Second Five-Year Review Report

for the

Mid-America Tanning Co. Site Sergeant Bluff Woodbury County, Iowa



June 2008

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Approved by:

Date:

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U.S. EPA Region 7

Executive Summary

A five-year review has been completed at the Mid-America Tanning Co. Site located near Sergeant Bluff, Iowa. This is the second five-year review at the site.

The Mid-America Tanning site occupies 98.7 acres in Woodbury County, Iowa, located approximately 10 miles south of Sioux City and about 6 miles south of Sergeant Bluff. Sergeant Bluff is a community of approximately 3,900 residents. Sioux City has approximately 104,000 residents. Figure 1 shows the location of the site. Figure 2 shows a map of the various components of the site itself.

The site was operated as a leather tannery from 1970 to 1989. The site lies in the Port Neal Industrial District and is surrounded by industry to the west, north, and south. Land use within a mile east of the site is agricultural and commercial. The area which is a mile east of the site is bordered by interstate 29. A portion of the site itself is bordered by Oxbow Lake and lies within the 100-year floodplain. The Missouri River is approximately 1.5 miles to the southwest of the site and receives discharges from Oxbow Lake. It is anticipated that land use in the surrounding area will remain similar to current uses.

In 1973, the plant began using a chrome tanning process. The process waste water treatment system produced a sludge that was high in chromium and contained other chemicals. On-site surface impoundments were used to store the sludge. Ultimate disposal of the sludge was by burial in on-site trenches and land application to on-site soils. Occasional system overloads resulted in overflow of chromium wastewater into Oxbow Lake. When the facility ceased operations in 1989, there was an estimated 5,000 gallons of chromium tanning solution on-site along with 525 gallons of sulfuric acid used in the tanning process. The site posed a threat to the public health through direct contact and through potential migration of chromium into the surrounding groundwater that was the primary drinking water source for approximately 850 individuals who live in the surrounding 3-mile radius of the site.

The main contaminant of concern at the site is chromium, which was of concern primarily in the surface soils and exposed wastes.

The site was added to the National Priorities List (NPL) in March 1989 (54 FR 13296). Because of imminent health threats, the United States Environmental Protection Agency (EPA) initiated a removal action in 1990. The EPA removal action was directed toward immediate site stabilization measures and included excavation and stockpiling of contaminated sludge from the on-site burial trench, containment and treatment of chromium tanning solutions, containment and neutralization of sulfuric acids, and cursory decontamination of the buildings. In conjunction with the removal activities, EPA conducted an investigation into the nature and extent of the contamination at the site and in September 1991, decided on a cleanup plan which was explained in a Record of Decision (ROD). The cleanup plan included on-site stabilization of contaminated wastes followed by installation of a soil cap and continued monitoring of the groundwater.

In 1996 EPA issued a ROD amendment due to concerns that solidification of sludge in the lagoons would pose a threat to public health and the environment from the potential release of hydrogen sulfide gas. The modified plan included dewatering the impoundment areas, treating and discharging the impoundment waters, excavating contaminated soils and combining them with the contaminated impoundment sludge, capping the impoundment soil/sludge with a floating geomembrane cover, and decontaminating various cement structures and a portion of one building.

The remedial action (RA) was initiated on September 30, 1998, and the physical construction activities were completed on July 27, 2000.

On July 9, 2005, EPA was notified by Emergency Management of Woodbury County that a release had occurred at the former Mid-America Tanning Co. Site facility and assistance was requested. The release, estimated at 100,000 gallons, was reported to have come from the aeration lagoons. Water and sediment samples from the release were collected for laboratory analysis. Before sample results were received, a second release occurred, discharging approximately 50,000 gallons of water and hydrogen sulfide gas. EPA determined that the release was emanating from a 10-inch cast iron pipe that originated from the east aeration lagoon. The pipe was plugged and capped.

Due to the 2005 release, EPA issued an Action Memorandum to implement additional controls to further reduce the potential of exposure. The proposed action included solidifying the contents of the aeration lagoons followed by capping with a clay and vegetative cover. This action was completed on June 19, 2007.

Based on the documents reviewed and the site inspection, the remedy is functioning as intended by the ROD. Only minor maintenance issues were noted during the five-year review (FYR) site inspection conducted on April 30, 2008, none of which impact the protectiveness of the remedy. The removal action, initiated by the June 2005 release from the aeration lagoons, has served to enhance the protectiveness of the remedy by providing a more stable cover over the waste materials. The applicable or relevant and appropriate requirement (ARARs) cited in the ROD have been met. Although there have been changes to the Water Quality Standards for Iowa, the baseline risk assessment deemed human health exposure pathways to surface water as incomplete or insignificant. In addition, the maximum contaminant level (MCL) for arsenic has changed from 50 μ g/L to 10 μ g/L, but the groundwater concentrations are still below the new MCL. Therefore, none of these changes impacts the protectiveness of the remedy. The remedy at the site is protective of human health and the environment. All threats at the site have been addressed through solidification and capping of contaminated soils and wastes on-site and institutional controls to prevent unrestricted use of the site.

