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CH2MHILL

October 25, 2000

Mr. Tony Rutter
Remedial Project Manager
U.S. Environmental Protection Agency
Remedial Response Branch (SR-6J)
77 West Jackson Boulevard
Chicago, IL 60604-3590

Dear Tony:

Subject: Site Management Plan
Penta Wood Products Site
Siren, Wisconsin
Work Assignment No. 101-RALR-05WE, Contract No. 68-W6-0025

Enclosed please find one copy of the Site Management Plan for the Penta Wood Products Site. Please feel free to call me if you have any questions or concerns.

Sincerely,

CH2M HILL

Regina Bayer
Site Manager

c: Stephen Nathan/PO/U.S. EPA, Region 5 (w/o enclosure)
Dave Alberts (Marshall McReynolds)/CO/U.S. EPA, Region 5 (w/o enclosure)
Tom Kendzierski/PM/WDNR (2 copies)
Ike Johnson/PM/CH2M HILL, Milwaukee
Dan Plomb/DPM/CH2M HILL, Milwaukee
Lauri Gorton, (Acting) QAM/CH2M HILL, Milwaukee
Phil Smith/RTL/CH2M HILL, Milwaukee
Cherie Wilson/AA/CH2M HILL, Milwaukee

SITE MANAGEMENT PLAN

PENTA WOOD PRODUCTS
Siren, Wisconsin

Long-Term Response Action

WA No. 101-RALR-05WE/Contract No. 68-W6-0025

October 25, 2000

Contents

Acronyms

ACZA	ammonia, copper II oxide, arsenate, and zinc
ASM	Assistant Site Manager
CAMU	Corrective Action Management Unit
CP	Contingency Plan
FSP	Field Sampling Plan
LNAPL	light non-aqueous phase liquid
LTRA	Long Term Response Action
mg/L	milligrams per liter
PCP	pentachlorophenol
POE	Point-of-entry
PPE	personnel protective equipment
ppm	parts per million
psi	pounds per square inch
PWP	Penta Wood Products
RCRA	Resource Conservation and Recovery Act
RI/FS	Remedial Investigation/Feasibility Study
ROD	Record of Decision
RTL	review team leader
SACM	Superfund Accelerated Cleanup Model
SM	Site Manager
SSC	Site Safety Coordinator
TSCA	Toxic Substance Control Act
USEPA	United States Environmental Protection Agency
WA	Work Assignment
WDNR	Wisconsin Department of Natural Resources
WDOJ	Wisconsin Department of Justice
WPDES	Wisconsin Pollutant Discharge Elimination System

SECTION 1

Site Management Plan

This technical report was originally prepared for the remedial action at the Penta Wood Products (PWP) site in accordance with Work Assignment No. 040-RDRD-05WE. It is being updated for the Long-Term Response Action (LTRA) under Work Assignment 101-RALR-05WE. The LTRA consists of operating and maintaining the bioventing and groundwater treatment system at the site.

Objective of the Site Management Plan

This plan includes the supporting plans required during LTRA activities, including:

- A Pollution Control and Mitigation Plan
- A Waste Management and Disposal Plan
- A Contingency Plan (CP) that discusses procedures to be used in the event of an accident or emergency at the site during LTRA activities

