Rosita Clark TY 11/11/99

Roy F. Weston, Inc.
1400 Weston Way
P.O. Box 2653
West Chester, PA 19380
610-701-3000 • Fax 610-701-3186
www.rfweston.com

EPA Region 5 Records Ctr.
274195

11 November 1999

Ms. Cheryl Allen
Community Involvement Coordinator
Office of Public Affairs (P-19J)
U.S. Environmental Protection Agency
77 West Jackson Boulevard
Chicago, Illinois 60604-3590

U.S. EPA Contract No.: 68-W7-0026
Work Assignment No.: 012-CRCR-05ZZ / North Bronson Industrial Area / Bronson, Michigan
Document Control No.: RFW012-2A-ADXM

RE: Final Revised Community Involvement Plan

Dear Ms. Allen:

Roy F. Weston, Inc. (WESTON®) is pleased to submit two copies of the Final Revised Community Involvement Plan for the North Bronson Industrial Area Superfund Site in Bronson, Michigan. Meg Moosa, Dynamac Corporation, incorporated all of the review comments and the WESTON Team prepared this final plan. At your request, Ms. Moosa will forward the Final Revised Community Involvement Plan to the six interviewees who requested a copy.

Also, please note that Ms. Moosa will send a copy of the Final Revised Community Involvement Plan to the site information repository at the Bronson Public Library.

If you have any questions please contact me at (610) 701-5178, fax (610) 701-7401, or e-mail volkmerd@mail.rfweston.com.

Very truly yours,

ROY F. WESTON, INC.

Deborah E. Volkmer

Deborah E. Volkmer
Site Manager

Enclosure

cc: Meg Moosa, Dynamac

DEV/RAC-29/24-LA.DOC RFW012-2A-ADXM

This document was prepared by Roy F. Weston, Inc., expressly for U.S. EPA. It shall not be released or disclosed in whole or in part without the express, written permission of U.S. EPA.

T4
11/1/89

EPA

Final Revised Community Involvement Plan for the North Bronson Industrial Area Superfund Site Bronson, Michigan

U.S. EPA Contract Number: 68-W7-0026
U.S. EPA Work Assignment Number: 012-CRCR-05ZZ

November 1999

WESTON

99P-2773

FINAL

REVISED COMMUNITY INVOLVEMENT PLAN
NORTH BRONSON INDUSTRIAL AREA
SUPERFUND SITE
BRONSON, MICHIGAN
NOVEMBER 1999

CONTRACT NUMBER: 68-W7-0026
WORK ASSIGNMENT NUMBER: 012-CRCR-05ZZ
DOCUMENT CONTROL NUMBER: RFW012-2A-ADXM

TABLE OF CONTENTS

SECTION		PAGE
Section 1	Overview of the Community Involvement Plan	1-1
	A Brief Explanation of the Superfund Process	1-2
Section 2	Site Background	2-1
	Site Location	2-1
	Site History	2-1
	Site Investigation	2-2
	Remedial Investigation	2-2
	Baseline Risk Assessment	2-5
	Feasibility Study	2-6
	Feasibility Study Addendum	2-12
	The Proposed Plan	2-13
	Public Comment Period	2-17
	Remedial Design/Remedial Action	2-17
	Operable Unit II	2-18
	Roles of Agencies and PRPs During RI/FS and RD/RA Activities	2-18
Section 3	Community Background	3-1
	Community Profile and History	3-1
	Past Community Involvement with the Site	3-1
	Key Community Issues and Concerns	3-3
	Length of Time	3-3
	Loss of Industrial Development	3-3
	Health Concerns	3-3
	Cost	3-4
	Property Values	3-4
	U.S. EPA Communications	3-4
	Cleanup Plan Acceptance	3-4
	Location of Superfund Site	3-4
Section 4	Highlights of the Community Involvement Program	4-1
	Enlist the Support and Participation of City Officials and Community Leaders	4-1
	Identify and Assess Citizen Perception of the Site	4-1
	Provide Follow-up Explanations about Technical Activities and Contaminants	4-2
	Inform the Community about the Procedures, Policies, and Requirements of Superfund	4-2

This document was prepared by Roy F. Weston, Inc., expressly for EPA. It shall not be released or disclosed in whole or in part without the express, written permission of EPA.

TABLE OF CONTENTS
(Continued)

SECTION		PAGE
Section 5	Community Involvement Techniques	5-1
	Maintain Contact with Local Officials and Community Leaders	5-1
	Provide Information about Superfund	5-1
	Educate the Community about the Roles of the Various Agencies	5-2
	Maintain Contact with Area Residents	5-2
	Maintain an Information Repository	5-3
	Write and Distribute News Releases	5-4
	Prepare and Distribute Fact Sheets	5-4
	Prepare and Distribute Update Reports	5-5
	Hold Public Meetings	5-5
	Public Comment Period	5-6
	Published Notices	5-6
	Public Meeting Transcript	5-6
	Responsiveness Summary	5-6
	Assist in the Activities of a Community Advisory Group (CAG)	5-7
	Revise the Community Involvement Plan	5-7
	Program Evaluation	5-7
Section 6	Schedule and Timeline	6-1

LIST OF ATTACHMENTS

ATTACHMENTS		PAGE
Attachment A	Glossary of Acronyms and Terms	A-1
Attachment B	Public Meeting Locations and Information Repository	B-1
Attachment C	List of Contacts and Interested Groups	C-1

LIST OF FIGURES

FIGURE		PAGE
Figure 1	Site Location Map	2-3
Figure 2	Site Diagram	2-4
Figure 3	Community Involvement Timeline for Operable Unit I	6-1
Figure 4	Community Involvement Timeline for Operable Unit II	6-2

This document was prepared by Roy F. Weston, Inc., expressly for EPA. It shall not be released or disclosed in whole or in part without the express, written permission of EPA.

1. OVERVIEW OF THE COMMUNITY INVOLVEMENT PLAN

The United States Environmental Protection Agency (U.S. EPA) developed this Revised **Community Involvement Plan (CIP)** in preparation for community involvement activities to be conducted prior to and during the cleanup activities at the North Bronson Industrial Area Superfund Site in Bronson, Michigan. The purpose of this document is to provide information about community concerns and present a plan that will enhance communication between local residents and U.S. EPA as the investigation and cleanup at the site continues. The Michigan Department of Natural Resources (MDNR) (now called the Michigan Department of Environmental Quality [MDEQ]) completed the initial Community Relations Plan in August 1992. The initial Community Relations Plan summarized the site history, the background of the community, key concerns of local officials and residents, and community relations activities to be conducted during the **Remedial Investigation/Feasibility Study (RI/FS)**.

(Words appearing in **bold** are defined in Attachment A.)

The initial Community Relations Plan developed in 1992 noted that the primary concerns expressed by those interviewed included property values, the potential financial impact on the **potentially responsible parties (PRPs),** and the health and safety of humans and animals.

The objective of community involvement is to involve the public in activities and decisions related to the cleanup of Superfund sites. The Superfund community involvement program promotes two-way communication between members of the public and U.S. EPA. U.S. EPA has learned that its decision-making ability is enhanced by actively soliciting comments and information from the public. Public input can be useful in two ways:

- Communities are able to provide valuable information on local history, citizen involvement, and site conditions.
- By expressing their concerns, the community is able to assist U.S. EPA in developing a response that more effectively addresses the community's needs.

This document was prepared by Roy F. Weston, Inc., expressly for EPA. It shall not be released or disclosed in whole or in part without the express, written permission of EPA.

Information presented in this document was obtained from U.S. EPA, MDEQ, and through interviews with local officials, community leaders, and residents of Bronson. The interviews were conducted in June 1999.

This CIP consists of the following sections:

- An explanation of the Superfund Process.
- A description and brief history of the site.
- A profile of the Bronson community.
- A discussion of issues and concerns raised during the community interviews.
- A discussion of community involvement objectives for the site and activities designed to implement them.

This CIP contains the following attachments:

- A glossary of acronyms and technical terms.
- A list of locations for public meetings and information repositories.
- A list of contacts and interested groups.

U.S. EPA Region 5 has the lead responsibility for managing the cleanup activities, and will oversee technical and community involvement work at the site. MDEQ is providing a supporting role to U.S. EPA. The PRPs are responsible for cleanup of the site under U.S. EPA oversight.

1.1 A BRIEF EXPLANATION OF THE SUPERFUND PROCESS

In 1980, the United States Congress enacted the **Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA)**, also called **Superfund**. CERCLA authorizes U.S. EPA to investigate and respond to hazardous substance releases that may endanger public health and the environment. The 1980 law also established a $1.6 billion fund to pay for the investigation and cleanup of sites where parties responsible for the releases are unable or unwilling to address contamination problems. Congress amended and reauthorized the Superfund law in October 1986 as the **Superfund Amendments and**

This document was prepared by Roy F. Weston, Inc., expressly for EPA. It shall not be released or disclosed in whole or in part without the express, written permission of EPA.

Reauthorization Act (SARA), increasing the size of the fund to about $8.5 billion. SARA expired in 1993 and is in the process of being amended and reauthorized.

After a site is initially discovered, it is inspected, usually by a state agency. The state or U.S. EPA contractor then scores the site using a system called the **hazard ranking system (HRS)**. The HRS takes into account:

- Possible health risks to the human population.
- Potential hazards (e.g., from contaminated soil, contaminated **ground water**, fire, explosion, etc.) created by the chemicals at the site.
- Potential exposure (e.g., from touching, eating, or breathing).
- Potential for the substances at the site to pollute or harm the environment.

If the HRS score indicates that potential site contamination problems are serious, the site is included on the U.S. EPA **National Priorities List (NPL)**, a national roster of uncontrolled or abandoned hazardous wastes sites. Sites on the NPL are eligible for investigation and cleanup under the Superfund Program.

After placement on the NPL, a Remedial Investigation/Feasibility Study (RI/FS) is planned and conducted. The RI:

- Identifies the types of contaminants present at and near the site.
- Assesses the degree of contamination.
- Characterizes potential risks to the community and environment.

The FS evaluates alternative remedies for environmental problems at the site.

At the completion of the RI/FS, U.S. EPA will hold a **public comment period** on the alternatives. At the end of the public comment period, the final cleanup remedy will be approved and designed. The design and cleanup phase is referred to as the **Remedial Design/Remedial Action**

This document was prepared by Roy F. Weston, Inc., expressly for EPA. It shall not be released or disclosed in whole or in part without the express, written permission of EPA.

(RD/RA). The actual cleanup begins once these planning activities are finished.

If one or more parties believed to be responsible for site contamination problems are identified, these PRPs may conduct the RI/FS under U.S. EPA supervision. If no PRPs are found, or the PRPs do not agree to conduct the RI/FS, the investigation is conducted by U.S. EPA. U.S. EPA may, through legal action, later recover from the PRPs any costs associated with the investigation. At the North Bronson Industrial Area Site, several PRPs have been identified and the PRPs have agreed to conduct the design and cleanup of the site. The PRPs and/or U.S. EPA may also, through legal action, later recover some of the cost from other remaining PRPs if existent.

If, at any time in the process, the site poses an immediate threat to public health or the environment, U.S. EPA can intervene with an **emergency response action**.

This document was prepared by Roy F. Weston, Inc., expressly for EPA. It shall not be released or disclosed in whole or in part without the express, written permission of EPA.

2. SITE BACKGROUND

2.1 SITE LOCATION

The 200-acre North Bronson Industrial Area Site is located in southern Michigan, in the City of Bronson, Branch County, Michigan (see Figure 1). A map of the study area for the site is shown in Figure 2. The Superfund site is divided into two primary areas referred to as **Operable Units (OUs)**. OU I includes two sets of lagoons (called Eastern and Western Lagoons) and County Drain #30. The Western Lagoons are located behind the Wastewater Treatment Plant off of Mill Street, and the Eastern Lagoons are located next to Bronson Plating. OU II involves the Industrial Sewer.

2.2 SITE HISTORY

In June of 1984, the site received a hazard ranking score by U.S. EPA. As a result of this score, the site was included on the NPL in June 1986 making the site eligible for investigation and, if necessary, cleanup under CERCLA.

