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# **Superfund Record of Decision:**

## **Union Scrap Iron Metal, MN**

<b>REPORT DOCUMENTATION PAGE</b>		1. REPORT NO. EPA ROD/R05-90/149	2.	3. Recipient's Accession No.
4. Title and Subtitle SUPERFUND RECORD OF DECISION Union Scrap Iron Metal, MN First Remedial Action - Final			5. Report Date 03/30/90	
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			11. Contract(C) or Grant(G) No. (C) (G)	
12. Sponsoring Organization Name and Address U.S. Environmental Protection Agency 401 M Street, S.W. Washington, D.C. 20460			13. Type of Report & Period Covered 800/000	
			14.	
15. Supplementary Notes				
16. Abstract (Limit: 200 words)  The Union Scrap Iron Metal site is a vacant industrial property in Minneapolis, Hennepin County, Minnesota. The site overlies an alluvial aquifer. Surrounding land use is primarily industrial and commercial, with adjacent residential areas. From the early 1970s until 1983, the site was used as a processing facility for used batteries and scrap metal. Batteries were crushed and recyclable materials were sorted. Several piles of crushed battery casings and electrical equipment were present onsite at various times. Intermittent investigations conducted from 1980 to 1987, identified contaminated soil onsite as a result of these processing activities. In 1987, a potentially responsible party removed 773 tons of battery casing material from the site. Two subsequent EPA removal actions in 1988 included the excavation and offsite disposal of onsite contaminated soil, an underground storage tank, debris, a concrete pad and an onsite building. A 1989 to 1990 remedial investigation determined that prior removal actions were effective in eliminating contaminated onsite soil and waste, and the low level ground water contamination does not pose any threat to public health. Therefore, there are no contaminants of concern affecting this site.  (See Attached Page)				
17. Document Analysis a. Descriptors Record of Decision - Union Scrap Iron Metal, MN First Remedial Action - Final Contaminated Media: None Key Contaminants: None  b. Identifiers/Open-Ended Terms          c. COSATI Field/Group				
18. Availability Statement		19. Security Class (This Report) None	21. No. of Pages 30	
		20. Security Class (This Page) None	22. Price	

EPA RUC - 6-11-14  
Upper Grand Iron Metal, MN  
First Remedial Action - Final

Abstract (Continued)

The selected remedial action for this site is no further action. Previous site removal activities have reduced onsite contaminant levels to below background or EPA health-based levels.

PERFORMANCE STANDARDS OR GOALS: Not applicable.

RECORD OF DECISION DECLARATION "

SITE NAME AND LOCATION

Union Scrap - 1608 Washington Avenue North  
Minneapolis, Hennepin County, Minnesota

STATEMENT OF BASIS AND PURPOSE

This decision document presents the selected remedial action for the Union Scrap Site (Site) in Minneapolis, Minnesota, developed in accordance with the Comprehensive Environmental Response, Compensation and Liability Act of 1980 (CERCLA), as amended by the Superfund Amendments and Reauthorization Act of 1986 (SARA), the Minnesota Environmental Response and Liability Act of 1983 (MERLA) and to the extent practicable, the National Oil and Hazardous Substances Pollution Contingency Plan (40 CFR Part 300, 1990). This decision document explains the factual and legal basis for selecting the remedy for this Site.

This decision is based on the administrative record for this Site. The index of the administrative record is attached.

The State of Minnesota and the U.S. Environmental Protection Agency (EPA) each and independently, concur and adopt the selected remedy.

DESCRIPTION OF SELECTED REMEDY: NO ACTION

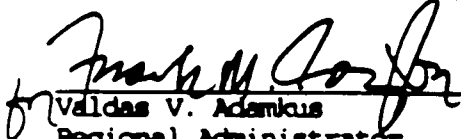
The results of the Remedial Investigation (RI) show that the excavations conducted by the EPA in 1988 were effective in removing contaminated soil and that there is not a significant source or amount of contaminated soil at the Site. Concentrations of contaminants found in the ground water, that originate at the Site, are below any applicable or relevant and appropriate requirement (ARAR's) and do not pose significant health or environmental risks. The selected remedy is that "no further action" be taken by the Minnesota Pollution Control Agency (MPCA) Site Response Section and the EPA Office of Superfund at the Site. Contaminants found to be originating from off-site sources will be followed up by the MPCA's Underground Storage Tank (UST) program and Preliminary Assessment/Site Inspection program.

DECLARATION STATEMENT

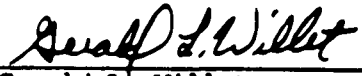
The selected remedy of "no action" is protective of human health and the environment, complies with Federal and State requirements that are legally applicable or relevant and appropriate to the remedial action, and is cost effective.

This remedy is a permanent solution and alternative treatment technologies are not needed.

Because this remedy will not result in hazardous substances remaining on-site above health-based levels, the five year review will not apply to this action.

  
Valdas V. Adamkus  
Regional Administrator  
U.S. Environmental Protection Agency

3/30/90  
Date

  
Gerald L. Willet  
Commissioner  
Minnesota Pollution Control Agency

March 23, 1990  
Date

Record of Decision  
Summary of Remedial Alternative Selection

Union Scrap Site  
Minneapolis, Hennepin County, Minnesota

I. SITE LOCATION AND DESCRIPTION

The Union Scrap site (Site) is located at 1608 Washington Avenue North, Minneapolis, Minnesota. It is on the northeast corner of the intersection of Washington Avenue North and 16th Avenue North. The Site is located in the southwest 1/4, Section 15, T29N, R24W. It is approximately 1,200 feet west of the Mississippi River and one mile north/northwest of downtown Minneapolis (Figure 1).

The Site is surrounded by commercial and industrial properties. However, there are residences within a mile in all directions, and within three blocks to the west. The Site is bounded on the south by 16th Avenue beyond which is currently an empty lot. Immediately east of the Site are two sets of Soo Line Railroad tracks that serve the scrap yards and tie into Burlington Northern Railroad (BNRR) lines northeast of the Site. East of the tracks in the same block are two scrap metal salvage yards. North of the Site is an E-Z Stop convenience store and gas station. Several underground storage tanks are located on the station property which are used for storage of kerosene, diesel, leaded, and unleaded gasolines, and racing fuel. In addition, fuel offloading piping and pumps are still in place along the Soo Line Railroad tracks on the east side of the station. Immediately west of the Site is Washington Avenue. Continuing west, the land surface drops off sharply to the Interstate-94 (I-94) access road; then further west, I-94. The elevation of the access road, which

was apparently excavated during I-94 construction, appears to be 25 to 35 feet below the Site elevation. The Site vicinity is shown in Figure 2.

The Site is currently vacant and level except for some concrete debris and minor subsidence in the northwest corner.

The major businesses in the area are involved in scrap metal processing. Other business scattered throughout the area consist of warehousing, auto parts repair, lumber yard, photographic processing, taverns, cafes, and service stations.

The known natural resources at the Site are soil and ground water. The Site is not located within a floodplain. The Site does not contain any wetlands, nor is it adjacent to any wetlands. Twenty-four ground water wells have been identified within a 1-mile radius of the Site. The nearest downstream user of Mississippi River water for drinking water purposes is 100 miles downstream in Iowa.

This area of Minneapolis, which borders the Mississippi River, is underlain by terraced alluvial deposits. This type of terrace deposit is typically flat with little vertical relief. The primary vertical relief in the area is the I-94 road cut to the west of the Site and the slope adjacent to the Mississippi River to the east.

