

7.2 PERMITS AND APPROVALS

Arch will procure the necessary access agreements and State or County permits for the project, including the SPDES permit for discharge of groundwater from the off-site extraction well. The contractor will be responsible for obtaining all necessary local permits from the City of Rochester and/or the Town of Gates.

7.3 CONSTRUCTION MANAGEMENT

MACTEC will provide construction management for installation of the proposed groundwater extraction and treatment systems.

7.3.1 Construction Reports

Weekly progress memos and monthly progress letter reports will be prepared. The reports will document the progress of remedial construction; summarize problems encountered, and solutions instituted.

7.3.2 Preconstruction Meetings

MACTEC personnel will conduct preconstruction meetings. MACTEC will prepare and distribute a meeting agenda prior to the meeting. During the meeting MACTEC will review the scope of work, HASP, QA/QC procedures, project schedule, roles and responsibilities, and lines of communication and reporting. Following the meeting MACTEC will prepare and distribute meeting minutes.

7.3.3 Construction Oversight

MACTEC will provide the following construction oversight services during the remedial action:

- Provide technical consultation and advice to Arch during construction;
- Observe remedial action construction work for compliance with the design documents and RD/RA Work Plan;
- Prepare and maintain daily observation logs;
- Provide photographic documentation of the remedial activities;
- Attend project progress meetings and generate formal meeting minutes;
- Review Contract Change Orders and provide technical advice to Arch as requested; and
- Review remedial contractors' as-built documentation of the project, and generate final project record drawings.

7.3.4 Quality Assurance

Quality assurance of on-site remedial activities will be the responsibility of the Resident Engineer, who will report to the MACTEC Project Manager and RA Task Leader. The CQA Plan will be developed as part of the Design submittal as described in Section 6.4, and will be used to direct QA during construction activities.

7.3.5 Final Inspection

MACTEC will perform a final inspection following completion of the extraction and treatment system construction. MACTEC will prepare as necessary, a detailed list of unfinished work items, an estimate of the value of work to be completed, and a determination of whether the work meets the requirements of the construction contract.

7.4 SYSTEM START-UP

The contractor, in conjunction with Arch maintenance and operations personnel as appropriate, will conduct start-up of the installed systems in accordance with the requirements of the approved design. Adjustments to the systems will be made as necessary until all systems are operating within specified design limits. The contractor will also provide an O&M Manual for all installed remediation systems for incorporation into the final OM&M Plan.

7.5 FINAL REPORT

MACTEC will prepare a final remedial construction report for the project which will include:

- Site history
- Description of remedial activities
- Chronology of events
- Description of changes/problems/solutions
- Record drawings
- OM&M plan

The report will be submitted to the NYSDEC within 90 days of completion of the remediation. The report, drawings, and certifications will be prepared, signed, and sealed by a professional engineer licensed in New York State.

8.0 POST-CONSTRUCTION ACTIVITIES

Post-construction activities include: remedial system operation, monitoring, and maintenance; long-term groundwater monitoring; and implementation and certification of institutional controls.

The purpose of post-construction activities are to:

- Operate and maintain engineering controls, including collection and treatment systems;
- Ensure that institutional controls are implemented and effective;
- Inspect and evaluate site information periodically to confirm that the remedy continues to be effective;
- Monitor and report performance and effectiveness of the remedy, both short and long-term (by assessing compliance with discharge permit limits, assessing achievement of the remedial performance criteria, and sampling and analyses of appropriate media); and
- Determine when the remedy is complete by demonstrating that the remedial action objectives have been met.

Post-construction activities will continue until the remedial action objectives for the project are met.

8.1 REMEDIAL SYSTEMS OPERATION, MONITORING, AND MAINTENANCE

OM&M activities will be conducted as directed in the OM&M Plan developed as part of the Final Remedial Construction Report. Performance of the remedial systems will be monitored and reported to the NYSDEC on a frequency established in the OM&M Plan.

8.2 LONG-TERM GROUNDWATER MONITORING

On-site and off-site groundwater quality will be conducted in accordance with the OM&M Plan. Arch will report the results from the environmental monitoring program to the NYSDEC on an ongoing basis, including analytical results to evaluate contaminant reduction, and piezometric plots to evaluate the effectiveness of the on-site groundwater containment. As part of the reporting of monitoring data, Arch will make periodic recommendations to the NYSDEC as to continuing, modifying, or discontinuing operation of the groundwater extraction and treatment system.

8.3 ANNUAL CERTIFICATION OF INSTITUTIONAL CONTROLS

On an annual basis, Arch will provide written certification to the NYSDEC that the measures described in the Institutional Controls Plan remain in effect.

