

Superfund Record of Decision:

Midwest Manufacturing/North Farm, IA

16. Abstract (Limit: 200 words)

The 8-acre Midwest Manufacturing/North Farm site is located on a manufacturing site owned and operated by Smith-Jones, Inc. in Kellog, Iowa. Land use in the area is primarily industrial. From 1973 to 1981, Smith-Jones engaged in electroplating and painting operations of manufactured products, which involved the use of TCE to clean the product before it was coated with the metal. In 1977, the State required treatment of the wastewaters to precipitate metals. The solid residuals were stored in an above-ground tank, then transferred periodically to an unlined disposal cell onsite. Site inspections in the early 1980s, by EPA revealed elevated heavy metal concentrations in the 170 cubic yard waste disposal cell, the surrounding soil, as well as a 7,200 cubic foot waste metals pile and a borrow pit area. Ground water sampling revealed contamination of the alluvial aquifer underlying the site. This ROD addresses both source control and ground water remediation at the site. The primary contaminants of concern affecting the soil/waste and ground water are VOCs, including PCE, TCE, toluene, and xylenes; and metals, including chromium, and lead.

The selected remedial action for this site includes installing a low permeability cap over the waste disposal cell in accordance with RCRA landfill closure requirements;

(See Attached Page)

17. Document Analysis a. Descriptors

Record of Decision - Midwest Manufacturing/North Farm, IA

First Remedial Action - Final

Contaminated Media: soil/waste, gw

Key Contaminants: VOCs (PCE, TCE, toluene, xylenes), metals (chromium, lead)

b. identifiers/Open-Ended Terms

c. COSATI Field/Group

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18.	Availability Statement	19. Security Class (This Report)	21. No. of Pages
		None	71
		20. Security Class (This Page)	22. Price
		None	

EPA/ROD/R07-90/037 Midwest Manufacturing/North Farm, IA First Remedial Action - Final

Abstract (continued)

treating ground water using air stripping, and possible treatment of vapor/air mixture using carbon adsorption, and filtering water to remove inorganics, if needed; discharging the treated water onsite to the Skunk River or offsite to a publicly owned treatment works (POTW); implementing institutional controls including deed and ground water use restrictions; and ground water monitoring for 30 years. The estimated capital cost for this remedial action is \$288,419, which includes a total O&M cost of \$200,425 for 25 to 30 years.

<u>PERFORMANCE STANDARDS OR GOAL</u>S: Ground water contamination at the site will be reduced to meet Iowa Anti-Degradation Requirements.

DECLARATION FOR THE RECORD OF DECISION FOR THE MIDWEST MANUFACTURING/NORTH FARM SITE MIDWEST OPERABLE UNIT KELLOGG, IOWA

SITE NAME AND LOCATION

Midwest Manufacturing/North Farm Superfund Site, Midwest subsite; Kellogg, Iowa.

STATEMENT OF BASIS AND PURPOSE

This Decision Document describes the selected remedial action for the Midwest subsite of the Midwest Manufacturing/North Farm Superfund Site (hereafter referred to as "the Site"). This Decision Document has been developed in accordance with the Comprehensive Environmental Response, Compensation, and Liability Act, as amended by the Superfund Amendments and Reauthorization Act (CERCLA), 42 U.S.C. § 9601 et seq., and to the extent practicable, the National Contingency Plan.

The selection of the preferred alternative is based upon the contents of the Administrative Record file for the Midwest Operable Unit. The attached index identifies the items that comprise the Administrative Record. Also attached is a letter of concurrence from the State of Iowa for the preferred remedial alternative. A copy of this letter has been included in the Administrative Record file for this site.

SCOPE AND ROLE OF RESPONSE ACTION

The scope of this response action is to address the principal threats at the Midwest subsite of the Midwest Manufacturing/North Farm Superfund Site. The principal threats posed by the North Farm subsite were addressed in a Record of Decision signed in September 1988.

ASSESSMENT OF THE SITE

Actual or threatened releases of hazardous substances from this site, if not addressed by implementing the response action selected in the Record of Decision (ROD), may present a current or potential threat to public health, welfare, or the environment.

DESCRIPTION OF THE REMEDY

The selected alternative provides for ground water treatment and capping of the waste disposal cell in accordance with the RCRA landfill closure and post-closure requirements as described in 40 C.F.R. § 264 Subparts G and N. The design life of the cap is estimated to be 30 years. Post-closure care requirements would include maintenance of the final cover and the maintenance of a ground water monitoring system. Ground water monitoring shall be in accordance with the RCRA ground water monitoring requirements, 40 C.F.R. § 264, Subpart F.

An air stripping column would be constructed at the Site to treat the volatile organic compounds (VOCs) in the extracted ground water. The air and VOC mixture leaving the air stripper may be treated by a vapor phase carbon adsorption unit, if necessary to meet ARARs. The clean air would be emitted into the atmosphere. In addition, inorganic contaminants in the ground water may be removed by a filtration unit, if one is necessary to meet ARARs. The treated water would be discharged either into the North Skunk River or into the POTW. All air and surface water discharges would comply with both state and federal standards.

Ground water monitoring would be conducted for at least 30 years. In addition, monitoring of the ground water at the Site would continue for at least three years after the completion of the remediation to ensure that the goals of the remedial action have been met. Deed restrictions would also be placed on the use of ground water for drinking water purposes until the remediation goals are achieved.

DECLARATION

Consistent with the Comprehensive Environmental Response, Compensation and Liability Act of 1980, as amended, I have determined that the selected alternative described above, is costeffective, protective of human health and the environment and utilizes permanent solutions and alternate treatment technologies to the maximum extent practicable. The remedy selection procedure of the selected remedial alternative complies with the provisions of CERCLA and the National Contingency Plan, 40 C.F.R. § 300.

Morris Kay Regional Administrator

SEP 27 1890

Date

DECISION SUMMARY FOR THE MIDWEST MANUFACTURING/NORTH FARM SITE MIDWEST OPERABLE UNIT KELLOGG, IOWA

I. SITE NAME, LOCATION, AND DESCRIPTION

The Midwest subsite of the Midwest Manufacturing/North Farm Superfund Site is located on a manufacturing site owned and operated by Smith Jones, Inc., Midwest Division. The Midwest subsite (hereafter referred to as "the Site") is located at 101 High Street in the city of Kellogg, Iowa, and occupies eight acres within the North Skunk River floodplain. Kellogg, population 700, is located in Jasper County, which is approximately 42 miles east of Des Moines (See figure #1).

A six foot chain link fence surrounds the active portion of the plant property and includes the waste disposal cell, waste metals pile, the borrow pit area and the plating and painting drain lines. The Site is bordered to the east by Holmdahl City Park, to the west by a county road and agricultural property and to the south by the North Skunk River. North of the Site is the Co-Op Farm Products operation consisting of storage elevators and a grain store and tracks from the Chicago-Rock Island and Pacific Railroads. The vegetation surrounding the Site is primarily mowed grass with deciduous trees. No federal or state natural resources are within close proximity of the Site.

Ground water flow and surface water drainage across the Site is to the south towards the North Skunk River. The river flows from the northwest to the southeast and eventually discharges into the Mississippi River. The City of Kellogg obtains its drinking water from three municipal wells. City well numbers 1 and 2 are both completed in the shallow alluvial aquifer and city well #3 is completed in the deep sandstone aquifer. All three of these wells are located upgradient of the site at distances of 1000 feet northeast, 1300 feet northwest and 3/4 of a mile east for city well numbers 1, 2, and 3 respectively. There are no drinking water wells located on the Site.

II. LEGAL SITE DESCRIPTION

The legal description of the Site is given below:

Outlot Two and Lots Five, Six, Seven, Eight and Nine in Block Five, including the alley between Lots Six and Seven, in Blair & Adair's Addition to Kellogg, Jasper County, Iowa, as appears in Plat Book B at page 540 in the office of the Recorder of said County.

Lots Two, Three, Four, Five, Six and the South Thirty-four Feet of Lot Seven in Block Six, and all of the alleys lying within said Block Six, EXCEPT that part of the alley lying between Lots One and Eight in said Block Six; Lots One, Two, Three, Four, Five, Six, Seven and Eight in Block Seven, and all of the alleys lying within said Block Seven; Outlots Five and Six; Lot Eleven, EXCEPT the north eight feet thereof (sometimes described as all of High Street the North Sixty-eight feet thereof) and Lot Thirteen in Block Five, all in Blair and Adair's Addition to Kellogg, Jasper County, Iowa, as shown by plat recorded in Plat Book B, page 541, in the office of the Recorder of said County.

The Twelve and one-half foot alley running North and South between Blocks Five and Six, Blair and Adair's Addition to Kellogg, Iowa, and Lot Twelve in Block Five, Blair and Adair's Addition to Kellogg, Jasper County, Iowa, as appears in Plat Book B, page 541 in the office of the Recorder of said county.

All that part of Lots One and Two in the Subdivision of the Southeast Quarter of the Northeast Quarter of Section Twenty-six, Township Eighty North, Range Eighteen West of the Fifth P.M., Jasper County, Iowa, as appears in Plat Book B at page 542 in the office of the Recorder of said County, EXCEPT that part conveyed to the City of Kellogg, Iowa, by deed in Book 720, page 472, in the office of the Recorder of said County.

All that part of the Southwest Quarter of the northeast Quarter of Section Twenty-six, Township Eighty North, Range Eighteen West of the Fifth P.M., Jasper County, Iowa, lying North and East of Skunk River Ditch as now located.

The section of road commencing in the center of the Northeast Quarter of Section Twenty-six, Township eighty North, Range 18.

West of the Fifth P.M., Jasper County, Iowa, running thence West Seven hundred and fifty feet (the South half of said road lying outside the corporate limits of the Town of Kellogg, Iowa).

III. SITE HISTORY

Smith Jones, Inc. engaged in electroplating and painting operations of manufactured products from 1973 until June 1981. The electroplating process involved the use of trichloroethylene (TCE) to clean the product before it was coated with a metal. Cadmium was used as the metal coating prior to 1979, nickel was used until 1980, and from 1980-1981 zinc was used. Prior to 1973, wastewaters containing TCE, heavy metals, and paint residue generated from onsite painting operations were disposed directly into the North Skunk River.

Smith Jones entered into an Amended Consent Order with the State of Iowa and in 1977 began to treat the wastewaters resulting from its electroplating and painting operations. Metals were precipitated from the wastewater and the resulting solids were initially stored inside an above-ground tank until it became full. Then its contents were transferred to an unlined disposal cell located between the Plant and the North Skunk River.

From 1981 to 1982 several onsite inspections of the plant Site were conducted by Ecology and Environment (E & E) on behalf of the EPA. Samples were collected from the waste disposal cell, from the soil located south of the disposal cell, from the sediments within the North Skunk River, and from the city municipal wells. A background soil sample was taken south of the disposal cell and a background sediment sample was taken from the river. The metal concentration levels in both the soil and waste disposal cell samples were higher than those in the background samples. The data also showed that the contaminants within the disposal cell had no impact on the river or the city water system.

This Site was listed on the Superfund National Priorities List in May 1986.

IV. SCOPE AND ROLE OF RESPONSE ACTION

The scope of this response action is to address the principal threats at the Midwest subsite of the Midwest Manufacturing/North Farm Superfund Site. The principal threats posed by the North Farm subsite were addressed in a Record of Decision signed in September 1988.

V. ENFORCEMENT ACTIVITIES

The Special Notice procedure of CERCLA section 122(e)(1) was followed regarding the Remedial Investigation/Feasibility Study (RI/FS) phase of this project. Smith Jones, Inc. is the only responsible party for this Site, and it did not make a good faith offer to undertake or finance the RI/FS.

VI. COMMUNITY RELATIONS FOR THE ROD

On August 22, 1990, EPA announced the availability of the Proposed Plan for the Midwest Subsite of the Midwest Manufacturing/North Farm site. Notice of the availability of the Proposed Plan and the administrative record file upon which EPA intended to base its remedy selection decision was published in the Newton Daily News. This notice also requested the public's

comments on the proposed plan and indicated the period during which public comments received by EPA would be considered in the decision-making process. A fact sheet in which the various remedial alternatives were described, including the identification of a preferred alternative, was mailed to persons who had previously expressed an interest in this site.

A public meeting was held on September 12, 1990 in Kellogg, Iowa to receive comments from the public regarding all of the remediation alternatives summarized in the Proposed Plan document and detailed in the FS report. A responsiveness summary to the public's comments received during the public comment period, including the public meeting, is attached to this Record of Decision. The Administrative Record File for this Site has been available for public review at the Newton Public Library in Newton, Iowa; the Kellogg Public Library in Kellogg, Iowa; and the New Brotherhood Building in Kansas City, Kansas. All community relations activities have been in conformance with the requirements of section 117 of CERCLA and the National Contingency Plan, 40 C.F.R. § 300.

VII. SITE CHARACTERISTICS

Field activities were conducted during October 1989 and April-May, 1990. The purpose of these field activities was to identify the types and quantities of contaminants that may have originated from four potential contaminant source areas and to identify the potential pathways for contaminant migration. These source areas are identified in Figure #2.

POTENTIAL CONTAMINANT SOURCE AREAS

1. WASTE DISPOSAL CELL

The waste disposal cell was investigated by collecting three samples from each of five different locations within the cell. An estimated 170 cubic yards of waste material is in the disposal cell. All of the samples were analyzed for volatile organic compounds, semi-volatile organic compounds, metals, and cyanide. Results of these analyses are presented in table \$1. Samples were analyzed using two tests that measure a waste's potential to leach contaminants (the Toxic Characteristics Leaching Procedure (TCLP) and Extraction Procedure Toxicity Test (EP TOX)).

The contaminant concentrations exhibited by the samples collected around the disposal cell did not differ significantly from the contaminant concentrations measured in the background samples. Wastes within the disposal cell are classified as listed RCRA hazardous wastes, as is described in the ARARS section herein. However, the waste material within the disposal

cell did fail both the TCLP and EP TOX tests for cadmium. This indicates that the waste material has the potential to leach cadmium into the ground water.

2. WASTE METALS PILE

Three soil samples were taken from this area southeast of the plant facility and were analyzed for volatile organic compounds, semi-volatile organic compounds, metals, and cyanide. Results of these analyses are presented in table \$2. Copper, lead, and zinc were found to have concentration levels exceeding the background soil data. A magnetometer and an electromagnetic conductivity meter qualitatively defined the boundary of the waste metals pile to be 40 feet wide by 90 feet long, and volume of the waste materials is approximately 7200 cubic feet.