## II. SITE HISTORY AND ENFORCEMENT ACTIVITIES

The area in which the Site is located has been a mixture of residential, commercial, and industrial properties. Most of the businesses were automobile salvage yards, scrap metal yards and petroleum product storage and retail sales facilities.

The 1600 block of Washington Avenue has been the Site of salvage operations from the 1930's until the 1980's. These salvage yards lined both sides of Washington Avenue north and south of the Site. The property north of the Site,

at the location of the current E-Z Stop gas station, has been the location of retail gasoline sales since the 1930's.

The Union Scrap Iron and Metal Company owned and operated a scrap metal, and battery top and casing processing facility at 1608 Washington Avenue North, Minneapolis, Minnesota. The company has occupied the property since the early 1970's (approximately 1972) until 1983. The company filed for bankruptcy in 1985.

The principal operation at the Site was processing of used battery parts. The battery parts were crushed in a hammer mill and sorted on a shaker table. Resulting recyclables were lead oxide, battery posts, and the casing "pulp". The rubber wastes were generally landfilled. These materials were eventually stockpiled on the Site. Electrical equipment was also stockpiled at various times.

Several short-term limited scope investigations have taken place at the Site over the past ten years. Since 1979, data has been collected by the MPCA, EPA, the Metropolitan Waste Control Commission (MWCC) and the Minneapolis Community Development Agency (MCDA). Additional studies were performed by the former owner of the Site. In summary, these investigations indicate that lead was present and widespread in surficial soils. PCB contamination, elevated levels of sulfate and depressed soil pH were also in evidence. Leaching of contaminants to underlying soils was also occurring at the Site.

The history of response actions at the Site is provided below in chronological order:

August  
1980

Union Scrap Iron and Metal Company hired Soil Exploration Company and Twin City Testing and Engineering, Inc. to advance on-site soil borings and take soil samples for measurement of pH, leachable metals and sulfates. Results indicated a shallow soil zone of elevated sulfate levels and lowered pH. No significant leachable metals were found.

May  
1985

EPA Technical Assistance Team (TAT) performed a Site Assessment at the Union Scrap Site. Samples were collected of on-site water, soil and rubber chips. Results showed high lead contamination in all samples. Recommendations were to control site access, remove waste piles, sample soils, cap the area to control airborne contaminants and install ground water monitoring wells.

November  
1985

A security fence was constructed and waste piles were stabilized with tarpaulins.

October  
1986

The Minneapolis Community Development Agency (MCDA) retained Braun Environmental Laboratories to advance two borings on the Site and collect soil samples for analysis of PCBs, VOCs, and leachable (E.P. Toxicity Method) metals. Results showed no indication of VOCs; however, PCBs and significant lead contamination was found.

December  
1986/  
January  
1987

Mr. Richard Rosen, a potential responsible party (PRP) arranged for removal of 773 tons of battery casing material to Louisiana.

October  
1987

To confirm that a removal action was still required and determine the magnitude of the action, EPA's TAT took soil profile samples at six on-site locations. Results for total lead showed significant contamination in surface soils up to 87,600 mg/kg. Lead contamination at one foot dropped off significantly with the highest being 285 mg/kg. The highest concentration at 3 feet was 242 mg/kg and at 4 feet, 34 mg/kg. An off-site background surface sample showed 492 mg/kg with 333 mg/kg at six inches. These were taken in a field 1/4 mile southeast of the Site.

December  
1987

EPA Region V approved the removal action.

April  
1988

EPA emergency removal action performed by O.H. Materials Corporation removed scrap materials for recycling or proper disposal and upper one to three feet of contaminated soils for disposal. An underground storage tank was discovered and removed from the east central property boundary. Some debris, the cement pad, and the building remained on Site. Waste materials were visible beneath the cement pad.

Surficial soils were most highly contaminated - up to 66,800 mg/kg total lead in the concrete pad area south of the building. Other Site areas showed less lead contamination. Lead levels decreased with depth, generally down to background levels i.e.



less than 300 mg/kg total lead within a couple of feet of the surface.

The Site was backfilled with clean fill from a residential area in north Minneapolis.

September  
1988

MPCA staff sampled several Site areas for leachable metals and PCBs. Results indicated elevated total lead in several samples and leachable lead levels (EP Toxicity Method) in two samples making the sediment hazardous waste.

September  
1988

The city of Minneapolis arranged for demolition and disposal of the on-site building.

November/December  
1988

EPA performed a second removal action at the Site removing debris, the cement pad, and additional contaminated soils. The Site was backfilled and leveled with clean fill. The only remaining debris on-site is some concrete foundation rubble in the northwest corner of the Site. This material tested non-hazardous for lead.

In total, 3,000 tons of hazardous materials from the Site were disposed. Additionally, eight rail cars of battery casings were recycled at a processing facility in Louisiana.

Enforcement activities at the Site have been handled by the EPA.

Potentially Responsible Parties (PRP's) in this case were discovered in a piecemeal fashion. The Site owner/operator was identified very early in the cleanup process. The owner arranged for some materials to be removed from the Site during the cleanup. During the 1988 response activities, documents were removed from the facility building, prior to its demolition. These documents were turned over to the EPA and a PRP search based on them was initiated. Information Requests were sent to this group of generator PRP's in November, 1988. With the response action complete, there was no opportunity to negotiate with the PRP's concerning the response activities.

Because of a potential Statute of Limitations running with respect to EPA's past response costs, EPA, through the Department of Justice, filed a cost recovery lawsuit under CERCLA Section 107, 42 U.S.C. Section 9607. Civil Action

Number 4-89-40 was filed in the District Court of Minnesota in January of 1989. Additional defendants were added to the lawsuit in March 1990.

Negotiations to recover past costs have been proceeding during the pretrial period. The defendants added nearly 100 third-party defendants to the case and, therefore, to the negotiations. Increased negotiation activity is anticipated in the near future.

### III. COMMUNITY RELATIONS

Community relations activities at the Site have been handled with direct involvement from the MPCA and the EPA. A chronology of community relations activities at the Site is listed in the Responsiveness Summary attached.

Although the Site is located in an industrial area, there are residential areas nearby. Interest in the Site on the part of local officials has continued since the early 1980s. A local neighborhood organization which represents a residential and business area near the Site has indicated interest in the status of the Site. Over the years the MPCA has attempted to keep city officials and the local neighborhood organization aware of actions relating to the Site.

Prior to the start of the remedial investigation, the EPA conducted two removal actions at the Site - In April 1988 and November 1988 - removing scrap materials and soil across the property. On April 7, 1988, the EPA and the MPCA held a public meeting to present the removal action activities and plans for the remedial investigation. The meeting was attended by local officials, residents, nearby business owners and others.

Since the beginning of the remedial investigation, the level of interest on the part of the general public has been low. However, city officials have expressed continued interest throughout the project.

The RI Report and the Proposed Plan (attached) for the Site were released to the public for comment on December 8, 1989. These two documents were made

available to the public at the North Regional Branch Library, 1315 Lowry Avenue North, Minneapolis. The notice of availability for these two documents was published in the Minneapolis Star and Tribune and in a news release to the Twin Cities news media on December 7, 1989. Copies of the proposed plan were mailed to city officials, local elected representatives, neighboring businesses and others. A public comment period on the documents was held from December 8, 1989, to January 8, 1990. In addition a public meeting was held on December 19, 1989. At this meeting representatives of the MPCA presented the results of the investigation and the recommendation that no further cleanup actions are needed at the Site, and answered questions about the Site. The attached Responsiveness Summary details the comments received and the MPCA's response.