The North Bronson Industrial Area Site includes two lagoons, referred to as the "old" (Western) and "new" (Eastern) lagoons because of the date of their construction. The "old" waste disposal lagoons, located northwest of Bronson's Wastewater Treatment Plant (WWTP), were constructed in 1939 by the City of Bronson. These "old" lagoons served the plating industries located in Bronson. During the ten-year period from 1939 to 1949, the "old" lagoons received untreated plating wastes containing cyanide, **nickel**, copper, zinc and **cadmium**. In 1949, disposal reportedly exceeded the capacity of the "old" lagoons. This resulted in apparent overflow discharges of plating wastes to County Drain #30.

Between 1938 and 1970, the City of Bronson owned and operated both sets of lagoons. In 1949, as a result of increased demand for disposal capacity, the City of Bronson constructed a second set of lagoons. These "new" lagoons are located approximately 1,500 feet east of the "old" lagoons. The Bronson Plating Company purchased the "new" lagoons in 1970 and is the current owner. Disposal operations ceased at both seepage lagoon sites in 1981. The "new" lagoons contain an estimated 3,000 to 5,000 cubic yards of waste material and the "old" lagoons contain a

This document was prepared by Roy F. Weston, Inc., expressly for EPA. It shall not be released or disclosed in whole or in part without the express, written permission of EPA.

considerably larger, but undetermined amount of waste material. The "new" lagoons are dry, but the "old" lagoons contain a large volume of standing water. Results of previous investigations of ground water, surface water, sediments, and soils have shown elevated concentrations of **heavy metals** in the shallow **aquifer** system and County Drain #30. **Trichloroethylene (TCE), chloroform**, heavy metals and **polychlorinated biphenyls (PCBs)** have also been found in the ground water.

The city's water supply has been tested and found free of contamination. Water samples are collected annually. The majority of the residents in the area are connected to this municipal water system.

A limited amount of cleanup has been performed at the site to date. County Drain #30 was dredged in 1985 in an attempt to remove contaminated sediments. No cleanup measures have been initiated yet regarding the waste disposal lagoons or the ground-water contamination in the area.

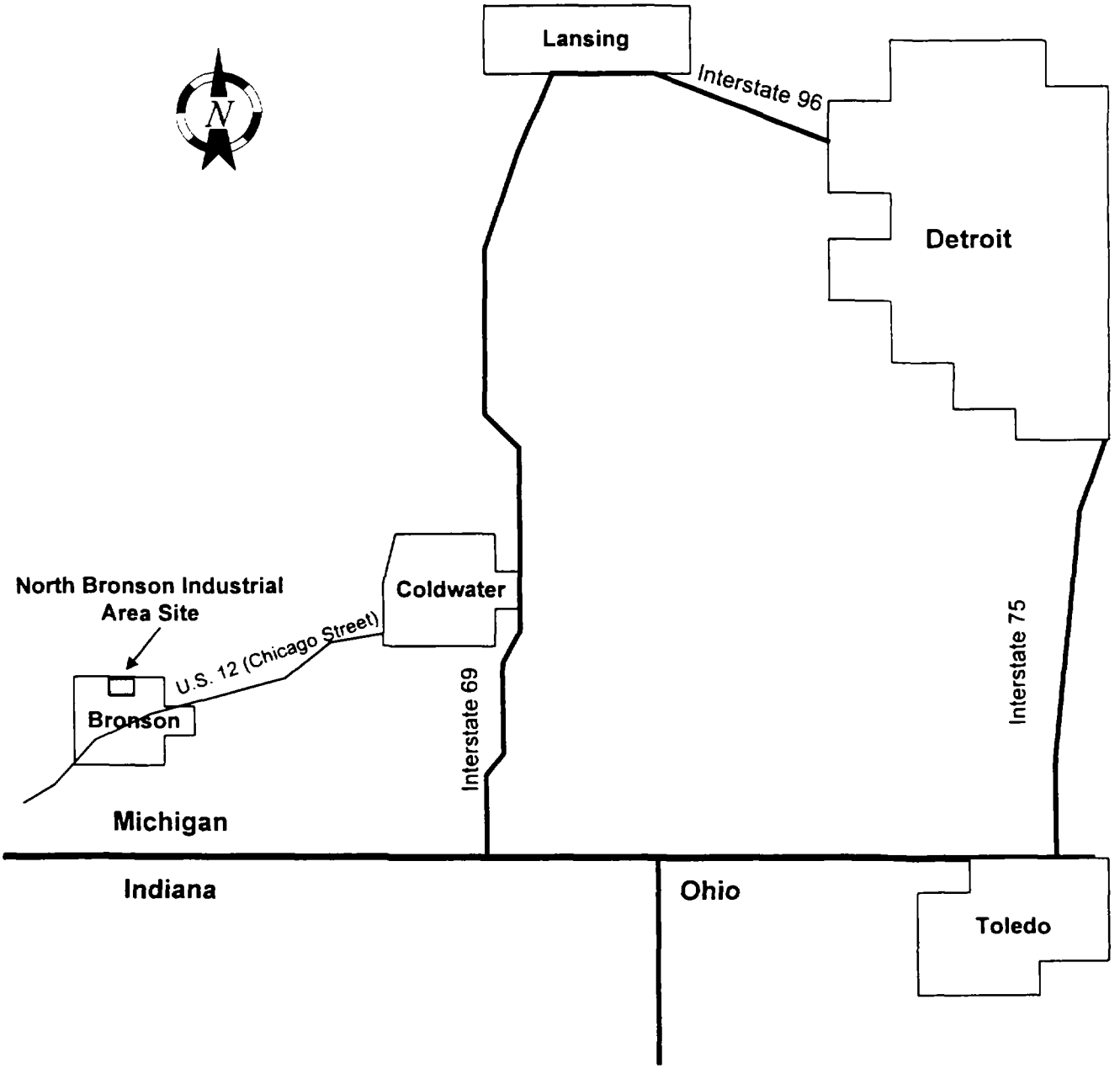
2.3 SITE INVESTIGATION

2.3.1 Remedial Investigation

The initial phase of the Remedial Investigation of OU I started in July of 1989. A Phase II investigation was completed during 1991. The Final Remedial Investigation Report was completed in July 1993. The results of the investigation indicate that contamination exists within four primary areas. The four areas include the Western Lagoons, Eastern Lagoons, areas along County Drain # 30, and ground water beneath the site. **Volatile organic compounds (VOCs)** were found in all four areas. **Semi-volatile organic compounds (SVOCs)** and PCBs were found throughout the Western Lagoons and in the sediments of the Eastern Lagoons and County Drain #30. Metals and cyanide were present in all samples taken from the Western and Eastern Lagoons. They were also present in the sediments along County Drain #30. Ground water beneath the site is contaminated with VOCs and the ground water directly beneath the lagoons is contaminated with heavy metals and cyanide. OU II involves the investigation and cleanup of the Industrial Sewer. Section 2.5 of this Community Involvement Plan addresses the status of OU II.

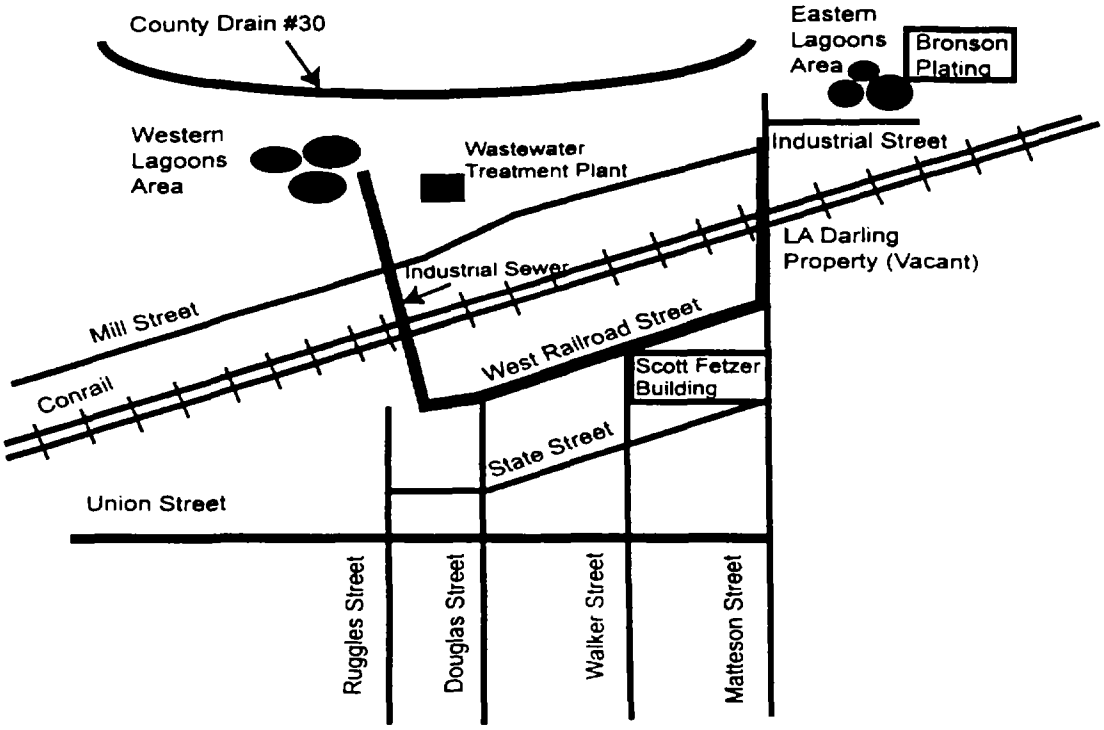
This document was prepared by Roy F. Weston, Inc., expressly for EPA. It shall not be released or disclosed in whole or in part without the express, written permission of EPA.

Figure 1
Site Location Map
North Bronson Industrial Area Superfund Site
Bronson, Michigan



This document was prepared by Roy F. Weston, Inc., expressly for EPA. It shall not be released or disclosed in whole or in part without the express, written permission of EPA.

Figure 2
Site Diagram
North Bronson Industrial Area Superfund Site
Bronson, Michigan



This document was prepared by Roy F. Weston, Inc., expressly for EPA. It shall not be released or disclosed in whole or in part without the express, written permission of EPA.

2.3.2 Baseline Risk Assessment

The **Baseline Risk Assessment** for Operable Unit I was completed in July 1993 and evaluated potential risks to human health and the environment. The results of the Baseline Risk Assessment indicate that the Eastern and Western Lagoon areas, County Drain #30, and ground water beneath the site pose health risks above U.S. EPA and MDEQ health risk goals.

Western Lagoon Area

Risks posed to humans in the Western Lagoon area were estimated for trespassers assumed to be exposed to contaminated sludge, surface water, and air. Under these conditions, the Western Lagoon area presents both cancer and non-cancer health risks. The majority of the non-cancer risk is from potential skin contact with cadmium- and **chromium**-contaminated sludge. The majority of the cancer risk is from ingestion of **arsenic** in surface water and sludge.

Eastern Lagoon Area

Risks posed to humans in the Eastern Lagoon area were estimated for trespassers exposed to contaminants in the surface soil. Under these conditions, the Eastern Lagoon area poses a potential non-cancer health risk. The majority non-cancer risk is from potential direct skin contact with and potential ingestion of **antimony**, chromium, and nickel.

County Drain #30

Risks posed to humans in County Drain #30 were evaluated for children playing in County Drain #30 and residents living near County Drain #30. Children who wade in County Drain #30 were assumed to be exposed to contaminated surface water, sediment, and VOC vapors in the air. Residents are potentially exposed to VOC vapors in the air. Under these conditions, there is a potential cancer risk posed to children exposed to contaminated sediment and residents exposed to the VOC vapors in the air. The majority of the cancer risk to children playing in County Drain #30 is associated with children eating sediment contaminated with arsenic. The majority of the cancer risk to residents living near County Drain #30 is associated with residents potentially inhaling **vinyl chloride**.

This document was prepared by Roy F. Weston, Inc., expressly for EPA. It shall not be released or disclosed in whole or in part without the express, written permission of EPA.

Ground Water

The most concentrated area of the VOC-contaminated ground water is below the industrial area near the former Scott Fetzer and L.A. Darling properties. The ground-water contamination generally decreases in concentration as it flows west and north toward County Drain #30. Risks were evaluated for residents assuming that they will use the contaminated shallow ground water for their drinking water supply in the future. Health risks were developed separately for ground water consumption and exposure to ground water contaminants through skin contact and inhalation while showering. Based on the concentration of contaminants in the ground water, potential residential use would pose both non-cancer and cancer risk to future residents. The non-cancer risk is associated with potential ingestion of **1,2 dichloroethene (1,2-DCE)**. The majority of the cancer risk is associated with the potential ingestion of vinyl chloride in the water.