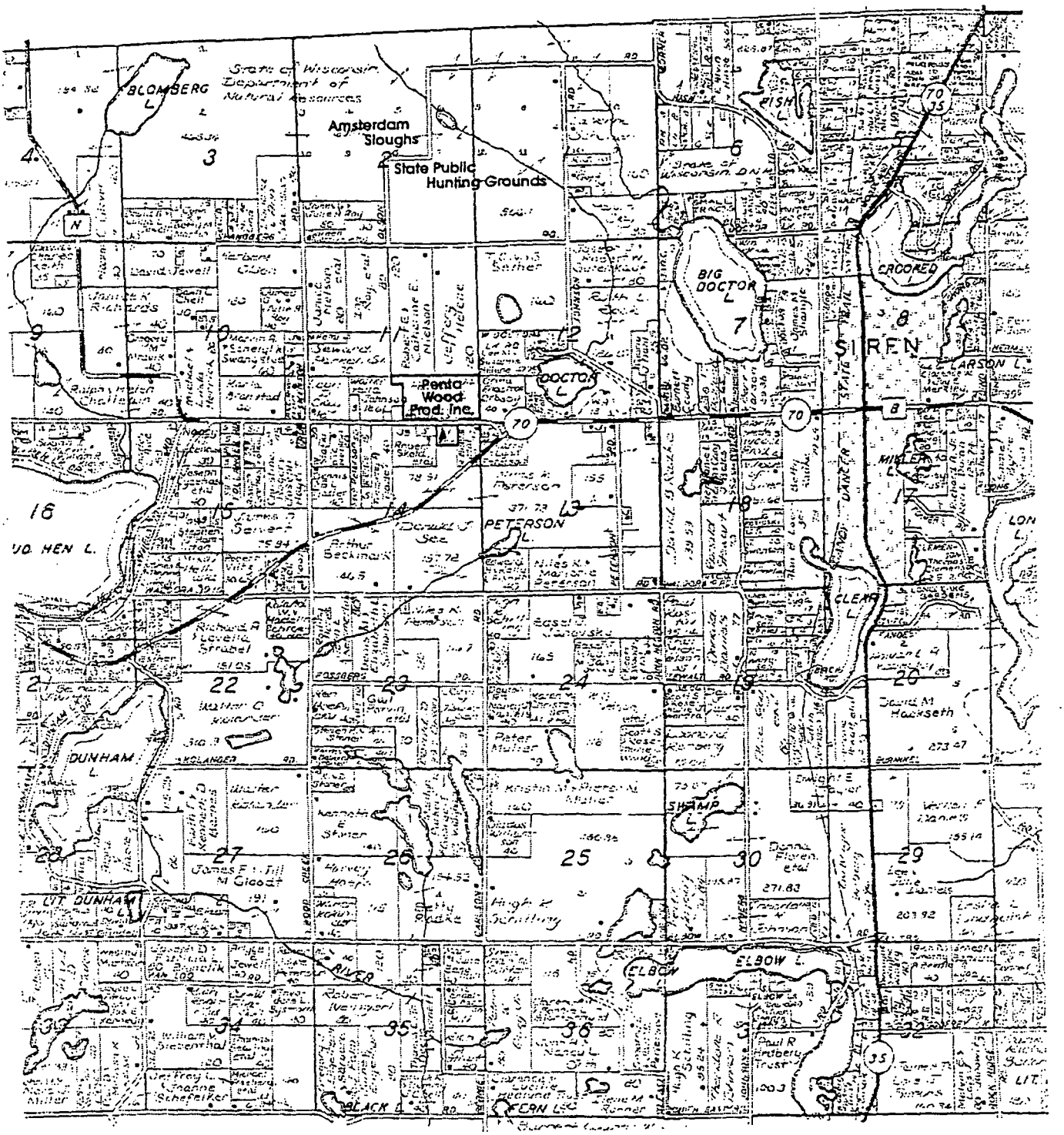
Site Description

The PWP site is an inactive wood treating facility located on Daniels 70 (former State Route 70) in Burnett County, Wisconsin (Figure 1). It is approximately 78 miles northeast of Minneapolis, Minnesota, and 60 miles south of Duluth, Minnesota. The Village of Siren, Wisconsin, is about 2 miles east of the site and there are three residences within 200 feet of the site using private wells.

The PWP property currently consists of approximately 82 acres that were actively used; 40 undeveloped acres consisting of forest were sold after the facility closed. The property is in a rural agricultural and residential setting and is bordered to the east, west, and north by forested areas. Some of these areas are classified by the State of Wisconsin as wetlands. With the exception of an 8-acre parcel, Daniels 70 forms the southern property boundary.

The PWP site is situated on a plateau with a 110-foot drop in elevation from the southern boundary to the northern boundary. The site stratigraphy consists of three layers: an upper sand, a glacial till that is not continuous throughout the site, and a lower sand. The depth to groundwater is over 100 feet on the plateau. Groundwater occurs both in a thin unconfined aquifer and within a multi-layered semiconfined aquifer system. The regional groundwater flow direction is to the north. Since the closing of the onsite production well, groundwater flow at the site has been radial, with a strong downward vertical gradient.

A number of surface water bodies are present north and east of the site. Doctor Lake and an unnamed lake are located 2,000 feet east and northeast of the site, respectively. Approximately 2,140 acres of lakes, 94 acres of bogs, and 7,500 acres of wetland are located within a 4-mile-radius of the site. A wetland is located within 130 feet of the northern property boundary.



NORTH

0 1

SCALE IN MILES

FIGURE 1
Site Location Map
Penta Wood Products Site
Site Management Plan

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The Amsterdam Slough Public Hunting area covers 7,233 acres and is located 1 mile north of the site. Attached Drawing A-1 shows the site and the remediation components.