Long-term protectiveness of the RA will be verified by continuing inspections and maintenance, as specified in the 1998 Surveillance and Monitoring Plan as updated by the Post Removal Site Control Plan in 2006.

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List of Abbreviations

ARAR Applicable or Relevant and Appropriate Requirement

CERCLA Comprehensive Environmental Response, Compensation, and Liability Act

CIC Community Involvement Coordinator

EPA United States Environmental Protection Agency

CFR Code of Federal Regulations

FYR Five-Year Review

IDNR Iowa Department of Natural Resources

MAT Mid-America Tanning Co. Site
MCL Maximum Contaminant Level
NCP National Contingency Plan

NPDES National Pollutant Discharge Elimination System

NPL National Priorities List

PRP Potentially Responsible Party
PRSCP Post-Removal Site Control Plan

RA Remedial Action

RAO Remedial Action Objective

RD Remedial Design

RI/FS Remedial Investigation/Feasibility Study

ROD Record of Decision

RPM Remedial Project Manager SSC State Superfund Contract

USACE United States Army Corps of Engineers

Five-Year Review Summary Form

SITE IDENTIFICATION						
Site name (from WasteLAN): Mid-America Tanning Co. Site						
EPA ID (from WasteLAN): IAD085824688						
Region: 7 State: IA City/County: Sergeant Bluff/Woodbury						
SITE STATUS						
NPL status: ☐ Final √ Deleted ☐ Other (specify)						
Remediation status (choose all that apply): □ Under Construction □ Operating √ Complete						
Site Wide FYR √ YES □ NO Construction completion date: 07 / 27 / 2000						
Has site been put into reuse? □ YES √NO						
REVIEW STATUS						
Lead agency: √ EPA □ State □ Tribe □ Other Federal Agency						
Author name: DeAndre' Singletary						
Author title: Remedial Project Manager Author affiliation: U.S. EPA Region 7						
Review period: <u>07</u> / <u>11</u> / <u>2003</u> to <u>07</u> / <u>11</u> / <u>2008</u>						
Date(s) of site inspection: <u>04/30/2008</u>						
Type of review: √ Statutory						
□ Policy						
√ Post-SARA □ Pre-SARA □ NPL-Removal only						
☐ Non-NPL Remedial Action Site ☐ NPL State/Tribe-lead						
☐ Regional Discretion						
Review number: □ 1 (first) √ 2 (second) □ 3 (third) □ Other (specify)						
Triggering action:						
☐ Actual RA Onsite Construction at OU #						
☐ Actual RA Start						
☐ Construction Completion						
√ Previous Five-Year Review Report						
☐ Other (specify)						
Triggering action date (from WasteLAN): 07/11/2003						
Due date (five years after triggering action date): <u>07 / 11 / 2008</u>						

Issues:

- 1. Minor erosion gullies at outer edges of lagoons
- 2. Ponding Area on south central lagoon cap
- 3. Potential ecological impact from sources not related to the Superfund Site

Recommendations and Follow-up Actions:

- 1. Fill in and reseed erosion gullies
- 2. Add topsoil and reseed ponding area to promote cap drainage
- 3. Complete investigation of permitted discharges into the Oxbow Lake

Protectiveness Statement(s):

The source control remedy at the site is protective of human health and the environment. All threats at the site have been addressed through solidification and capping of contaminated soils and wastes on-site and institutional controls to prevent unrestricted use of the site.

Long-term protectiveness of the remedial action will be verified by continuing inspections and maintenance, as specified in the 1998 Surveillance and Monitoring Plan as updated by the Post Removal Site Control Plan in 2006.

Other Comments:

1.0 Introduction

The purpose of five-year reviews (FYR) is to determine whether the remedy at a site is protective of human health and the environment. The methods, findings, and conclusions of reviews are documented in FYR reports. In addition, FYR reports identify issues found during the review, if any, and recommendations to address them.

The United States Environmental Protection Agency (EPA) is preparing this FYR pursuant to the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) section 121(c) and the National Contingency Plan (NCP). CERCLA § 121(c) states:

If the President selects a remedial action that results in any hazardous substances, pollutants, or contaminants remaining at the site, the President shall review such remedial action no less often than each five years after the initiation of such remedial action to assure that human health and the environment are being protected by the remedial action being implemented. In addition, if upon such review it is the judgment of the President that action is appropriate at such site in accordance with section 104 or 106, the President shall take or require such action. The President shall report to the Congress a list of facilities for which such review is required, the results of all such reviews, and any actions taken as a result of such reviews.