#### IV. SCOPE OF RESPONSE ACTION

This ROD of "No Action" represents the final action at the Site under the Federal and State Offices of Superfund. The remedial investigation determined that the removal actions conducted by the EPA in 1988 were effective in removing contaminated on-site soils and wastes for recycling or proper disposal. Contaminants found to be originating from off-site sources will be followed up by the MPCA's Underground Storage Tank (UST) program and Preliminary Assessment/Site Inspection program.

#### V. SITE CHARACTERISTICS

Remedial Investigation field activities were carried out at the Union Scrap Site from July 31 through September 19, 1989. Field activities were designed to enable the evaluation of the extent and magnitude of soil and ground water contamination originating from the Site. The results of the RI can be broken down into two areas: A) soils, and B) ground water. Due to the lack of surface water on or adjoining the Site, a surface water investigation was not included as part of the scope of work in the RI Work Plan.

The analytical results from the RI and the risk assessment can be found in the RI Report for the Site completed November 22, 1989. A brief summary of the results is presented below.

A. Soil

The local geology consists of four major units: a surficial sand and gravel unit, a silty clay and clay unit, a deeper sand and gravel unit, and a bedrock unit. The surficial sand and gravel unit was found to be between 43 and 51 feet thick. Based on the one deep boring, the clay unit appears to be about 50 feet thick. The deeper sand and gravel unit extends to bedrock, at about 192 feet. The clay unit present below the sand and gravel unit was found beneath the entire Site and appears to be acting as a confining unit in the vicinity of the Site separating the surficial sand and gravel aquifer from the deeper sand and gravel aquifer.

The soil investigation focused on the old fill material and natural soils beneath the base of the new fill brought in following the EPA removal action in 1988. Thirty-six soil samples were collected at various depths from the Site. Soil samples were analyzed for organic compounds including volatile and semi-volatile compounds, PCBs, inorganic metals, and cyanide. Boring locations are shown in Figure 3.

The results of the characterization show that volatile contamination in soils was limited to two volatile organics, tetrachloroethene and trichloroethene. These organics were found in low concentrations, 6 micrograms per kilogram (ug/kg) and 11 ug/kg, and at different locations and depths, B-5 (deep) and B-7 (shallow), respectively (Figure 3). There does not appear to be any significant source of either of these organics on-site. The trichloroethene (TCE) found in B-7 shallow was not found in deeper samples at that location. The concentrations of TCE which were found in the soil were significantly lower

than the concentrations which were found in the monitoring wells, upgradient and downgradient of the Site. Therefore, the low TCE concentrations found in the soil could not constitute the source of the TCE contamination in the ground water. Tetrachloroethene was found only in the deep sample in boring B-5. Also, no tetrachloroethene was found in ground water; consequently there has been no impact of tetrachloroethane on ground water. Based on their limited extent and magnitude, the volatile organics do not appear to be a continuing source or significant contaminants at this Site.

The PCB contamination was found in low concentrations at four locations (Figure 3). The PCB concentrations ranged from 94 to 1,000 ug/kg. This concentration range is low, particularly for soils in the vicinity of the Site. In October 1986, Braun Environmental Laboratories reported on a limited investigation at the Site for the MCDA. PCB concentrations were found to range between 0.2 to 130 milligrams per kilogram (mg/kg) on the Site, and 4.4 to 1110 mg/kg on the vacant lot directly to the south of the Site. Based on the limited extent and magnitude of PCBs found in subsurface soils, it appears most of the PCB contamination originating from Union Scrap Iron and Metal Company operations was removed during the EPA removal actions in 1988. The low concentrations of PCBs which were found in the subsurface soils at the Site are not a hazard to the ground water, as evidenced by the absence of PCBs in the ground water samples.

The lead levels detected in soil samples at the Site are within the range of lead found in natural soils in the United States. Natural soils have been found to contain lead in concentrations from 2 to 200 mg/kg. The highest lead concentration found in Site soils was 102 mg/kg. This is well within the range of natural soil lead concentrations. Lead was analyzed in off-site surface soils considered to be background for the area by an EPA technical

assistance team in October 1987. Background concentrations at the surface were 492 mg/kg and at six inches below surface, 333 mg/kg. These are relatively high but are probably indicative of this area where auto salvaging and metal scraping operations have been prevalent for many years. Based on these results, it appears any significant levels of lead contamination originating from Union Scrap Iron and Metal Company operations was removed during EPA's removal actions in 1988.

The potential presence of off-site contamination due to wind-borne particulates originating from the Site was not investigated during the remedial investigation. This is because it was decided that the widespread contamination resulting from the neighboring land uses would be likely to obscure any analytical results.

#### B. Ground Water

Ground water occurs at about 30 feet below land surface. Ground water flow in the surficial aquifer above the clay unit is to the southeast towards the Mississippi River. Single well recovery tests were completed and used to calculate the local hydraulic conductivities with these results used in the calculation of ground water flow velocity. Using the change in ground water elevation across the Site as the hydraulic gradient, flow velocities ranging from 0.16 feet/day to 0.48 feet/day were calculated for the surficial aquifer. A hydraulic head difference of approximately 8 feet was observed between the surficial aquifer and the deeper aquifer.

Ground water samples were obtained from seven monitoring wells located on and off-site (Figure 4). The results of the characterization show that trichloroethene; 1,2-dichloroethene; 1,2-dichloroethane; benzene and xylene were found in ground water in the surficial aquifer but are originating from off-site sources. Trichloroethene was found in all shallow monitoring wells.

1,2-Dichloroethene was found in all shallow wells except MW-10.

1,2-Dichloroethane was found in upgradient shallow wells MW-14s and MW-10.

Benzene, and xylenes were detected only in upgradient well MW-10. No contaminants were found in MW-14D the deep monitoring well (Figure 4).

1,1-Dichloroethane and 1,1,1-trichloroethane were found in shallow ground water and appear to be originating from the Site. Both compounds were found in low concentrations in on-site well MW-7 and downgradient well MW-15 (Figure 4).

## VI. RISK ASSESSMENT

The risk assessment was divided into a public health risk assessment and an environmental assessment.

### A. Health Risk Assessment

#### 1. Ground Water

Only two chemicals are present in the ground water in the Site vicinity which are attributable to the Site. These are 1,1-dichloroethane and 1,1,1-trichloroethane. Neither of these chemicals are believed to cause cancer.

The highest concentrations of these chemicals measured on-site were 9 ug/l of 1,1-dichloroethane and 12 ug/l of 1,1,1-trichloroethane. As indicated in Table 1, these concentrations are considerably lower than the most stringent Federal and State of Minnesota requirements for human consumption of ground water (MCLs, MCLGs, and RALs). Therefore, the Site does not pose any conceivable hazard to consumers of drinking water.

#### 2. Fish Consumption

Concentrations of 1,1-dichloroethane and 1,1,1-trichloroethane in fish were also estimated, assuming that the maximum on-site concentrations of these contaminants in the ground water (9 ug/l of 1,1-dichloroethane and 12 ug/l of 1,1,1-trichloroethane) discharged to the Mississippi River and were then

diluted to one tenth of their original concentrations. For the purpose of calculating the worst possible human exposure, we assumed that people would eat 30 grams of fish from the river each day. We assumed this even though fish advisories have been issued for this portion of the river, for reasons unrelated to the Site. Based on these assumptions, it was calculated that the maximally exposed person could consume approximately  $5.0 \times 10^{-4}$  micrograms per kilogram per day (ug/kg/day) of 1,1-dichloroethane, and  $2.9 \times 10^{-3}$  ug/kg/day of 1,1,1-trichloroethane.