Site History

PWP operated from 1953 to 1992. Raw timber was cut into posts and telephone poles and treated with either a 5- to 7-percent pentachlorophenol (PCP) solution in a No. 2 fuel oil carrier, or with a water borne salt treatment called Chemonite consisting of ammonia, copper II oxide, arsenate, and zinc (ACZA). During its 39 years of operation, PWP discharged wastewater from an oil/water separator down a gully into a lagoon on the northeast corner of the property (Figure 1). Process wastes were discharged onto a wood chip pile in the northwestern portion of the property. Ash from a boiler was used to berm a cooling pond. Beginning in the 1970s, Wisconsin Department of Natural Resources (WDNR) investigators noted several large spills, stained soils, fires, and poor operating practices.

PWP began an environmental investigation in 1987. In 1988 the onsite production well was closed for potable use when it was found to contain 2,700 µg/L of PCP. The State of Wisconsin Department of Justice (WDOJ) filed a preliminary injunction against PWP in 1991, citing Wisconsin Pollutant Discharge Elimination System (WPDES) violations and violations of other state statutes regarding storage of raw materials and waste handling practices. The facility voluntarily closed in May 1992 with the promulgation of the Resource Conservation and Recovery Act (RCRA) drip track regulations.

The site was put into the Superfund Accelerated Cleanup Model (SACM) pilot program, and a removal action was conducted by the United States Environmental Protection Agency (USEPA) from 1994 to 1996. The ACZA treatment building and half of the oil/water separator building were demolished and remaining chemicals and sludges were disposed offsite. Grossly PCP- and metals-contaminated soils were excavated and disposed offsite, and metals-contaminated soils were excavated and mixed onsite with cement to form a 3-acre concrete biopad. Emergency erosion control measures were taken in 1998 in an effort to reduce washout of contaminated wood debris from the lagoon wall into the wetlands.

CH2M HILL conducted a Remedial Investigation/Feasibility Study (RI/FS) in 1997-1998, culminating with the issuance of a Record of Decision (ROD) in September 1998. The ROD specifies that the selected remedial action for the site consists of soil and sediment consolidation and bioventing, light non-aqueous phase liquid (LNAPL) collection and disposal, groundwater collection and treatment in the LNAPL area, and monitored natural attenuation for the remainder of the groundwater plume. CH2M HILL performed remedial design activities between March and November 1999, and construction activities were completed under Work Assignment (WA) No. 049-RARA-05WE from March to September 2000. These activities included mobilization, demolition of existing structures and foundations, earthwork, contaminated soil excavation and consolidation, arsenic stabilization, bioventing and groundwater extraction and treatment system installation, construction of the infiltration basin, and erosion control measures.

Nature and Extent of Contamination

As a result of spills and past waste handling practices at the site, subsurface soils to a depth of over 100 feet are contaminated with a PCP/oil mixture beneath the gully where wastewater was discharged from an oil/water separator to a lagoon. Over the years, PWP filled erosion gullies with wood debris. This wood debris layer is semi-saturated with the PCP/oil mixture. The PCP/oil mixture, which has traveled to the groundwater and spread horizontally as a LNAPL layer, is in equilibrium with pore pressures and is not expected to continue spreading. An LNAPL of PCP/oil is floating on the water table over an estimated 4-acre area.

A dissolved phase PCP plume exists in the groundwater and appears to be stable. PCP concentrations in groundwater have been monitored at the site since 1988, and some of the wells have 11 rounds of sampling data. PCP groundwater concentrations have shown consistent declines at the majority of monitoring wells over time, with the exception of the wells within the LNAPL area. There is a general decrease in the size of the PCP plume, and the total contaminant mass of PCP in the saturated zone has declined since 1994. There is no evidence of contaminated groundwater discharging to the wetland or migrating below the wetland to surface water bodies.

Additional evidence that PCP is biodegrading in groundwater is supported by the natural attenuation parameter data. The groundwater is under anaerobic conditions in both the unconfined and semiconfined aquifer in the LNAPL plume area. The anaerobic plume is not expanding, which is important because aerobic biodegradation has a faster decay rate than anaerobic biodegradation; therefore, biodegradation should be capable of preventing the further expansion of the plume.

The northern lagoon wall collapsed and overland transport of oil saturated soil and wood debris resulted in sediment and surface water contamination in an offsite wetland.