EPA interpreted this requirement further in the NCP; 40 CFR § 300.430(f)(4)(ii) states:

If a remedial action is selected that results in hazardous substances, pollutants, or contaminants remaining at the site above levels that allow for unlimited use and unrestricted exposure, the lead agency shall review such action no less often than every five years after the initiation of the selected remedial action.

EPA Region 7 has conducted a FYR of the RAs implemented at the Mid-America Tanning Co. Site in Woodbury County, Iowa. This review was conducted from December 2007 through May 2008. This report documents the results of the review.

This is the second FYR for the Mid-America Tanning Co. Site. The triggering action for this review is five years after the date of the first FYR for the site, which was completed in July 2003. The FYR is required due to the fact that chromium contamination remains on-site above levels that allow for unlimited use and unrestricted exposure.

2.0 Site Chronology

A chronology of significant site events and dates is included in Table 1.

Table 1: Chronology of Site Events

EVENT	DATE
Tannery operations at the site	1970-1989
Final listing on EPA National Priorities List	3/31/1989
EPA removal action to stabilize site and excavate and stockpile sludge	1990-1991
Remedial Investigation/Feasibility Study made available to public	7/16/1991
Proposed plan identifying EPA's preferred remedy presented to public; start of public comment period	7/16/1991
ROD selecting the source control remedy is signed	9/24/1991
Remedial Design completed	9/1993
Administrative Order issued to compel second removal action	8/1994
PRP removal completed	7/1995
ROD Amendment to change remedy design because of hydrogen sulfide concerns in impoundment sludge	7/29/1996
Consent Decree finalizing settlement for responsible party payment for remedy entered by Federal Court	5/10/1998
Second remedial design completed	9/1998
Start of on-site construction (date that triggers Five-Year Review).	9/30/1998
Pre-final inspection of remedial action	12/20/1999
Completion of on-site physical construction	7/27/2000
Completion of ROD determination on groundwater	8/30/2000
Final Close-Out Report signed	9/12/2000
Operation and Maintenance Plan approved; source control remedy operational and functional	9/12/2000
First Five-Year Review	7/11/2003
Site Deleted from NPL	. 2004
Release from Lagoons	7/9/2005
Removal Action Complete – solidification of sludge in aeration lagoons	6/19/2007

3.0 Background

3.1 Physical Characteristics

The Mid-America Tanning site occupies 98.7 acres in Woodbury County, Iowa, located approximately 10 miles south of Sioux City and about 6 miles south of Sergeant Bluff. Sergeant Bluff is a community of approximately 3,900 residents. Sioux City has approximately 104,000 residents. Figure 1 shows the location of the site. Figure 2 shows a map of the various components of the site itself.

3.2 Land and Resource Use

The site was operated as a leather tannery from 1970 to 1989. The site lies in the Port Neal Industrial District and is surrounded by industry to the west, north, and sourth. Land use within a mile east of the site is agricultural and commercial. The area which is a mile east of the site is bordered by interstate 29. A portion of the site itself is bordered by Oxbow Lake and lies within the 100-year floodplain. The Missouri River is approximately 1.5 miles to the southwest of the site and receives discharges from Oxbow Lake. It is anticipated that land use in the surrounding area will remain similar to current uses. The groundwater beneath the site is not designated or currently used as a drinking water source.

3.3 History of Contamination

In 1973, the plant began using a chrome tanning process. The process waste water treatment system produced a sludge that was high in chromium and contained other chemicals. On-site surface impoundments were used to store the sludge. Ultimate disposal of the sludge was by burial in on-site trenches and land application to on-site soils. Chromium-containing sediments also accumulated in another on-site surface impoundment, the waste water polishing basin. Occasional system overloads resulted in overflow of chromium wastewater into Oxbow Lake. When the facility ceased operations in 1989, there was an estimated 5,000 gallons of chromium tanning solution on-site along with 525 gallons of sulfuric acid used in the tanning process. The site posed a threat to the public health through direct contact and through potential migration of chromium into the surrounding groundwater that was the primary drinking water source for approximately 850 individuals who lived in the surrounding 3-mile radius of the site.

3.4 Initial Response

The site was added to the National Priorities List (NPL) in March 1989 (54 FR 13296). Because of imminent health threats, EPA initiated a removal action in 1990. The EPA removal action was directed toward immediate site stabilization measures and included excavation and stockpiling of contaminated sludge from on-site burial trenches, containment and treatment of chromium tanning solutions, containment and neutralization of sulfuric acids, and decontamination of the buildings. In conjunction with the removal activities, EPA conducted an investigation into the nature and extent of the contamination at the site and in September 1991, decided on a cleanup plan which was explained in a Record of Decision (ROD). The cleanup

plan included on-site stabilization of contaminated wastes followed by installation of a soil cap and continued monitoring of the groundwater.