9.0 REMEDIAL DESIGN/REMEDIAL ACTION SCHEDULE

The project schedule illustrated in Figure 9-1 shows the anticipated tasks and activities for the remedial design and construction phase. The schedule includes both onsite and offsite activities. The schedule for the design and construction tasks is dependent on NYSDEC review and approval timeframes, and on availability of various subcontractors. While the schedule reflects controllable task durations, it is recognized that delays can occur due to unforeseen circumstances, such as severe weather or protracted negotiations related to permits or site access. This schedule will be periodically updated to reflect actual conditions and progress on the project. Updated schedules will be provided with regular reporting to the NYSDEC.

ID	Task Name	Duration	Start	Finish
1	**Arch Chemicals Rochester Plant Site Remediation OU-2**	**739 days**	**Thu 8/21/03**	**Mon 8/29/05**
2	**Task 100 – RD/RA Work Plan**	**249 days**	**Thu 8/21/03**	**Mon 4/26/04**
3	101 - Prepare Draft Work Plan	60 days	Thu 8/21/03	Mon 10/20/03
4	102 - NYSDEC Review	60 days	Tue 10/21/03	Mon 12/22/03
5	103 - Revisions to Work Plan	60 days	Tue 12/23/03	Mon 2/23/04
6	104 - DEC Approval	60 days	Tue 2/24/04	Mon 4/26/04
7	**Task 200 – Remedial Design**	**247 days**	**Tue 4/27/04**	**Thu 12/30/04**
8	201 - Prepare Draft Design Basis Report and Bid Documer	60 days	Tue 4/27/04	Mon 6/28/04
9	202 - NYSDEC Review	60 days	Tue 6/29/04	Mon 8/30/04
10	203 - Revisions to Design	60 days	Tue 8/31/04	Thu 10/28/04
11	204 - DEC Approval	60 days	Fri 10/29/04	Thu 12/30/04
12	205 - SPDES Permit	120 days	Tue 4/27/04	Wed 8/25/04
13	**Task 300 – Contractor Procurement**	**204 days**	**Tue 8/31/04**	**Tue 3/22/05**
14	301 – Prequalification of Contractors	30 days	Tue 8/31/04	Wed 9/29/04
15	302 – Preparation of Bids	50 days	Fri 12/31/04	Thu 2/17/05
16	303 – Contractor Selection & Contract Negotiation	30 days	Fri 2/18/05	Tue 3/22/05
17	**Task 400 – Remedial Construction**	**145 days**	**Wed 4/6/05**	**Mon 8/29/05**
18	401 – Pre-Construction Meeting	1 day	Wed 4/6/05	Wed 4/6/05
19	402 – Mobilization & Submittals	14 days	Thu 4/7/05	Wed 4/20/05
20	403 – Construct Overburden Trench	30 days	Thu 4/21/05	Fri 5/20/05
21	404 – Install Perimeter Extraction Well	5 days	Thu 4/21/05	Wed 4/27/05
22	405 – Install Monitoring Wells	5 days	Thu 4/28/05	Wed 5/4/05
23	406 – Install Off-site Extraction Well	5 days	Thu 5/5/05	Wed 5/11/05
24	407 – Install Treatment System and Discharge Line	30 days	Thu 4/21/05	Fri 5/20/05
25	408 - System Startup	5 days	Mon 5/23/05	Fri 5/27/05
26	409 - Demobilization	1 day	Mon 5/30/05	Mon 5/30/05
27	410 - Final Remediation Report	90 days	Tue 5/31/05	Mon 8/29/05