Wastewater was discharged into a ravine filled with wood chips. Despite elevated levels of PCP and total petroleum hydrocarbon (TPH) detected in the wood chips, the soil, and groundwater below the wood chip pile appear to be minimally impacted. The wood chips appeared to have retained the contamination.

Surficial soils were contaminated with arsenic. The metals-contaminated soil was mainly around the treatment building and on the eastern portion of the site where ACZA-treated wood was stored. Surficial soil PCP contamination that existed along the gully corridor and in hot spots near the rail tracks, treatment cylinder, and areas used to store the treated wood have been consolidated into a Corrective Action Management Unit (CAMU).

Description of Work

The ROD specifies that the selected remedial action for the site consists of soil and sediment consolidation and bioventing, LNAPL collection and disposal, groundwater collection and treatment in the LNAPL area, and monitored natural attenuation for the remainder of the groundwater plume. The selected remedy focuses on removing free phase LNAPL and the

grossly contaminated groundwater while slowly drawing down the water table and enhancing natural biodegradation of the soils above the LNAPL by bioventing (adding air to the soils above the water table). PCP/fuel oil contaminated soils, wood chips, and sediments were consolidated in a designated CAMU, mixed with the shallow layer of wood debris/soil, and covered. Bioventing wells were installed in this area of the CAMU and air will be blown into the subsurface soils. Near-surface arsenic/metals contaminated soil were segregated where possible; highly contaminated soils were solidified in cement and placed onsite in a separate area of the CAMU.

The overland transport of contaminated site materials through a collapsing lagoon wall to an adjacent wetland was eliminated with reconstruction of the slope, regrading of the site for surface water runoff control, and reestablishing vegetation. The natural degradation of contaminants that is occurring in the groundwater plume will be monitored. If monitoring detects that offsite receptors are threatened, or if the remedy fails to effectively reduce the contaminants mass within a reasonable amount of time, contingency plans will be implemented.

The major components of the LTRA consist of:

- Operating and maintaining the groundwater treatment facility and bioventing treatment system.
- Sampling and analyzing the influent to and effluent from the groundwater treatment facility to monitor process performance and ensure compliance with discharge requirements.
- Measuring groundwater levels in the groundwater monitoring wells to verify capture of the grossly-contaminated plume and exposure of the light non-aqueous phase layer (LNAPL) smear zone.
- Sampling and analyzing groundwater monitoring well samples to track the extent of contamination and monitor cleanup.
- Sampling and analyzing soil gas and soil samples to monitor oxygen uptake and contamination reductions in soils resulting from bioventing system operation.
- Sampling and analyzing residential well samples to confirm that contaminants do not extend to drinking water wells.

Project Organization and Responsibility

The organizational structure of the construction team is shown in Figure 2. Key parties of the organization include the USEPA, WDNR, the contractor, and subcontractors.

USEPA

The USEPA is ultimately responsible for all activities at the facility related to the LTRA. The USEPA also has the authority to accept or reject quality assurance plans, reports, and recommendations of the contractor.