Reference doses (RfDs) have been developed by EPA for indicating the potential for adverse health effects from exposure to chemicals exhibiting noncarcinogenic effects. RfDs are estimates of lifetime daily exposure levels for humans, including sensitive individuals, that are not likely to be without an appreciable risk of adverse health effects. Estimated intakes of chemicals from fish consumption can be compared to the RfD. RfDs are derived from human epidemiological studies or animal studies to which uncertainty factors have been applied (e.g., to account for the use of animal data to predict effects on humans). These uncertainty factors help ensure that the RfDs will not underestimate the potential for adverse noncarcinogenic effects to occur.

The oral RfD for 1,1,1-trichloroethane is 90 ug/kg/day. Our worst-case calculated value is therefore over 400 times lower than the oral RfD. There is no published oral RfD value for 1,1-dichloroethane.

The human health hazard posed by ingestion of 1,1-dichloroethane is believed to be lower than that posed by an equal concentration of 1,1,1-trichloroethane, as evidenced by the State of Minnesota limits for these compounds in drinking water. Therefore, since the projected concentration of 1,1-dichloroethane in fish is even lower than that of 1,1,1-trichloroethane, the



Site appears to pose no threat to human health via either of these chemicals due to consumption of fish from the Mississippi River.

B. Environmental Assessment

The environmental assessment evaluated the impact of 1,1-dichloroethane and 1,1,1-trichloroethane on aquatic organisms.

The environmental assessment compared estimated surface water concentrations of 1,1-dichloroethane and 1,1,1-trichloroethane to available water quality criteria for aquatic toxicity. No criteria were available for 1,1-dichloroethane. However, the projected 1,1,1-trichloroethane concentrations (1.2 ug/l) in the river and maximum concentrations of this contaminant on-site (12 ug/l) are well below the State of Minnesota's aquatic toxicity criteria of 138 ug/l (Table 1). Therefore, aquatic organisms are not likely to be negatively impacted due to the presence of these contaminants.

C. Risk Assessment Summary

Current on-site ground water concentrations of 1,1-dichloroethane and 1,1,1-trichloroethane are below levels that would pose increased human health risks. Estimated concentrations of these contaminants in surface water and in fish are also below levels of human health concern. Environmental risks are also negligible, since concentrations of 1,1-dichloroethane and 1,1,1-trichloroethane currently beneath the Site are already less than drinking water standards and available water quality criteria for aquatic toxicity (Table 1). Therefore, due to the low levels of the estimated human and environmental risks, further remedial actions at the Site are not recommended.

VII. DESCRIPTION OF THE "NO ACTION" PREFERRED ALTERNATIVE

Based upon the data collected during the Remedial Investigation and upon the Administrative Record for this Site, no further action is necessary at this Site. The Site will be released for unrestricted use.

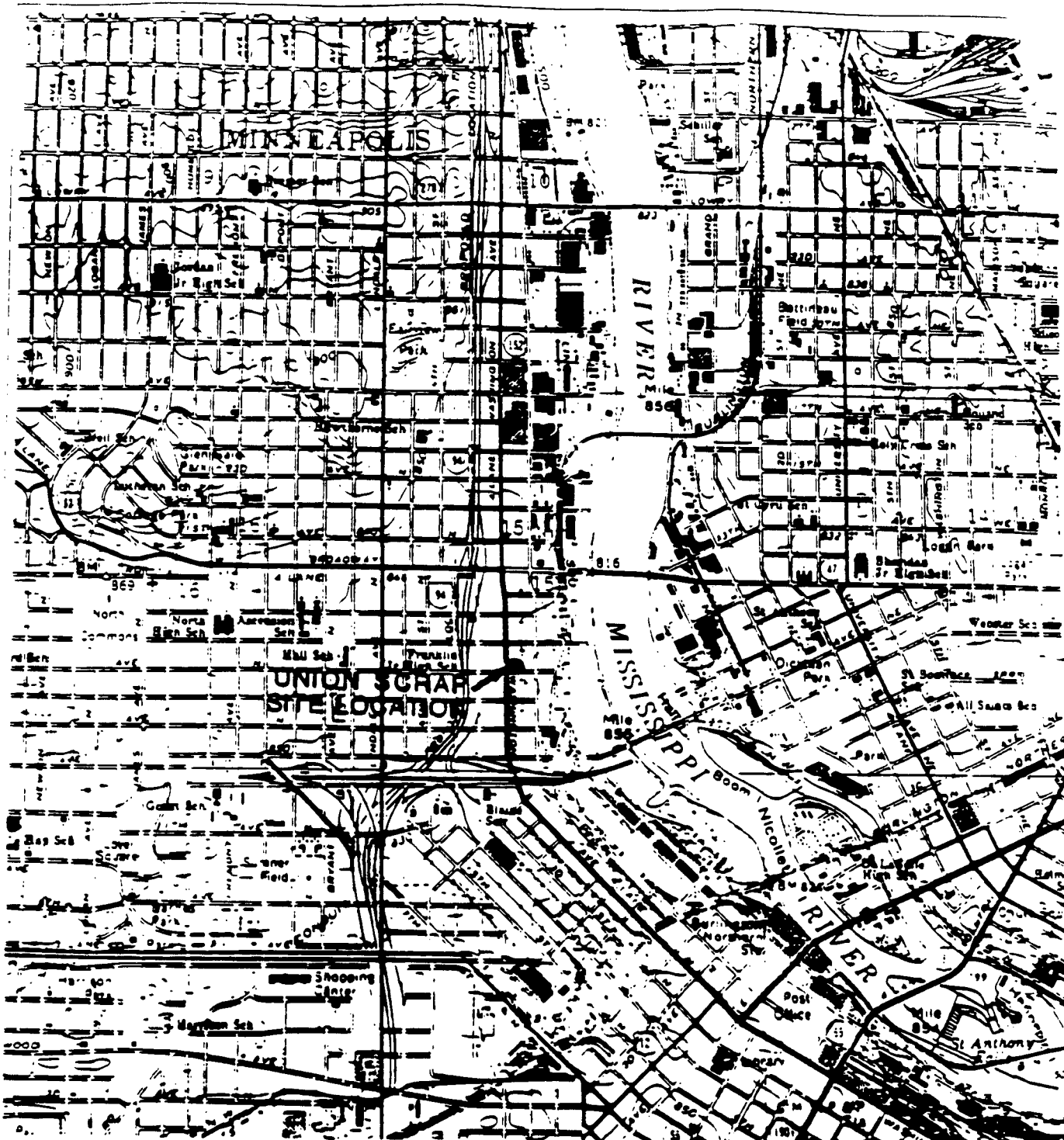
This "No Action" alternative is fully protective of Human Health and the Environment, and meets all Applicable Relevant and Appropriate Requirements (ARARs).

#### VIII. RECOMMENDATIONS FOR FUTURE WORK

The two separate ground water problems originating from off-site sources identified during the RI will be followed up by the MPCA through normal administrative processes, i.e., reporting of the investigation findings to the Preliminary Assessment/Site Inspection program (the TCE plume) and the Underground Storage Tank program (the benzene and xylene occurrence). These referrals will allow these programs to deal with these problems consistent with their program's priorities.

#### IX. DOCUMENTS REVIEWED

Information for this Record of Decision was obtained from the Delta Environmental Consultants, Incorporated 1989 Remedial Investigation report for the Site. This decision was based on a review of information listed in the Administrative Record Index attached.



MINNEAPOLIS NORTH, MINN.  
MINNEAPOLIS SOUTH, MINN.