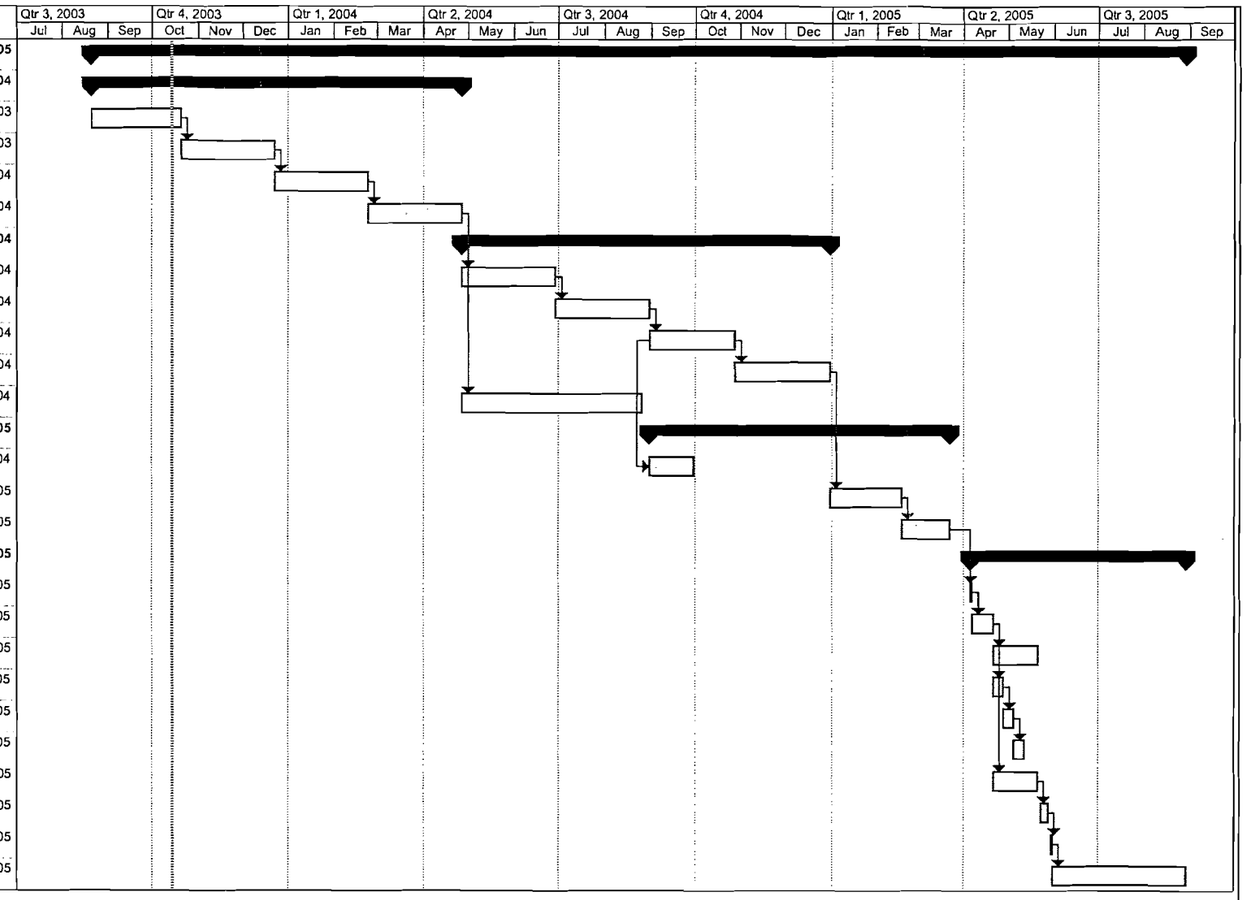


FIGURE 9-1
Arch Chemicals RD/RA Schedule

Task | Progress | Summary | Rolled Up Split | Rolled Up Progress | Project Summary
Split | Milestone | Rolled Up Task | Rolled Up Milestone | External Tasks

APPENDIX A

CITIZEN PARTICIPATION REQUIREMENTS FOR REMEDIAL DESIGN AND CONSTRUCTION

(from "Citizen Participation in New York's Hazardous Waste Site Remediation Program: A Guidebook", NYSDEC, June 1998)

7

Citizen Participation Requirements for Remedial Design and Construction

About This Chapter . . .

This chapter identifies and describes the citizen participation (CP) requirements for site Remedial Design and Remedial Construction. The chapter also explains the CP scoping process to be performed during these stages of the remedial process. This scoping process helps to determine if the required citizen participation activities are sufficient, or if additional CP is appropriate.

The CP requirements and scoping process for Remedial Design and Construction are summarized, opposite, and described in detail starting on page 7-2. At appropriate points, additional sources of information are identified in other chapters or Appendices to help to plan and conduct CP activities.

Introduction

The public's interest in being informed about and involved in site decision making does not end when the Record of Decision is signed. However, public interest often changes and refocuses during Remedial Design and Construction.

Experience has taught DER to anticipate changes in public interest as well as its own changing needs to inform and involve the public at this point in the remedial process. DER citizen participation activities reflect these changing staff and public needs.

During Remedial Design and Construction, people focus much of their attention on the "nuts and bolts" of the upcoming remedial action (what it will be and how it will be done). Often they are interested in issues such as ways in which the remedy may impact their daily lives (noise, dust, health concerns, truck traffic, road closures, safety issues, etc.) as well as other subjects such as future use of the site.

Note: If preparing to plan and conduct CP activities for site remedial design or construction, the reader should consult this chapter in conjunction with Chapter 2: *Planning and Conducting a Site Citizen Participation Program.*

7.1 Before Finalizing the Remedial Design

1. Citizen Participation Record for Remedial Design and Construction. Prepare the CP Record for Remedial Design and Construction and its supporting document when a site enters the Remedial Design stage of the remedial process. The CP Record should be prepared *before* conducting other CP activities at this stage. The CP Record:

- **Coordinates scoping** to effectively plan and conduct the CP program for Remedial Design and Construction. The CP Record helps to assess a site's remedial program and affected/interested community, and identifies issues and information important to DER and the community. The CP Record also helps to determine if the citizen participation activities required to be conducted (the "baseline" CP program) during Remedial Design and Construction are sufficient, or if additional CP activities are appropriate and feasible.