3. BORROW PIT AREA

Five sediment samples and three surface water samples were collected in this marshy area immediately west of the plant facility. These, too, were analyzed for volatile organic compounds, semi-volatile organic compounds, metals, and cyanide. Sample location spots are shown in figure #2. Results of these analyses are presented in tables #3A and #3B.

The borrow pit sediment samples were elevated in concentrations of cadmium, chromium, iron, nickel, barium, and lead when compared to the background data. Elevated concentration levels of trichloroethylene (TCE), toluene, ethyl benzene, and total xylene were also detected.

The borrow pit water samples detected elevated concentration levels of cyanide, TCE, and 1,2 dichloroethylene. None of the detected concentration levels of metals (either dissolved or total) exceeded the primary Maximum Contaminant Level (MCL) as established under the Safe Drinking Water Act (SDWA). (This ground water quality criteria has been established to protect public health to the extent feasible and taking cost into consideration, using technology, treatment techniques, and other means.)

4. PAINTING AND PLATING DRAIN LINES

An organic vapor analyzer was used to scan the drain lines located at the south side of the plant, as is shown on figure #2. The analysis took place within the manholes of each drain line. The scan revealed the presence of organic vapors at concentration levels of 0 to 3 parts per million (PPM) in the plating area and 160-180 PPM in the painting area drains lines.

SUBSURFACE PATHWAYS OF MIGRATION

Twenty ground water monitoring wells were installed at the location shown on figure #2. Sixteen of the wells were constructed as well nests: each nest consists of one deep monitoring well and one shallow monitoring well. The deep wells were screened in the lower portion of the alluvial aquifer at depths of 25 to 30 feet. The shallow wells were screened across the shallow alluvial water table at 9 to 19 feet. (One well was screened in the lower sandstone aquifer (at 55 to 65 feet), but no contaminants were identified in the samples collected from that well.)

All samples collected from these monitoring wells were analyzed for volatile organic compounds, semi-volatile organic compounds, total and dissolved metals, and cyanide. Table #4 presents the results of these analyses. The only contaminant concentration levels for total metals that exceeded the MCLs were for barium, cadmium, arsenic, chromium, and lead. The other contaminants identified in the ground water were as follows: 1,2 dichloroethylene, TCE, vinyl chloride, 2-butanone, 1,1,1-trichloroethane, carbon tetrachloride, toluene, ethyl benzene, and total xylenes.

Water samples were also collected for analysis from City well numbers 1, 2, and 3. These samples were also analyzed for volatile organic compounds, semi-volatile organic compounds, total and dissolved metals, and cyanide. No contaminants were found at concentrations exceeding health-based action levels. City well numbers 1 and 2 are both completed in the shallow alluvial aquifer and are located upgradient of the Site at distances of 1000 feet northeast and 1300 feet northwest respectively. City well #3 is completed in the deep sandstone aquifer and is located upgradient of the Site at a distance of 3/4 of a mile.

VIII. SITE RISKS

As part of the remedial investigation process, a risk assessment was conducted. The risk assessment analyzes the current and potential human health and environmental risks posed by the Site in the absence of any remedial action and considers both current and future use scenarios. The risk assessment provides the basis for determining if a clean up action is necessary. This section summarizes the findings concerning the quantified risks.

1. CONTAMINANTS OF CONCERN

Chemicals were eliminated from the risk assessment if they were not detected in environmental samples, were detected infrequently, were common laboratory contaminants or if they were chemicals that were essential nutrients (and therefore relatively non-toxic). After exclusion of such chemicals, twenty-six chemicals were selected as contaminants of potential concern. These chemicals are presented in table #5.

2. EXPOSURE ASSESSMENT

An exposure assessment analyzes two factors that affect the quantification of risks: potentially exposed populations and exposure pathways. In general, Superfund Exposure Assessments consider both current and future exposure scenarios.

A. POTENTIALLY EXPOSED POPULATION

Current human populations that potentially may be exposed on Site are occupational workers of the Smith Jones plant and Site trespassers. There are no off-Site populations that would potentially be exposed to the contaminants of concern.

Currently, the Smith Jones property is zoned for industrial use and a county ordinance prohibits residential construction on a floodplain. Therefore, it was assumed that any future development would be industrial in nature and future onsite populations would be engaged in similar occupational activities as current ones. Future occupational workers could be exposed via contaminated drinking water if a well was drilled onsite. Future offsite residential populations are assumed to be the same as current populations. These populations could be exposed to contaminated drinking water if a drinking water well were installed into a plume that originated from the Site.

B. EXPOSURE PATHWAYS

Ten exposure pathways were selected for further quantitative evaluation from a list of 27 exposure pathways presented in table 3-1 of the Risk Assessment report, because these ten are more likely to present the highest potential for adverse health effects resulting from Site exposures. These pathways are described below.

The current potential exposure routes that were evaluated in the Risk Assessment report are as follows:

1) Ingestion of contaminated soils originating from the waste disposal cell, the waste metals pile, the borrow pit area and from the soils located south of the waste disposal cell;

- 2) Dermal contact with the contaminated soils originating from the waste disposal cell, the waste metals pile, the borrow pit area and from the soils located south of the waste disposal cell; and
- 3) Inhalation of volatiles and contaminated particulates from soils originating from the waste disposal cell, the waste metals pile, the borrow pit area and from the soils located south of the waste disposal cell.

The future potential exposure routes that were evaluated in the Risk Assessment report are as follows:

- 1) Ingestion of contaminated ground water from an onsite or offsite well;
- 2) Dermal contact with contaminated ground water from an onsite or offsite well;
- 3) Ingestion of surficial soils or excavated subsurface soils from areas in and around the waste disposal cell;
- 4) Dermal contact with surficial soils or excavated subsurface soils from areas in and around the waste disposal cell;
- 5) Ingestion of contaminated sediment or surface water whose origin is the borrow pit or the North Skunk River;
- 6) Dermal contact with sediment or surface water whose origin is the borrow pit or the North Skunk River; and
- 7) Inhalation of volatiles and contaminated particulates from soils, sediment, and surface waters of the borrow pit and the North Skunk River.

3. TOXICITY ASSESSMENT

The Toxicity Assessment portion of the Risk Assessment report weighs the available evidence regarding the potential for particular contaminants to cause adverse health effects in exposed individuals. It also provides, where possible, an estimate of the relationship between the extent of exposure to a contaminant and the increased likelihood and/or severity of adverse health effects.

Table #6 presents both the chronic and sub-chronic reference doses for the contaminants of concern that have non-carcinogenic effects, as well as the cancer potency factors for the contaminants of concern that are carcinogens.

References doses (RfDs) have been developed by the EPA for indicating the potential for adverse health effects from exposure to chemicals exhibiting non-carcinogenic effects. RfDs, which are expressed in units of mg/kg-day, are estimates of lifetime daily exposure levels for humans, including sensitive individuals. Estimated intakes of chemicals from environmental media (e.g., the amount of chemical ingested from contaminated drinking water) can be compared to the RfD. RfDs are derived from human epidemiological studies or animal studies to which uncertainty factors have been applied (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 non-carcinogenic effects to occur.

Cancer potency factors (CPFs) have been developed by EPA's Carcinogenic Assessment Group for estimating excess lifetime cancer risks associated with exposure to potentially carcinogenic chemicals. CPFs, which are expressed in units of (mg/kg-day) X E-1 are multiplied by the estimated intake of a potential carcinogen, in mg/kg-day, to provide an upper bound estimate of the excess lifetime cancer risk associated with exposure at that intake level. The term "upper bound" reflects the conservative estimate of risks calculated from the CPF. Use of this approach makes underestimation of the actual cancer risk highly unlikely. Cancer potency factors are derived from the results of human epidemiological studies or chronic animal bioassays to which animal-to-human extrapolation and uncertainty factors have been applied.

A. ASSUMPTIONS - CHILD TRESPASSERS

Child trespassers were assumed to be exposed on the site 2 days/week during the summer when school is not in session and 1 day/week during school (32 weeks/year) except when the ground is snow covered (8 weeks/year). Thus the average number of days/year that a child is exposed is:

(2 days/week) (12 week/year) + (1 day/week) (32 weeks/year) = 56 days/year

B. ASSUMPTIONS - OCCUPATIONAL WORKERS

Occupational workers were assumed to be exposed on the Site for 8 hours/day, five days/week, for 50 weeks/year for 40 years.

4. RISK CHARACTERIZATION

The Risk Characterization portion of the Risk Assessment report integrates the results of the exposure and toxicity assessments into a quantitative description of cancer and non-cancer risks.

Table numbers 7, 8, 9 and 10 present the twelve exposure scenarios that were quantified, a summary of the carcinogenic risks associated with the Site, a summary of the sub-chronic non-carcinogenic health hazards associated with the Site and a summary of the chronic non-carcinogenic health hazards associated with the Site, respectively.

Excess lifetime cancer risks are determined by multiplying the intake level with the cancer potency factor. These risks are probabilities that are generally expressed in scientific notation (e.g., 1 X E-6, or 1 X 10⁻⁶). An excess lifetime cancer risk of 1 x E-6 indicates that, as a plausible upper bound, an individual has a one in one million chance of developing cancer as a result of Site-related exposure to a carcinogen over a 70-year lifetime under the specific exposure conditions at a Site.

Potential concerns for non-carcinogenic effects of a single contaminant in a single medium is expressed as the hazard quotient (or the ratio of the estimated intake derived from the contaminant concentration in a given medium to the contaminant's reference dose). By adding the hazard quotients for all contaminants within a medium or across all media to which a given population may reasonably be exposed, the Hazard Index (HI) can be generated. The HI provides a useful reference point for gauging the potential significance of multiple contaminant exposures within a single medium or across media. A HI of less than 1 indicates that non-carcinogenic health effects are not believed to occur.

A. NON-CANCER RISKS RESULTING FROM EXPOSURE TO CONTAMINANTS OF CONCERN VIA BOTH CURRENT AND FUTURE EXPOSURE PATHWAYS

Onsite trespassers (children playing in various locations on the Site) do not appear to have a risk of any non-cancer health effects.

B. CANCER RISKS RESULTING FROM EXPOSURE TO CONTAMINANTS OF CONCERN VIA BOTH CURRENT AND FUTURE EXPOSURE PATHWAYS

The baseline risk assessment report did not identify any current human health risks posed by the Site. Onsite workers may experience a small excess cancer risk (6 X E-6) from contact with contaminants arsenic, beryllium and vinyl chloride in soil, and a large risk (1 X E-3) from ingestion of the same contaminants in ground water. This future risk calculation was based upon the ingestion of beryllium, arsenic and vinyl chloride at concentration levels identified in the onsite ground water.

However, the presence of both arsenic and beryllium in the ground water can be explained by their presence in both onsite

and offsite soils. The concentration levels of these two contaminants were found to be essentially the same in both the on- and offsite soil samples. Therefore, the presence of both arsenic and beryllium in the ground water is not a result of plant activities but is naturally occurring.

IX. ENVIRONMENTAL RISKS

An ecological assessment was conducted to determine if there are any adverse effects occurring or likely to occur in aquatic organisms, populations or communities exposed to contaminants originating from the Site. Three river sediment samples were collected at an upstream and at a downstream location from the site, for a total of six sediment samples. These samples were collected at a depth of one foot below the river bed and analyzed for total metals. Analysis of these samples did not indicate the presence of metals at concentrations that would pose an adverse threat to aquatic organisms. This conclusion is further supported by the results obtained from analysis of two biological samples collected from an upstream and a downstream location from the site. Analysis of these two samples indicated that there was no uptake of metals by these organisms.

No federal or state critical habitats, endangered wildlife, or natural resources are potentially threatened or damaged as a result of past waste disposal practices conducted at the Site.

X. POTENTIALLY APPLICABLE OR RELEVANT AND APPROPRIATE REQUIREMENTS (ARARS)

CERCLA section 121(d)(2) provides that at the completion of any onsite Superfund remedial actions, if any hazardous substance, contaminant, or pollutant remains onsite, the remedial action shall attain other federal standards or requirements, or more stringent state requirements that are determined to be legally applicable or relevant and appropriate (ARAR) to the specified circumstances at the Site. A variety of federal environmental laws were reviewed as to legal applicability or relevance and appropriateness to the remedial alternatives under consideration at this Site. Further, the State of Iowa was requested to provide a list of its statutes that may be applicable or relevant and appropriate to this Site. One statute provides more stringent requirements than federal laws. environmental laws that were determined to be either applicable or relevant and appropriate for the remedial actions being considered for this Site are discussed under each medium of concern.

A. HAZARDOUS WASTE

RESOURCE CONSERVATION AND RECOVERY ACT (RCRA)

The Resource Conservation and Recovery Act (RCRA) regulates the generation, transportation, treatment, storage and disposal of hazardous waste as provided in 40 C.F.R. §§ 260 - 270.

The RCRA hazardous waste management regulations that may be applicable or relevant and appropriate to the response alternatives considered at this Site are described below.

1. RCRA'S DEFINITION OF A HAZARDOUS WASTE

A RCRA hazardous waste can be defined as: 1) one that exhibits any of the characteristics of a hazardous waste, or 2) one that has been listed as a hazardous waste. Certain electroplating wastes are listed as a RCRA hazardous waste (F006) at 40 C.F.R. § 261.31.

2. RCRA LAND BAN DISPOSAL RESTRICTIONS

The electroplating wastes generated and disposed at the Smith Jones property are a RCRA hazardous waste (F006), which became subject to the Hazardous and Solid Waste Amendments to RCRA on August 8, 1988.) Superfund wastes usually contain soil and debris that are contaminated with RCRA hazardous wastes. In general, RCRA's Land Disposal Restrictions or LDRs were established for waste streams that differ significantly from Superfund wastes. Because the LDRs are not based on treating wastes that contain soil or debris, a Treatability Variance would be appropriate to comply with RCRA's restrictions. Under a Treatability Variance, alternate treatment levels are established based on data from actual treatment of soil, or best management practices for debris.

3. RCRA LANDFILL CLOSURE AND POST-CLOSURE STANDARDS

If a waste is hazardous and was disposed of subsequent to November 19, 1980, when RCRA requirements became effective, then RCRA closure standards apply.

Landfill closures require post-closure care and maintenance of the unit for at least 30 years. The landfill unit must be capped with a final cover designated and constructed to 1) provide long-term minimization of migration of liquids; 2) function with minimum maintenance; 3) promote drainage and minimize erosion; 4) accommodate settling and subsidence; and 5) have a permeability less than or equal to any bottom liner system or natural subsoils present. Post-closure care includes maintenance of the final cover and maintenance of a ground water monitoring system (see 40 C.F.R. §§ 264.117 and 264.310(b)).