Ecological Risks

Based on the concentrations of contaminants in surface water, sediments, and sludge from either County Drain #30 or the Western Lagoons, sensitive aquatic animals may be harmed or likely have been eliminated from these surface waters. Adverse effects on land animals in the areas around County Drain #30 and the Western Lagoons were not observed. However, without a thorough land survey, conclusions could not be drawn concerning adverse health effects on land animals or their habitats in these areas. Signs of stressed vegetation were observed along the berms surrounding the Western Lagoons. The diversity of the plants along the banks of the Western Lagoons also appeared to be low.

According to U.S. EPA and MDEQ standards, these risks warrant cleanup actions at the site. For a complete review of the Baseline Risk Assessment, please refer to the RI/FS Baseline Risk Assessment document or section 1.4 of the Feasibility Study, both of which can be found in the site Information Repository located at the Bronson Public Library (see Attachment B for the library location).

2.3.3 Feasibility Study

The Feasibility Study was completed in May 1995 and evaluated cleanup alternatives for Operable Unit I. The cleanup alternatives evaluated are outlined on the following pages.

This document was prepared by Roy F. Weston, Inc., expressly for EPA. It shall not be released or disclosed in whole or in part without the express, written permission of EPA.

All the alternatives considered for the site have a number of common elements. These elements are:

- Institutional Controls/Access Restrictions – This generally refers to perimeter fencing, warning signs, permanent markers, and deed restrictions on the property to control future site development and the use of impacted resources like ground water.
- Further Characterization – Further characterization of impacted areas may be required to refine the horizontal and vertical extent of soil, sludge, and ground-water contamination in the source areas.
- Ground-water Monitoring – Ground-water monitoring will be required to confirm the effectiveness of the selected remedy.
- Five-year Reviews.

2.3.3.1 *No Action Alternatives - Alternative 1 for: Western Lagoon (WL-1), Western Lagoon Ground Water (WLG-1), Eastern Lagoon (EL-1), Eastern Lagoon Ground Water (ELG-1), and County Drain (CD-1):*

The Superfund program requires that a "no action" option be considered at every site. Under a no action remedy the site would remain as it is today. This option is used as the benchmark for comparing and evaluating the effectiveness of all other alternatives.

The costs associated with a no action alternative are those related to the five-year reviews and ground-water monitoring. Thirty-year **present worth** estimates are $10,000 for reviews and $300,000 for ground-water monitoring. However, a no action remedy does not meet the cleanup objectives for the site, and would allow a continued unacceptable risk to human health and the environment.

2.3.3.2 *Western Lagoon (WL) Area:*

Alternative WL-2: Area Cap

WL-2 requires constructing a **cap** over the Western Lagoon area. The purpose of the cap is to cover the waste to prevent exposure, and to stop rainwater from infiltrating and **leaching** contaminants into the ground water. The cap however, will not prevent the leaching of contaminants into the ground water from waste deposited below the water table.

This document was prepared by Roy F. Weston, Inc., expressly for EPA. It shall not be released or disclosed in whole or in part without the express, written permission of EPA.

Total Present Worth Cost: $1.6 million

Alternative WL-3: Soil Fixation

The intent of soil fixation is to slow the release of contaminants into the environment. This process involves a deep soil mixing technique that directly applies stabilizing agents to the soils. These agents are designed to reduce the movement of the contaminants. An area cap would also be required to prevent exposure and to reduce the infiltration of rainwater.

Total Present Worth Cost: $12.4 million

Alternative WL-4: Excavation with Treatment

The intent of excavation with treatment is to prevent exposure and the release of Western Lagoon contaminants into the environment by removing, treating, and properly disposing of contaminated sludge and soil. This alternative is the most affective alternative evaluated for the area. However, the cost of this alternative is extremely high compared to the other alternatives.

Total Present Worth Cost: $52.3 million

2.3.3.3 Western Lagoon Area Ground Water (WLG)

Alternative WLG-2: Ground-water Pumping

The intent of ground-water pumping is to capture and treat contaminated ground water before it moves from the site. This prevents the movement of contaminants into the surrounding environment. Treated ground water would be discharged to County Drain #30.

Total Present Worth Cost: $4.3 million

Alternative WLG-3: Containment by **Slurry Wall** and Ground-water Pumping

The intent of this alternative is to prevent the movement of contaminants through the ground water by surrounding the lagoons with a subsurface

This document was prepared by Roy F. Weston, Inc., expressly for EPA. It shall not be released or disclosed in whole or in part without the express, written permission of EPA.

slurry wall. A slurry wall is a barrier used to contain the flow of contaminated ground water or liquids underneath the ground. The wall would create a cell isolating the contaminants from the environment. Ground water seeping into the cell would be pumped out and treated before discharging it to County Drain #30. This alternative, however, would not prevent ground water contaminated by sources upgradient from the lagoons from moving around the cell and discharging to County Drain #30.

Total Present Worth Cost: $2.8 million

2.3.3.4 Eastern Lagoon (EL) Area

Alternative EL-2: Area Cap

Alternative EL-2 requires the construction of a cap over the Eastern Lagoon area. The purpose of the area cap is to prevent exposure to Eastern Lagoon contaminants and to slow the leaching of contaminants into the ground water by preventing the infiltration of rainwater. The cap, however, will not prevent the leaching of contaminants into the ground water from waste that is below the water table.

Total Present Worth Cost: $802,100

Alternative EL-3: Soil Fixation

The intent of soil fixation is to slow the movement of contaminants into the ground water. This process involves a deep soil mixing technique that directly applies stabilizing agents to the soils. These agents are designed to reduce the movement of the contaminants. An area cap would also be required to prevent exposures and to reduce the infiltration of rainwater.

Total Present Worth Cost: $3.3 million

Alternative EL-4: Excavation and Treatment

The intent of excavation and treatment is to prevent direct contact, exposure, and the movement of contaminants into the surrounding environment by removing, treating, and properly disposing of contaminated sludge and soil. This alternative is the most effective

This document was prepared by Roy F. Weston, Inc., expressly for EPA. It shall not be released or disclosed in whole or in part without the express, written permission of EPA.

alternative for the area. However, the cost of this alternative is extremely high compared to the other alternatives.

Total Present Worth Cost: $10.4 million

2.3.3.5 Eastern Lagoon Ground Water (ELG)

Alternative ELG-2: Ground-water Pumping

The intent of ground-water pumping is to capture and treat contaminated ground water before it moves away from the site. This prevents the movement of contaminants into the surrounding environment. Treated ground water would be discharged to County Drain #30.

Total Present Worth Cost: $3.2 million

Alternative ELG-3: Containment Wall and Ground-water Pumping

The intent of this alternative is to isolate the contaminants beneath the Bronson Plating Company building by surrounding the facility with a subsurface containment wall. Ground water would be pumped from within the contained area and treated prior to discharge to County Drain #30.

Total Present Worth Cost: $4 million

Alternative ELG-4: Containment Wall, Slurry Wall, and Ground-water Pumping

The intent of this alternative is to isolate the contaminants beneath the Bronson Plating Company building with a containment wall and to build a slurry wall around the remaining lagoons. Ground water would be pumped from within the containment and slurry walls and treated to remove contaminants prior to discharge to County Drain #30.

Total Present Worth Cost: $3.6 million

This document was prepared by Roy F. Weston, Inc., expressly for EPA. It shall not be released or disclosed in whole or in part without the express, written permission of EPA.

2.3.3.6 County Drain #30 (CD)

Alternative CD-2: Access Restriction and Monitoring

The intent of access restriction and monitoring is to prevent exposure to contaminants in County Drain #30 by institutionally controlling access to the drain.

Total Present Worth Cost: $748,300

Alternative CD-3: Partial Sediment Dredging and Treatment

The intent of partial sediment dredging is to reduce exposure to contaminants and the movement of contaminants into the surrounding environment by removing and treating contaminated sediments from the drain near the lagoon areas.

Total Present Worth Cost: $995,200

Alternative CD-4: Full Sediment Dredging and Treatment

The intent of full sediment dredging and treatment is to prevent exposure and the movement of contaminants into the surrounding environment by removing and treating contaminated sediment from the entire length of County Drain #30.

Total Present Worth Cost: $2.6 million

Alternative CD-5: Sediment Dredging with Channeling

This alternative would only redirect the path of ground water and would spread the contamination downstream. This alternative was therefore eliminated as a possible option.

Total Present Worth Cost: $2.8 million

This document was prepared by Roy F. Weston, Inc., expressly for EPA. It shall not be released or disclosed in whole or in part without the express, written permission of EPA.

Alternative CD-6: Full Sediment Dredging/**French Drain** along Selected Areas

The intent of this alternative is to prevent exposure to contaminated sediment and prevent the movement of contaminated ground water into County Drain #30. To accomplish the goals of this alternative the entire length of the drain would be dredged. Also, contaminated ground water coming from the lagoon areas would be intercepted by the french drain and treated before it could enter County Drain #30 and recontaminate that portion of the county drain. A french drain is a drain system constructed of crushed rock or gravel and sand surrounding perforated pipes.

Total Present Worth Cost: $4.1 million

Alternative CD-7: Full Sediment Dredging and Full French Drain.

The intent of this alternative is to prevent exposure to and the movement of contaminated sediment and the movement of contaminated ground water into the environment. To accomplish the goals of this alternative, the entire length of the drain would be dredged. Also, contaminated ground water along the entire length of the drain would be intercepted by the french drain and treated before it could enter County Drain #30 and recontaminate the drain.

Total Present Worth Cost: $8.9 million

2.3.4 Feasibility Study Addendum

After completion of the original FS, on June 5, 1995, the Michigan legislature made changes to the laws that outlined the cleanup criteria for hazardous waste sites. In addition, on October 12, 1995, U.S. EPA and MDEQ agreed to expand the site to include the Industrial Sewer as a potential source of contamination. The Industrial Sewer, which was not addressed in the original FS, was used by several industries in the area to drain liquid industrial waste to the lagoons. Contamination detected along the sewer pipe during the RI did not clearly indicate whether or not the sewer pipe leaked, but the MDEQ believed that leakage may have occurred. In 1996, MDEQ staff investigated to determine if the sewer was a source of contamination. This was the beginning of the investigation for Operable Unit II (the Industrial Sewer).

This document was prepared by Roy F. Weston, Inc., expressly for EPA. It shall not be released or disclosed in whole or in part without the express, written permission of EPA.

Because of the change in the state laws and the decision to add the Industrial Sewer to the site, U.S. EPA and MDEQ determined it was necessary to review and revise the original FS before selecting a cleanup remedy for the site. The revisions were necessary to ensure that the North Bronson site FS complied with current state laws and to ensure that the alternatives reviewed and selected during the FS process represent the best alternatives available. Finally, the FS revision, completed in July 1997, provided U.S. EPA and MDEQ the opportunity to develop and screen an additional alternative as described below.

Wetland Alternative

This alternative includes a constructed wetland to treat contaminated ground water at the site. A constructed wetland is a man-made wetland with specific types of vegetation, such as cattails and reeds above the ground and the roots below the ground that provide organic material for microorganisms to help break down the contaminants.

Total Present Worth Cost: $2.3 million

2.3.5 The Proposed Plan

To protect human health and the environment from contaminated soil, sludge, sediments, and ground water associated with the Eastern Lagoons and Western Lagoons and County Drain #30 (Operable Unit I), MDEQ and U.S. EPA propose to incorporate the following elements of all of the alternatives examined:

- Excavate Eastern Lagoon soil.
- Dredge County Drain #30 sediment.
- Deposit contaminated waste into the Western Lagoons.
- Cap the Western Lagoon area.
- Install a french drain between the Western Lagoons and County Drain #30 to capture contaminated ground water.
- Construct a treatment wetland to treat contaminated water collected by the french drain.
- Pump contaminated water from the french drain to the treatment wetland.
- Discharge treated water to County Drain #30.

This document was prepared by Roy F. Weston, Inc., expressly for EPA. It shall not be released or disclosed in whole or in part without the express, written permission of EPA.

- Monitor ground-water and surface water quality to assess the effectiveness of the remedy.
- Install permanent warning markers.
- Fence off the Western Lagoon and wetland area.
- Incorporate restrictions on land use.
- Restrict the use of contaminated ground water.