- **Establishes a record** for staff and public which clearly identifies the required citizen participation activities (the "baseline" CP program) and any additional CP activities that may need to be conducted during Remedial Design and Construction.

- **Tracks completion** of the required citizen participation activities and any additional CP activities selected to help assure implementation of the CP program for the site.

The Citizen Participation Record for Remedial Design and Construction incorporates information from its support document: Site Issues and Community Profile Scoping Sheet for Remedial Design and Construction. The scoping sheet:

- identifies issues and information important to DER and the community and information that needs to be exchanged at these stages;
- summarizes information about land use, population, demographics, economics and other aspects of the community around the site which can influence issues and ways to communicate effectively;
- identifies affected/interested categories of community members.

The CP Record for Remedial Design and Construction and its instructions are at the end of the chapter, following page 7-5. The Site Issues and Community Profile Scoping Sheet accompanies the CP Record at the end of the chapter.

"Take Note . . ."

☑ If, following Remedial Construction, it is proposed that the site be delisted, CP activities for proposed site delisting are implemented. *(See Chapter 4: Citizen Participation Requirements for Site Listing, Reclassification and Delisting Actions.)*

2. Fact Sheet (Mailed). Before finalizing the Remedial Design, prepare and send to the contact list a fact sheet that:

- describes the site's remedial action plan and the general schedule of the major activities to implement the plan;
- highlights the final draft plans and specifications of the Remedial Design.

As with other written materials sent to the public, the fact sheet also should include:

- a brief history of the site, its hazardous waste problems, and why DER is proposing remediation of the site;
- description of the remaining citizen participation activities that will be conducted, their general timing, and how they relate to remedial activities (i.e. required CP activities and any additional CP activities, if appropriate, identified through the Citizen Participation Record prepared for Remedial Design and Construction);
- the location, days and hours of operation of the site's document repositories and the documents available (including the ROD and Remedial Design documents);
- staff contacts and other ways people can obtain more information (e.g. the Division of Environmental Remediation's toll-free information number).

(Appendix A.3 provides general information about preparing and distributing a fact sheet.)

7.2 Before the Start of Remedial Construction

1. Fact Sheet (Mailed). When Remedial Construction is about to begin, prepare and send to the contact list a fact sheet that describes:

- planned start date for remedial construction;
- the major construction activities and their general schedule;
- any action which is likely to affect the public or require the public to take action (closure of roads; truck routes and volume; dust problems; hours of operation, noise levels, etc.);
- date and location of an availability session (described immediately below).

As with other written materials sent to the public, the fact sheet also should include:

- a brief history of the site, its hazardous waste problems, and why DER is proposing remediation of the site;
- description of the remaining citizen participation activities that will be conducted, their general timing, and how they relate to remedial activities (i.e. required CP activities and any additional CP activities, if appropriate, identified through the Citizen Participation Record prepared for Remedial Design and Construction);
- the location, days and hours of operation of the site's document repositories and the documents available (including the ROD and Remedial Design documents);
- staff contacts and other ways people can obtain more information (e.g. the Division of Environmental Remediation's toll-free information number).

(Appendix A.3 provides general information about preparing and distributing a fact sheet, and includes an example of a Remedial Construction fact sheet.)

2. Availability Session. Plan and conduct an availability session to explain the upcoming Remedial Construction and address public questions and concerns. The availability session is conducted *before* the Remedial Construction begins. Public notification of the upcoming availability session is accomplished with the fact sheet described at the bottom of page 7-3.

An availability session is an informal gathering of DER staff and the public in a setting which is generally more casual than a public meeting. Often staff from other NYSDEC Divisions, NYSDOH, consultants, representatives of the site's responsible party and/or others also participate. This format provides opportunity for people to meet with staff individually or in small groups to discuss questions and concerns.

(Appendix A.5 provides information about planning and conducting an availability session.)

7.3 At the Completion of Remedial Construction

1. Public Notification. When Remedial Construction ends, notify by mail or telephone appropriate county and municipal clerks, site owner and adjacent property owners. Consideration should be given to notifying additional individuals and organizations as appropriate. The notification includes:

- announcement of completion of remedial construction activities;
- how the remedial program has mitigated hazardous waste problems;

- any post construction operation and maintenance activities planned;
- staff contacts and other ways for people to obtain more information (e.g. the Division of Environmental Remediation's toll-free number).