4. RCRA AND DEPARTMENT OF TRANSPORTATION REGULATIONS APPLICABLE TO TRANSPORTERS OF HAZARDOUS WASTE

A transporter must comply with the regulations under 40 C.F.R. § 263 (Subtitle C). A transporter under Subtitle C is defined as any person engaged in off-site transportation of hazardous waste within the United States. Such transportation requires a manifest under 40 C.F.R. § 262.

B. GROUND WATER/SURFACE WATER

1. SAFE DRINKING WATER ACT

CERCLA section 121(d)(2)(A) requires onsite remedies to attain Maximum Contaminant Level Goals (MCLGs) that are above zero, if MCLGs are relevant and appropriate to the circumstances of the release. If the MCLGs are not relevant and appropriate, then the corresponding Maximum Contaminant Level (MCL) shall be attained where relevant and appropriate. Currently, the MCL for vinyl chloride is 2 micrograms per liter.

2. IOWA ANTIDEGRADATION REQUIREMENTS FOR GROUND WATER

The Iowa Department of Natural Resources (IDNR) has promulgated rules for determining ground water clean up levels. These rules became effective on August 16, 1989. The rules, as stated in chapter 133 of the Iowa Administrative Code, refer to a hierarchy of cleanup levels starting with the lifetime Health Advisory Level (HAL), followed by the Negligible Risk Level (NRL) for an additional lifetime 1 X E -6 cancer risk, and then by the Maximum Contaminant Level (MCL) as established under the Safe Drinking Water Act.

3. RCRA GROUND WATER MONITORING REQUIREMENTS

Landfill closure requires ground water monitoring to be conducted in accordance with the requirements of 40 C.F.R. § 264, Subpart F. These regulations describe monitoring schedules, continued site characterizations, and provide for corrective action if the standards are not met.

4. NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM

The Clean Water Act (CWA) controls the direct discharge of pollutants to surface waters through the National Pollutant Discharge Elimination System (NPDES) program. NPDES requires permits for direct discharge to surface waters. An onsite discharge from a CERCLA site to surface waters must meet the substantive NPDES requirements but need not obtain an NPDES permit or comply with the administrative process, consistent with CERCLA section 121(e)(1). The NPDES permits are issued, monitored and

enforced by the State of Iowa. Chapters 60-64 of the Iowa Administrative Code address the specifics of the NPDES program.

5. PRETREATMENT PROGRAM

Under the CWA, all discharges by non-domestic users into the Publicly Owned Treatment Works (POTWs) must meet pretreatment standards. The purpose of the pretreatment standards is to avoid the introduction of pollutants into municipal wastewater treatment plants that pass through, interfere with, or are otherwise incompatible with such treatment works. Any discharge from a CERCLA site to a POTW is considered an off-site activity. It is therefore, subject to both substantive and administrative requirements of the national pretreatment program, and all applicable state and local pretreatment regulations. These regulations are also found in Chapters 60 - 64 of the Iowa Administrative Code.

6. AQUIFER CLASSIFICATION

Although the state has not officially categorized the aquifer beneath and around the Site, this type aquifer is one that is a current or potential source for drinking water and has other beneficial uses.

7. SURFACE WATER CLASSIFICATION

The state has categorized the North Skunk River as a class B warm water body. See Ch. 61.3(5) Iowa Admin. Code. A class B(W) water is protected for wildlife, fish, aquatic and semiaquatic life, and secondary contact water uses.

C. AIR

1. RCRA CLEAN AIR STANDARDS

The use of an air stripper to remove volatile organic compounds (VOCs) from ground water causes the contaminants to be transferred from a liquid phase to a vapor phase and they are subsequently released to the ambient air. A vapor phase carbon adsorption unit shall be used if the air emissions coming from the air stripper exceed the emission limit goals specified in 55 Fed. Reg. 25,454 (June 21, 1990) (to be codified at 40 C.F.R. § 264, Subpart AA and Subpart BB).

XI. DESCRIPTION OF ALTERNATIVES

ALTERNATIVE #1: NO ACTION WITH GROUND WATER MONITORING

Estimated Construction Cost: \$27,209
Estimated Engineering Cost: \$9,009

Estimated Operation and

Maintenance Cost: \$82,588*

Estimated Implementation

Timeframe: one month

The Superfund program requires that the "no action" alternative be considered at every site. The no action alternative is the baseline against which effectiveness of other remedial alternatives are judged. Under this alternative, EPA will not take a clean up action to address the ground water contaminant plume. However, long term monitoring would be conducted to ensure that the plume does not impact the city municipal drinking water wells. In order to ensure that this alternative is protective of human health, monitoring would be implemented around the perimeter of the Site. The monitoring well network would consist of two new monitoring wells and four existing monitoring wells. The four existing monitoring wells are located in the southern portion of the Site. One of the new monitoring wells would be located in the northeast corner of the Site directly downgradient of the City's municipal well #1 and the other new monitoring well would be located off-Site to the west of the Site directly down-gradient of the City's municipal well #2.

Sampling and analysis of the six ground water monitoring wells would take place quarterly for the first two years, semi-annually for 3 to 10 years, and annually for 11 to 45 years. The ground water samples would be analyzed for the twenty-six contaminants of concern.

The area of attainment defines the area over which cleanup levels will be achieved in the ground water. This area has been defined as the area at the site boundaries. This alternative relies on natural attenuation to reduce the level of contamination. It is estimated that the contaminant levels will be reduced to concentrations in accordance with ARARs in approximately 40 to 45 years.

^{*} All operation and maintenance cost estimates for <u>each</u> alternative are in present worth, estimated over 30 years at 8 percent interest per annum.

ALTERNATIVE #2: SOIL CAPPING OF THE WASTE DISPOSAL CELL AND GROUND WATER PUMPING, TREATMENT AND DISCHARGE

Estimated Construction Cost: \$199,373 Estimated Engineering Cost: \$89,046

Estimated Operation and

Maintenance Cost: \$200,425

Estimated Implementation

Timeframe: five months

This alternative would require that the waste disposal cell which received the plant's electroplating waste be capped in accordance with the RCRA landfill closure requirements as described in the ARARS section herein and in 40 C.F.R. § 264 Subparts G and N. The design life of the cap is estimated to be 30 years. The purpose of the cap is to minimize infiltration of surface waters through the wastes and thus to minimize the potential for generation of leachate. The RCRA landfill closure requirements are applicable, because the listed waste was disposed after RCRA's effective date. Post-closure care requirements include maintenance of the final cover and the maintenance of a ground water monitoring system.

An air stripping column would be constructed at the Site to treat the volatile organic compounds (VOCs) in the extracted ground water. The air and VOC mixture leaving the air stripper may be treated by a vapor phase carbon adsorption unit, if necessary to meet ARARs.

The clean air would be emitted into the atmosphere. In addition, inorganic contaminants in the ground water may be removed by a filtration unit, if one is necessary to meet ARARS. The treated water would be discharged either into the North Skunk River or into the POTW. All air and surface water discharges would comply with both state and federal standards.

Ground water monitoring would be conducted during the postclosure period. In addition, monitoring of the ground water at the Site would continue for at least three years after the completion of the remediation to ensure that the goals of the remedial action have been met. Deed restrictions would also be placed on the use of ground water for drinking water purposes until the remediation goals are achieved.

The area of attainment for the treatment of ground water under this alternative encompasses the area outside the boundary of the waste disposal cell and up to the contaminant plume. The ground water contamination will be reduced to concentrations in accordance with Iowa's antidegradation statute in approximately 25 to 30 years.

ALTERNATIVE #3: SOIL CAPPING AND IN-SITU STABILIZATION OF THE WASTE DISPOSAL CELL AND GROUND WATER PUMPING, TREATMENT AND DISCHARGE

Estimated Construction Cost: \$232,385 Estimated Engineering Cost: \$99,878

Estimated Operation and

Maintenance Cost: \$200,425

Estimated Implementation

Timeframe: five months

Under this alternative, a cement-silicate agent would be used to immobilize the waste within the waste disposal cell. Because of the shallow depth of the waste within the cell, the immobilization agent would be added to the surface of the disposal cell. After immobilization of the waste material has occurred, a RCRA cap as described in Alternative #2 would be placed over the disposal cell. It is estimated that 340 cubic yards of waste material would be treated under this Alternative.

The ground water pumping, treatment and discharge scenario would be the same as described in Alternative #2.

ALTERNATIVE #4: SOIL EXCAVATION AND STABILIZATION OF THE WASTE DISPOSAL CELL AND GROUND WATER PUMPING, TREATMENT AND DISCHARGE

Estimated Construction Cost: \$362,437 Estimated Engineering Cost: \$109,407

Estimated Operation and

Maintenance Cost: \$190,012

Estimated Implementation

Timeframe: five months

This alternative provides for the excavation of the waste material within and around the waste disposal cell. The excavated material would be treated on site using immobilization technology to achieve compliance with RCRA's land disposal restrictions. 40 C.F.R. § 268. The disposal cell would be closed in compliance with RCRA's clean landfill closure requirements as explained in the ARARs section herein. The treated material would be disposed into a RCRA Subtitle C licensed disposal facility.

Transportation of the treated material would be in compliance with RCRA's regulations for hazardous waste transportation regulations. 40 C.F.R. § 263. It is estimated that 340 cubic yards of contaminated material would be excavated under this alternative. Clean offsite fill material of low permeability will be used to back-fill the excavations. The area would be graded with clean soil to support a vegetative cover.

The ground water pumping, treatment and discharge scenario would be the same as described in Alternative #2, except that the area of attainment under this alternative would be the entire plume including where the waste disposal cell was previously located.

XII. NINE EVALUATION CRITERIA

EPA has developed nine criteria to be used to evaluate remedial alternatives to ensure all important considerations are factored into remedy selection decisions. These criteria are described from the statutory requirements of section 121 of CERCLA, as well as other technical and policy considerations that have proven to be important for selecting the preferred remedy.

A. THRESHOLD CRITERIA

The two most important criteria are statutory requirements that must be satisfied by any alternative in order for it to be eligible for selection.

- 1. Overall protection of human health and the environment addresses whether a remedy provides adequate protection of human health and the environment and describes how risks are eliminated, reduced, or controlled through treatment, engineering controls, or institutional controls.
- 2. <u>Compliance with ARARs</u> addresses whether a remedy will meet all of the applicable or relevant and appropriate requirements of other environmental statutes, or provide grounds for waiving such a requirement.

B. PRIMARY BALANCING CRITERIA

Five primary balancing criteria are used to identify major trade-offs among remedial alternatives. These trade-offs are ultimately balanced to identify the preferred alternative and to select the final remedy.

- 1. Long term effectiveness and permanence refers to the ability of a remedy to maintain reliable protection of human health and the environment over time once cleanup goals have been met.
- 2. Reduction of toxicity, mobility or volume through treatment is the anticipated performance of the treatment technologies a remedy may employ.
- 3. <u>Short-term effectiveness</u> addresses the period of time needed to achieve protection and any adverse impacts on human health and the environment that may be posed during the construction and implementation period until cleanup goals are achieved.

- 4. <u>Implementability</u> is the technical and administrative feasibility of a remedy, including the availability of materials and services needed to implement a particular option.
- 5. <u>Cost</u> includes estimated capital and operation and maintenance costs.

C. MODIFYING CRITERIA

These criteria may not be considered fully until after the formal public comment period on the Proposed Plan and the RI and FS reports is complete.

- 1. <u>State acceptance</u> addresses the support agency's comments after it reviews the RI and FS reports and Proposed Plan.
- 2. <u>Community acceptance</u> addresses concerns of the public regarding acceptance of a particular remedy.

XIII. SUMMARY OF COMPARATIVE ANALYSIS

A detailed analysis was performed on four alternatives using the nine evaluation criteria described above in order to identify the preferred alternative for the Site. The following is a summary of the comparison of each alternative's strength and weakness with respect to the nine evaluation criteria.

1. Protection of human health and the environment

Protection of human health and the environment pertains to how risks are eliminated, reduced, or controlled through treatment, engineering controls, or institutional controls.

With the exception of the no action alternative, all of the alternatives provide protection of human health and the environment by reducing or controlling risk through treatment and engineering controls. The potential health risk resulting from exposure to the contaminated ground water is significantly reduced by all of the action alternatives. In addition, the potential for migration of the contaminants within the waste disposal cell to the ground water is also significantly reduced, thus preventing increased health risks from further contamination of the aquifer.

2. <u>Compliance with applicable or relevant and appropriate</u>

Alternative numbers 2 through 4 would meet all ARARs whereas Alternative #1 would not meet the state of Iowa's antidegradation provisions.

Because these criteria are threshold considerations, any alternative that is not protective or does not comply with ARARs cannot be considered further. Therefore, Alternative #1 is removed from further discussion.

3. Reduction of toxicity, mobility, or volume

Section 121(b) of CERCLA states that remedial actions involving treatment that permanently and significantly reduces the volume, mobility or toxicity of hazardous materials, are to be preferred over those not involving such treatment. This evaluation criteria relates to the ability of a remedial alternative to control or eliminate risks caused by the mobility, toxicity or volume of a hazardous waste.

Alternative numbers 2 through 4 will stabilize the plume and thereby reduce its mobility by pumping and treating the ground water. Also, as the ground water is treated the toxicity of the contaminants will be reduced. The reduction of the contaminants to appropriate ARARs will take 25 to 30 years.

Alternative #2 proposes to cap the waste disposal cell. This action would not reduce the toxicity or volume of the materials within the cell since the cadmium concentration would remain at its current level. However, the mobility of the contaminants would be minimized by reducing the flow of surface water through the waste. The leaching of contaminants into the ground water could continue, but at a significantly reduced rate.

Alternative numbers 3 and 4 would use immobilization treatment technology to reduce the mobility of cadmium in the soil. Neither of these alternatives would reduce the toxicity or volume of the hazardous wastes within the disposal cell. However, each would provide a great degree of protection against the ability of the cadmium to leach into the ground water. The issue of reduction of toxicity, mobility, and volume is resolved in Alternative #4 by providing that the waste will be transported offsite for disposal.

4. Short-term effectiveness

This evaluation focuses on the effects on human health and the environment that may occur while the remedy is being implemented and until the remedial objectives are met. The following factors were used to evaluate the short-term effectiveness of each alternative: protection of the community during the remedial action and protection of workers during remedial action.

With respect to the community, none of the alternatives will pose a risk to the community.

Alternative number 2 would not pose a risk to workers, because no waste will be excavated or treated as would be required for the other two alternatives. Alternatives 3 and 4 could potentially pose a risk to workers during soil disturbing and handling activities through direct contact, ingestion, or inhalation of contaminated soil particles. Measures can be implemented to eliminate the potential for worker exposure, such as the use of protective clothing, appropriate breathing apparatus, and effective dust control.