The Eastern Lagoons and Ground Water

Contaminated soils and sludge in the Eastern Lagoon area would be excavated (without treatment) and consolidated into the Western Lagoons. Contaminated sludge and soil, if present beneath the Bronson Plating building, will remain in place because it is covered by the building. The removal and capping of the most contaminated zone of soil in this area eliminates direct contact concern and reduces the impact of the waste material on the ground water.

The highest concentrations of contaminants in the Eastern Lagoon area are generally found in the upper 10 feet of soil. The removal of this material combined with the capping of any residual material that may be beneath the building should reduce the concentration of contaminants leaching into the ground water. This should lower the concentration of contaminants detected in the Eastern Lagoon ground water to acceptable levels for County Drain #30. After this action, ground-water monitoring would be required in the area to evaluate the effectiveness of the remedy.

The estimated amount of contaminated sludge and soil to be excavated is 28,000 cubic yards. Under this plan, the excavated material would not be treated. Instead, all excavated material would be consolidated and buried in the Western Lagoons. The excavated area would be backfilled with clean soil. Future excavations below ten foot in the removal area or beneath the building would be prohibited unless proper precautions were taken to maintain the integrity of the building, protect workers from potential exposure to contamination, or ensure contaminated soil is properly managed.

County Drain #30

Sediment contaminated above the cleanup goals would be dredged from the drain. Dredged material would then be consolidated with wastes in the

This document was prepared by Roy F. Weston, Inc., expressly for EPA. It shall not be released or disclosed in whole or in part without the express, written permission of EPA.

Western Lagoon. A french drain would be installed along the Western Lagoon area to intercept contaminated ground water from the Western Lagoons. This action would prevent the recontamination of sediment in the drain and the release of contaminants from the Western Lagoon area into the environment. A french drain along the Eastern Lagoons would not be necessary. Removal of the source material in this area is expected to lower the concentration of contaminants in the ground water to a level that is protective of human health and the environment.

The Western Lagoon Area

The Western Lagoon area or waste area would be capped to prevent direct contact exposures to the material. The cap, however, does not have to meet MDEQ or **Resource Conservation and Recovery Act (RCRA)**, standards for a hazardous waste landfill. The preferred plan manages waste that is below the water table by improving upon a preexisting waste area (the Western Lagoon). Because the waste is below the water table, preventing the infiltration of rainwater through the waste is not an objective of the remedy. Under these conditions there is no legal or practical advantage to building a cap to strict hazardous waste requirements.

After this action, contaminated waste will remain on site to a depth of at least 20 feet below the ground. The amount of waste that would remain on site is estimated at 150,000 cubic yards. The waste area would be fenced off and identified with a permanent marker to prevent any future activities in the area other than maintenance requirements for the remedy.

Ground-water Treatment

Ground water impacted by the waste material in the Western Lagoon area would be intercepted by a french drain before entering County Drain #30. Contaminated water would be pumped from the drain and discharged to a treatment wetland. Contaminated ground water would flow through the wetlands for treatment before being discharged to County Drain #30. The wetland would be fenced off and managed as part of the Western Lagoon waste area.

The treatment wetland as a technology was screened in the North Bronson site FS addendum. The treatment wetland appears to be a highly effective, although innovative, option that promises substantial cost savings over more traditional ground-water treatment options screened in the FS.

This document was prepared by Roy F. Weston, Inc., expressly for EPA. It shall not be released or disclosed in whole or in part without the express, written permission of EPA.

Hundreds of treatment wetlands have been built and used to successfully treat surface water discharges containing individual contaminants. However, in this case, MDEQ and U.S. EPA consider the use of a treatment wetland to be an innovative technology. The technology is innovative because of the limited data available about a treatment wetland's ability to remove the large variety of contaminants found in the ground water at North Bronson. This required MDEQ and U.S. EPA to make assumptions in developing a site-specific alternative. However, the combination of effectiveness and substantial cost savings for this technology over the other alternatives screened for the site makes a treatment wetland worth developing.

A treatment wetland is a technology that requires land instead of mechanical devices to clean the water. According to the FS addendum for the North Bronson site, the amount of land necessary to meet ground-water treatment goals was estimated at 11.3 acres. This estimate was based on capturing and treating ground water from both the Eastern and Western Lagoon areas. However, it should not be necessary to treat ground water in the Eastern Lagoon area if Eastern Lagoon waste is excavated. As the volume of water requiring treatment is reduced, the size of the treatment wetland can be reduced. Current estimates indicate the size of the wetland may only need to be around 6 acres.

Total Present Worth Cost: $5 million

This **Proposed Plan** would reduce risks to human health and the environment by eliminating or controlling direct contact with contaminants and by preventing contaminants from leaving the site. Except for the complete removal and treatment of contaminated sludge, soil, and sediment this remedy provides at least as much protection of public health and the environment as any other plan considered in the FS and is the most cost effective. The plan would take up to 18 months to implement.

This remedy will result in hazardous substances remaining on site above health based levels. Therefore, according to requirements in CERCLA, a review will be conducted within five years after implementing the remedy. This review is to evaluate whether the remedy continues to provide adequate protection of human health and the environment.

This document was prepared by Roy F. Weston, Inc., expressly for EPA. It shall not be released or disclosed in whole or in part without the express, written permission of EPA.

The proposed remedy for the industrial area (the lagoons and ground water) will meet MDEQ criteria for a limited industrial cleanup. A limited industrial cleanup will require: perimeter fencing around the Western Lagoon area, permanent warning markers identifying the location of the buried waste material, and land use restrictions to limit future development in the area to industrial use only. Also, restrictions of ground-water use will be required for the entire North Bronson Industrial Area. The area is currently zoned by the City of Bronson for industrial use only.

The cleanup goals of County Drain #30 are based on ecological concerns and the MDEQ criteria to protect the residents in the area. Residential standards are higher than industrial cleanup standards and are necessary for County Drain #30 because public access to the drain cannot be controlled.

2.3.6 Public Comment Period

Before selecting a final cleanup plan for Operable Unit I, U.S. EPA considered public comments received during the public comment period held from August 6, 1997, through September 5, 1997. MDEQ and U.S. EPA sponsored a public meeting in Bronson on August 19, 1997, to explain the alternatives considered and to allow an opportunity for the public to comment on the alternatives during the official comment period. After reviewing comments received during the comment period, U.S. EPA selected the Proposed Alternative as the final cleanup plan for Operable Unit I. The final cleanup plan was described in the final decision document, called a **Record of Decision (ROD)**. This ROD was signed on June 18, 1998. The ROD is also available for public review in the site Information Repository in the Bronson Public Library.

2.4 REMEDIAL DESIGN/REMEDIAL ACTION

U.S. EPA has entered into an agreement, called a **Consent Decree**, with the PRPs to have the PRPs conduct the design and implementation of the remedy for OU I. Once the design is complete, it will be implemented. All work will be performed under U.S. EPA's oversight with support from MDEQ.

This document was prepared by Roy F. Weston, Inc., expressly for EPA. It shall not be released or disclosed in whole or in part without the express, written permission of EPA.

2.5 OPERABLE UNIT II

The investigation of Operable Unit II (the Industrial Sewer) is currently being completed. The results of this investigation are being summarized in two documents called Technical Memorandum I and II. Once these documents are complete, they will be placed in the Information Repository at the Bronson Public Library. (See Attachment B for the library location and hours.) Work will begin on the Feasibility Study (FS) for Operable Unit II upon completion of the Technical Memorandum.

2.6 ROLES OF AGENCIES AND PRPS DURING RI/FS AND RD/RA ACTIVITIES

When the North Bronson Industrial Area Site was placed on the NPL in 1986, U.S. EPA notified the PRPs that an investigation (a Remedial Investigation/Feasibility Study [RI/FS]) needed to be conducted at the site. U.S. EPA invited the PRPs to perform the RI/FS. However, an agreement was not reached between U.S. EPA and the PRPs, and the RI/FS was conducted by MDEQ (previously MDNR) with U.S. EPA funding. During this phase of the work, MDEQ took the lead at the site with U.S. EPA's consultation.

Upon completion of the RI/FS in 1998, MDEQ and U.S. EPA made a decision for cleanup of the site. At that time, the PRPs were notified by U.S. EPA and invited to take part in the second phase which would be the Remedial Design/Remedial Action (RD/RA). U.S. EPA and the PRPs conducted negotiations and reached an agreement called a Consent Decree. The Consent Decree is an agreement that the PRPs will undertake the RD/RA work for the site with oversight from U.S. EPA in consultation with MDEQ.

This document was prepared by Roy F. Weston, Inc., expressly for EPA. It shall not be released or disclosed in whole or in part without the express, written permission of EPA.

3. COMMUNITY BACKGROUND

3.1 COMMUNITY PROFILE AND HISTORY

Bronson was the first settlement in Branch County. Branch County is located in southern Michigan. The City of Bronson was named after Jabez "Jabe" Bronson who opened a tavern and became the owner of the first general store in Branch County and was also the first Justice of the Peace in the area. His tavern served as a hall of justice as well as a post office. Many pioneers passed through the area on an old Indian trail between Detroit and Chicago. This is now known as U.S. 12 (or Chicago Road). However, according to information supplied by the County, few settled in the area because of the presence of Indians.

Bronson was incorporated as a village in October of 1866. The primary industries at the time were a steam gristmill and an iron foundry. In the 1890s, Bronson became a booming cement-making town.

According to 1990 Census figures, the population of the City of Bronson is 2,342. There are a high percentage of family households and the median age for the community is 31.3.

There are eight major industrial employers in Bronson. Douglas Autotech employs the largest number, 212, and Bronson Plating employs the second largest number, 150.

3.2 PAST COMMUNITY INVOLVEMENT WITH THE SITE

Community relations activities in Bronson started during the planning of the initial phase of existing well sampling and has continued to the present time. Sampling of existing wells was done prior to preparing Phase I of the Work Plan. During this time, the MDNR (now MDEQ) project manager, Brady Boyce, made contacts with local residents, city officials, and local businesses.

In addition to the personal contacts made by the project manager in July 1989, a newspaper notice was placed in "The Bronson Journal." The notice ran for two weeks and included a request for persons interested in

This document was prepared by Roy F. Weston, Inc., expressly for EPA. It shall not be released or disclosed in whole or in part without the express, written permission of EPA.

receiving site progress reports to write or call and their names would be placed on a mailing list. No response was received from this advertisement.

Community concerns regarding the site were identified through one-on-one interviews conducted with local residents, city officials, and local businesses in August 1992. An initial Community Relations Plan was then developed based on the community interviews conducted in 1992. The primary concerns expressed by those interviewed in 1992 included property values, the potential financial impact on the potentially responsible parties (PRPs), and the health and safety of humans and animals.

In June 1995, a fact sheet explaining the alternatives that were being considered for the cleanup of the site was developed and distributed to those individuals on the mailing list. A public meeting was also held at that time to explain the results of the RI/FS. The meeting was held at the Bronson Theater.

A 30-day public comment period on the Proposed Plan for the site was held from August 6, 1997, through September 5, 1997. Section 5.10 of this CIP defines the purpose of the public comment period. A public meeting for the site was held on August 19, 1997, as advertised in the Proposed Plan.

In the Proposed Plan for Operable Unit I, Dave O'Rourke, Bronson City Manager, requested that citizens interested in being a member of the **Citizen's Advisory Group (CAG)** contact him. A CAG for the North Bronson Industrial Area Site was set up in 1997 and has been active providing input regarding the community's needs and concerns about the cleanup.

This document was prepared by Roy F. Weston, Inc., expressly for EPA. It shall not be released or disclosed in whole or in part without the express, written permission of EPA.

3.3 KEY COMMUNITY ISSUES AND CONCERNS

On June 16 and 17, 1999, representatives of U.S. EPA met one-on-one with Bronson area residents and officials to discuss community concerns regarding the on-going investigation of the North Bronson site. In addition, U.S. EPA mailed out a fact sheet explaining the status of the site and requesting comments from residents that may not have been contacted by U.S. EPA directly. The following is a summary of the major areas of concern raised during those interviews and from the comments received from the mailing.

3.3.1 Length of Time

Everyone interviewed expressed strongly that the investigation had taken too long. One person summarized that millions of dollars have been spent and not a shovel full has been moved. People also expressed frustration with schedules continually slipping.