45093-A3-TF-024  
1967

PHOTO REVISED 1972 AND 1980  
DMA 1374 III SE-SERIES V872

0 2000  
SCALE IN FEET



FIGURE 1  
AREA TOPOGRAPHIC MAP  
UNION SCRAP  
MINNEAPOLIS, MINNESOTA

PROJECT NO  
10-89-185

PREPARED BY  
MVM/PR

DATE  
6/25/89

APPROVED BY  
BHO



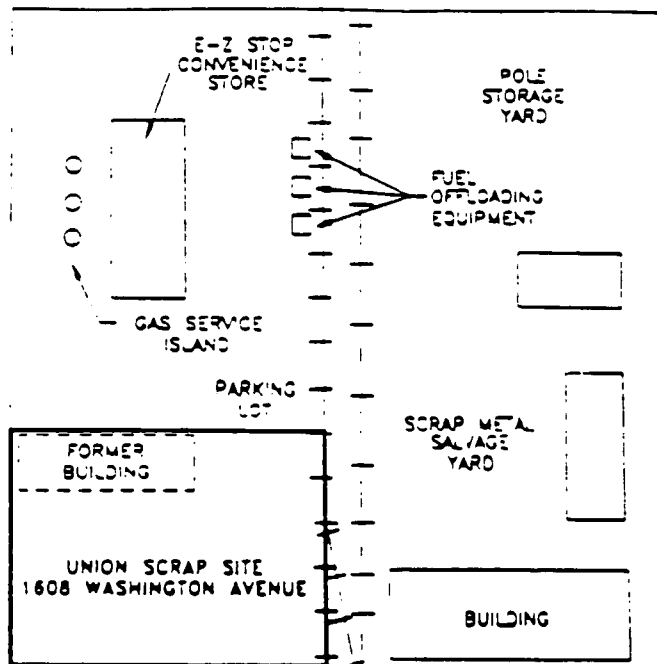
Delta  
Environmental  
Consultants, Inc.

I-94 RIGHT OF WAY

WASHINGTON AVENUE

17TH AVENUE

N SECOND STREET



16TH AVENUE

VACANT

INACTIVE  
SALVAGE  
YARD  
BUILDING

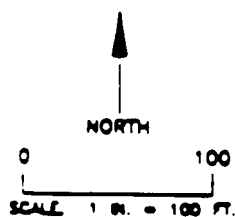


FIGURE 2  
VICINITY MAP  
UNION SCRAP SITE  
MINNEAPOLIS, MINNESOTA

PROJECT NO.  
10-89-185

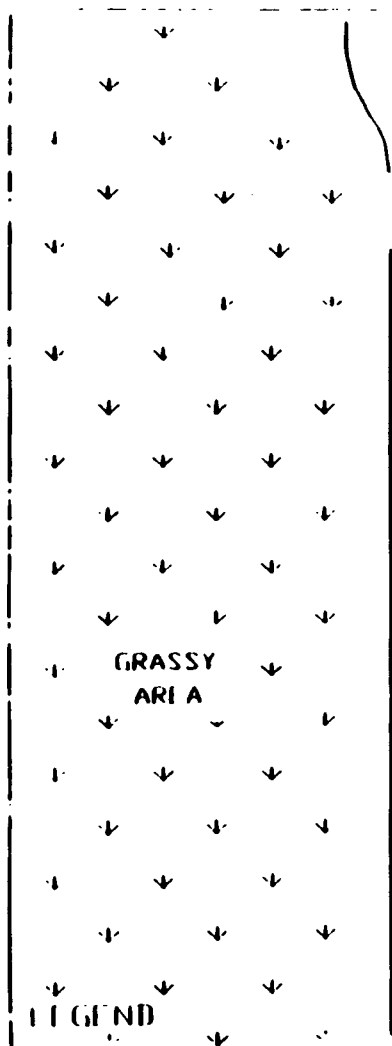
PREPARED BY  
BDO/PR

DATE  
8/28/89

REVIEWED BY  
300



Delta  
Environmental  
Consultants, Inc.



# LEGEND

- ⊗ POLYCHLORINATED BIPHENYLS
- TETRACHLOROETHYLENE
- ⊙ TRICHLOROETHYLENE
- (11) CONCENTRATION IN ug/kg
- ( ) SHALLOW SOIL BORING LOCATION
- s SHALLOW SAMPLE
- d DEEP SAMPLE

WASHINGTON AVENUE CORNER

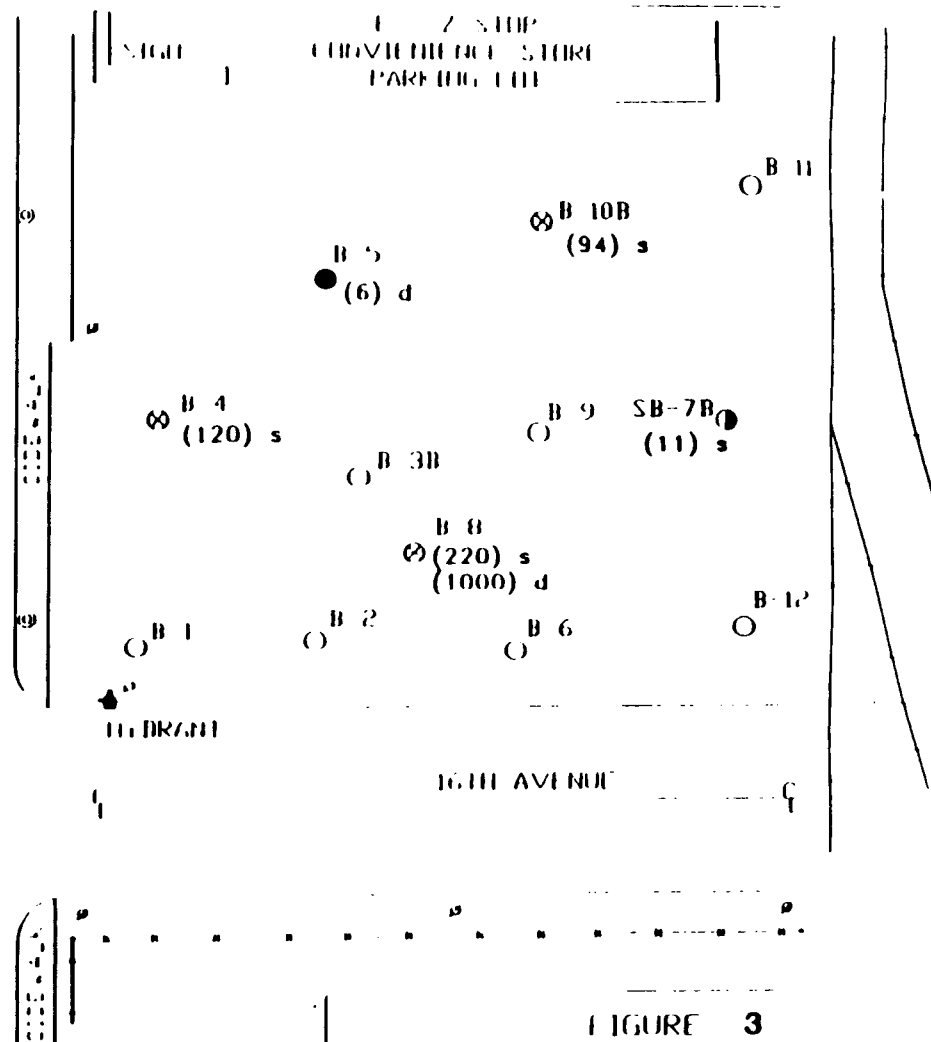
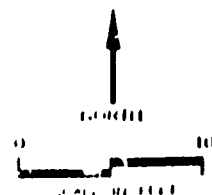