Prior to initiating the ROD remedy, site conditions deteriorated due to vandalism and areas of the site were recontaminated. In 1994, EPA issued an Administrative Order to Foxley Cattle Company, a Potentially Responsible Party (PRP), to perform a second removal action to address recontamination concerns. The removal action performed by Foxley was completed in 1995 and consisted of decontaminating buildings, removal and disposal of drummed wastes, and securing the site buildings and manholes.

Subsequently, EPA determined that the sludge in the surface impoundment was emitting hydrogen sulfide gas and that the implementation of the stabilization component of the cleanup plan would likely result in the release of this gas at concentrations which would pose a threat to public health and the environment. In response to the new data regarding the hydrogen sulfide emissions, EPA modified the cleanup plan for the site. The modified plan included dewatering the impoundment areas, treating and discharging the impoundment waters, excavating contaminated soils and combining them with the contaminated impoundment sludge, capping the impoundment soil/sludge with a floating geomembrane cover, and decontaminating various cement structures and a portion of one building. EPA detailed the changes in the cleanup plan for the site in an amended source control ROD issued in July 1996. Based on previous investigations at the site and EPA experience at similar "green tanning" sites, the source control ROD established an action level of 2,000 mg/kg of total chromium in surface soils. In May 1996, the proposed plan identifying the preferred source control remedy was presented to the public for their review and comment, along with the Remediation Investigation/Feasibility Study (RI/FS) reports.

A description of the RA is presented in Section 4.0 of the FYR.

3.5 Basis for Response Action

The main contaminant of concern at the site was chromium, which was of concern primarily in the surface soils and exposed wastes. Exposures to soil and exposed wastes were associated with significant human health risks, due to exceedance of EPA's risk management criteria for either the average or the reasonable maximum exposure scenarios. Potential carcinogenic risks were highest for exposure to soils and waste potentially containing hexavalent chromium. Noncarcinogenic hazards were highest for exposure to sediments and sludges containing trivalent chromium.

4.0 Remedial Actions

4.1 Remedy Objectives

The amended ROD for the site source control remedy was signed on July 29, 1996. Remedial Action Objectives (RAOs) were developed as a result of data collected during the Remedial Investigation to aid in the development and screening of remedial alternatives to be considered for the ROD. The RAOs for the site were:

- 1. Prevent site workers from inhaling contaminated soil and remove contaminant sources to prevent future groundwater contamination;
- 2. Prevent site workers from dermal contact with sediments and remove contaminant sources to prevent future groundwater contamination.

4.2 Remedy Selection

The major components of the source control remedy selected in the amended ROD included:

- excavation and relocation of on-site contaminated soil, sediment and sludge materials;
- coverage of those materials with multi-media landfill cap structures
- treatment of free waste waters located in several site impoundments
- installation of floating geosynthetic covers on existing site lagoons
- decontamination by steam cleaning of selected site facilities;
- decontamination of selected buildings
- transfer of waste waters from and to selected surface impoundments
- installation of chain link fencing:
- institutional controls, including a deed notice and state registry restrictions, to control future land use at the site

Institutional controls were required for the site. These controls were sought in two ways. First, before remediation, the state had already placed the site on Iowa's Registry of Hazardous Waste or Hazardous Substance Disposal Sites, which prevents changes in land ownership or use without state approval. A registry notice was put in place by the state. Second, a deed notice was placed on the site property to warn potential purchasers of the presence of hazardous waste remaining on-site.

A second ROD was issued on August 30, 2000, to clarify that no additional groundwater monitoring or remedy was needed at the site. A further assessment of the groundwater at the site was completed in December 1997 in accordance with the sampling plan approved by EPA. Twenty-one monitoring wells were sampled, obtaining water from both shallow and deep water bearing zones at the site. These samples were analyzed for 19 analytes. The assessment showed that groundwater flow direction was consistent with that previously determined and also found

that upward hydraulic gradients were present. These upward gradients are important because they prevent downward contaminant migration and help limit migration at the site. Metals detected in groundwater samples, including arsenic, barium and chromium, were well below Maximum Contaminant Levels (MCL); the highest chromium levels were less than 10 percent of the MCL. Lead, aluminum and arsenic were below Iowa Aquatic Standards as well. The ROD issuance followed a public notice period and public meeting, which determined that no further action was necessary for the groundwater at the site.

4.3 Remedy Implementation

The remedial design (RD) was conducted in conformance with the amended source control ROD. The RD was approved by EPA on September 25, 1998. The RA was initiated on September 30, 1998. EPA conducted a pre-final inspection on December 20, 1999. At that time, all the major RA work elements had been substantially completed and the subcontractor was ready to demobilize from the site. A short list of uncompleted items was prepared and distributed to all the contractual parties. A final inspection was conducted on May 19, 2000, and a revised punch list was prepared based on the observations made during the site visit. All items on the final punch list were corrected by July 27, 2000, signifying the completion of physical construction activities.