3.3.2 Loss of Industrial Development

One of the primary concerns expressed by everyone interviewed was the loss of industrial development. According to those interviewed, the Superfund site has deterred industry from locating in Bronson. One specific instance of an industry choosing to locate their business outside of Bronson was cited several times. As one person put it, "The site has frozen our main industrial area."

3.3.3 Health Concerns

One individual that responded in writing to U.S. EPA explained that three members of their family had developed cancer – two developed colon cancer and one developed lung cancer. This family has lived near the site along Swan Creek since 1945, and the individual expressed that they believed that there was a definite connection between the cancers in their family and the contamination at the site. Other individuals who met with U.S. EPA did not express a great deal of concern regarding health issues, however, they did express some concern about potential affects on human health if the site is not cleaned up.

This document was prepared by Roy F. Weston, Inc., expressly for EPA. It shall not be released or disclosed in whole or in part without the express, written permission of EPA.

3.3.4 Cost

Along with the length of time that the investigation has taken, people were concerned about the cost involved in such a lengthy investigation. Everyone interviewed, and several people that responded in writing, expressed frustration that so much money was being spent on the investigation, and none had been spent on cleaning up the site.

3.3.5 Property Values

Those interviewed explained that individuals near the site would be concerned about property values.

3.3.6 U.S. EPA Communications

Most people interviewed requested that an update be developed and sent out explaining the current status of the site. They said that most people are not aware of the on-going activities at the site, and should be kept informed. However, several people interviewed said that they did not want to hear from U.S. EPA until U.S. EPA was actually ready to clean up the site. They expressed a great deal of frustration with schedules being announced by the various agencies involved, and then hearing that the schedule was going to be delayed.

3.3.7 Cleanup Plan Acceptance

The cleanup plan that was selected involves creating a wetland on the site to provide organic material for microorganisms to help break down the contaminants allowing the site to clean itself naturally. Everyone interviewed was pleased with the cleanup plan selected. They liked the idea of doing "something natural." Many people explained that there was already wildlife in the area, and this plan would work well in that location.

3.3.8 Location of the Superfund Site

There seemed to be a great deal of confusion about the actual location of the North Bronson Industrial Area Superfund Site.

The Superfund site investigation and cleanup has been divided into two Operable Units. The first Operable Unit involves two sets of lagoons,

This document was prepared by Roy F. Weston, Inc., expressly for EPA. It shall not be released or disclosed in whole or in part without the express, written permission of EPA.

(called Eastern and Western Lagoons) located behind the Wastewater Treatment Plant off of Mill Street and next to Bronson Plating, and County Drain #30. (See the map on page 2-4.) The method for cleaning up the first Operable Unit (the Proposed Plan described on page 2-13) was decided in the fall of 1997 and is in the process of being designed. The second Operable Unit involves the Industrial Sewer and is currently being evaluated to determine the best cleanup method.

Contrary to what most people seemed to think, the Scott Fetzer Building and the L.A. Darling property are not part of the Superfund site, and are being handled under another program through the State of Michigan.

This document was prepared by Roy F. Weston, Inc., expressly for EPA. It shall not be released or disclosed in whole or in part without the express, written permission of EPA.

4. HIGHLIGHTS OF THE COMMUNITY INVOLVEMENT PROGRAM

Community involvement objectives and activities have been developed to encourage public participation during upcoming activities at the site. They are intended to ensure that residents and interested officials are informed about activities taking place at the North Bronson Industrial Area Site and, at appropriate times, have an opportunity for input during the investigation and cleanup process. To be effective, the community involvement program must be formulated according to the community's need for information, and its interest and willingness to participate in the process.

The following objectives have been developed as a guideline for the implementation of community involvement activities.

4.1 ENLIST THE SUPPORT AND PARTICIPATION OF CITY OFFICIALS AND COMMUNITY LEADERS

City officials and community leaders provide an invaluable resource in U.S. EPA's effort to understand and monitor community concerns. Local officials' and community leaders' frequent contact with residents provide direct lines of communication, in which questions and concerns may be addressed or referred to U.S. EPA. It is essential that local officials be regularly and fully informed of site activities, plans, findings, and developments. Appropriate officials and community leaders to keep informed and involve in a community involvement program include: the Mayor; City Manager; and editor of the "Bronson Journal" (The names, addresses, and phone numbers of these individuals are listed in Attachment C of this CIP).

4.2 IDENTIFY AND ASSESS CITIZEN PERCEPTION OF THE SITE

Information regarding citizen perception and concern of the site is indispensable. At this time, the areas of concern are; the length of the investigation, the lack of progress on the cleanup, the cost of the investigation, the impact on industrial development, and potential health risks. Understanding these concerns will help U.S. EPA focus the level of effort for community involvement at the site. It is important to plan community involvement activities that will promote participation from

This document was prepared by Roy F. Weston, Inc., expressly for EPA. It shall not be released or disclosed in whole or in part without the express, written permission of EPA.

members of the community. Background information and the direction of local concern will determine those activities that best meet the community's needs.

4.3 PROVIDE FOLLOW-UP EXPLANATIONS ABOUT TECHNICAL ACTIVITIES AND CONTAMINANTS

Concise, easily understood, and timely information should be available to all area residents concerning the schedule of technical activities, their purpose, and their outcome. Where information cannot be released to the public, either because of quality assurance requirements or the sensitivity of enforcement proceedings, a clear and simple explanation as to why the information must be withheld is in order. A written, basic description and discussion of any contaminants connected with the North Bronson Industrial Area, should be provided so that residents understand possible threats to the public near or on site. The community involvement staff should also attempt to identify special situations or concerns where more specialized information is desired by individuals or groups. Finally, to ensure that inquiries from the community are handled efficiently and consistently, U.S. EPA should continue to maintain a single point of contact.

4.4 INFORM THE COMMUNITY ABOUT THE PROCEDURES, POLICIES, AND REQUIREMENTS OF THE SUPERFUND PROGRAM

Everyone interviewed regarding the North Bronson Industrial Area Site said that they did not understand the Superfund program. In order to dispel possible confusion about U.S. EPA's purpose and responsibilities at the site, an effort should be made to circulate basic information to the community describing the Superfund process. The general public should be informed of the environmental and enforcement laws U.S. EPA is required to follow. U.S. EPA terms, acronyms, policies, and procedures should also be explained as site activities progress. The public should also be aware of the following community involvement requirements as outlined in *Community Relations in Superfund: A Handbook:*

- **Community Interviews** - On-site discussions must be held with local officials and community members in order to assess their concerns and determine appropriate community involvement activities.

This document was prepared by Roy F. Weston, Inc., expressly for EPA. It shall not be released or disclosed in whole or in part without the express, written permission of EPA.

- **Community Involvement Plan** - A complete Community Involvement Plan, based on community interviews, must be developed and approved.

- **Information Repository** - An Information Repository must be established which includes each item developed, received, published, or made available pursuant to the Superfund Amendment and Reauthorization Act. These items must be made available for public inspection and copying at or near the facility.

- **Administrative Record** - U.S. EPA must establish an Administrative Record, which contains many of the documents, reports, correspondence, and other material related to a Superfund project. In order for the public to review these documents, a copy of the Administrative Record is maintained in a public facility in the community or area of a Superfund site. U.S. EPA must inform the public of the Administrative Record's location.

- **Notice and Analysis of the RI/FS and Proposed Plan** - A RI/FS and Proposed Plan must be developed. Notice of the availability of the RI/FS and Proposed Plan, including a brief summary of the Proposed Plan, must be published in a major local newspaper of general circulation. The notice must also announce the public comment period.

- **Public Comment Period on RI/FS and Proposed Plan** - The RI/FS and Proposed Plan must be provided to the public for review and comment for a period of not fewer than 30 calendar days. Both oral and written comments must be considered.

- **Opportunity for Public Meeting** - Before adoption of any cleanup plan, an opportunity for a public meeting at or near the site at issue must be provided. A meeting transcript must be prepared and made available to the public.

- **Responsiveness Summary** - A response to each of the significant comments, criticisms, and new data submitted on the Proposed Plan and RI/FS must be prepared and accompany the ROD.

This document was prepared by Roy F. Weston, Inc., expressly for EPA. It shall not be released or disclosed in whole or in part without the express, written permission of EPA.

- **Record of Decision Availability and Notification.** U.S. EPA must make the Record of Decision available for public inspection and copying at or near the site prior to commencement of any cleanup action. Also, U.S. EPA must publish a notice of the Record of Decision's availability in a major local newspaper of general circulation. The notice must state the purpose of the selected cleanup action.

- **Revision of the Community Involvement Plan.** Prior to Remedial Design, U.S. EPA should consider the need to revise the Community Involvement Plan to reflect community concern, as discovered during interviews and other activities, that pertain to the Remedial Design and Remedial Action Phase.

- **Notice of Availability/Brief Description of Proposed Record of Decision Amendment.** If U.S. EPA wants to Amend the Record of Decision, U.S. EPA must propose the amendment to the Record of Decision and issue a notice of the availability of the amendment and a brief description of the proposed amendment in a major newspaper of general circulation.

- **Public Comment Period, Public Meeting, Meeting Transcript, and Responsiveness Summary.** U.S. EPA must follow the same procedures as required for the completion of the RI/FS and Proposed Plan.

- **Notice and Availability of Amended Record of Decision**. U.S. EPA must publish a notice of the amended Record of Decision in a major local newspaper and make the amended Record of Decision and supporting information available for public inspection and copying in the Administrative Record and Information Repository prior to beginning the action affected by the amendment.

- **Remedial Design Fact Sheet and Public Briefing**. Upon completion of the final engineering design, U.S. EPA must issue a fact sheet and provide a public meeting briefing, as appropriate, prior to beginning the cleanup action.

This document was prepared by Roy F. Weston, Inc., expressly for EPA. It shall not be released or disclosed in whole or in part without the express, written permission of EPA.

In addition to the above items, U.S. EPA should inform local officials, environmental groups, and interested residents about the availability of the **Technical Assistant Grants (TAGs).** The TAG program provides up to $50,000 to community groups for the purpose of hiring technical advisors to help citizens understand and interpret site-related technical information for themselves. Congress and U.S. EPA have established certain basic requirements concerning the proper use of TAG funds by a recipient group. For example, the group must provide 35 percent of the total costs of the project to be supported by TAG funds, and must budget the expenditure of grant funds to cover the entire cleanup period. Congress has also stipulated that there may only be one TAG award per Superfund site at any one time.

As the cleanup process progresses, it will also be worthwhile to evaluate the effectiveness of the community involvement activities in providing information to residents and encouraging citizen participation.

This document was prepared by Roy F. Weston, Inc., expressly for EPA. It shall not be released or disclosed in whole or in part without the express, written permission of EPA.

5. COMMUNITY INVOLVEMENT TECHNIQUES

The Superfund law requires that certain community involvement activities be conducted at designated milestones during the RI/FS process. In addition, U.S. EPA Region 5 undertakes other activities to strengthen its communication. A member of the U.S. EPA Region 5 community involvement staff has been designated to respond directly to media and public inquiries regarding site activities. Activities that will be conducted during the cleanup of the North Bronson Industrial Area Site are described below.

5.1 MAINTAIN CONTACT WITH LOCAL OFFICIALS AND COMMUNITY LEADERS

The process of community interviews has already set up an initial communications link between the community and U.S. EPA. Furthermore, the Community Involvement Coordinator for the site has been designated by U.S. EPA as a contact person (See Attachment C – U.S. EPA Representatives). Access to a contact person reduces the frustration that may accompany attempts to obtain information and communicate with the several agencies and organizations involved in the cleanup. The Community Involvement Coordinator will continue to maintain contact with the appropriate local officials and community leaders to provide them the opportunity to address any issues that may arise during the cleanup at the site.

U.S. EPA will provide local officials and community leaders with periodic updates on site activities and on the Superfund process. Clear and understandable information will be provided about the ongoing activities and any potential risks associated with the site. Appropriate officials and community leaders to maintain contact with include: Len Kolcz, Mayor; Dave O'Rourke, City Manager; and Scott McGraw, Editor of the "Bronson Journal" (The addresses and phone numbers of these individuals are listed in Attachment C of this CIP).