FIGURE 3  
SOIL CONTAMINATION

UNION SCRAP  
MINNEAPOLIS, MINNESOTA



PROJECT NO.  
H 100 115  
DATE  
10/1/80

PREPARED BY  
BDE/PR  
REVIEWED BY  
f210



Delta  
Environmental  
Consultants

DCE 10 (12) ND  
 DCA 11 (13) MW 14D  
 TCE 260 (320)

MW-14S

GRASSY AREA

# LEGEND

● MONITORING WELL LOCATION  
 5.8 CONCENTRATION OF FIRST ROUND (MICROGRAMS/LITER)  
 (11) CONCENTRATION OF SECOND ROUND (MICROGRAMS/LITER)  
 1,1,0 1,1 DICHLOROETHANE  
 DCE 1,2 DICHLOROETHANE (TOTAL)  
 DCA 1,2 DICHLOROETHANE  
 TCA 1,1,1 TRICHLOROETHANE  
 TCE TRICHLOROETHANE  
 BEN BENZENE  
 XYL XYLENES  
 ND NO VOLATILES DETECTED

STOP  
 CONVENIENCE STORE  
 PARKING LOT

MW 10  
 DCA 6 (11)  
 TCE 12 (12)  
 BEN 92 (110)  
 XYL 6 (12)

MW-7  
 1,1D 6 (9)  
 DCE 10 (17)  
 TCA 12 (8)  
 TCE 9 (12)

DCE 13 (14)  
 TCE 120 (110)

HYDRANT

16TH AVENUE

1,1D ND (5)  
 DCE 10 (12)  
 TCA 5 (7)  
 MW-15 TCE 39 (45)

MW 13  
 TCE 370 (650)  
 DCE 14 (21)

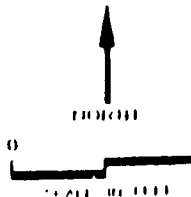


FIGURE 4  
 VOLATILE CONTAMINATION  
 IN GROUND WATER  
 UNION SCRAP  
 MINNEAPOLIS, MINNESOTA

PROJECT NO  
 11-89-185  
 DATE  
 10-5-89  
 PREPARED BY  
 HILTZER  
 10-5-89  
 1300



**TABLE 1**  
**Applicable or Relevant and Appropriate Requirements (ARARs)**  
**for Site Contaminants**  
**Union Scrap Iron and Metal Company**  
**Minneapolis, Minnesota**

					Federal Ambient Water Quality Criteria for Human Health /c	Minnesota Ambient Water Quality Criteria or Aquatic Toxicity /d	Minnesota Proposed Acceptable Ambient Levels in Air/e
Compound	Maximum On-Site Concentration	MDM RAL/a	USEPA MCL/b	USEPA MCLG /b	Water and Fish Consumption (ug/l)	Fish Consumption Only (ug/l)	Protection of Aquatic Life (ug/l)
	(ug/l)	(ug/l)	(ug/l)	(ug/l)			(mg/cu. meter)
1,1-Dichloroethane	9	810	NA	NA	NA	NA	NA
1,1,1-Trichloroethane	12	200	200	200	18,400	1,030,000	138

NA- Not available

- a/ Recommended allowable limits for drinking water contaminants Minnesota Department of Health, Section of Health Risk Assessment Release No. 2, November 1988
- b/ U.S. EPA, Office of Drinking Water Drinking Water Standards, Maximum Contaminant Levels, Maximum Contaminant Level Goals and Secondary Standards
- c/ from chemical files in IRIS, an electronic data base prepared and maintained by the U.S. EPA, August 1989
- d/ from the Minnesota Pollution Control Agency, telephone conversation, September 5 and 6, 1989
- e/ from the Minnesota Pollution Control Agency, Table B of the "Non-Criteria Source Review Guide," distributed to members of the Air Toxics Technical Advisory Committee, October 1989.

#### SOIL

Compound	Maximum On-Site Concentration	CDC /a	TSCA /b
	(mg/kg)	(mg/kg)	(mg/kg)
Lead	102	500	NA
PCB	1	NA	10

NA- Not applicable

- a/ Centers for Disease Control Suggested Level of Concern: "Preventing Lead Poisoning In Young Children: A Statement By The CDC," U.S. Department of Health and Human Services, Atlanta, Georgia, January 1985, Document Number 99-2210.
- b/ Toxic Substances Control Act, 40 CFR part 761, Polychlorinated Biphenyls Spill Cleanup Policy; Final Rule (Federal Register April 2, 1987).

## RESPONSIVENESS SUMMARY

for the

### UNION SCRAP SUPERFUND PROJECT 1608 Washington Avenue North, Minneapolis, Minnesota

This community responsiveness summary has been developed to document community involvement and concerns during the remedial investigation phase of the project, and to respond to comments received during the public comment period. Also included as an attachment is a summary of the community relations activities conducted by the Minnesota Pollution Control Agency (MPCA) during the Superfund project at the Union Scrap site.

## OVERVIEW

Based on the findings of the remedial investigation, the MPCA and U.S. Environmental Protection Agency (EPA) recommended no further action for the Union Scrap site, 1608 Washington Avenue North, Minneapolis. The investigation found that previous removal actions at the site had been successful in cleaning up contamination and no further work was needed.

This proposal was announced to the community through a newspaper ad and news release. A public meeting and comment period were provided, and the MPCA received several comments during the comment period.

This responsiveness summary contains the following sections:

- o Background Information on the Community's Involvement
- o Summary of Comments Received and the MPCA's Response
- o Remaining Issues
- o Attachment: Community Relations Activities for the Union Scrap site



#### BACKGROUND INFORMATION ON THE COMMUNITY'S INVOLVEMENT

Prior to the start of the remedial investigation, EPA conducted two removal actions at the site -- in April 1988 and November 1988 -- removing scrap materials and soil across the property. At the time of the first removal action, the EPA and MPCA held a public meeting on the activities and plans for the remedial investigation. The meeting was attended by local officials, residents, nearby business owners and others.

Since the beginning of the Superfund remedial investigation at the site, the level of interest on the part of the general public has been low. Members of a neighborhood organization, who had expressed interest in the removal action, no longer indicated an interest. Pollution and redevelopment officials with the city of Minneapolis, however, have expressed continued interest throughout the project. In addition to the 1608 North Washington Avenue site, their interest has also encompassed nearby properties -- the Snafre site and the 1500 block of Washington Avenue, where the Union Scrap Iron and Metal Company had operated related facilities in the past.

Under a cooperative agreement with the EPA, the MPCA conducted the community relations program for the remedial investigation. The MPCA provided information to the community on the plans for the remedial investigation through a news release. In addition, the agency called local officials and nearby property owners with information on the start of the investigation.

At the conclusion of the investigation, the MPCA announced a 30-day public comment period (December 8, 1989 through January 8, 1990) on its proposal to take no further action at the site. This announcement was made through an advertisement in the Minneapolis Star and Tribune and news release to the Twin Cities' news media. Copies of the proposed plan were mailed to city officials, local elected representatives, neighboring business owners and others. Copies of the investigation report and the proposed plan were made available at the North Regional Library.

#### SUMMARY OF COMMENTS RECEIVED AND THE MPCA'S RESPONSE

Several comments were received during the public comment period. The comments are summarized below, along with the MPCA's responses.

Comment: A representative of Earth Protector, Inc., an environmental organization, requested that the MPCA continue to regularly sample monitoring wells for trichloroethylene (TCE) to determine whether levels of the chemical in ground water are changing.