The construction completion designation was achieved when the Final Close-Out Report was signed on September 12, 2000.

On July 9, 2005, EPA was notified by Emergency Management of Woodbury County that a release had occurred at the former Mid-America Tanning Co. Site facility and assistance was requested. The release, estimated at 100,000 gallons, was reported to have come from the aeration lagoons. Water and sediment samples from the release were collected for laboratory analysis. Before sample results were received, a second release occurred, discharging approximately 50,000 gallons of water. EPA determined that the release was emanating from a 10-inch cast iron pipe that originated from the east aeration lagoon. The pipe was plugged and capped.

Due to the 2005 release, EPA determined that additional controls were needed to further reduce the potential of exposure. The proposed action included solidifying the contents of the aeration lagoons followed by capping with a clay and vegetative cover.

Solidification of the east lagoon was completed December 6, 2006. The west lagoon was completed March 6, 2007, after significant delays that were attributed to winter conditions. Construction of the protective cover was completed April 18, 2007. The protective cover consists of the High-Density Polyethylene membranes used in the original floating cover design from the previous RA to assist with drainage and erosion below a minimum 18-inch soil cover. The site was seeded on June 19, 2007, with vegetation indigenous to the area as prescribed by the local soil conservation office.

4.4 Operation and Maintenance Activities

Prior to completion of the 2006-2007 removal action, the state of Iowa was conducting operations and maintenance activities pursuant to the September 2000 approved Surveillance and Maintenance Plan. Prior to the execution of the time-critical removal action to solidify sludge from the aeration lagoons, the State Superfund Contract (SSC) for MAT was amended. The amended SSC served to document the Iowa Department of Natural Resources' (IDNR) agreement with the proposed actions and its acceptance to maintain the remedy upon completion of the work. The signing of the SSC also established the Post Removal Site Control Plan (PRSCP) which was included as an appendix to the document. The PRSCP is a result of the reevaluation of maintenance obligations established in the Surveillance and Maintenance Plan taking into consideration the modification to the remedy. It was agreed upon by both EPA and IDNR that guidelines established in the PRSCP serve to incorporate and update those guidelines previously established in the Surveillance and Maintenance Plan.

The site was sold in 2002, with state and EPA approval. The conditions of the sale identified restricted activities and shifted the maintenance responsibilities to the new owner. The state of Iowa still performs annual inspections to ensure no restricted activities are taking place and the covers are maintained to prevent erosion and exposure of the waste.

Response Action Costs

Remedial Action Costs	\$1,912,900
2005 Emergency Response Costs	\$152,000
2006 – 2007 Removal Costs	\$1,911,000

5.0 Progress Since Last Review

The protectiveness statement provided in the last FYR:

The source control remedy at the site is protective of human health and the environment. All threats at the site have been addressed through solidification and capping of contaminated soils and wastes on-site, construction of covers on the surface impoundments, and access and institutional controls.

Long-term protectiveness of the RA will be verified by continuing inspections and maintenance, as specified in the Surveillance and Monitoring Plan.

Two issues were identified in the last FYR. Neither of these issues were considered to have an impact on the current or future impact on the protectiveness of the remedy. The current status of these issues is as follows:

Issue 1: Evidence of vehicle tracks in the vegetation of the landfill caps.

To address this issue, a recommendation was made to keep vehicles and stumps off the landfill caps to avoid damage to the caps and to repair and reseed the affected areas. During the site inspection on April 30, 2008, there was no noticeable rutting or other damage to the caps that could be attributed to a truck or other vehicle. There were some stumps and other debris on the cap of the polishing basin. EPA and IDNR consider this an acceptable use of the capped areas provided the storage activities do not result in damage to the cap. EPA is currently in the process of drafting an Environmental Covenant for the property. The covenant will provide surveyed locations of the capped chromium waste and define allowable activities that may take place on the caps. One of the allowable activities will be to use the caps for storage. The covenant may also allow the surface of the caps to be changed from vegetative covers to gravel.

Issue 2: Some warning signs north of the covered lagoons had fallen.

To address this issue, a recommendation was made to reestablish and maintain the warning signs that had fallen on the north side of the lagoon. This recommendation is no longer pertinent since a removal action, completed in June 2007, solidified the waste in the lagoons and covered them with an 18-inch soil cover. This resulted in a much more stable situation and significantly reduced the risk of exposure to the waste. The fencing preventing access to the lagoons was also removed during 2006-07 removal action.

Other significant items that have occurred since the 2003 FYR include:

- The site was deleted from the NPL in 2004.
- A release from the east aeration lagoon in 2005 resulting in an emergency response action and subsequent time-critical removal action.
- EPA and the state of Iowa are currently in the process of preparing an Environmental Covenant for the site that will clearly delineate the disposal areas and prescribe restrictions as well as allowable activities that apply to these areas.