5.2 PROVIDE INFORMATION ABOUT SUPERFUND

In response to the requests from the people interviewed, and due to the general lack of understanding of Superfund, information on the Superfund process will be provided. An explanation of Superfund will be provided at

This document was prepared by Roy F. Weston, Inc., expressly for EPA. It shall not be released or disclosed in whole or in part without the express, written permission of EPA

public meetings, and information on the Superfund program will be placed in the Information Repository at the Bronson Public Library. (See Attachment B of this Plan for the library location and hours.)

5.3 EDUCATE THE COMMUNITY ABOUT THE ROLES OF THE VARIOUS AGENCIES

Bronson residents, city officials, and community leaders are receptive to the role of U.S. EPA in resolving problems at the North Bronson Industrial Area Site. However, there is a general lack of understanding of the investigation and the roles of those involved. The nature and extent of the investigation and cleanup process and the roles of the various participants in the process, such as the government agencies, PRPs, contractors, and other personnel, should be explained.

5.4 MAINTAIN CONTACT WITH AREA RESIDENTS

The information that residents may provide U.S. EPA about the background of a site is valuable to U.S. EPA in planning the clean up of a site. U.S. EPA will maintain a mailing list as one means of providing information to interested residents and the general community. Through regular and frequent contact, residents can voice their concerns regarding the site directly to the following designated U.S. EPA representatives:

Ms. Rosita Clarke

Remedial Project Manager

Superfund Division (SR-6J)

U.S. EPA Region 5

77 West Jackson Boulevard

Chicago, IL 60604-3590

(312) 886-7251

This document was prepared by Roy F. Weston, Inc., expressly for EPA. It shall not be released or disclosed in whole or in part without the express, written permission of EPA.

Ms. Cheryl Allen
Community Involvement Coordinator
Office of Public Affairs (P-19J)
U.S. EPA Region 5
77 West Jackson Boulevard
Chicago, IL 60604-3590

(312) 353-1325
1 (800) 621-8431

5.5 MAINTAIN AN INFORMATION REPOSITORY

A repository is an information file required under Superfund that contains documents and other information about the site and Superfund in general. It typically includes consent orders, work plans, reports, and copies of applicable laws. The establishment of an Information Repository facilitates public access to site-related information. A repository for the North Bronson Industrial Area Site has been established by U.S. EPA. Its location is listed below and also in Attachment B of this CIP. Many documents, plans, and other finalized written materials generated during the investigation and cleanup are placed in the repository. U.S. EPA will notify community groups, city officials, and interested citizens on the mailing list of its location.

The Information Repository for the North Bronson Industrial Area Site is available for public review at the following location and hours:

Bronson Public Library
207 N. Matteson
Bronson, MI 49028
(517) 369-3785

Hours:

Monday	closed
Tuesday – Thursday	10:30 a.m. – 5:00 p.m.
Friday	10:30 a.m. – 4:00 p.m.

This document was prepared by Roy F. Weston, Inc., expressly for EPA. It shall not be released or disclosed in whole or in part without the express, written permission of EPA.

Saturday	9:00 a.m. to 12:00 p.m.
Sunday	closed

5.6 WRITE AND DISTRIBUTE NEWS RELEASES

Prepared statements will be released to local newspapers, and radio and television stations to announce the discovery of any significant findings at the site during the investigation/cleanup, and to notify the community of any public meetings or public comment periods. Copies of the news releases should be sent to the appropriate city officials and community leaders, if possible, before their release. Additional news releases are advisable at the completion of the cleanup. The news releases should be mailed to the media list in Attachment C and placed in the site Information Repository. Because news releases usually contain only the most important information, other details that citizens may be more interested in are often excluded. A news release alone cannot address all citizen concerns; therefore, this CIP includes additional methods of communication that supplement the news releases. News releases may also be posted on U.S. EPA Region 5's Web page at: www.epa.gov/region5/news99/index.htm.

5.7 PREPARE AND DISTRIBUTE FACT SHEETS

Fact sheets, written in non-technical language and produced to coincide with particular milestones during the cleanup process, are intended to provide the community with detailed information about the site. These will be placed in the Information Repository and sent to all parties on the mailing list. The Proposed Plan for Operable Unit I was released in the form of a fact sheet in August 1997 and outlined each of the alternatives being considered for clean up of Operable Unit I. A description of the U.S. EPA-recommended alternative for Operable Unit I was also provided in the Proposed Plan. Additional fact sheets may be issued to describe the cleanup as it progresses. Other fact sheets may be developed to respond to specific community information needs. For example, U.S. EPA plans to develop a fact sheet explaining exactly what areas the Superfund site encompasses in response to the confusion surrounding what areas the site includes. Information may also be placed on U.S. EPA Region 5's Web page at: www.epa.gov/region5/sites/.

This document was prepared by Roy F. Weston, Inc., expressly for EPA. It shall not be released or disclosed in whole or in part without the express, written permission of EPA

5.8 PREPARE AND DISTRIBUTE UPDATE REPORTS

U.S. EPA may issue a series of update reports whenever new or pertinent information is available on the North Bronson Industrial Area Site. The updates would be produced and distributed periodically during the process as deemed necessary by U.S. EPA. All updates would be placed in the Information Repository.

5.9 HOLD PUBLIC MEETINGS

A meeting provides an opportunity for U.S. EPA to present information and a proposed course of action. U.S. EPA staff is available to provide information and answer questions. A public meeting is not necessarily a formal public hearing where testimony is received. Instead it might be a meeting to exchange information and comments. Public meetings provide the public with an opportunity to express their concerns to the U.S. EPA, state, or local government officials. Public meetings or informal availability sessions will be held at various times throughout the process. Cheryl Allen, U.S. EPA Community Involvement Coordinator, and Rosita Clarke, U.S. EPA Remedial Project Manager, will conduct these meetings (See Attachment C). Scheduling public meetings should remain flexible to account for technical milestones and public interest.

Site specific presentations improve the public's understanding of the problems associated with spills or releases of hazardous substances and what U.S. EPA is doing about them. Presentations can easily be adapted to suit different audiences. Each presentation should at least describe the problem, describe how the problem affects the public and the environment, discuss what U.S. EPA is doing about it, discuss how residents can help or obtain additional information, and respond to questions from the audience. A presentation for the North Bronson Industrial Area Site could describe the history of the site; discuss previous removal activities at the site; illustrate the Superfund program; highlight the timetable for the U.S. EPA cleanup actions; and explain and evaluate the cleanup alternatives being considered. Through question and answer periods, U.S. EPA has an opportunity to identify citizen concerns. Presentations are suitable for public meetings, small group meetings, and special interest groups. Visual aids should be used whenever possible to enhance and reinforce the information being presented.

This document was prepared by Roy F. Weston, Inc., expressly for EPA. It shall not be released or disclosed in whole or in part without the express, written permission of EPA.

5.10 PUBLIC COMMENT PERIOD

Superfund requires that a minimum 30-day public comment period be held after completion of the RI/FS and Proposed Plan. The purpose of the comment period is to enable all interested parties, including local officials, residents, groups, and PRPs, an opportunity to express their opinions about the recommended alternative and participate in the decision-making process for site cleanup. The comment period for Operable Unit I of the North Bronson Industrial Area Site was held from August 6, 1997, through September 5, 1997, and was announced by an advertisement published in the "Bronson Journal" as well as by mail to the people on the mailing list. Community input during this period was encouraged. A public comment period on the Proposed Plan for Operable Unit II will also be held at the appropriate time in the process.

5.11 PUBLISHED NOTICES

Before adoption of any plan for cleanup is undertaken, Superfund requires that a notice and brief explanation of the Proposed Plan for cleanup be published in a major local newspaper of general circulation, such as the "Bronson Journal." A notice explaining the final cleanup plan adopted for Operable Unit I was published and the final decision document was made available to the public in the Information Repository. A notice will also be placed announcing the cleanup plan for Operable Unit II. Notices or advertisements also will be published to announce all public meetings sponsored by U.S. EPA.

5.12 PUBLIC MEETING TRANSCRIPT

When the public hearing was held during the public comment period on the recommended alternative for Operable Unit I, a verbatim transcript was taken. The transcript was placed in the Information Repository. If a public hearing is held during the public comment period on the recommended cleanup alternative for Operable Unit II, a verbatim transcript will also be taken and placed in the Repository.

5.13 RESPONSIVENESS SUMMARY

All comments received during the public comment period on Operable Unit I were addressed in a document called a **Responsiveness Summary**. This report is required by Superfund as part of the ROD. The ROD for

This document was prepared by Roy F. Weston, Inc. expressly for EPA. It shall not be released or disclosed in whole or in part without the express, written permission of EPA.

Operable Unit I was signed on June 19, 1998. The ROD was placed in the site Information Repository. A Responsiveness Summary, in response to comments received during the public comment period on the cleanup plan for Operable Unit II, will also be developed.

5.14 ASSIST IN THE ACTIVITIES OF A COMMUNITY ADVISORY GROUP (CAG)

One of the ways communities can participate in site cleanup decisions is by forming a Community Advisory Group (CAG). A CAG is made up of representatives of diverse community interests. Its purpose is to provide a public forum for community members to present and discuss their needs and concerns related to the Superfund decision-making process. CAGs offer U.S. EPA a unique opportunity to hear – and respond to – community preferences for site cleanup activities. The existence of a CAG also does not eliminate the need for U.S. EPA to keep the general community informed about plans and decisions throughout the Superfund process. The community, with U.S. EPA's assistance, establishes a Superfund site's CAG. In the Proposed Plan for Operable Unit I, Dave O'Rourke, the City Manager, requested that citizens interested in being a member of the CAG contact him. A CAG for the North Bronson Industrial Area Site was set up in 1997.

5.15 REVISE THE COMMUNITY INVOLVEMENT PLAN

Through the various means of communication and interaction previously listed, U.S. EPA is noting changes in community concerns, information needs and activities, and is currently modifying the original CIP from 1992 by developing this Revised Community Involvement Plan as necessary to respond to those changes.

5.16 PROGRAM EVALUATION

At key milestones during the cleanup, U.S. EPA Region 5 may evaluate the effectiveness of the community involvement program for the North Bronson Industrial Area Site. These milestones may include the completion of the cleanup phase. Questionnaires or other evaluation tools may be designed to assess the effectiveness of public meetings, fact sheets, and other activities in conveying information and encouraging citizen participation.

This document was prepared by Roy F. Weston, Inc., expressly for EPA. It shall not be released or disclosed in whole or in part without the express, written permission of EPA.

6. SCHEDULE AND TIMELINE

Community involvement activities at the North Bronson Industrial Area Site will be conducted by: Rosita Clarke, U.S. EPA Region 5 Remedial Project Manager; and Cheryl Allen, U.S. EPA Region 5 Community Involvement Coordinator. Community involvement activities may be implemented to coincide with the technical milestones as presented in Figure 3 and Figure 4.

Figure 3
Community Involvement Timeline
For Operable Unit I
North Bronson Industrial Area Superfund Site
Bronson, Michigan

Community Involvement Activities	Technical Milestones for OU I			
	Remedial Design	Prior to Remedial Action	Remedial Action	Upon Completion of Remedial Action
1. Contact with Officials	---------- as needed ----------			
2. Contact with Residents	---------- as needed ----------			
3. Information Repository	---------- update as needed ----------			
4. Assist in CAG Activities	---------- as needed ----------			
5. News Releases	X	X	X	X
6. Fact Sheets/Update Reports	X	as needed	as needed	X
7. Public Meetings	X			X
8. Published Notices	X			X

NOTE: A broken line (---------) indicates continuous activities

This document was prepared by Roy F. Weston, Inc., expressly for EPA. It shall not be released or disclosed in whole or in part without the express, written permission of EPA.

Figure 4
Community Involvement Timeline
For Operable Unit II
North Bronson Industrial Area Superfund Site
Bronson, Michigan

Community Involvement Activities	Technical Milestones for OU II			
	Remedial Investigation	Feasibility Study	Proposed Plan	Selection of Cleanup Remedy
1. Contact with Officials	---------- as needed ----------			
2. Contact with Residents	---------- as needed ----------			
3. Information Repository	---------- update as needed ----------			
4. Assist in CAG Activities	---------- as needed ----------			
5. News Releases	X	X	X	X
6. Fact Sheets/Update Reports	X	as needed	X	as needed
7. Public Meetings	X		X	
8. Public Comment Period			X	
9. Published Notices	X		X	X
10. Public Meeting Transcript			X	
11. Responsiveness Summary			X	

NOTE: A broken line (---------) indicates continuous activities

This document was prepared by Roy F. Weston, Inc., expressly for EPA. It shall not be released or disclosed in whole or in part without the express, written permission of EPA

ATTACHMENT A

GLOSSARY

Antimony

A metal used in fire retardants, ceramics, electronics, fireworks, and solder. Exposure to antimony can cause skin and eye irritation. It is also a suspected cause of cancer.