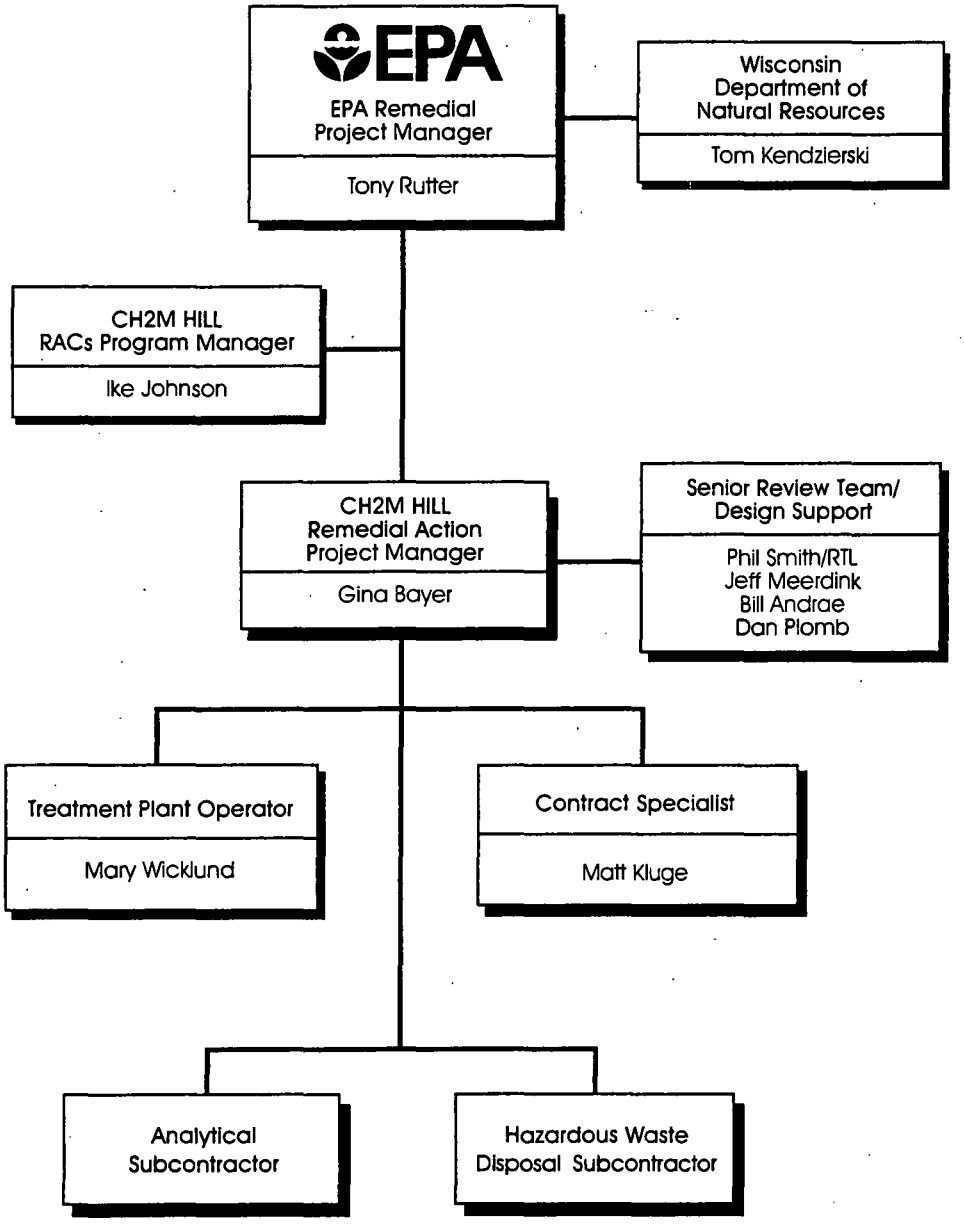

FIGURE 2
Team Organization
Penta Wood Products Site
Site Management Plan

CH2M HILL Site Manager

The CH2M HILL Site Manager (SM) is responsible for implementing the project and is authorized to commit resources to meet project objectives and requirements. The SM's primary function is to achieve technical, financial, and scheduling objectives. The SM will report directly to the USEPA Region 5 WAM during the LTRA and will be the major point of contact for matters concerning the project. The SM is in direct communication with all field leaders and support staff. The SM will visit the site on an as-needed basis. More specifically, the SM will:

- Define project objectives and develop a detailed work plan and schedule.
- Establish project policy and procedures to address the specific needs of the project as a whole, as well as the objectives of each task.
- Acquire and apply technical and corporate resources to meet budget and schedule constraints.
- Orient field leaders and support staff with regard to the project's special considerations.
- Monitor and direct other team members.
- Develop and meet ongoing project or task staffing requirements, including mechanisms to review and evaluate each task product.
- Review the work performed on each task to ensure quality, responsiveness, and timeliness.
- Review and analyze overall task performance with regard to planned schedule and budget.
- Review external reports (deliverables) before submission to USEPA Region 5.
- Represent the project team at meetings and public hearings.
- Supervise CH2M HILL staff and assist them in resolving project-related issues that cannot be adequately resolved at a lower level.

CH2M HILL Review Team Leader

The role of the review team leader (RTL) is to support the SM in site management activities and to coordinate CH2M HILL internal reviews. The RTL will also be involved in ongoing planning activities. Phil Smith is the RTL for the LTRA.

CH2M HILL Contract Specialist

CH2M HILL's RAC Program APM-ADMIN is responsible for the contract documents created in support of LTRA activities. Specific responsibilities include the following:

- Contracting the analytical laboratories.
- Contracting the subcontractors.
- Resolving any contract disputes.

CH2M HILL's contract specialist is Matt Kluge.