6.0 Five-Year Review Process

6.1 Administrative Components

The FYR process was conducted by DeAndre Singletary, the Region 7 EPA Remedial Project Manager for the site, supported by Paul Speckin and Debra Snodgrass of the U.S. Army Corps of Engineers (USACE), Kansas City District.

6.2 Community Involvement

Activities to involve the community in the FYR were initiated in February 2008 by the RPM and the Community Involvement Coordinator (CIC) for the site. A fact sheet was sent to parties on the EPA mailing list explaining the initiation of the FYR on February 15, 2008, and faxed to regional congressional offices on that same date. A notice was also published in the *Sioux City Journal* on February 17, 2008, and posted on the Region 7 Web site the following day. The notice and fact sheet invited the public to submit any comments to EPA. No comments were received.

Soon after approval of this report, a notice will be placed in the same local newspaper announcing that the FYR is complete, and that the results of the review and the report are available to the public at the Sergeant Bluff City Hall and EPA Region 7 Records Center.

6.3 Document Review

The following documents were reviewed as part of this five-year review:

- Unilateral Administrative Order, December 29, 1989
- Preliminary Health Assessment, June 8, 1990
- Action Memorandum, August 31, 1990
- Removal Report, March 15, 1991
- Action Memorandum, May 26, 1991
- Feasibility Study, June 1991
- Remedial Investigation Report, July 1991
- Record of Decision (Soils), September 24, 1991
- Action Memorandum, March 26, 1993
- Remedial Design Report, September 1993
- Action Memorandum, March 23, 1994
- Public Health Assessment, June 24, 1994
- Record of Decision Amendment, July 24, 1996
- Consent Decree, July 15, 1998
- Fact Sheets, May 1990, May 1996, May 2000, July 2000, October 2000
- Notice of Intent to Include Property on Registry of Confirmed, Abandoned or Uncontrolled Disposal Sites, July 13, 2000
- Record of Decision (Groundwater), August 30, 2000

- Public Health Assessment, January 12, 2001
- Consent Decree, May 9, 2001
- Property Deed, September 13, 2001
- First FYR Report, Mid-America Tanning Co. Site, Sergeant Bluff, Woodbury County, Iowa, July 2003
- Notice of Intent to Delete, July 23, 2004
- Health Consultation from the Agency for Toxic Substances and Disease Registry, February 17, 2005
- Pollution Report, July 11, 2005
- Action Memorandum, August 18, 2005
- Emergency Response and Removal Action Report, August 19, 2005
- Action Memorandum, June 7, 2006
- Post Removal Site Controls Plan, June 12, 2006
- Pollution Report, June 27, 2007

6.4 Data Review

Data collected during the 2005 release is the only data collected at the site since the last FYR. The purpose of this data was to determine if the release caused the spread of contamination to adjacent areas. Of all the samples collected, one water sample exceeded the level of concern. However, there was no measurable impact to the surrounding environment. All samples in soil and sediment impacted by the release returned results below the site cleanup levels.

6.5 Site Inspection

A site visit for the FYR was held on April 30, 2008. Participants in the site visit included DeAndre Singletary, EPA RPM for the site; Bob Drustrup and Cal Lundberg, both representing IDNR; and Paul Speckin, USACE. The purpose of the site visit was to obtain an overview of the project, inspect current site conditions, and to determine if there had been any changes to surrounding land use. Photos taken during the site visit are included in Attachment 3.

The site visit consisted of inspecting each of the chromium waste disposal areas to assess the condition of the covers.

The first area inspected was the North Field landfill. Chromium contaminated soils and sediment were consolidated and covered with a geomembrane and soil cover. The cover in the North Field area was in good condition. In general, the vegetative cover was dense except for a few areas with sparse vegetation. It is expected these areas will fill in later in the growing season. There were no signs of erosion or other disruptions to the integrity of the cover.

Next the aeration lagoon area was inspected. This was the area that was previously covered with the floating geomembrane prior to a removal action completed in June 2007. The removal action consisted of solidifying the sludge in the lagoons and then placing an 18-inch soil cover over the solidified waste. The geomembrane was placed below the cover to provide some additional protection against erosion, but due to its condition, it is not considered an

impermeable barrier. The cover was seeded with native grasses that were expected to take a few years to fully establish. At the time of the site visit, the vegetative cover was generally sparse. However, even though the area had received significant recent precipitation, there were only a few small erosion gullies. These were located near the outer edges of the lagoons on the east and north sides, primarily over the containment berms. There was also a 20-foot diameter ponding area near the southern center of the cover.