5. Long-term effectiveness and permanence

Long-term effectiveness and permanence refers to the ability of a remedy to maintain reliable protection of human health and the environment over time after clean up goals have been met.

Alternative numbers 2 through 4 would eventually reduce the contaminants present in the ground water through pump and treatment technology in accordance with all ARARs so that long term effectiveness and permanence is achieved.

Alternative #2 proposes to place a RCRA cap over the waste disposal cell. This alternative would provide a high degree of long-term effectiveness and reliability, because the waste poses a relatively low long-term threat and it can be reliably contained over a significant period of time by available capping technology. A cap will require long-term maintenance and portions will need replacement as they erode.

The use of in-situ stabilization in conjunction with a cap as proposed in Alternative #3 may provide a higher degree of protectiveness and reliability when compared to Alternative number 2. The use of a cap in conjunction with immobilization technology will significantly reduce the likelihood for ground water contamination.

Alternative #4 would also provide a high degree of protectiveness and reliability, because it proposes to remove the source of cadmium from the Site.

6. Implementability

Implementation addresses the technical and administrative feasibility of a remedy, including the availability of materials and services needed to implement the chosen solution. Although all of the alternatives considered are implementable, some alternatives are easier to implement than others.

Alternative #2 is the easiest to implement. Its implementability would only be affected by the availability of suitable cover materials (e.g., rock, clay, soil, and seed for

acclimated vegetation). The remedial design would take site characteristics into account when developing the cap.

Both Alternative numbers 3 and 4 propose using an immobilization technology to treat the waste disposal cell. Since immobilization treatment is a proven technology, no technical difficulties are expected regarding its implementation. However, Alternative #4 would probably be the most difficult to implement because some difficulty may be encountered in locating a RCRA Subtitle C Landfill operator to accept the treated waste.

7. Cost

Capital costs consist of direct (construction) and indirect (non-construction and overhead) costs. Annual operation and maintenance costs are post-construction costs necessary to ensure the continued effectiveness of a remedial action. The cost estimates developed in the Feasibility Study are expected to provide an accuracy of +50 percent to -30 percent. A present worth analysis is used to evaluate expenditures that occur over different time periods by discounting all future costs to a common base year, usually the current year. This allows the cost of remedial action alternatives to be compared on the basis of a single figure representing the amount of money that, if invested in the base year and disbursed as needed, would be sufficient to cover all costs associated with the remedial action over its planned life.

CERCLA requires that the EPA select a cost-effective alternative (not merely the lowest cost) that protects human health and the environment and meets other requirements of the law.

The primary risk at the Site is the ingestion of contaminated ground water. No potential health risks were identified from direct contact, ingestion or inhalation of surface soils originating from the waste disposal cell. However, the potential for migration of cadmium to ground water needs to be addressed under a cost effective remedy to prevent any increased risks from further contamination of the aquifer. Alternative #2 would achieve this goal at a cost of 20% less than Alternative #4.

The total cost of Alternative #2 is \$488,844 and Alternative #3 is \$532,688. The total cost of Alternative #4 is greater than the other two alternatives, due in part to the increased construction costs involved. Its cost is \$661,856.

8. <u>Community acceptance</u>

The comments received from the public indicate that they are concerned about the costs of the preferred remedial alternative

and who will pay these costs. In addition, the comments also indicate that the public does not perceive the Site as presenting any significant threat to the public health or the environment.

9. State acceptance

The State of Iowa informed the Agency in a letter dated September 21, 1990, that it agreed with the EPA's selection of Alternative #2 as the preferred alternative for the Site. Alternative #2 proposes ground water treatment and containment of the contaminated soils in the waste disposal cell.

XIV. SELECTED ALTERNATIVE

Based on the information available to evaluate the remedial options against the previously described criteria, Alternative #2 is selected as the preferred alternative for the Site. This alternative provides for capping of the waste disposal cell in accordance with the RCRA landfill closure requirements as described in the ARARS section and in 40 C.F.R. § 264 Subparts G and N. The design life of the cap is estimated to be 30 years. The RCRA landfill closure requirements are applicable because disposal of hazardous waste occurred after November 19, 1980. The purpose of the cap would be to minimize infiltration of surface waters through the wastes, and thus to minimize the generation of leachate. Post-closure care requirements would include maintenance of the final cover and the maintenance of a ground water monitoring system. Ground water monitoring shall meet the RCRA requirements found at 40 C.F.R. § 264, Subpart F.

This alternative also provides for ground water treatment. Iowa's ground water protection law, described in the ARARS section, is a comprehensive, highly regulatory statute. Its premise is a non-degradation policy, intended to prevent further contamination to the maximum extent practicable, and to restore the ground water to a potable state, if necessary. Other drinking water programs relate to public (municipal) water supplies, and do nothing to protect the extensive rural and farm population, with their own private wells, in a state such as Iowa. Iowa's ground water protection statute attempts to minimize or eliminate contamination to alleviate health risks, particularly for farm families whose water supply is not regulated and typically not treated.

A general description of the ground water treatment is as follows. An air stripping column would be constructed at the Site to treat the volatile organic compounds (VOCs) in the extracted ground water. The air and VOC mixture leaving the air stripper may be treated by a vapor phase carbon adsorption unit, if necessary to meet ARARs. The clean air would be emitted into the atmosphere. In addition, inorganic contaminants in the ground

water may be removed by a filtration unit, if one is necessary to meet ARARs. The treated water would be discharged either into the North Skunk River or into the POTW. All air and surface water discharges would comply with both state and federal standards.

Environmental monitoring would be required during the life of the treatment process. In addition, monitoring of the ground water at the Site would continue for at least three years after the completion of the remediation to ensure that the goals of the remedial action have been met. Deed restrictions would also be placed on the use of ground water for drinking water purposes until the remediation goals are achieved.

The area of attainment for the treatment of ground water under the preferred alternative is the area outside the boundary of the waste disposal cell and up to the contaminant plume. The time to reduce the ground water contaminant concentrations in accordance with all ARARs is estimated to be 25 to 30 years.

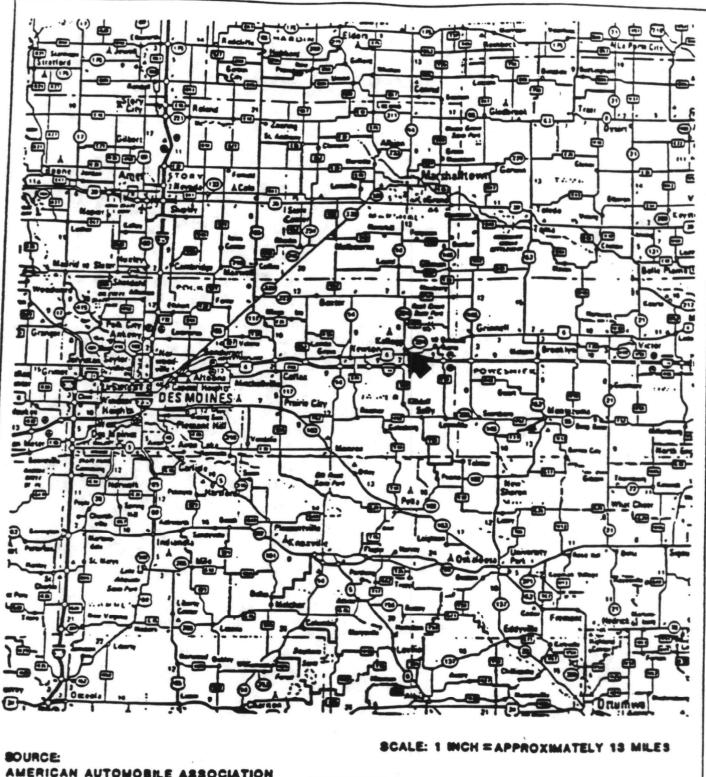
In summary, the preferred alternative is believed to provide the best balance among alternatives with respect to the criteria used to evaluate remedies. Based on the information available at this time, therefore, EPA and the State of Iowa believe the preferred alternative would protect human health and the environment, would comply with ARARS, would be cost-effective, and would utilize permanent solutions to the maximum extent practicable. The preferred alternative also satisfies the preference for treatment as a principal element.

XVII. STATUTORY DETERMINATION

Based upon the available information, the selected Alternative satisfies the remedy selection requirements under CERCLA, as amended and the National Contingency Plan. The selected alternative is protective of public health and the environment, satisfies all applicable or relevant and appropriate environmental requirements, is cost effective and would utilize permanent solutions to the maximum extent practicable. The preferred Alternative also satisfies the preference for treatment as a principal element.

GLOSSARY OF TERMS

- 1. ARARS: Applicable or Relevant and Appropriate Requirements refers to the Federal and State requirements that a remedy selected by EPA must attain. These requirements may vary from site to site.
- 2. Ground Water: Underground water that fills pores in soils or opening in rocks to the point of saturation. Ground water is often used as a source of drinking water for municipal or domestic wells.
- 3. Leachate: A liquid that has passed through wastes and contains some components of these wastes.
- 4. Immobilization Technology: A process used to reduce the mobility of liquid contaminants by mixing them with a material such as cement kiln dust in order to increase the ability to handle the waste and make the substance less likely to leach.



AMERICAN AUTOMOBILE ASSOCIATION (AAA) MAP OF IOWA, HEBRASKA, 1986



MIDWEST OPERABLE UNIT KELLOGG, IOWA

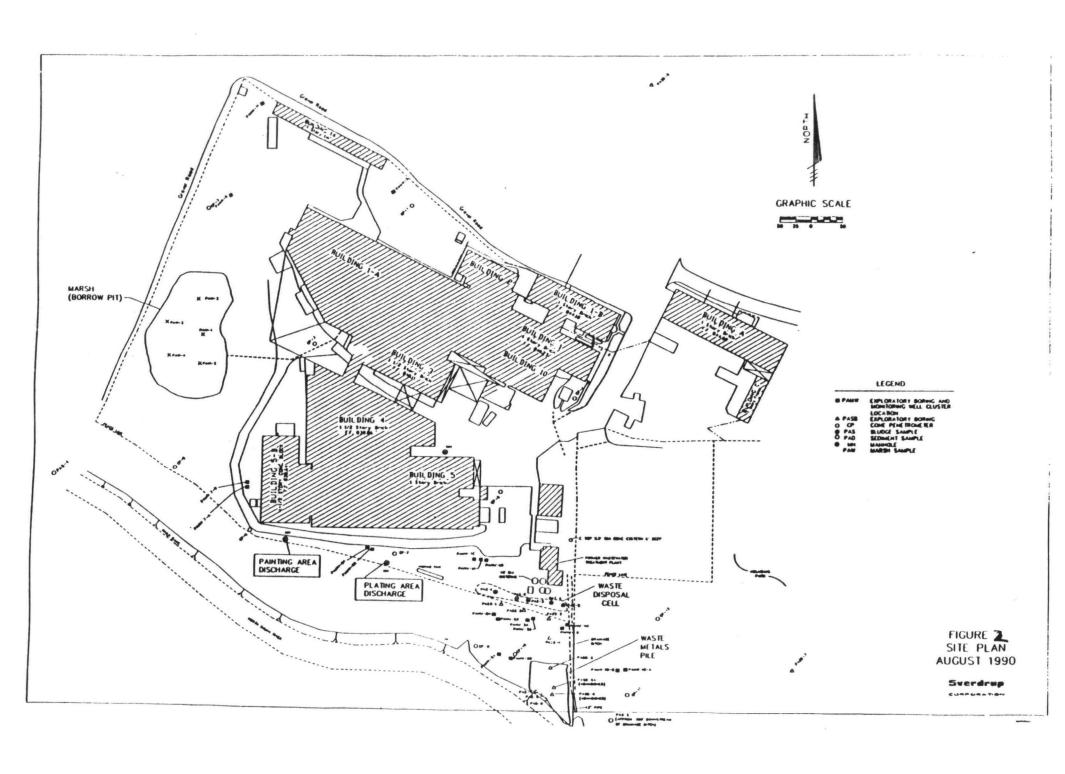
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CORPORATION

SITE VICINITY MAP

Brewn	Approved	Drowing Ho.
Chested	Dete	FIGURE 1-1



LIST OF CODES USED IN TABULATED ANALYTICAL DATA

CODE	DDE EXPLANATION	
U	Indicates the compound was analyzed for, but was not detected.	
I	Indicates the data is invalid (compound may or may not be present). Resampling and/or reanalysis is necessary for verification.	
В	Indicates the compound was found in the associated blank as well as in the sample. This indicates possible laboratory induced contamination.	
1	Indicates the presence of a compound that meets the identification criteria, but the result is less than the quantitation limit, but greater than zero. For example, if the sample quantitation limit is 10 ug/l, but a concentration of 3 ug/l is calculated, it is reported as 3 J ug/l.	
E	Concentration exceeds calibration range of GC/MS instrument.	

TABLE 1

CHEMICALS OF POTENTIAL CONCERN*
WASTE SLUDGE TRENCH/SITE SOILS
UNITS: Mg/Kg

Sampling Area Sample Medium	Waste Disposal Trench	Site Soil Borings Soil	Site Surface Soils Soil	Background Soils Soil
Chemical of Potential Concern	Detected Concentration Range	Detected Concentration Range	Detected Concentration Range	Detected Concentration Range
Aluminum	2,300J-13,000J	7,500-14,000	6030-7440	5,730-13,300
Antimony	Ü	3.4J-4.4J	U	Ü
Arsenic	4.2J	2.23-5.5	2.9-5.6	3.4-6.3
Barium	82-230J	34.7-480	120-176	137-186
Beryllium	0.70-0.81J	0.28B-0.80J	0.49B	0.45B-0.66B
Chromium	22-320	6.3-20	9.8-13.4	9.5-14.7
Cobalt	2.0B-5.4J	2.9J-50	6.2B-6.8B	6.2B-9.4B
Cadmium	13-2,300	0.33B-19	1.6-79.9	0.61B-4.4
Iron	16,400-81,500	15,000-30,000	12,000-17,200	11,200-18,700
Lead	19-214	3.6-71	14.3-34.1	3.6-91.6
Manganese	660J-2,480	91J-7000J	444-510	514-960
Mercury	U	0.12	U	0.21
Nickel	130-3800	10.4-52	14.2-69.2	14.0-18.8
Vanadium	3.53-32	12.6-48	20.4-21.7	19.9-30.4
Cyanide	2.0-7.0	υ	NA	4.6
Vinyl Chloride	U	NA	NA	NA
Carbon Disulfide	0.007-0.028	NA	NA	NA
1.2-Dichloroethene	0.002-0.011J	NA	NA	NA
_ Butanone	0.280	NA	NA	NA
1,1,1-Trichloroethane	υ	NA	NA	NA
Tetrachloroethene	0.002 - 0.031	NA	NA	NA
Trichloroethene	0.002-0.016	NA	NA	NA
Toluene	0.002J	NA	NA	NA
Ethyl Benzene	0.003J-0.063	NA	NA	NA
Xylenes	0.002J-0.300	NA	NA	NA
Phenanthrene	2.000-21.000	NA	NA	NA

NOTES

NA sample not analyzed for that constituent.