Resident Plant Operator

CH2M HILL will provide a part-time resident plant operator who will be directly responsible to the SM. Specific responsibilities include the following:

- Operate and perform routine maintenance of the groundwater treatment facility and bioventing system.
- Collect influent and effluent samples of the groundwater treatment system.
- Collect samples of LNAPL waste samples prior to disposal.
- Collect carbon and activated clay samples prior to change-out and disposal.
- Participate in quarterly groundwater sampling, including measuring groundwater levels, taking field parameter measurements, purging and collecting groundwater samples from monitoring wells, and collecting residential well samples.
- Respond to security and operational alarms as needed.
- Perform inspection of the erosion and water control features of the site on a periodic basis, after major storm events, and during quarterly groundwater sampling. Areas needing attention and repair will be documented, and persistent problem areas will be noted.
- Maintain written documentation of operational and sampling activities.

Sample Team

CH2M will provide a sample team to support quarterly groundwater sampling. The team will be directly responsible to the SM. Specific responsibilities include the following:

- Mobilization/demobilization of personnel and equipment to and from the site.
- Measurement of groundwater elevations in the monitoring well network.
- Purging the necessary volume of groundwater to assure that representative conditions exist before samples are collected. Purge water will be containerized and properly disposed of in an approved manner that is protective against cross contamination to the site.
- Collection and shipment of samples from designated monitoring well and residential well locations. Purging and sampling techniques, documentation, and shipping, will be consistent with the LTRA Quality Assurance Project Plan (QAPP).
- Providing written documentation of field parameters, sample dates/times, appearance and odor of the sample, weather conditions, health and safety issues, and any noteworthy conditions observed onsite.
- Assisting with the inspection of the condition and effectiveness of the erosion and water control features of the site.

SECTION 2

Erosion and Surface Water Control Plan

Erosion and Surface Water Control

Safeguards have been implemented to minimize soil erosion, offsite migration, and surface water impacts throughout implementation of the LTRA.

Mulch, topsoil, and erosion control blankets were placed where required. Fertilizing and revegetation (grasses and trees) were conducted to allow establishment of permanent vegetation over all disturbed areas.

Stormwater interceptor ditches or berms have been constructed along the perimeter and within the boundaries of the historically active site. Ditches within the site have been located close to each other to intercept overland sheet flow prior to channelization of this flow and formation of rills and gullies. These ditches have been lined with erosion matting or riprap to reduce erosion of the ditch lining, and will contain rock check-dams at regular intervals to trap mobilized settlement. These ditches will intercept sheet flow from the site and transport this flow to engineered stormwater downchutes and settling basins prior to offsite discharge.

Two stormwater downchutes have been constructed to transport water collected from the interceptor ditches down the steep slope on the northern edge of the active site. These downchutes have been constructed of large rip-rap in gabion baskets, cased with concrete to eliminate erosion of the downchute lining. Each has been constructed with a riprap/gabion energy dissipation basin at the downstream end to minimize scour from the concentrated water flow.

Three settling basins have been constructed along the surface water collection system, one at the upstream end of each downchute, and one directly upstream of the offsite discharge point. These basins will slow down the flow of water such that suspended solids will settle from the discharge.

Since vegetation is the primary erosion control mechanism, it will be visually inspected at the beginning and end of each growing season for locations experiencing increased erosion or decreased vegetation. The primary focus for erosion control will be the downchutes and CAMU areas. Erosion control at the rest of the site will be monitored and repaired only if the erosion will negatively impact the long-term performance of the CAMU or offsite properties at levels beyond what would be expected for the final land use. Repairs will be made to prevent water from ponding on the CAMU cover. Remedies to correct problem areas may include physical restoration, drainage enhancement through excavation, and reseeding or placement of erosion matting. The downchutes will be visually inspected for damage and functionality on an annual basis. Maintenance activities may include the rock placement as the gabions settle and the gabion mesh deteriorates.

SECTION 3

Waste Management and Disposal Plan

Process Wastes

Granular activated carbon (GAC), spent activated clay, and spent bag filters (stored in drums) will be disposed of at a RCRA Subtitle C TSD facility in accordance with RCRA regulations.

Recovered LNAPL from the oil/water separator will be stored and disposed of in accordance to RCRA regulations.

Used oil from the air compressor will be disposed of at an oil recycling facility.

Miscellaneous Wastes

Solid Waste

Solid waste will be generated during the LTRA consisting of used personnel protective equipment (PPE) (gloves, booties), used sampling equipment (bailers, bailer line), plastic sheeting, and broken or unused sample containers (some with preservatives). These wastes will be containerized and disposed of offsite.