The final area inspected was the cover for the consolidated waste in the Polishing Basin. The cap was in good condition with a dense vegetative cover. There were no signs of erosion or other disruptions to the integrity of the cap. There were a few piles of debris being stored on the cap. This was considered an acceptable use of the capped areas provided it does not result in damage to the cap.

Although there appeared to be the ability to control vehicular access to the site, due to the nature of the waste and the current caps in place preventing exposure, access controls are not considered necessary for this site. Prior to solidifying the waste in the lagoons and placing a vegetative cover, access to the lagoon area was controlled by a fence with locking gate. During the removal action to solidify and cap the aeration lagoon waste, the fence was removed since it was no longer considered necessary.

During the site inspection, EPA and IDNR personnel staked out the boundary limits of each of the disposal cells so the limits of the restricted areas could be accurately identified in the Environmental Covenant currently being prepared for the site. A surveyor was also on-site during the inspection to survey in each of the boundary points identified during the inspection.

6.6 Interviews

Interviews with EPA and IDNR personnel were conducted through discussions during the site inspection. Discussions included historical and current site conditions and activities. Future institutional controls, in the form of an Environmental Covenant, were also discussed. No significant issues regarding the protectiveness of the site were identified through the interviews. Except for involvement of the Woodbury County emergency response during the 2005 release from the lagoons, there have been no issues or concerns expressed by the community. The removal action completed in June 2007 stabilized the waste in the aeration lagoons, so there is no risk of a similar release occurring in the future.

7.0 Technical Assessment

The FYR must determine whether the remedy at a site is protective of human health and the environment. EPA guidance describes three questions used to provide a framework for organizing and evaluating data and information and to ensure all relevant issues are considered when determining the protectiveness of a remedy. These questions are assessed for the site in the following paragraphs. At the end of the section is a summary of the technical assessment.

7.1 Question A: Is the remedy functioning as intended by the decision documents?

Yes.

7.1.1 Remedial Action Performance

The RA is currently performing as designed. The remedy in the 1991 ROD called for removal of the water from the aeration lagoons, in situ immobilization of soil and sediment, placement of caps over contaminated areas, and topsoil and seeding to prevent erosion. Due to concerns for the presence of hydrogen sulfide gas in the aeration lagoons, this remedy was revised in a 1996 ROD amendment that called for placement of a floating geomembrane cover over the aeration lagoons in place of immobilization and capping. The remedy in the 1996 ROD amendment was completed in August 2000. In July 2005, a release from the lagoons occurred from a previously unidentified buried pipe connected to the lagoon. Sampling after the release confirmed that no significant adverse impact resulted from the release. However, due to the 2005 release, EPA determined that additional controls were needed to further reduce potential of exposure. An Action Memorandum was signed in June 2006 to perform a removal action that consisted of the following:

- Removal and disposal of the fence surrounding aeration lagoons.
- The discharge of water from aeration lagoons in compliance with discharge criteria established by IDNR
- Solidification of lagoon aeration in situ using fly ash
- Plugging of any piping discovered during the solidification process
- Implementation of measures to reduce exposure to dust and particulates within the aeration lagoon area
- Construction of a soil cover consisting of a compacted low hydraulic conductivity soil layer and a vegetated/top soil layer. The former floating geomembrane was used below the soil cover to provide additional protection against erosion

This removal action was completed in June 2007 and is performing as designed to prevent exposure to the chromium contaminated sludge. The other capped disposal areas, identified as the North Field and Polishing Basin, have adequate soil and vegetative covers and are performing as designed.

7.1.2 System Operations and Maintenance

The remedy for this site does not have an operating treatment system. However, there are maintenance and inspection activities that occur to ensure the remedy is functioning properly. After completion of the remedy in 2000, the state of Iowa took over responsibility for maintenance of the capped wastes and floating cover. When the property was sold in 2002, specific allowable-use conditions were specified by the state and the new property owner assumed those maintenance responsibilities, with inspection and oversight from the state of Iowa. Inspections are performed annually to verify the condition of the capped areas and ensure they are being maintained properly. In addition, FYRs are performed to make an overall assessment of the protectiveness of the remedy. During the FYR inspection on April 30, 2008, it was found that the caps associated with the North Field and Polishing Basin disposal areas were being adequately maintained and there were no restricted activities occurring in these areas. The vegetation on the recently constructed cover for the aeration lagoons was still sparse. There were also some minor erosion gullies that had formed on the eastern and northern perimeter of the lagoon area. It is recommended these erosion areas be filled and seeded to halt the progress of the erosion and the condition of the cover be monitored closely for additional erosion until the vegetative cover is fully established. In addition, a 20-foot-diameter ponding area on the south central portion of the cap should be filled with topsoil and reseeded to allow for proper drainage of the cap.