Responsiveness Summary  
Page 3

- MPCA Response:** The MPCA's investigation determined that the TCE contamination detected is not a result of Union Scrap site activities. Information on the contamination will be forwarded to the MPCA's Preliminary Assessment/Site Inspection (PA/SI) program for follow-up. PA/SI staff review and assess such sites and determine whether further investigation and cleanup is needed. The well sampling schedule for the TCE contamination will be determined by the PA/SI program, and PA/SI staff will consider the request for regular monitoring in its assessment.
- Comment:** A representative of the Minneapolis Community Development Agency (MCDA) requested that the MPCA and EPA conduct follow-up testing/cleanup as soon as possible on the 1500-block site and the Snafer site.
- MPCA Response:** The MPCA has a verbal commitment from EPA's Response Team to conduct a removal action at the 1500 block of Washington Avenue. MPCA staff will keep the city and MCDA informed of plans for this removal.
- At the Snafer site, the MPCA is working with the Minnesota Department of Transportation -- the current owner of the property -- to complete the investigation of contamination at the site and evaluate cleanup alternatives.
- Comment:** One commentor requested a breakdown of the expenses associated with the removal action at the Union Scrap site.
- MPCA Response:** Since the removal actions were conducted by EPA and the MPCA does not have the cost information, the MPCA provided interested persons with the names and phone numbers of contacts at EPA. EPA will provide this information, on request.
- Comment:** The City of Minneapolis and the Minneapolis Community Development Agency jointly submitted a written comment opposing the proposed plan to take no further action at the site. The letter indicated that contamination concerns at two separate sites, also formerly owned by the Union Scrap Iron and Metal Co., should be resolved before any decision on the proposed plan is made.
- MPCA Response:** The MPCA's recommendation that no further cleanup actions are needed applies only to the Union Scrap site at 1608 Washington Avenue North. The two other sites mentioned in the letter -- the Snafer site and the 1500 block of Washington Avenue -- are separate sites, and cleanup actions that may be necessary at those sites would be handled separately by the MPCA and the EPA. Any decision on the 1608 site would not affect the other related sites.

The boundaries of the 1608 site were determined by the MPCA in the mid-1980s. The Shafer site is owned by the Minnesota Department of Transportation -- a responsible party under Minnesota's Superfund law -- and was not included as part of the Union Scrap site. Superfund activities at the Shafer site are being conducted by the MnDOT, and the site is included separately on the Superfund list.

Relative to the 1500-block area, at the time the boundaries for the 1608 site were being determined, MPCA staff surveyed the area. At that time, although scrapyard-type waste was evident on the 1500 block, the area did not appear to contain hazardous waste. Hazardous waste -- cracked batteries principally -- was evident on the 1608 property, resulting in the MPCA and EPA including the site on the Superfund lists.

When federal Superfund money is received to investigate a site, the project is limited to the site as it is defined on the federal Superfund list. Although the proposed plan is to take no further action at the 1608 site, the Shafer site will continue to be worked on as a separate site with the responsible party. The 1500 block will be handled, as mentioned earlier, by the MPCA Preliminary Assessment/Site Inspection program and the EPA's Emergency Response Program. The decision on the 1608 site does not preclude further work at the two related sites.

#### REMAINING ISSUES

At the public meeting, a number of questions were asked relating to the list of Potentially Responsible Parties (PRPs) and EPA's process in identifying companies included on the list. As the enforcement process proceeds, PRPs will have a continuing need for information about their role in the process. The MPCA will work with EPA in providing information and assistance to interested PRPs.

ATTACHMENT

COMMUNITY RELATIONS ACTIVITIES CONDUCTED FOR UNION SCRAP IRON AND METAL CO. SITE

- Fall 1987 - Community interviews conducted and community relations plan written for Union Scrap Superfund project
- March 31, 1988 - EPA news release announcing start of removal action at site
- April 7, 1988 - EPA public meeting, with MPCA participation, on removal action and plans for remedial investigation
- July 28, 1989 - Telephone contacts with local officials and neighboring business owners on start of remedial investigation
- August 1, 1989 - News release on start of Superfund remedial investigation
- December 6, 1989 - Copy of remedial investigation report, proposed plan and project work plan delivered to North Regional Branch Library
- December 8, 1989 - Advertisement in Minneapolis Star and Tribune announcing availability of proposed plan, start of public comment period and date for public meeting. News release mailed to all metropolitan-area news media containing the same information.
- December 19, 1989 - Public meeting held at Franklin Junior High School.
- January 8, 1990 - End of public comment period; responsiveness summary drafted



*Proposed Plan/Fact Sheet for the*

# **Union Scrap Superfund Project Minneapolis, Minnesota**

## **Introduction**

This Proposed Plan provides information on a recommendation to take no further cleanup actions at the Union Scrap Superfund site. The Minnesota Pollution Control Agency (MPCA) and the U.S. Environmental Protection Agency (EPA) are proposing no further action based on a Superfund investigation into the extent of contamination remaining at the site, conducted by the MPCA, which indicated that previous cleanup actions at the site were successful in removing contamination caused by site activities.

Under the federal Superfund law, a plan explaining proposed actions at Superfund sites is developed and presented for public review and comment before a final decision is made. The public comment period, discussed in other sections of this fact sheet, provides this opportunity for the public to comment on the agencies' plan.

## **What is the history of the site?**

The Union Scrap Iron and Metal Co. site, located at 1608 Washington Avenue North, Minneapolis, housed a scrap metal and battery-recycling operation from the early 1970s until 1983. During the site's operations, battery parts were crushed and sorted at the facility, in preparation for recycling. The company filed for bankruptcy in 1985, leaving piles of lead-contaminated scrap and debris on the property. In late 1986, the owner of the company removed a portion of the waste piles for recycling.

In 1988, the EPA removed the remaining scrap materials and debris, and excavated the upper one to three feet of lead-contaminated soil on the property. The materials were transported to out-of-state facilities for recycling or proper disposal, and the excavated area was filled with clean soil. The EPA also pressure-washed the vacant building on the property to remove the lead contamination, and the city of Minneapolis arranged for demolition of the structure.

In total, about 3,000 tons of contaminated materials and soil.

## **WE WANT YOUR OPINION**

The MPCA and EPA are asking for public comments on the proposed plan to take no further cleanup actions on the site. Comments may be submitted between December 8, 1989, and January 8, 1990, and may be addressed to:

Elizabeth Gelbmann  
Public Information Office  
MPCA  
520 Lafayette Road  
St. Paul, Minnesota 55155  
612/296-7792 or toll-free 1-800-652-9747

## Page Two

as well as eight rail-car loads of battery casings, have been removed since the site ceased operations.

Earlier this year, the MPCA began a soil and ground water investigation at the site. The purpose of the MPCA's investigation, called a "remedial investigation," was to determine whether any contaminated soil remained on the site and whether ground water had been contaminated by past operations of the scrap yard.

**What did the investigation include?**

The MPCA investigation included installing and sampling seven ground water monitoring

wells — on the property, to the south and southeast of the property and to the northwest of the property (see map).

Sampling to the south of the property — the direction ground water flows in the area — was chosen in order for the MPCA to determine whether contamination was moving from the site. Testing to the northwest, in the opposite direction of ground water flow, was chosen to provide background ground-water data — information on ground-water quality in the area before the ground water reaches the site.