Aquifer

A layer of rock, sand or gravel below the ground surface where all open spaces between rock or soil grains are filled with water. Aquifers can supply useable quantities of ground water through wells and springs.

Arsenic

An element of varying appearance found naturally in the environment. Arsenic has been used in the production of boric acid, pharmaceutical products, and pesticides. It is a by-product of copper and lead smelting. It is highly toxic by inhalation and ingestion, and is suspected to cause cancer in humans.

Baseline Risk Assessment

A study, based on the results of the Remedial Investigation, to determine the extent to which chemical contaminants found at a Superfund site pose a risk to public health and the environment.

Cadmium

A metal found in some ores that is commonly used to coat metals and as a paint additive. Cadmium is toxic, and can be fatal if contaminated dust or fumes are inhaled.

Cap

Layering with a material, such as clay or a synthetic material used to prevent rainwater from penetrating and spreading contaminated materials. A RCRA or municipal landfill type cap can substantially limit potential

This document was prepared by Roy F. Weston, Inc., expressly for EPA. It shall not be released or disclosed in whole or in part without the express, written permission of EPA.

skin contact with humans or animals. The cap also minimizes rainwater from infiltrating through the contaminated soils and sediments.

Chloroform

A nonflammable, very volatile organic chemical used as a solvent, as a cleansing agent, in fire extinguishers, and in the rubber industry.

Chromium

A metal used in the electroplating industry to protect against corrosion and in paints to help paint adhere to metal. Ingestion of high doses can cause hemorrhages of the digestive tract, while inhalation over a long period of time can cause lung and other respiratory cancers.

Community Advisory Group (CAG)

A CAG is made up of representatives of the community with diverse community interests. Its purpose is to provide a public forum for community members to present and discuss their needs and concerns related to the Superfund decision-making process.

Community Involvement Plan (CIP)

A plan that outlines specific community involvement activities that occur during the investigation and cleanup at the site. The CIP outlines how U.S. EPA will keep the public informed of work at the site and the ways in which citizens can review and comment on decisions that may affect the final actions at the site. The document is available in the site's Information Repository maintained by U.S. EPA.

Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA)

A Federal law passed in 1980 and modified in 1986 by the Superfund Amendments and Reauthorization Act (SARA). The Act created a special tax that goes into a trust fund, commonly known as Superfund, to investigate and clean up hazardous waste sites. Under the program, U.S. EPA can either:

- Pay for site cleanup when parties responsible for the contamination cannot be located or are unwilling or unable to perform the work; or

This document was prepared by Roy F. Weston, Inc., expressly for EPA. It shall not be released, or disclosed in whole or in part without the express, written permission of EPA.

- Take legal action to force parties responsible for site contamination to clean up the site or pay back the Federal government for the cost of the cleanup.

Consent Decree

A legal document, approved and issued by a judge, that formalizes an agreement reached between U.S. EPA and the PRPs where PRPs will perform all or part of a Superfund site cleanup.

1,2-Dichloroethene (1,2-DCE)

A clear, colorless, sweet-smelling, flammable volatile liquid used in such things as solvents, adhesives, lacquers, perfumes, plastic products, as a leaded-gas additive, and as a flame retardant in carpeting. It is toxic by inhalation, ingestion, and skin contact, and may cause cancer.

Emergency Response Action

If a site poses an immediate threat to public health or the environment, an emergency response action will be taken immediately to stop the threat.

French Drain

A drain system constructed of crushed rock or gravel and sand surrounding perforated pipes, which is used to drain and dispense wastewater.

Ground Water

Underground water that fills spaces in soil or between rocks. When ground water accumulates in significant quantities and quality, it may be used as a source of drinking water. Ground water is not being used for drinking water at the North Bronson Industrial Area Site.

Hazard Ranking System (HRS)

A system used by U.S. EPA to decide whether a site should be placed on the NPL. The score a site receives from the HRS compares the relative hazards for different sites, taking into account the impact the site has on ground water, surface water, and air, as well as the number of people potentially affected by contamination. Sites receiving a score of 28.5 or greater are proposed for the NPL.

This document was prepared by Roy F. Weston, Inc., expressly for EPA. It shall not be released, or disclosed in whole or in part without the express, written permission of EPA.

Heavy Metals

Metals such as lead, chromium, cadmium, and cobalt have often been used in the manufacture of pigments, inks, and paints. Heavy metals can be highly toxic at fairly low concentrations.

Leaching

Leaching refers to the movement of water downward through the soil. The water tends to dissolve and/or suspend some of the solid material from the soil and carries it through to the water table.

National Priorities List (NPL)

The official U.S. EPA list of top priority hazardous waste sites in the country that are eligible for investigation and cleanup under the Superfund program.

Nickel

A metal found throughout nature, and as a trace element in food and water, used in coins, batteries, ceramics, and stainless steel and other commercial grade metal. Exposure to low levels of nickel over long periods of time may cause cancer.

Operable Unit

A term used to describe a certain portion of a Superfund site. An operable unit may be established based on a particular type of contamination, contaminated media (such as soils or water), source of contamination, and/or geographical location.

Polychlorinated Biphenyls (PCBs)

PCBs are a family of organic compounds used since 1926 in electric transformers as insulators and coolants, in lubricants, carbonless copy paper, adhesives, and caulking compounds. PCBs are extremely persistent in the environment. PCBs can be stored in the fatty tissues of humans and animals. U.S. EPA banned the use of PCBs, with limited exceptions, in 1976. In general, PCBs are not as toxic in high short-term doses as some other chemicals, although severe and long-term exposure can cause liver damage. PCBs have also been found to cause cancer in laboratory animals.

This document was prepared by Roy F. Weston, Inc. expressly for EPA. It shall not be released, or disclosed in whole or in part without the express, written permission of EPA.

Potentially Responsible Parties (PRPs)

Individuals, businesses, or government agencies identified by U.S. EPA as potentially liable for the release or threatened release of contaminants at a Superfund site.

Present Worth Cost

The total cost of an alternative in term's of today's dollars, using a discount rate of 7%, and an operation and maintenance period of 30 years.

Proposed Plan

A document summarizing the cleanup alternatives U.S. EPA has considered for controlling contamination at a Superfund site. The Proposed Plan includes the alternative that U.S. EPA recommends for the particular site.

Public Comment Period

A time during which the public can review and comment on various documents and U.S. EPA actions. For example, a minimum 30-day comment period is held to allow citizens to review and comment on the final RI/FS and Proposed Plan.

Record of Decision (ROD)

A document issued after the Remedial Investigation/Feasibility Study (RI/FS) that describes the U.S. EPA's selected remedy for cleanup of a non-time critical site.

Remedial Investigation/Feasibility Study (RI/FS)

An investigation at a Superfund site to assess contamination and environmental problems, and to evaluate cleanup alternatives. The process consists of two distinct but related phases. The first phase is RI, which examines the nature and extent of contamination problems at the site. The second phase is the FS, which evaluates different methods to remediate, or cleanup the contamination problems found during the RI.

This document was prepared by Roy F. Weston, Inc., expressly for EPA. It shall not be released, or disclosed in whole or in part without the express, written permission of EPA.

Remedial Design/Remedial Action (RD/RA)

The RD is a phase of the Remedial Action that follows the Remedial Investigation/Feasibility Study and includes the development of engineering drawings and specifications for a site cleanup. The RA is the response actions that stop or substantially reduce a release or threatened release of hazardous substances that are a serious but not an immediate threat to public health.

Resource Conservation and Recovery Act (RCRA)

A federal law that regulates management and disposal of hazardous materials and wastes that are currently being generated, treated, stored, disposed, or distributed.

Responsiveness Summary

The section within the Record of Decision that summarizes comments received from the public during the public comment period, and provides U.S. EPA's responses to them.

Semi-Volatile Organic Compounds (SVOCs)

A group of chemical compounds which evaporate in air at a slower rate than volatile organic compounds. Many are suspected or known to cause cancer or other illnesses. Also known as semi-volatiles or semi-volatile organics.

Slurry Wall

A barrier used to contain the flow of contaminated ground water or liquids underneath the ground. Slurry walls are constructed by digging a trench around a contaminated area and filling the trench with an impermeable material that prevents water and other liquids from passing through.

Superfund

The commonly used term that describes the Federal legislation authorizing U.S. EPA to investigate and respond to the release or threatened release of hazardous substances into the environment. It is also know as CERCLA (Comprehensive Environmental Response, Compensation and Liability Act). In 1986, Superfund was reauthorized as SARA (Superfund Amendments and Reauthorization Act).

This document was prepared by Roy F. Weston, Inc., expressly for EPA. It shall not be released, or disclosed in whole or in part without the express, written permission of EPA.

Superfund Amendments and Reauthorization Act (SARA)

Modifications to CERCLA enacted on October 17, 1986.

Technical Assistance Grant (TAG)

The term is used in association with grants supported by various environmental laws, most notably U.S. EPA under SARA.

Trichloroethylene (TCE)

A chlorinated organic compound. A stable colorless liquid with a low boiling point. TCE is used as an industrial solvent and as a metal degreasing agent. TCE may be toxic when inhaled, ingested, or through skin contact can damage vital organs, especially the liver.

Vinyl Chloride

A gaseous substance which is used in the manufacture of plastics to make pipes, records, raincoats, floor tiles, food packaging, and as a propellant in aerosol containers. Health risks from exposure to high levels of vinyl chloride include liver and lung cancer, as well as cancer of the lymphatic and nervous system.

Volatile Organic Compounds (VOCs)

A group of organic compounds that are used in various industrial applications, such as solvents, degreasers, paints, thinners, and fuels, which evaporate very rapidly when exposed to air. Due to this tendency, VOCs disappear more rapidly from surface water than ground water. Since ground water does not usually come into contact with air. VOCs are not easily released and can be present for many years in the ground water used for drinking water. When present in drinking water, VOCs may pose a potential threat to human health. Also known as volatile organics or volatiles.

This document was prepared by Roy F. Weston, Inc., expressly for EPA. It shall not be released, or disclosed in whole or in part without the express, written permission of EPA.

ATTACHMENT B

LOCATIONS FOR INFORMATION REPOSITORIES AND PUBLIC MEETINGS

B.1 INFORMATION REPOSITORY

Bronson Public Library
207 N. Matteson
Bronson, MI 49028

Library Hours:

Monday	closed
Tuesday – Thursday	10:30 a.m. – 5:00 p.m.
Friday	10:30 a.m. – 4:00 p.m.
Saturday	9:00 a.m. to 12:00 p.m.
Sunday	closed

Contact: Carole Maddox (517) 369-3785
Branch Manager

B.2 PUBLIC MEETING FACILITIES

Bronson Theater
204 E. Chicago Street
Bronson, MI 49028
Capacity: 350 people

Contact: Dave O'Rourke (517) 369-7334
City Manager Fax: (517) 369-1457

This document was prepared by Roy F. Weston, Inc., expressly for EPA. It shall not be released or disclosed in whole or in part without the express, written permission of EPA.

ATTACHMENT C

LIST OF CONTACTS AND INTERESTED GROUPS

C.1 FEDERAL ELECTED OFFICIALS

Senator Carl Levin		(202) 224–6221
459 Russell Senate Office Building	Fax:	(202) 224-1388
U.S. Senate		
Washington, D.C. 20510		

District Office

124 West Allegan		(517) 377-1508
Room 1810	Fax:	(517) 377-1506
Lansing, MI 48933		

Senator Spencer Abraham		(202) 224-4822
329 Dirksen Senate Office Building	Fax:	(202) 224-8834
U.S. Senate		
Washington, D.C. 20510		

District Office

115 W. Allegan		(517) 484-1984
Room 820	Fax:	(517) 484-3099
Lansing, MI 48933		

Representative Nick Smith		(202) 225-6276
306 Cannon House Office Building	Fax:	(202) 225-6281
Washington, D.C. 20515		

This document was prepared by Roy F. Weston, Inc., expressly for EPA. It shall not be released or disclosed in whole or in part without the express, written permission of EPA.