The metals concentrations are reported as total metals.

^{*}As identified in the baseline risk assessment.

TABLE 2

CHEMICALS OF POTENTIAL CONCERN®
WASTE METALS PILE
UNITS: Mg/Kg

Sampling Area Sampling Medium	Waste Metals Pile Soil	Background Soils Soil
Chemical of Potential Concern	Detected Concentration Range	Detected Concentration Range
Aluminum	7,660-22,000J	5,730-13,300
Antimony	6.43	U
Arsenic	4.5-14J	3.4-6.3
Barium	225-670J	137-186
Beryllium	0.47B-2.7	0.45B-0.66B
Chromium	15.1-39	9.5-14.7
Cobalt	7.7-8.8	6.2B-9.4B
Cadmium	1.1-4.2	0.61B-4.4
Iron	22,400-28,100	11,200-18,700
Lead	136-360J	3.6-91.6
Manganese	1,840-3,100	514-960
Mercury	U	0.21
Nickel	25.9-43	14.0-18.8
Vanadium	20.9-51	19.9-30.4
Cyanide	0.78-2.3	4.6
Vinyl Chloride	U	NA
Carbon Disulfide	U	NA
1,2-Dichloroethene	U	NA
2-Butanone	0.013	NA
1,1,1-Trichloroethane	U	NA NA
Tetrachloroethene	U	NA NA
Trichloroethene	ט	NA NA
Toluene	Ū	NA NA
Ethyl benzene	0.003J-0.019	NA NA
Xylenes	0.013-0.092	NA NA
Phenanthrene	U	NA NA

^{*} As identified in the baseline risk assessment.

NA Sample not analyzed for that constituent.

The metals concentrations are reported as total metals.

TABLE 3a

CHEMICALS OF POTENTIAL CONCERN' MARSH SURFACE SEDIMENT UNITS: mg/Kg

Sampling Area	Marsh	Background Soils
Sampling Medium	Surface Sediments	Soil
Chemical of Potential Concern	Detected Concentration Range	Detected Concentration Range
Aluminum	10,300-24,300	5,730-13,300
Antimony	17,2-17.3	U
Arsenic	3.3-6.7	3.4-6.3
Barium	196-727	137-186
Beryllium	0.65B-1.3	0.45B-0.66B
Chromium	46.5-138	9.5-14.7
Cobalt	4.5B-18.8	6.2B-9.4B
Cadmium	7.8-275	0.61B-4.4
Iron	20,600-97,600	11,200-18,700
Lead	24.9-890	3.6-91.6
Manganese	134-1070	514-960
Mercury	U	0.21
Nickel	36.5-93.1	14.0-18.8
Vanadium	30.1-56.1	19.9-30.4
Cyanide Vinyl Chloride	1.2-3.8 U	4.6 NA
Carbon Disulfide 1,2-Dichloroethene	ט	NA NA
2-Butanone	บ	NA
1,1,1-Trichloroethane	บ	NA
Tetrachloroethene	U	NA
Trichloroethene	0.018-0.065	NA
Toluene Ethyl benzene	0.011-0.016 0.076	NA NA
Xylenes Phenanthrene	1,100E U	NA NA

^{*} As identified in the baseline risk assessment.

NA Sample not analyzed for that constituent.

The metals concentrations are reported as total metals.

TABLE 3b

CHEMICALS OF POTENTIAL CONCERN*
MARSH SURFACE WATER
UNITS: ug/l

Sample Area Sample Medium	Marsh Surface Water							
Chemical of Potential Concern	Detected Concentration Range	MCL	SMCL					
Aluminum	63.1B - 432		••					
Antimony	U							
Arsenic	U	50						
Barium	27.8B - 36.8B	1,000						
Beryllium	1.3B - 1.5B							
Chromium] 11.1	50						
Cobalt	U							
Cadmium	2.7B - 3.9B	10						
Iron	377 - 1630		3 00					
Lead	1.9B - 4.6	50						
Manganese	46.0 - 82.2		5 0					
Mercury	บ	2	••					
Nickel	11.1B - 13.1B		••					
Vanadium	15.0B - 20.2B		••					
Cyanide	18.9 - 34.8		••					
Vinyl Chloride	ט	2						
Carbon Disulfide	U							
1,2-Dichloroethene	7 - 12		••					
2-Butanone	U	••	••					
1,1,1-Trichloroethane	บ	••	••					
Tetrachloroethene	ט	••						
Trichloroethene	11 - 18	5						
Toluene	ไบ้							
Ethyl benzene	ไบ้							
Xylenes	ĺŪ							
Phenanthrene	บั							

^{*} As indentified in the baseline risk assessment.

MCL - Maxium Contaminant Level as established under the Safe Drinking Water Act

SMCL - Secondary Maximum Contaminant Level

The metals concentration are reported as total metals.

TABLE 4

CHEMICALS OF POTENTIAL CONCERN*

GROUNDWATER

UNITS: ug/l

Sample Area Sample Medium	Site Monitor Wells 1 thru 11 Groundwater	City Water Supply Wells 1 thru 3 and Distribution System Groundwater		
Chemical Potential Concern	Detected Concentration Range	Detected Concentration Range	MCL	
Aluminum	81.8B-49000J	39.2B	••	
Antimony	22J-31J	บ		
Arsenic	2.3J-87.6J	U	50	
Barium	11.7 J -1350	24.4B-53.4B	1000	
Beryllium	1B-8.2	υ		
Chromium	4.7B-110	U	50	
Cobalt	6.4J-284	ប		
Cadmium	2.7B-23.3	3.3B-5.9	10	
Iron	433-140,000	11B-1870		
Lead	1.2B-147	1.1B-2.5B	50	
Manganese	156-29,600	2.6B-298		
Mercury	0.21-0.72	ט	2	
Nickel	9.6J-243	บ		
Vanadium	11.8B-280	υ		
Cyanide	10J-35.9	10.6-79.0		
Vinyl Chloride	3J-41	NA	2	
Carbon Disulfide	U	NA NA		
Carbon Tetrachloride	87	NA		
1,2-Dichloroethene	9-170	NA NA		
2-Butanone	26	NA		
1,1,1-Trichloroethane	11-13	NA		
Tetrachloroethene	υ	NA	••	
Trichloroethene	3J-670E	NA	5	
Toluene	3J-3.5	NA		
Ethyl benzene	3J-3.5	NA	••	
Xylenes	11	NA		
Phenanthrene	l Ü	NA		

^{*} As identified in the baseline risk assessment.

The metals concentrations are reported as total metals.

NA sample not analyzed for that constituent

TABLE 5 CHEMICALS OF POTENTIAL CONCERN*

Aluminum

Antimony

Arsenic

Barium

Beryllium

Cadmium

Chromium

Cobalt

Iron

Lead

Manganese

Mercury

Nickel

Vanadium

Cyanide

Vinyl chloride

Carbon disulfide

1,2-Dichloroethene

2-Butanone

1,1,1-Trichloroethane

Trichloroethene

Tetrachloroethene

Toluene

Ethyl benzene

Xylene

Phenanthrene

[•] As identified in the baseline risk assessment.

TABLE 6

SUMMARY OF TOXICITY VALUES (A) FOR THE CONTAMINANTS
OF POTENTIAL CONCERN AT THE MIDWEST SITE

		Oral	
Chemical Name	RfD _e	RfDc	SF
Aluminum	-(b)	_	
Antimony	4.0E-04(c)	4.0E-04	-
Arsenic	1.0E-03 ^(c)	1.0E-03 ^(c)	1365.00
Barium	5.0E-02 ^(c)	5.0E-02 ^(c)	1.75E+00
Beryllium	5.0E-03 ^(c)	5.0E-03	4 3 7 . 00
Cadmium	-	1.0E-03 ^(d)	4.3E+00
Chromium	2.0E-02 ^(c)	5.0E-03	-
Cobalt	1.02-02	J.UE-U3	_
Iron		•	-
Lead		•	-
Manganese	5.0E-01 (c)	2.0E-01 (c)	-
Mercury	3.0E-04 ^(c)	3.0E-04 ^(c)	•
Nickel	2.0E-02 ^(c)		-
Vanadium	7.0E-03 ^(c)	2.0E-02	-
Cyanide	2.0E-02 ^(c)	7.0E-03 ^(c)	-
Vinyl chloride	2.0E-02	2.0E-02	•
Carbon disulfide	-	•	2.3E+00 ^(c)
1,2-Dichloroethene (Trans)	3.05.0.(6)	1.0E-01	-
2-Butanone	2.0E-01 ^(c)	2.0E-02	-
1,1,1-Trichloroethane	5.0E-01 ^(c)	5.0E-02	
Trichloroethene	9.0E-01 ^(c)	9.0E-02	
Tetrachloroethene	(6)	-	1.1E-02 ^(c)
Toluene	1.0E-01 ^(c)	1.0E-02	5.1E-02 ^(c)
Ethylbenzene	4.0E-01(c)	3.0E-01 (c)	-
Kylene	1.0E+00 ^(c)	1.0E-01	-
Aylene Phenanthrene	4.0E+00 ^(c)	2.0E+00	-
rnenaniniene	•		l .

(a) Toxicity Values: RfD.

RfD₆ - Subchronic Reference Dose

RIDc - Chronic Reference Dose

SF - Slope Factor

(b) No value available.

(c) Value obtained from USEPA (1989a). All other values from USEPA (1990).

(d) Oral RfD listed is for cadmium in food. This is used for cadmium in soil. Oral RfD used for cadmium in water is 5.0E-4.

TABLE 7 EXPOSURE SCENARIOS QUANTIFIED AT THE MIDWEST SITE

Exposed Population	Exposure Point	Exposure Medium	Exposure Route
Trespasser 1	Waste Disposal Trench	Soil	Ingestion Dermal Contact
Trespasser 2	Site	Surface Soil	Ingestion
Trespasser 3	River Bank	Soil	Ingestion Dermal Contact
Trespasser 3	N. Skunk River	Sediment	Ingestion Dermal Contact
Trespasser 4	Borrow Pit (Marsh)	Surface Water	Ingestion
Trespasser 4	Borrow Pit (Marsh)	Sediment	Ingestion Dermal Contact
Occupational (Future)	Future Site	Surface Soil Sludge Groundwater	Ingestion Ingestion Ingestion

Trespasser 1 Child playing in the waste disposal trench.

Trespasser 2 Child playing and riding a bicycle or all-terrain vehicle on-site.

Trespasser 3 Child walking and playing along the river bank and in the North Sounk River.

Trespasser 4 Child playing in the borrow pit (marsh).

TABLE 8
SUMMARY OF CARCINOGENIC RISK

Exposed Population	Exposure Point	Exposure Medium	Specific Contaminant of Concern (c)	Exposure Route	Cancer Risk ^(a)	
Adult Occupational (b) (Future)	Future Site Soil		Arsenic Beryllium Vinyl Chloride	Ingestion	6 E-6	
Adult Occupational (b) (Future)	Future Site	Groundwater	Arsenic Beryllium Vinyl Chloride	Ingestion	1E-3	

Typically, cancer risk of 1E-6 or lower are considered to be of no practical significance, while higher cancer risk levels may be cause for concern.

⁽b) Adult occupational worker.

The chemicals of potential concern (Table 5) were evaluated in the risk assessment under each exposure scenario. Those contaminants identified as posing unacceptable health risks are presented here.

TABLE 9
SUMMARY OF SUBCHRONIC NONCARCINOGENIC HEALTH HAZARDS

Exposed Population			Specific Contaminant of Concern(8)	Exposure Route	Hazard Index ^(a)		
Child (b) Trespasser 1	Waste Disposal Trench	Soil	NA NA	Ingestion Dermal Contact	<1 ≤1		
Child (c) Trespasser 2	Site	Surface Soil	NA	Ingestion	<1		
Child (cl) Trespasser 3	River Bank	Soil	NA	Ingestion	<1		
•	N. Skunk River	N. Skunk River Sediment		Ingestion Dermal Contact Total	<1 <1 <1 <1		
Child ^(e) Trespasser 4	Borrow Pit (Marsh)	Surface Water Sediment	NA NA	Ingestion Ingestion Dermal Contact	<1 <1 <1 <1		
Adult ^(f) Occupational	Future Site	Surface Soil Groundwater	NA Antimony	Ingestion Ingestion Total	<1 >1 >1		

⁽a) A Hazard Index of one (IE+0) or less indicates no noncarcinogenic health risks, exist for that

- (c) Child playing and riding a bicycle or all-terrain vehicle on-site.
- (d) Child walking and playing along the river bank and in the North Skunk River.
- (e) Child playing in the borrow pit (marsh).
- M Adult occupational workers.
- The chemicals of potential concern (Table 5) were evaluated in the risk assessment under each exposure scenario. Those contaminants identified as posing unacceptable health risks are presented

NA Not Applicable

⁽b) Child playing in the waste disposal trench.

TABLE 10
SUMMARY OF CHRONIC NONCARCINOGENIC HEALTH HAZARDS

Exposed Population	Exposure Point	Exposure Medium	Specific Contaminant of Concern (g)	Exposure Route	Hazard Index ^(a)
Child ^(b) Trespasser I	Waste Disposal Trench	Soil	NA NA	Ingestion Dermal Contact	<1 <1
Child ^(c) Trespasser 2	Site	Surface Soil	NA	Ingestion	<1
Child ^(d) Trespasser 3	River Bank	Soil	NA	Ingestion Dermal Contact	<1 <1
·	N. Skunk River	Sediment	NA	Ingestion Dermal Contact Total	<1 <1 <1
Child ^(e) Trespasser 4	Borrow Pit (Marsh)	Surface Water Sediment	NA NA	Ingestion Ingestion Dermal Contact	<1 <1 <1 <1
Adult ^(f) Occupational	Future Site	Surface Soil Groundwater	NA Antimony	Ingestion Ingestion Total	<1 >1 >1

⁽a) A Hazard Index of one (1E+0) or less indicates no noncarcinogenic health risks exist for that scenario.