Liquid Waste

Purgewater from monitoring well sampling will be held in spill-proof containers and transported to the treatment plant for disposal (it will be pumped into the oil/water separator) where it will be treated onsite in the groundwater treatment system.

SECTION 4

Contingency Plan

Emergency Response Plan

Pre-Emergency Planning

The Site Safety Coordinator (SSC) will perform the applicable pre-emergency planning tasks before starting field activities:

- Locate nearest telephone to the site and inspect onsite communications.
- Locate chemical, safety, and biological hazards.
- Confirm and post emergency telephone numbers and map of route to hospital.
- Post site map marked with locations of emergency equipment and supplies.
- Review emergency response plan for applicability to any changes in site conditions, alterations to onsite operations, or personnel availability.
- Designate one vehicle as an emergency vehicle. Place hospital directions and map inside. Keep keys accessible during field activities.
- Inventory and check site emergency equipment and supplies.
- Review emergency procedures for personnel injury, exposures, fires, explosions, and chemical and vapor releases with field personnel.
- Locate onsite emergency equipment and supplies of clean water.
- Verify local emergency contacts, hospital routes, evacuation routes, and assembly points.
- Drive route to hospital.
- Review names of onsite personnel trained in first aid and CPR.
- Review notification procedures for contacting CH2M HILL's medical consultant and team member's occupational physicians.
- Brief new workers on the emergency response plan.

Emergency Equipment and Supplies

The SSC will mark the locations of the following emergency equipment on the site map and post the site map in the support zone:

- 20-lb ABC fire extinguisher
- Industrial first aid kit

- Facility emergency equipment
- Additional emergency equipment
- Nearest phone

Emergency Medical Treatment

The SSC will assume charge during a medical emergency until the ambulance arrives or the injured person is admitted to the emergency room. The following procedure will be implemented:

- Prevent further injury.
- Initiate first aid and CPR.
- Call the ambulance and hospital.
- Determine if decontamination will make injury worse.
- Make certain that injured person is accompanied to emergency room.
- Notify the SM of the injury.
- Notify the CH2M HILL District or Regional Health and Safety Manager.
- Notify the injured person's human resources department.
- Prepare an incident report to be submitted to the CH2M HILL Corporate Director of Health and Safety and the CH2M HILL Corporate Human Resources Department within 48 hours.

Evacuation

- Evacuation routes will be designated by the SSC before beginning work.
- Onsite and offsite assembly points will be designated before beginning work.
- An air horn will be used for the emergency signal.
- Personnel will exit the work area and assemble at the onsite assembly point upon hearing the emergency signal for evacuation.
- The SSC and a "buddy" will remain onsite after the site has been evacuated (if possible) to assist local responders and advise them of the nature and location of the incident.
- The SSC will account for all personnel in the onsite assembly zone.
- A person designated by the SSC (before work) will account for personnel at the offsite assembly area.
- The SSC is to write up the incident as soon as possible after it occurs and submit a report to the CH2M HILL Corporate Director of Health and Safety.

Emergency contacts and emergency notification procedures are presented on the attached forms. These forms will be posted in the field trailer for quick and easy access in the event of an emergency.

First Aid Medical Information

One person who is trained in first aid and CPR will be onsite during work hours. The SSCs are trained in first aid and CPR and will be responsible for first aid during emergencies. The SSCs will review the names of trained personnel and note them at the health and safety briefings and will designate a trained individual for those occasions when he or she is not onsite.

In the event of an emergency, the information noted on the Emergency Response Numbers form will be provided to the emergency response provider.

Route to Hospital

Written/verbal directions to the nearest hospital, Burnett Medical Center, are as follows.

1. Leave the site and turn right (head west) on Highway Daniels 70.
2. After 3.5 miles, Daniels 70 joins State Highway 70.
3. After 9.7 miles (in Grantsburg), turn right on Highway 48/87 and go one block to St. George Avenue.
4. Turn left on St. George Avenue (long block).
5. Hospital will be on the left.