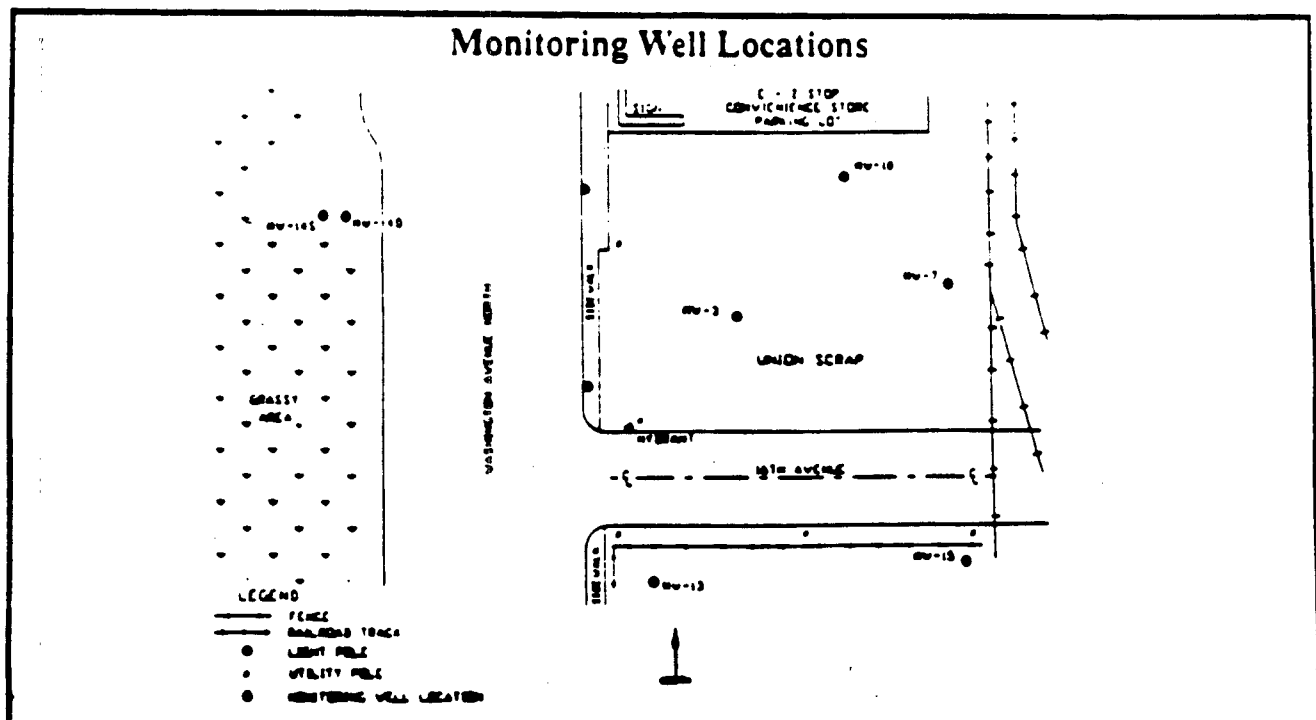
Ground water testing included sampling both the shallow aquifer — the layer of ground water closest to the surface —

and the deeper aquifer, located beneath a 40-foot-thick clay layer underlying the site, about 95 feet below the surface.

In addition, 36 soil samples were taken from 12 locations on the site. The samples were taken at three levels, down to about ten feet below the surface.

**What did the investigation find?**

The MPCA's investigation found little contamination caused by Union Scrap's past operations. Contaminants detected, in most cases, were typical of contaminants the MPCA would expect to find in an industrial area.



## Page Three

In soil, the sampling indicated that EPA's excavations last year were effective in removing contaminated soil. The MPCA's soil sampling on the site detected only very low levels of lead, volatile organic compounds (VOCs) and polychlorinated biphenyls (PCBs).

From the ground water investigation, the MPCA determined that ground water flow in the area is from the northwest to the southeast. Of all of the samples taken, the contaminants detected were only found in the shallow aquifer — the deeper aquifer, beneath the thick clay layer, was clean.

The investigation did not find any lead contamination in ground water samples taken from the shallow aquifer on or off the site. One of the monitoring wells on the Union Scrap property — the well closest to the railroad track — showed low levels of PCBs in one sample. However, the MPCA resampled the well on two occasions and found no PCB contamination, indicating that the first sample result was in error.

The ground water investigation did uncover ground water contamination the MPCA did not expect to find. Sampling of wells both on and off the Union Scrap property detected VOCs,

principally trichloroethylene (TCE) — an industrial solvent. However, the chemical was found at higher levels in the well northwest of the site than in the on-site monitoring wells. This indicates that the source of the VOC contamination is not the Union Scrap site. The MPCA believes that the contamination may be the result of past solvent spillage from industrial operations in the area near the I-94 freeway.

One other area of ground water contamination was detected — samples from the monitoring well near the convenience store showed levels of benzene and xylene — chemicals typically associated with petroleum products. The MPCA believes that the contamination may be the result of spillage from former gas stations in the area or from the convenience store's existing tanks.

### What are the reasons for proposing no further action?

The agencies' proposal to take no further action is based on the investigation findings that no significant areas of soil and ground water contamination remain which were caused by the Union Scrap site.

The agencies evaluated the no-further-action proposal against seven criteria, listed below.

These criteria are used at all Superfund sites to evaluate proposals for future action.

In this case, the evaluation concluded that the low levels of contamination remaining do not pose a risk to human health or the environment and that the proposal for no further action meets the seven criteria.

Following the public comment period, the agencies may modify the proposal to take no further action based on an eighth criteria -- community acceptability.

### THE CRITERIA

Does the proposal:

- protect human health and the environment?
- comply with health and environmental regulations?
- reduce toxicity, mobility or volume of the contaminants?

Is the proposal:

- effective for the short term?
- effective over the long term/permanent?
- technically feasible?
- cost effective?

And, following the comment period:

- Is the proposal acceptable to the community?

## **Page Four**

**What about the solvent and petroleum-product contamination found in the ground water?**

The MPCA and EPA do not intend to ignore the other areas of contamination. However, because this contamination was not caused by the Union Scrap site, the problem cannot be addressed under the Union Scrap federally-funded Superfund project. When the MPCA receives federal Superfund money to investigate a site, the money can only be used for contamination resulting from that site. The MPCA will look to other agency programs for dealing with the off-site contamination problems discovered.

The petroleum-product contamination will be handled by the MPCA's Underground Storage Tank (UST) program for investigation and cleanup. The UST program was set up in 1986 to clean up contamination from leaking underground storage tanks around the state.

The solvent contamination problem will be referred to the MPCA's Preliminary Assessment/Site Inspection program. Staff in this program review and assess areas with reported contamination problems and determine whether the contamination poses a risk to

health or the environment and whether further investigation and cleanup actions are needed.

**Will the Union Scrap property have to remain vacant?**

No, the property can be redeveloped at any time. The MPCA would require, however, that any new use of the site be planned so as not to disturb the monitoring wells, which will remain on the site to assist future investigations and actions. In addition, a notice placed on the property's deed will alert potential buyers to the site's past history.

**When will the MPCA and EPA make the final decision?**

The agencies are holding a 30-day public comment period on the recommendation that no further cleanup actions are needed at the Union Scrap site. Following the comment period, the agencies will consider comments received in making the final decision, and will notify the community of the decision.

**More questions?**

The complete report of the investigation is available for review at North Regional Branch Library, 1315 Lowry Avenue North, Minneapolis.

A public meeting on the plan to take no further cleanup action at the site will be held on December 19, 1989, at 7:00 p.m. in the Auditorium, Franklin Junior High School, 1501 Aldrich Avenue North.

Comments on the plan may be presented at the meeting or may be addressed to:

Elizabeth Gelbmann  
Public Information Office  
MPCA  
520 Lafayette Road  
St. Paul, Minnesota 55155  
612/296-7792

Comments must be received at the MPCA by January 8, 1990.

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**December 1989**