- (e) Child playing in the borrow pit (marsh).
- ^(f) Adult occupational workers.
- The chemicals of potential concern (Table 5) were evaluated in the risk assessment under each exposure scenario. Those contaminants identified as posing unacceptable health risks are presented here.

NA Not Applicable

⁽b) Child playing in the waste disposal trench.

⁽c) Child playing and riding a bicycle or all-terrain vehicle on-site.

⁽d) Child walking and playing along the river bank and in the North Skunk River.

RESPONSIVENESS SUMMARY FOR THE

MIDWEST MANUFACTURING/NORTH FARM SUPERFUND SITE

MIDWEST OPERABLE UNIT

KELLOGG, IOWA

This Responsiveness Summary presents the responses of the United States Environmental Protection Agency (EPA) to the comments received during the public comment period conducted as part of the remedy selection process for the Midwest Subsite of the Midwest Manufacturing/North Farm Superfund Site.

INTRODUCTION

On August 22, 1990, EPA announced the availability of its Proposed Plan for the remedial action at the Midwest Subsite of the Midwest Manufacturing/North Farm Superfund Site. Notice of the availability of the proposed plan and the administrative record upon which EPA intended to base its remedy selection decision was published in the Newton Daily News. This notice also requested the public's comments on the proposed plan and indicated the period during which public comments received by EPA would be considered in the decision-making process. A fact sheet in which the various remedial alternatives were described, including identification of a preferred alternative, was mailed to persons who had previously expressed an interest in this Site.

A public meeting was held in Kellogg, Iowa, on September 12, 1990, to receive comments. Copies of the proposed plan and fact sheet were made available to persons attending the public meeting. A transcript was made of the public meeting. That transcript was consulted in preparation of this responsiveness summary. Copies of the transcript are included with the administrative record file for public review.

PUBLIC COMMENTS

The comments received in on the Proposed Plan and EPA's response to these comments are set forth below.

The EPA received comments pertaining to the cost of the remedial action alternatives considered for the Site. These comments generally fell into the following categories.

1. Can the Superfund Trust fund pay for a site cleanup?

Superfund was established by Congress as a trust fund under the Comprehensive Environmental Response, Compensation and Liability Act. Money for Superfund in large part comes from taxes paid by companies which produce various chemical substances, from costs (including fines and punitive damages) recovered from responsible parties, and, to a lesser, extent, from Government general revenue. The trust funds are to be used if an immediate response is required, whether or not there is a possibility of recovery from responsible parties; or where no responsible party with adequate funds to pay for investigation and cleanup can be found. If Superfund money is used for cleanup then the EPA is bound by statute to attempt to recover these monies from responsible parties. These include waste generators, waste haulers, landowners, etc.

2. Can EPA hold parties liable even though their disposal of hazardous waste was proper, lawful, or specifically authorized by a regulatory agency at the time?.

The general policy of CERCLA is that the persons responsible for creation of the problem are responsible for paying for remedying the problem. CERCLA provides that the persons who generated the wastes, arranged for disposal of the wastes and owned the site at which the wastes were disposed of are responsible for the costs of cleaning up the site. Liability for response costs under CERCLA do not depend upon compliance or noncompliance with past regulatory requirements.

Under CERCLA's special notice procedure, the persons believed to be responsible are given the opportunity to undertake or finance the response action before the Superfund monies are used to do so. If the responsible parties are unwilling or unable to finance or implement the remedy, EPA would consider spending Superfund monies to do so. When Superfund monies are used to finance the remedy, it is the policy of EPA to seek recovery of those response costs from the responsible parties. It is the policy of EPA to seek full recovery of all response costs.

3. Did the EPA design and approve of the waste disposal cell used by the Midwest Manufacturing Company to dispose of their electroplating wastes?

No, the Agency did not approve or design the disposal cells used by the company to dispose of its hazardous waste.

During the public meeting several persons voiced their concern regarding EPA's intentions to remediate the Midwest Operable Unit. These persons felt that requirement of CERCLA, which requires the potential responsible parties (PRPs) to pay the cleanup costs, would place an economic hardship on both the PRPs and the community. Provided below are several of the major comments given by members of the community.

Statement of Glen Dezwarte

I'm Glen DeZwarte. I live about three miles south of here. I guess, not knowing a great deal when I came here but having a concern for this community and this town and the surrounding areas, I find it real difficult how this company can begin to survive if it is asked to bring up this much money to pay for this. I think it, to me, would have to bankrupt the company which would cost the community many jobs, cause a loss of students in schools, and would have a lasting effect on this community and would be devastating to it. And I guess I would like to see, for the benefit not only for the company, but for the people in the community, that the company not have to pick up the tab and the costs, whatever needs to be done. Should have repair work, or whatever needs to be done, be done at a minimal cost. And I guess I also find it hard when I talk about—hear things that happened in 1950 and the early seventies, why this company is required to pick up the tab.

That means that if I own a gas station, and hire—and sell it to a, quote, Domino's Pizza, and there is found that there is contaminants under this old gas station, who's going to be responsible for digging it up? Is it going to be Domino's Pizza, or is it going to be possibly my estate? I guess I have figured out where all the blame lies and who's going to pick it up, because my concern is we're trying to be able to keep this factory in this community.

Statement of Virgil Redding

My name is Virgil Redding. I've lived here all my life, and I have to refer back to the statement that was just made from Midwest that seems as though every so often things change. You folks will come around here and say it's got to be done this way. Well, ten years, people who succeed you come around and say, "That's wrong. We got to do it some other way." When is this

going to stop? It's costing the taxpayers, and we aren't gaining anything.

We found out from the landfills when that started, I said, in my own mind, anyway, that it would never work. Well, it's coming back now, and it isn't working. We're having to drain water out of them, do this, and do that. We're still back to square one again. We aren't gaining a thing, and it's costing taxpayers billions of dollars.

Statement of Lois Pickles

Well, my name is Lois Pickles, and I've worked at the factory for 30 years, and at all times, they have made efforts to keep everything safe and clean. And sometimes it gets a little messy, but then it's a factory. It's not an apartment house.

And it seems to me like every two years, or at the time of an election, this all comes back up, and I think that maybe part of it is political, not necessary.

William King who represented Midwest Manufacturing read the following written statement on behalf of David Sandeen who is the President of Midwest Manufacturing.

In my absence, I have in advance prepared the following statement with some comments and observations representing the opinion of the owners and senior management of Midwest Manufacturing Company.

I want to clarify that Midwest is not opposed to hazardous waste cleanup and in general cleaning up our total environment. What we are opposed to is the method of handling this cleanup and the EPA's insistence that the financial responsibility belongs to Midwest.

Over the past 17 years, the current owners of Midwest have made a commitment to the environment evidenced in part by the following:

Item 1: The pond area south and west of the manufacturing facility was literally loaded with junk, paint drums, oil drums, and et cetera. This area has been completely cleaned out.

Item 2: All scrap and open containers setting around the buildings at the time of purchase have been cleaned up.

Item 3: A new oil recovery system to further extract oil for machining chips was installed.

Item 4: Numerous process improvements have been implemented to minimize dust, smoke, fumes, etc.

Item 5: Numerous ventilation programs have been implemented within the manufacturing facility to clean up the environment.

Item 6: Most importantly, in the early 1970's, Midwest accepted its responsibilities to discontinue discharging hazardous wastes created from its plating and painting facility into the North Skunk River. We diligently worked with our engineering firm and the Environmental Protection Agency, EPA, in Kansas City, as well as, at that time, the Iowa Department of Environmental Quality, IDEQ.

Through the efforts of these two groups, a plan was developed, approved and implemented to chemically treat hazardous waste, and thus, allow for discharge of nonhazardous water into the North Skunk River. A part of this plan consisted of providing areas for disposal of the hazardous materials that were generated as a part of the chemical treatment process. Initially, this waste was transported to a fully-approved holding pond on land leased from Merl Brown to Midwest. This is now referred to by EPA as the North Farm Site. Later on, it was agreed that if a holding pond were constructed closer to the plant facility, the plant would run more economically.

In the mid 1970's, this holding area, constructed at the Midwest site, was built under the direct supervision of EPA and IDEQ personnel.

In the early 1980's, Midwest determined the profits generated from its plating and paint operation were no longer sufficient to cover the cost of water treatment and related expenses. In 1981, the product lines were discontinued, and at that time the plating and painting operations were closed down. At that time, Midwest asked for assistance from the various regulatory agencies as to the proper close-down of the holding ponds. We received no assistance until more than six years later representatives from the EPA Superfund appeared at our doorstep advising they were going to assist us in removing our name from the EPA Superfund list.

Unfortunately, as with most bureaucratic organizations, there was no easy cost-effective answer. On July 30, 1987, representatives from EPA Superfund toured the Midwest facilities and stated, due to the low volume which has been produced and the current condition of the area, this would probably be a walk-away situation.

Shortly after that visit, we began receiving from EPA large volumes of questionnaires and requests for historic data that we gathered and presented to them. They also, at that time, requested Midwest to assume financial responsibility for both the North

Farm and Midwest facility investigation and cleanup. In the fall of 1987, I met with EPA officials in Kansas City during which time they advised the cost could run as high as \$250,000, to which I replied that we were not willing to accept the financial responsibility for the program.

A recent edition of the "Newton Daily News" stated the cleanup portion of the North Farm Site was budgeted at \$221,000; however, that is only a portion of the cost which EPA is attempting to recover. Based on the latest information we have available, the following are the cost estimates to clean up both the North Farm and the Midwest site.

Item A: Expenses incurred as of November 4, 1988 relating to the Remedial Investigation/Feasibility Study for the North Farm Site, \$350,666.17.

Item B: EPA's cleanup recommendation for the North Farm Site, \$221,000.

Item C: Estimated Remedial Investigation/Feasibility Study for the plant site, \$600,000.

Item D: Alternative #2 cleanup for the Midwest plant site, \$488,844, which comes to a total of \$1,660,510.

It should also be noted, at various times, Midwest gave the EPA names and contacts of companies who had quoted the Remedial Investigation/Feasibility Study and cleanup costs approximately 1/4 or 1/5 of those costs noted above. EPA responded that they could not use any of these bids as they were committed to companies under national contracts.

In conclusion, to the best of our knowledge, Midwest has not violated any laws, and, in fact, has complied with every request made in the construction and implementation of the waste treatment facility, both with the Iowa DEQ and EPA. They are now telling us this is not acceptable, and we must correct the situation.

This would be similar to an individual property owner requesting a building permit to build a home, and then find out a year after the home has been constructed that the permit is no longer valid, and thus, requiring the house to be torn down, removed, and the land brought back to its natural state.

Representatives of the EPA have continually advised Midwest that the parties responsible for creating the hazardous waste should bear the financial responsibility of cleanups. We believe that since we did everything under the direction of EPA and IDEQ, they are the responsible party and, in fact, created the hazardous waste area, and thus, are financially responsible for cleanup.

Mr. Sandeen's comments have been summarized below, and each point has an individual response.

1. Over the past 17 years, the current owners of Midwest have made a commitment to the environment evidenced in part by cleaning up drums and scrap, as well as installing process improvements.

Cleaning the drums and rubbish around the site does not mean that any contamination that had previously leached into the environment has been addressed. During site investigations conducted in October 1989 and April/May 1990, twelve buried drums were noted to remain in the marshy borrow pit area at the Site.

2. Midwest accepted its responsibilities to discontinue discharging hazardous wastes into the North Skunk River.

Midwest Manufacturing Co. was required to install the waste water treatment plant by the NPDES permit program (National Pollutant Discharge Elimination System), now regulated under the Clean Water Act.

3. Midwest diligently worked with its engineering firm, EPA, and the State of Iowa to develop and implement a plan to chemically treat hazardous waste, in order to allow for discharge of non-hazardous water into the North Skunk River.

The predecessor to Smith Jones, Inc., Midwest International, Inc., entered into a Consent Order with the Iowa Department of Environmental Quality (IDEQ) (now the IDNR) on February 24, 1972. The Order required Midwest to prepare plans to construct facilities to eliminate the discharge of toxic wastes by May 1, 1972. When Smith Jones purchased Midwest in 1973, the Order had already been extended twice at the request of Midwest, and was amended again on November 1, 1973, to extend deadlines. The Order was subsequently amended three more times at Midwest's (Smith Jones') request. The implementation of a waste water treatment facility, a requirement of the Order, was not accomplished until 1977. The wastewater treatment facility never was able to comply with the NPDES regulations. Midwest ceased all plating operations in June 1981.

4. A part of the approved plan developed by Midwest consisted of providing areas for disposal of the hazardous materials. It was agreed that if a holding pond were constructed closer to the plant facility, the plant would run more economically. In the mid-1970's a holding area was constructed at the Midwest site, and was built under the direct supervision of EPA and IDEQ personnel.

The NPDES permit program mentioned above only regulates discharges to waters of the United States. Thus, under that authority EPA could and did regulate Midwest's discharge to the river; however, EPA could not and did not regulate what Midwest did with its treatment residuals. EPA's hazardous waste regulations (CERCLA and RCRA) were not enacted into law until 1980, and therefore EPA had no regulatory authority to manage the disposal of hazardous waste.

EPA did not express an opinion regarding the economics of constructing a holding pond near the plant facility. Further, EPA did not supervise the construction of the holding area.

5. In 1981 Midwest asked for assistance from the various regulatory agencies as to the proper close-down of the holding ponds.

EPA has no records in its files that indicate a request from Midwest regarding information as to closure of its holding ponds.

6. On July 30, 1987, EPA representatives stated that due to the low volume of waste and the current condition of the area, this would probably be a walk-away situation.

EPA representatives did not state that the agency would walk away from this Site. However, EPA did inform Midwest that the investigation would be performed by EPA, and that it is EPA's policy to consider a "no action" alternative in its Feasibility Study. However, this alternative cannot be considered as a remedy if it does not meet the two threshold criteria of overall protectiveness of human health and the environment and compliance with ARARS.

7. At various times, Midwest gave the EPA names of companies who had quoted the RI/FS and clean up costs approximately 1/4 or 1/5 of EPA's estimated costs. EPA responded that they could not use any of these bids as they were committed to companies under national contracts.

Midwest hired one consultant that gave Midwest an estimate lower than what EPA had estimated the investigation would cost. The consultant had no previous Superfund experience, and EPA was not provided a breakdown of the items in the estimate to assess whether all procedures required by regulation and policy were included. Further, this consultant never provided a bid to EPA for its consideration. EPA is unaware of any other companies consulted by Midwest.

EPA gave Midwest two opportunities to perform or finance the investigation, using the engineering consulting firm of its choice. However, Midwest declined to perform or finance the

investigation. EPA then performed the investigations using its contractors. EPA does have national contracts, which rely on standard work plans as a means of utilizing economies of scale.