Total distance: 13.5 miles

Travel time: 15 minutes

Emergency Numbers

Emergency Service	Address	Telephone
Ambulance	Frederic Ambulance Service	911
	Frederic, WI 54837	715-327-4430
Hospital	Burnett Medical Center	715-463-5353
	257 W St. George Ave	
	Grantsburg, WI 54840-7827	
County Sheriff	7410 County Road K # 122	911.
	Siren, WI 54872-9067	715-349-2121
Fire Department	Siren Fire Hall	911
	7732 State Road 70	517-681-3111
	Siren, WI 54872-8223	
Poison Control Center		800-343-2722
Gas Company	Wisconsin Gas Company	800-242-4035
Electric Company	Northwestern Wisconsin Electric	715-463-5371
	104 S Pine St	
	Grantsburg, WI 54840-7926	
Water Department	Siren Water Utility	715-349-2493
	7660 Cape St	After hours:
	Siren, WI 54872-8318	715-349-2416
Chemtree		800-424-9300
National Spill Response Center		800-424-8802
USEPA Emergency Response Team		908-321-6660

When calling 911 be prepared to answer the following questions:

Who: Penta Wood Products Site
Where: 8682 Daniels 70 (Former State Road 70)
Siren, WI 54782

How many are injured?

Describe the type of injuries/illnesses and first aid being administered.

An individual must meet the emergency vehicle at the site entrance to direct emergency personnel to the victim(s).

Emergency Notification Procedure

An emergency can be an injury to a worker, an evacuation, fire, etc. An unusual situation could involve equipment failures, work that is not being performed appropriately, or

anything involving risk or exposure to the public. If an emergency or unusual situation should come to the attention of an onsite worker, it is their responsibility to notify others of the situation. If an emergency or unusual situation occurs, emergency services will be notified, followed by notification to the CH2M HILL Site Manager or Construction Manager as soon as conditions allow.

Name	Work Telephone	Home Telephone
Gina Bayer, Site Manager	(414) 272-2426	(920) 727-4717

If the CH2M HILL Site Manager cannot be reached, notify one of the following:

Name	Work Telephone	Home Telephone
Mary Wicklund, Resident Plant Operator	(715) 349-8357	(715) 463-3419

Calling must continue until one of the above persons has been notified of the situation. The facts of the matter, status of emergency services, effect on the public, and any other pertinent information will be identified.

Communication with members of the press will be through Tony Rutter/USEPA. His work telephone is (312) 886-8961.

Spill Reporting

All spills will be documented in the field notes and reported in the daily CQC reports. A spill report will be prepared that will include:

- Description of the material spilled (including identity and quantity).
- Whether the amount is USEPA or state reportable including when and to whom it was reported.
- Time, location, and a description of the area involved.
- Receiving stream or waters.
- Cause of the incident, equipment, and personnel involved.
- Injuries or property damage.
- Containment procedures initiated.
- Summary of contact with government agencies, contracting officer, engineer, or owner.
- Description of the cleanup procedures employed or to be employed including the disposal location of contaminated material.

Attachments

N

0 100 200 300
SCALE IN FEET

N 2200
N 2000
N 1800
N 1600
N 1400
N 1200
N 1000
N 800
N 600
N 400

E -400
E -200
E 0
E 200
E 400
E 600
E 800
E 1000
E 1200
E 1400
E 1600
E 1800
E 2000
E 2200
E 2400
E 2600

APPROXIMATE PROPERTY BOUNDARY

CAMU BOUNDARY

INFILTRATION BASIN AND LEACH FIELD

MW-26
N 1682.23
E 599.17

WELL NEST 11
N 1567.53
E 1679.22

WELL NEST 02
N 1300.71
E 1399.65

WELL NEST 03
N 1169.67
E 1300.48

WELL NEST 10
N 1082.06
E 1387.28

SOIL GAS WELL NEST 04
N 1257.63
E 1460.36

WELL NEST 05
N 1159.90
E 1569.75

PROPOSED TREATMENT BUILDING

WELL NEST 04
N 1015.75
E 1188.29

SOIL GAS WELL NEST 05
N 1074.92
E 1510.58

WELL NEST 06
N 1011.23
E 1480.39

BIOVENTING WELL 08
N 830.11
E 1090.06

SOIL GAS WELL 22
N 799.96
E 997.68

BIOVENTING WELL 09
N 760.03
E 879.67

1000 ug/L 1997

1997 ND

SOIL GAS WELL NEST 06
N 891.59
E 1487.57

WELL NEST 07
N 860.22
E 1370.30

SOIL GAS WELL NEST 07
N 917.80
E 1222.85

TARGET GROUNDWATER COLLECTION AREA

TARGET LNAPL RECOVERY AREA

TARGET BIOVENTING AREA

1997 PCP NON-DETECT CONTOUR

Attachment A-1
SITE PLAN
SITE MANAGEMENT PLAN

CH2MHILL

HERCULES/PROJ/EPA/151745-PENTAWOOD/CAD/DRAWINGS/CONSTDOCS/FIGUREA-1.dlv