District Office

110 First Street (517) 783-4486
Suite A Fax: (517) 783-3012
Jackson, MI 49201

C.2 STATE ELECTED OFFICIALS

Governor John Engler (202) 624-5840
444 North Capital Street, North West Fax: (202) 624-5841
Hall of the States, Suite 411
Washington, D.C. 20001

U.S. Mail

P.O. Box 30013 (517) 335-7858
Lansing, MI 48909 Fax: (517) 335-6863

Southeastern Michigan Office

1200 6th Street, 20th Floor (313) 256-1003
The Michigan Plaza Building Fax: (313) 256-1012
Detroit, MI 48226

Northern Michigan Office

540 West Kaye Avenue (906) 228-2850
Marquette, MI 49855 Fax: (906) 228-8347

Senator Philip E. Hoffman (517) 373-2426
705 Farnum Building Fax: (517) 373-2964
P.O. Box 30036
Lansing, MI 48909-7536

No District Office

This document was prepared by Roy F. Weston, Inc., expressly for EPA. It shall not be released or disclosed in whole or in part without the express, written permission of EPA.

Representative Steve Vear (517) 373-1794
Michigan House of Representatives Fax: (517) 373-6970
P.O. Box 30014
Lansing MI 48909-7514

No District Office

C.3 LOCAL OFFICIALS

C.3.1 Branch County

Bob Sargent (517) 639-8902
Chairman, County Board
515 Wildwood Road
Quincy, MI 49082

Ken Strong (517) 279-4310
Drain Commissioner Fax: (517) 279-2486
Branch County Courthouse
31 Division Street
Coldwater, MI 49036

Noel Wiley, R.S., M.P.H. (517) 279-9561
Environmental Health Director Fax: (517) 278-2923
Human Services Building
809 Marshall Road
Coldwater, MI 49036

Ken Carpenter (517) 369-9226
Supervisor
Bronson Township
1103 Carpenter Road
Bronson, MI 49028

This document was prepared by Roy F. Weston, Inc., expressly for EPA. It shall not be released or disclosed in whole or in part without the express, written permission of EPA.

Tina Kesslar (517) 369-9456
Clerk
Bronson Township
584 Bawden Road
Bronson, MI 49028

Richard G. Losinski (517) 369-3025
Treasurer
Bronson Township
158 E. McMahon Drive
Bronson, MI 49028

Charles Somerlott (517) 369-1492
Trustee
Bronson Township
988 Weaver Road
Bronson, MI 49028

C.3.2 City

City of Bronson Offices (517) 369-7334
141 S. Matteson Fax: (517) 369-1457
Bronson, MI 49028

Dave O'Rourke (517) 369-7334
Manager Fax: (517) 369-1457
207 Matteson Street
Bronson, MI 49028

This document was prepared by Roy F. Weston, Inc., expressly for EPA. It shall not be released or disclosed in whole or in part without the express, written permission of EPA.

Karen Smith (517) 369-7334
Clerk/Assessor Fax: (517) 369-1457
990½ Weaver Road
Bronson, MI 49028

Lori Buys (517) 369-7334
Administrative Assistant Fax: (517) 369-1457
71109 Aldrick Lake Road
Sturgis, MI 49091

Brent Wilber (517) 369-6475
Fire Chief
4391 Gilead Shores Drive
Bronson, MI 49028

Jim Eley (517) 369-6095
City Attorney Fax: (517) 369-2901
107 West Chicago Street
Bronson, MI 49028

Police Department

Dick Stout (517) 369-9083
Police Chief Fax: (517) 369-2901
4393 Beverly Drive
Coldwater, MI

This document was prepared by Roy F. Weston, Inc., expressly for EPA. It shall not be released or disclosed in whole or in part without the express, written permission of EPA.

Department of Public Works

Carl Ransbottom (517) 369-5555
Supervisor
992 ½ Weaver Road
Bronson, MI 49028

Gordon Bidwell (517) 369-5555
130 North Ruggles Street
Bronson, MI 49028

Phil Slisher (517) 369-5555
648 Bawden Road
Bronson, MI 49028

Frank Hyska (517) 369-5555
566 Kosmerick Road
Bronson, MI 49028

Tom Bidwell (517) 369-5555
150 McMahon Drive
Bronson, MI 49028

Water/Wastewater Treatment Plant

Charles Buckley (517) 369-5745
Superintendent
431 Matilda Street
Bronson, MI 49028

This document was prepared by Roy F. Weston, Inc., expressly for EPA. It shall not be released or disclosed in whole or in part without the express, written permission of EPA.

Don Robinson (517) 369-5745
Assistant Superintendent
399 Orland Road
Bronson, MI 49028

City Council Members

Leonard Kolcz (517) 369-4275
Mayor Fax: (517) 369-2113
City of Bronson
321 East Chicago Street
Bronson, MI 49028

Thomas Rissman (517) 369-4585
Vice-Mayor
City of Bronson
524 West Chicago Street
Bronson, MI 49028

Randy Ludwick (517) 369-6491
Councilman
Bronson City Council
140 West Corey Street
Bronson, MI 49028

Tony Rzepka (517) 369-8695
Councilman
Bronson City Council
118 Cynthia Street
Bronson, MI 49028

This document was prepared by Roy F. Weston, Inc., expressly for EPA. It shall not be released or disclosed in whole or in part without the express, written permission of EPA.

Leo Lehman (517) 369-1850
Councilman
Bronson City Council
227 North Ruggles Street
Bronson, MI 49028

C.4 U.S. EPA REPRESENTATIVES

Rosita Clarke (312) 886-7251
Remedial Project Manager Fax: (312) 353-4071
Office of Superfund (SR-6J) Email: clarke.rosita@epa.gov
U.S. EPA Region 5
77 West Jackson Blvd.
Chicago, IL 60604-3590

Cheryl Allen (312) 353-6196
Community Involvement Coordinator Fax: (312) 353-1155
Office of Public Affairs (P-19J) Email: allen.cheryl@epa.gov
U.S. EPA Region 5
77 West Jackson Blvd.
Chicago, IL 60604-3590

C.5 STATE OFFICIALS

Brendan Boyle (517) 335-8138
Program Manager Fax: (517) 335-9775
Michigan Department of Community Health
P.O. Box 30195 Email: boyleb@state.mi.us
Lansing, MI 48909

This document was prepared by Roy F. Weston, Inc., expressly for EPA. It shall not be released or disclosed in whole or in part without the express, written permission of EPA.

Deborah Larsen (517) 373-4825
State Project Manager Fax: (517) 335-4887
Michigan Department of Environmental Quality
Environmental Response Division Email: larsend@state.mi.us
Superfund Section
P.O. Box 30426
Lansing, MI 48909

C.6 MEDIA

C.6.1 Newspaper

Scott McGraw (517) 369-5085
Editor Fax: (517) 369-2225
"Bronson Journal"
113 W. Chicago
Bronson, MI 49028

Robert Jordan (517) 278-2318
"Daily Reporter" Fax: (517) 278-6041
15 W. Pearl Street
Coldwater, MI 49036

C.6.2 Radio

News Director (616) 345-2101
WKZO-AM Fax: (616) 345-1436
(Q106.5 FM, WKLZ1470 AM, WKZO590 AM, WNFN1660 AM)
4200 West Main Street
Kalamazoo, MI 49006

This document was prepared by Roy F. Weston, Inc., expressly for EPA. It shall not be released or disclosed in whole or in part without the express, written permission of EPA.

Mike Stiles (517) 279-9767
News Director Fax: (517) 279-4695
WMSH (1230 AM and 99.3 FM)
P.O. Box 7080
Sturgis, MI 49091

Peter Tanz (517) 279-9767
General Manager Fax: (517) 279-4695
WTVB-AM
174 North Angola Road
Coldwater, MI 49036

WLKI (FM 100) (219) 665-9554
U.S. Hwy 27 Fax: (219) 665-9064
North Angola, IN 46703

C.6.2 Television

News Director
WOTV (ABC, Channel 41) (616) 968-9341
5200 West Dickmen Road Fax: (616) 966-6837
Battlecreek, MI 49015

News Director
WOOD-TV (NBC, Channel 8) (616) 456-8888
120 College Avenue SE Fax: (616) 456-5757
Grand Rapids, MI 49503

News Director
WMT (CBS, Channel 3) (616) 388-3333
590 West Maple Street Fax: (616) 388-8228
Kalamazoo, MI 49008

This document was prepared by Roy F. Weston, Inc., expressly for EPA. It shall not be released or disclosed in whole or in part without the express, written permission of EPA.

C.7 LOCAL BUSINESSES AND ORGANIZATIONS

Bronson Precision Products		(517) 369-7361
404 Union Street	Fax:	(517) 329-2318
Bronson, MI 49028		

Bronson Plating Company		(517) 369-2885
135 Industrial Avenue	Fax:	(517) 369-9008
Bronson, MI 49028		

Geiger HG Manufacturing, Company		(517) 369-7357
416 Mill Street	Fax:	(517) 369-7139
Bronson, MI 49028		

Putnam Hitch Products, Inc.		(517) 369-2165
211 Industrial Avenue	Fax:	(517) 369-9319
Bronson, MI 49028		

Douglas Autotech Corporation		(517) 369-2315
300 Albers Road	Fax:	(517) 369-7217
Bronson, MI 49028		

Oak Prairie Farms		(517) 369-2341
182 North Matteson Lake	Fax:	(517) 369-2116
Bronson, MI 49028		

C.8 INTERESTED CITIZENS AND GROUPS

Coldwater and Branch County		(517) 278-5985
Chamber of Commerce	Fax:	(517) 278-8369
20 Division Street		
Coldwater, MI 49036		

This document was prepared by Roy F. Weston, Inc., expressly for EPA. It shall not be released or disclosed in whole or in part without the express, written permission of EPA.

Community Advisory Group

Susan Barricks 333 Taggart Road Bronson, MI 49028	No Phone
Judy Bertsch P.O. Box 152 Bronson, MI 49028	Home Phone: (517) 369-9452
Chuck Buckley 431 Matilda Bronson, MI 49028	Work Phone: (517) 369-5745 Home Phone: (517) 369-3105
Leo Lehman 227 North Ruggles Bronson, MI 49028	Home Phone: (517) 369-1850
Larry McConn 119 West Chicago Bronson, MI 49028	Work Phone: (517) 369-3261 Home Phone: (517) 369-5665
Scott McGraw P.O. Box 38 Bronson, MI 49028	Work Phone: (517) 369-5085 Home Phone: (517) 369-2120
Elmer Moffett 7 Foy CT. Bronson, MI 49028	Home Phone: (517) 369-9336

This document was prepared by Roy F. Weston, Inc., expressly for EPA. It shall not be released or disclosed in whole or in part without the express, written permission of EPA.

Bill Myers 211 Gilead Lake Road Bronson, MI 49028	Home Phone: (517) 369-1851
Letha Myers 143 State Bronson, MI 49028	Home Phone: (517) 369-1851
Dave O'Rourke 207 South Matteson Bronson, MI 49028	Work Phone: (517) 369-7331 Home Phone: (517) 369-3805
Tom Rissman 524 West Chicago Bronson, MI 49028	Work Phone: (517) 369-4585 Home Phone: (517) 369-1687
Nick Roussey 105 First Street Bronson, MI 49028	Home Phone: (517) 369-9443
Jim Schafer 281 East Grant Bronson, MI 49028	Home Phone: (517) 369-6025
Mr. and Mrs. Sosinski 406 Shaffmaster Bronson, MI 49028	Home Phone: (517) 369-9640
Louie Uhrig 762 West Colom Road Bronson, MI 49028	Work Phone: (517) 369-9096 Home Phone: (517) 369-5096

This document was prepared by Roy F. Weston, Inc., expressly for EPA. It shall not be released or disclosed in whole or in part without the express, written permission of EPA.

Stan Welch	Work Phone: (517) 369-2885
364 South Snow Prairie	Home Phone: (517) 369-1045
Bronson, MI 49028	
Len Kolcz	Work Phone: (517) 369-4275
321 East Chicago Street	Home Phone: (517) 369-4075
Bronson, MI 49028	Fax: (517) 369-2113

This document was prepared by Roy F. Weston, Inc., expressly for EPA. It shall not be released or disclosed in whole or in part without the express, written permission of EPA.