8. Midwest has not violated any laws, and, in fact, has complied with every request made in the construction and implementation of the waste treatment facility.

Under the provisions of CERCLA, liability for response costs does not depend upon compliance or non-compliance with past regulatory requirements.



TERRY E. BRANSTAD, GOVERNOR

DEPARTMENT OF NATURAL RESOURCES

Robert Morby, Chief
Superfund Branch
U.S. Environmental Protection Agency
Region VII
726 Minnesota Ave.
Kansas City, KS 66101

RECEIVED
SEP 9 5 1990

REMD SECTION

RE: Proposed Plan for the Midwest Manufacturing/North Farm Site Midwest Subsite Kellogg, Iowa

Dear Bob:

We have reviewed the Proposed Plan for the Midwest Subsite and would like to emphasize this department's position with respect to groundwater actions. The 1985 Iowa Legislature mandated that a groundwater protection strategy be developed in response to growing concerns of groundwater contamination. A two-year planning effort ensued which included a considerable amount of public involvement. The 'Iowa Groundwater Protection Strategy 1987' resulted from this planning effort which was presented to the 1987 Iowa Legislature. The 1987 Iowa Legislature in turn passed a comprehensive legislative package regarding groundwater protection, commonly referred to as the 'Iowa Groundwater Protection Act'. The goal of this act is 'to prevent contamination of groundwater from point and nonpoint sources of contamination to the maximum practical, and if necessary to restore the groundwater to a potable state, regardless of present condition, use, or characteristics'. The act instructed this department to 'adopt rules which specify the guidelines for determining the cleanup actions necessary to meet the goals of the state --*. In August 1989, Chapter 133 of the Iowa Administrative Code, Section 567 entitled 'Rules for Determining Groundwater Cleanup Actions and Responsible Parties' became effective. These rules were developed by this department in accordance with standard rulemaking procedures which included public review and comment.

The Chapter 133 rules establish groundwater "action levels", as described in the ARAR's section of the Proposed Plan, which trigger response actions. Site specific conditions are used to determine whether an "aggravated risk" or "significant risk" exists. The distinction between the two is basically that an aggravated risk presents an immediate threat whereas a significant risk represents a potential threat. The Midwest site clearly falls into the "significant risk" category. Required response actions for a "significant risk" are given in Subrule 133.4(3). This subrule calls first for an investigation which has been done in the Remedial Investigation. The subrule goes on to say that "the goal of groundwater cleanup is to use best available technology (BAT) and best management practices (BMP) to remove all contaminants, and in any event until water contamination remains below the action level for any contaminant, and the department determines that the contamination is not likely to increase and no longer presents a significant risk. Where site conditions and available technology are such that attainment of these goals would be impractical, the department may establish an alternative cleanup level or levels, including such conditions as will adequately protect the public health, safety, environment, and the quality of life. Clearly the action levels for TCE and other volatile organic compounds have been exceeded. We agree that a "pump and treat" action using an air stripper is reasonable and practical and constitutes BAT/BMP for this site.

In conclusion, we concur with the preferred alternative as presented in the Proposed Plan. Please contact me if you have any further concerns regarding this site.

Sincerely,

Morris Preston

Supervisor

Solid Waste Section

DOCUMENT DATE: 04/28/82

NUMBER OF PAGES: 90

AUTHOR: Jackson, Dave, Team Leader

COMPANY/AGENCY: Ecology and Environment, Inc.

RECIPIENT: William Keffer DOCUMENT TYPE: Report

REFERENCE: No

DOCUMENT TITLE: Report Entitled: "Site Investigation Plan for

Midwest Manufacturing, Kellogg, Iowa"

CATEGORY: 1.5

DOCUMENT DATE: 08/03/82 NUMBER OF PAGES: 123

AUTHOR:

COMPANY/AGENCY: Ecology and Environment, Inc.

RECIPIENT: William Keffer DOCUMENT TYPE: Report

REFERENCE: No

DOCUMENT TITLE: Report Entitled: "Full Field Investigation

Report for Midwest Manufacturing Company,

Kellogg, Iowa"

CATEGORY: 1.5

DOCUMENT DATE: 08/04/82

NUMBER OF PAGES: 15

AUTHOR:

COMPANY/AGENCY: Region VII, U.S. EPA

RECIPIENT:

DOCUMENT TYPE: Preliminary Assessment

REFERENCE: No

DOCUMENT TITLE: Report Entitled: "Potential Hazardous Waste

Site Identification and Preliminary Assessment"

for Midwest Manufacturing, Kellogg, Iowa

CATEGORY: 1.5

DOCUMENT DATE: 12/28/83 NUMBER OF PAGES: 54 AUTHOR: Roberts, Mark

COMPANY/AGENCY: Ecology and Environment, Inc.

RECIPIENT: William Keffer, RPO

DOCUMENT TYPE: Report

REFERENCE: No

DOCUMENT TITLE: Report Entitled: "Field Investigation Report

North Farm Site of the Midwest Manufacturing

Company, Kellogg, Iowa"

DOCUMENT DATE: 03/19/85

NUMBER OF PAGES: 14

AUTHOR:

COMPANY/AGENCY: Region VII, U.S. EPA

RECIPIENT:

DOCUMENT TYPE: Site Inspection

REFERENCE: No

DOCUMENT TITLE: *Potential Hazardous Waste Site, Site

Inspection Report", EPA Form 2070-13 for Midwest Manufacturing/North Farm Site, Kellogg,

Iowa

DOCUMENT DATE: 09/21/89

NUMBER OF PAGES: 2 AUTHOR: Trugley, Dana

COMPANY/AGENCY: Remedial Section, SPFD Branch, Waste Management

Division

RECIPIENT: Morris Preston, Supervisor of Solid Waste Section,

Iowa Department of Natural Resources

DOCUMENT TYPE: Correspondence

REFERENCE: No

DOCUMENT TITLE: Letter re: Transmittal of RI/FS Work Plan,

POP/QAPP and the Health and Safety Plan to the

State

CATEGORY: 3.1

DOCUMENT DATE: 03/14/90

NUMBER OF PAGES: 1 AUTHOR: Trugley, Dana

COMPANY/AGENCY: Remedial Section, Superfund Branch, Waste

Management Division

RECIPIENT: Jim Thayer, Iowa Department of Natural Resources

DOCUMENT TYPE: Correspondence

REFERENCE: No

DOCUMENT TITLE: Letter re: Transmittal of the Preliminary

Remedial Investigation Report (Not Attached)

CATEGORY: 3.1

DOCUMENT DATE: 03/20/90

NUMBER OF PAGES: 1
AUTHOR: Trugley, Dana

COMPANY/AGENCY: Remedial Section, Superfund Branch, Waste

Management Division

RECIPIENT: David Sandeen, Smith-Jones, Midwest Division

DOCUMENT TYPE: Correspondence

REFERENCE: No

DOCUMENT TITLE: Letter re: "Transmittal of Remedial Investigation Data" (Not Attached)

CATEGORY: 3.1

DOCUMENT DATE: 04/10/90

NUMBER OF PAGES: 5

AUTHOR: Thayer, Jim, Environmental Specialist

COMPANY/AGENCY: State of Iowa

RECIPIENT: Dana Trugley, Remedial Section, Superfund Branch, Waste Management Division, Region VII, U.S. EPA

DOCUMENT TYPE: Correspondence

REFERENCE: No

DOCUMENT TITLE: Letter re: Review of the Preliminary Remedial

Investigation Report

DOCUMENT DATE: 04/26/90

NUMBER OF PAGES: 1

AUTHOR: Trugley, Dana

COMPANY/AGENCY: Remedial Section, Superfund Branch, Waste

Management Division

RECIPIENT: Jay Stevenson, City Water Supervisor

DOCUMENT TYPE: Correspondence

REFERENCE: No

DOCUMENT TITLE: Letter re: "Transmittal of Remedial Investigation Data" (Not Attached)

CATEGORY: 3.1

DOCUMENT DATE: 07/21/89 NUMBER OF PAGES: 37

AUTHOR:

COMPANY/AGENCY: Sverdrup Corporation

RECIPIENT:

DOCUMENT TYPE: Health and Safety Plan

REFERENCE: No

DOCUMENT TITLE: Report Entitled: "Health and Safety Plan,

Midwest Operable Unit of Midwest

Manufacturing/North Farm Superfund Site,

Kellogg, Iowa"

CATEGORY: 3.2

DOCUMENT DATE: 08/28/89 NUMBER OF PAGES: 87

AUTHOR:

COMPANY/AGENCY: Sverdrup Corporation

RECIPIENT:

DOCUMENT TYPE: RI/FS Report

REFERENCE: No

DOCUMENT TITLE: Report Entitled: "Project Operations

Plan/Quality Assurance Project Plan Summary Document for the RI/FS at the Midwest Operable Unit Midwest Manufacturing/North Farm Superfund

Site, Kellogg, Iowa"

CATEGORY: 3.2

DOCUMENT DATE: 08/28/89 NUMBER OF PAGES: 24

AUTHOR:

COMPANY/AGENCY: Sverdrup Corporation

RECIPIENT:

DOCUMENT TYPE: Work Plan Summary

REFERENCE: No

DOCUMENT TITLE: Report Entitled: "Work Plan Summary Document

for the RI/FS at the Midwest Operable Unit of the Midwest Manufacturing/North Farm Superfund

Site, Kellogg, Iowa"

DOCUMENT DATE: 09/01/89 NUMBER OF PAGES: 15

AUTHOR:

COMPANY/AGENCY: Sverdrup Corporation

RECIPIENT: EPA

DOCUMENT TYPE: Work Plan

REFERENCE: No

DOCUMENT TITLE: Report Entitled: "Final Work Plan, Midwest Manufacturing RI/FS and Technical Support"

CATEGORY: 3.2

DOCUMENT DATE: 03/23/90 NUMBER OF PAGES: 14

AUTHOR: Bockelmann, David J.

COMPANY/AGENCY: Sverdrup Corporation

RECIPIENT: Dana Trugley, Region VII, U.S. EPA

DOCUMENT TYPE: Correspondence/Work Plan

REFERENCE: No

DOCUMENT TITLE: Letter re: Transmittal of the "Midwest Operable

Unit, Draft Work Plan, Amendment No. 1"

CATEGORY: 3.2

DOCUMENT DATE: 09/23/87 NUMBER OF PAGES: 48

AUTHOR: Takade, Dennis Y., Site Manager, Michael L. Kiefer, REM

II Region VII Manager

COMPANY/AGENCY: Woodward-Clyde Consultants

RECIPIENT: Robert L. Morby, Gale A. Wright, Dana Trugley

DOCUMENT TYPE: Correspondence/RI/FS Scoping Report

REFERENCE: No

DOCUMENT TITLE: Letter re: Transmittal of the Report Entitled:

"Site Evaluation and RI/FS Scoping Document, Smith-Jones/Midwest Division Plant Site,

Kellogg, Iowa"

CATEGORY: 3.4

DOCUMENT DATE: 12/17/87

NUMBER OF PAGES: 2

AUTHOR: Pericich, Sigrid A., Senior Staff Engineer; Dennis Y.

Takade, Site Manager

COMPANY/AGENCY: Woodward-Clyde Consultants

RECIPIENT: Dana Trugley, Regional Project Manager, Superfund

Branch, Region VII, U.S. EPA

DOCUMENT TYPE: Correspondence

REFERENCE: No

DOCUMENT TITLE: Letter re: Errata Sheet for Site Evaluation and

RI/FS Scoping Document for the

Smith-Jones/Midwest Division Plant Site Dated

9-23-87

DOCUMENT DATE: 09/22/90

NUMBER OF PAGES:

AUTHOR:

COMPANY/AGENCY:

RECIPIENT: Region VII, U.S. EPA

DOCUMENT TYPE: RI Report and Risk Assessment Report

REFERENCE: No

DOCUMENT TITLE: Report Entitled: Remedial Investigation (RI)

Report and Risk Assessment Report for the

Midwest Manufacturing/North Farm, Operable Unit 2, Superfund Site (Report Dated August 1990)

DOCUMENT DATE: 09/23/90

NUMBER OF PAGES:

AUTHOR:

COMPANY/AGENCY:

RECIPIENT: Region VII, U.S. EPA

DOCUMENT TYPE: Feasibility Study (FS) Report

REFERENCE: No

DOCUMENT TITLE: Report Entitled: Feasibility Study (FS) Report

for the Midwest Manufacturing/North Farm,

Operable Unit 2, Superfund Site (Report Dated

August 1990)

DOCUMENT DATE: 09/23/90

NUMBER OF PAGES: 27

AUTHOR:

COMPANY/AGENCY:

RECIPIENT: Region VII, U.S. EPA DOCUMENT TYPE: Proposed Plan

REFERENCE: No

DOCUMENT TITLE: Report Entitled: Proposed Plan for the Midwest

Manufacturing/North Farm, Operable Unit 2, Superfund Site (Report Dated August 1990)

DOCUMENT DATE: 04/14/81

NUMBER OF PAGES: 6

AUTHOR: Williams, Steve

COMPANY/AGENCY:

RECIPIENT: Smith-Jones, Inc. DOCUMENT TYPE: Memorandum

REFERENCE: No

DOCUMENT TITLE: Memorandum re: Smith-Jones Indicates Intentions

to Discontinue Plating Operations by 6-30-81

CATEGORY: 11.6

DOCUMENT DATE: 09/29/87 NUMBER OF PAGES: 10

AUTHOR: Kay, Morris, Regional Administrator

COMPANY/AGENCY:

RECIPIENT: Dave Sandeen, President, Smith-Jones, Inc. - Midwest

Division

DOCUMENT TYPE: Correspondence

REFERENCE: No

DOCUMENT TITLE: Letter re: EPA's Special Notice Letter and 104e

Request

CATEGORY: 11.6

DOCUMENT DATE: 11/13/87 NUMBER OF PAGES: 16

AUTHOR: Sandeen, David, President

COMPANY/AGENCY: Midwest Manufacturing Company

RECIPIENT: Dana Trugley, Superfund Branch, Region VII, U.S. EPA

DOCUMENT TYPE: Correspondence

REFERENCE: No

DOCUMENT TITLE: Letter re: Smith-Jones Response for the EPA's

Special Notice Letter and 104e Request

CATEGORY: 11.6

DOCUMENT DATE: 12/23/87 NUMBER OF PAGES: 10

AUTHOR: Wagoner, David A., Director

COMPANY/AGENCY: Waste Management Division

RECIPIENT: David E. Sandeen, President, Smith-Jones,

Inc./Midwest Division

DOCUMENT TYPE: Correspondence

REFERENCE: No

DOCUMENT TITLE: Letter re: EPA's Response to Smith-Jones

Refusal to Conduct a RI/FS

DOCUMENT DATE: 12/29/87

NUMBER OF PAGES: 6

AUTHOR: Sandeen, David E., President

COMPANY/AGENCY: Midwest Manufacturing Company

RECIPIENT: Dana Trugley, Superfund Agency, Region VII, U.S. EPA

DOCUMENT TYPE: Correspondence

REFERENCE: No

DOCUMENT TITLE: Letter re: Submittal of Additional Information

to Supplement 104e Response by Smith

Jones/Midwest Division

CATEGORY: 11.6

DOCUMENT DATE: 03/20/90

NUMBER OF PAGES: 1 AUTHOR: Trugley, Dana

COMPANY/AGENCY: Remedial Section, Superfund Branch, Waste

Management Division

RECIPIENT: David Sandeen, Smith-Jones, Midwest Division

DOCUMENT TYPE: Correspondence

REFERENCE: No

DOCUMENT TITLE: Letter re: Transmittal of Remedial

Investigation Data

DOCUMENT DATE: 07/26/88 NUMBER OF PAGES: 26

AUTHOR: Barrett, Leslie L., Douglas E. Fiscus, Dennis Y. Takade

COMPANY/AGENCY: Woodward-Clyde Consultants

RECIPIENT: Dana Trugley, Regional Project Manager, Steve Wurtz

DOCUMENT TYPE: Correspondence/Community Relations Plan

REFERENCE: No

DOCUMENT TITLE: Letter re: Attached Report Entitled: "Final

Community Relations Plan for Midwest

Manufacturing/North Farm Site in Kellogg, Iowa"

DOCUMENT DATE: 03/14/90

NUMBER OF PAGES: 2 AUTHOR: Trugley, Dana

COMPANY/AGENCY: Remedial Section, Superfund Branch, Waste

Management Division

RECIPIENT: Sheila Huff, Department of Interior, Superfund

Coordinator

DOCUMENT TYPE: Correspondence

REFERENCE: No

DOCUMENT TITLE: Letter re: Transmittal of two Copies of the

Draft Preliminary Remedial Investigation Report

(Not Attached)

CATEGORY: 16.1

DOCUMENT DATE: 04/26/90

NUMBER OF PAGES: 1

AUTHOR: Nelson, Richard C., Field Supervisor

COMPANY/AGENCY: United States Department of the Interior

RECIPIENT: Dana Trugley, Superfund Branch, Region VII, U.S. EPA

DOCUMENT TYPE: Correspondence

REFERENCE: No

DOCUMENT TITLE: Letter re: Response to the Draft Preliminary

Remedial Investigation Report

DOCUMENT DATE: 02/20/90

NUMBER OF PAGES: 4

AUTHOR: Price, Ceil, Assistant Regional Counsel

COMPANY/AGENCY: Region VII, U.S. EPA

RECIPIENT: Steven B. Nosek, Dunkley, Bennett & Christensen,

P.A.

DOCUMENT TYPE: Correspondence

REFERENCE: No

DOCUMENT TITLE: Letter re: "Smith Jones, Inc./Midwest

Manufacturing Plant Access" and the Transmittal

of Information

CATEGORY: 17.1

DOCUMENT DATE: 02/21/90

NUMBER OF PAGES: 2

AUTHOR: Nosek, Steven B.

COMPANY/AGENCY: Dunkley, Bennett & Christensen, P.A.

RECIPIENT: Ceil Price, Assistant Regional Counsel, Region VII,

U.S. EPA

DOCUMENT TYPE: Correspondence

REFERENCE: No

DOCUMENT TITLE: Letter re: Will Not Consider an Amended or

Expanded Access Agreement on Smith Jones, Inc.

CATEGORY: 17.1

DOCUMENT DATE: 02/27/90

NUMBER OF PAGES: 2

AUTHOR: Price, Ceil, Assistant Regional Counsel

COMPANY/AGENCY: Region VII, U.S. EPA

RECIPIENT: Steven B. Nosek, Dunkley, Bennett & Christensen,

P.A.

DOCUMENT TYPE: Correspondence

REFERENCE: No

DOCUMENT TITLE: Letter re: "Smith Jones, Inc., Midwest

Manufacturing Site Access"

CATEGORY: 17.1

DOCUMENT DATE: 03/14/90

NUMBER OF PAGES: 6

AUTHOR: Price, Ceil, Assistant Regional Counsel

COMPANY/AGENCY: Region VII, U.S. EPA

RECIPIENT: Steven B. Nosek, Dunkley, Bennett & Christensen,

P.A.

DOCUMENT TYPE: Correspondence

REFERENCE: No

DOCUMENT TITLE: Letter re: Transmittal of the Amended Access

Agreement for Execution by Recipient's Client

DOCUMENT DATE: 03/14/90

NUMBER OF PAGES: 1

AUTHOR: Nosek, Steven B.

COMPANY/AGENCY: Dunkley, Bennett & Christensen, P.A.

RECIPIENT: Ceil Price, Assistant Regional Counsel, Region VII,

U.S. EPA

DOCUMENT TYPE: Correspondence

REFERENCE: No

DOCUMENT TITLE: Letter re: Requesting an Amended Access

Agreement

CATEGORY: 17.1

DOCUMENT DATE: 03/15/90

NUMBER OF PAGES: 1

AUTHOR: Nosek, Steven B.

COMPANY/AGENCY: Dunkley, Bennett & Christensen, P.A.

RECIPIENT: Ceil Price, Assistant Regional Counsel, Region VII,

U.S. EPA

DOCUMENT TYPE: Correspondence

REFERENCE: No

DOCUMENT TITLE: Letter re: Did Not Agree to the Activities set

forth in Nos. 2, 3 or 7 of Section 3 of the

Access Agreement

CATEGORY: 17.1

DOCUMENT DATE: 03/15/90

NUMBER OF PAGES: 3

AUTHOR: Price, Ceil, Assistant Regional Counsel

COMPANY/AGENCY: Region VII, U.S. EPA

RECIPIENT: Steven B. Nosek, Dunkley, Bennett & Christensen,

P.A.

DOCUMENT TYPE: Correspondence

REFERENCE: No

DOCUMENT TITLE: Letter re: Transmittal of the Revised Page One

of the Amended Access Agreement

CATEGORY: 17.1

DOCUMENT DATE: 03/19/90

NUMBER OF PAGES: 1

AUTHOR: Nosek, Steven B.

COMPANY/AGENCY: Dunkley, Bennett & Christensen, P.A.

RECIPIENT: Ceil Price, Region VII, U.S. EPA

DOCUMENT TYPE: Correspondence

REFERENCE: No

DOCUMENT TITLE: Letter re: PRP Agreeable to Execute the Amended

Access Agreement

DOCUMENT DATE: 03/22/90

NUMBER OF PAGES: 10

AUTHOR: Price, Ceil, Assistant Regional Counsel

COMPANY/AGENCY:

RECIPIENT: Steven B. Nosek, Dunkley, Bennett & Christensen,

P.A.

DOCUMENT TYPE: Correspondence

REFERENCE: No

DOCUMENT TITLE: Letter re: Client Willing to Sign the Proposed

Access Agreement

CATEGORY: 17.1

DOCUMENT DATE: 03/29/90

NUMBER OF PAGES: 2

AUTHOR: Nosek, Steven B.

COMPANY/AGENCY: Dunkley, Bennett & Christensen, P.A.

RECIPIENT: Ceil Price

DOCUMENT TYPE: Correspondence

REFERENCE: No

DOCUMENT TITLE: Letter re: Transmittal of the Term of Agreement

CATEGORY: 17.1

DOCUMENT DATE: 03/30/90

NUMBER OF PAGES: 1

AUTHOR: Nosek, Steven B.

COMPANY/AGENCY: Dunkley, Bennett & Christensen, P.A.

RECIPIENT: Ceil Price, Assistant Regional Counsel, Region VII,

U.S. EPA

DOCUMENT TYPE: Correspondence

REFERENCE: No

DOCUMENT TITLE: Letter re: Transmittal of the Amended Access

Agreement (Not Attached)

CATEGORY: 17.1

DOCUMENT DATE: 04/11/90

NUMBER OF PAGES: 1

AUTHOR: Price, Ceil, Assistant Regional Counsel

COMPANY/AGENCY:

RECIPIENT: Steven B. Nosek, Dunkley, Bennett & Christensen,

P.A.

DOCUMENT TYPE: Correspondence

REFERENCE: No

DOCUMENT TITLE: Letter re: Transmittal of the Executed Access

Agreement (Not Attached)

DOCUMENT DATE: 05/02/90

NUMBER OF PAGES: 4

AUTHOR: Price, Ceil, Assistant Regional Counsel

COMPANY/AGENCY: Region VII, U.S. EPA

RECIPIENT: Steven B. Nosek, Dunkley, Bennett & Christensen,

P.A.

DOCUMENT TYPE: Access Agreement

REFERENCE: No

DOCUMENT TITLE: Transmittal of a Second Amended Access

Agreement

CATEGORY: 17.1

DOCUMENT DATE: 05/24/90

NUMBER OF PAGES: 5

AUTHOR: Price, Ceil, Assistant Regional Counsel

COMPANY/AGENCY:

RECIPIENT: Steven B. Nosek, Dunkley, Bennett & Christensen,

P.A.

DOCUMENT TYPE: Access Agreement

REFERENCE: No

DOCUMENT TITLE: Transmittal of the Second Amended Access

Agreement

CATEGORY: 17.1

DOCUMENT DATE: 02/26/87

NUMBER OF PAGES: 1

AUTHOR: Wagoner, David A., Director

COMPANY/AGENCY: Waste Management Division

RECIPIENT: Larry J. Wilson, Director, Iowa Department of

Natural Resources

DOCUMENT TYPE: Correspondence

REFERENCE: No

DOCUMENT TITLE: Letter re: EPA's Request for ARAR's from the

State

CATEGORY: 17.10

DOCUMENT DATE: 07/01/87

NUMBER OF PAGES: 5

AUTHOR: Wagoner, David A., Director

COMPANY/AGENCY: Waste Management Division

RECIPIENT: Larry O. Wilson, Director, Iowa Department of

Natural Resources

DOCUMENT TYPE: Correspondence

REFERENCE: No

DOCUMENT TITLE: Letter re: EPA's Request for ARAR's from the

State

DOCUMENT DATE: 07/29/87

NUMBER OF PAGES: 18

AUTHOR: Stokes, Allan E., Administrator

COMPANY/AGENCY: Environmental Protection Division, State of

Iowa

RECIPIENT: Dana Trugley, Superfund Branch, Region VII, U.S. EPA

DOCUMENT TYPE: Correspondence

REFERENCE: No

DOCUMENT TITLE: Letter re: State's Transmittal of Potential

ARAR's



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY WASHINGTON, D.C. 20460

JAN 29 1990

MEMORANDUM

OFFICE OF BOLID WASTE AND SMERGENCY RESPONSE

SUBJECT: Twenty First Remedy Delegation Report

FROM:

Don R. Clay Assistant Administrate

TO:

Regional Administrators

Regions I-X

PURPOSE:

To delegate selection of remedy authority for all Superfund Records of Decision (RODs) scheduled for signature during FY 90.

BACKGROUND:

EPA Delegation of Authority 14-5 authorizes delegation of remedy selection decisions to the Regional Administrators. These procedures are outlined in OSWER Directive 9260.1-9, dated March 24, 1986. To further streamline this process and facilitate planning, I am delegating all RODs scheduled for signature during FY 90 which are listed in CERCLIS and targeted for completion. Some RODs may require consultation as described below. Our objective is to provide Regional management greater control for meeting project commitments by providing broad delegation of RODs, and by reducing incoming submittals and the number of Headquarters' formal consultations.

At your discretion, this authority may be redelegated to the Deputy Regional Administrator.

IMPLEMENTATION:

The remedial actions delegated in this report are those current SPMS FY 90 ROD targets (including alternates) listed in CERCLIS as of January 9, 1990 (see attached). If your Region has revisions to this list during the year, a memorandum to Headquarters requesting delegation of additional RODs will be required. Formal Regional consultation with Headquarters Division Director in OERR (Fund-lead) or OWPE (Enforcement-lead), or respective Office Director or AA as appropriate, is required only for the following limited situations where the proposed remedy:

. exceeds \$30 million

. utilizes a fund balancing waiver [SARA 121(d)(4)]

. involves real property acquisition for a fund-financed response

involves a ROD amendment resulting from PRP settlement/ negotiations

involves nationally precedent-setting issues, e.g. remediation of dioxin wastes, complex area-wide contamination, etc.

This consultation should occur prior to issuance of the Proposed Plan or amended Proposed Plan.

In addition to on-going coordination between Remedial Project Managers and Headquarters' Regional Coordinators (OERR/OWPE), Regions must consult with the appropriate Headquarters Branch Chief for those sites where there is an Explanation of Significant Differences (ESD) planned, and should consult on an unresolved issue relating to State concurrence, ARAR compliance or use of waivers, PRP settlement/negotiations, multi-source groundwater contamination, risk assessment, permanent relocation, or other significant issues. Regional Coordinators can assist your staff in identifying these sites.

OSWER Directive 9355.3-08, dated November 30, 1989, discusses the role of the Regional Coordinators and identifies key quality themes for the selection of remedy process. I strongly recommend that your staff work with the Regional Coordinators on implementing these themes in all Proposed Plans and RODs in order to continually improve program quality and consistency.

Delegation briefing sheets formerly requested for both Fundlead and Enforcement-lead sites will not be required this year due to this delegation. However, briefing materials on major site issues may be necessary for those RODs which require Headquarters consultation.

Delegation questions should be addressed to Carol Jacobson (FTS 475-9834) in the Hazardous Site Control Division or Joe Tieger (FTS 475-8372) in the CERCLA Enforcement Division.

CENCIS DATA BASE DATE: 01/08/90 CENCIS DATA BASE TIME: 10:30:04

U.S. EPA SUPERFUND PROGRAM

CERNELP DATA BASE DATE: 01/00/70
CERNELP DATA BASE TIME: 21:12:30
ENFORCIMENT SENSITIVE

SCAP-14B: FY90 TARGETS AND ACCOMPLISHMENTS SETE SURFARY REPO

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Attachment

cc: Director, Waste Management Division, Regions I, IV, V, and VII
Director, Emergency and Remedial Response Division, Region II
Director, Hazardous Waste Management Division, Regions III, VI and VIII
Director, Toxics and Waste Management Division, Region IX Director, Hazardous Waste Division, Region X Regional Counsels, Regions I - X Superfund Branch Chiefs, Regions I - X