7.1.3 Opportunities for Optimization

Since inspection and maintenance are the only ongoing activities associated with the site, there is limited opportunity for optimization. Under the Environmental Covenant being prepared, no construction activities, including excavation, will be allowed without prior written approval from IDNR. There is also discussion of the potential of replacing the vegetative covers with gravel. This type of cover would be more suitable for the vehicular traffic that may be associated with material storage and also prevent the need to revegetate bare spots left after removal of stored materials. Overall, a gravel cover may result in less maintenance, although the need for inspections and repairs would not be eliminated.

7.1.4 Early Indicators of Potential Issues

The July 2005, release from the aeration lagoons was an indicator of an issue with the previous remedy. EPA adequately addressed this issue through implementation of the removal action completed in June 2007 that solidified the waste in the aeration lagoons. Another indicator of a potential issue is the sparse vegetation on the recently completed cover over the aeration lagoons. This has resulted in some minor erosion gullies near the outer boundaries of the lagoons. It was indicated that this type of vegetative cover may take several years to fully establish. Until the vegetative cover is established, there is a greater potential for erosion which may require more frequent maintenance to minimize impact to the integrity of the cover.

7.1.5 Implementation of Institutional Controls and Other Measures

The state of Iowa also sent a notice in 1989 to the Recorders Office that the property was listed on the Registry of Hazardous Waste or Hazardous Substance Disposal Sites. The existence of this notice appeared on a September 13, 2001, version of the deed when the property was sold to USA Tire Management System, Inc. The title to the property was transferred to a new owner on December 3, 2002. Prior to the transfer, a letter was sent to the state of Iowa to request approval of the transfer of ownership. The state of Iowa sent a letter approving the transfer with a list of conditions and restrictions. The current deed contained in Woodbury County's automated system does not identify any of the restrictions on the site. However, a title search, as part of a property sale, would identify the restrictions and notices filed with the Woodbury County Recorders Office. A copy of the recent deeds and associated notices is included in Attachment 2.

EPA and IDNR are currently preparing an environmental covenant for the property that will delineate, by surveyed coordinates, the waste disposal areas and identify restrictions on activities which can be conducted in those areas. The environmental covenant will be filed with the Woodbury County Recorders Office and will provide notification on restrictions and maintenance requirements to the current and any future owners of the property.

7.2 Question B: Are the exposure assumptions, toxicity data, cleanup levels, and remedial action objectives (RAOs) used at the time of the remedy selection still valid?

Yes.

7.2.1 Changes in Exposure Pathways

The human health baseline risk assessment evaluated current receptors (adult hunter/trespasser scenario) and potential future receptors (child resident, adult resident and adult construction and industrial workers) assuming various completed pathways for exposures to chemicals in soil, sludge, surface water, and groundwater. The remedy and removal actions have served to minimize or eliminate potentially completed exposure pathways.

7.2.2 Changes in Land Use

There have been no changes in land use at the site that would affect the protectiveness of the remedy. While land use was industrial/commercial at the time the human health risk assessment was conducted, a future residential land use scenario was assumed to account for reasonable maximum exposure opportunities under unrestricted land use conditions. Land use continues to be and is predicted to remain industrial/commercial.

7.2.3 New Contaminants and/or Contaminant Sources

No new contaminants or sources have been identified.

7.2.4 Remedy Byproducts

The are no byproducts associated with the remedy at the site.

7.2.5 Changes in Standards, Newly Promulgated Standards, To Be Considered

The remedial work at the site has been completed, and all ARARs listed in the 1991 source control ROD were met. The MCL for arsenic, however, has changed from that identified in the 2000 ROD addressing groundwater. In 2006, the MCL for arsenic was reduced from 50 μ g/L to 10 μ g/L. Results from the 1997 groundwater assessment detected dissolved arsenic ranging from 0 to 5.4 μ g/L. These concentrations are below the current MCL for arsenic. Therefore, this change has no impact on the protectiveness of the remedy.

In 2007, Water Quality Standards for Iowa were revised. Since the baseline risk assessment deemed human health exposure pathways to surface water as incomplete or insignificant, changes to these standards do not impact the protectiveness of the remedy.

7.2.6 Changes in Toxicity and Other Contaminant Characteristics

There have been no changes in the toxicity factors for the contaminants characterized to pose potentially significant risk. Contaminant characteristics, thoroughly described in the RI, have not changed.

7.2.7 Changes in Risk Assessment Methods

There have been no changes to the standardized risk assessment methodology that would affect the protectiveness of the source control remedy.

7.2.8 Expected Progress Toward Meeting RAOs

The RA objectives identified for the site have been met.

7.3 Question C: Has any other information come to light that could call into question the protectiveness of the remedy?

No.

7.3.1 Ecological Risks

At the time of the 1991 ROD, the ecological risk assessment was conducted according to Risk Assessment Guidance for Superfund, the Environmental Evaluation Manual (USEPA, 1989). The ecological assessment was performed qualitatively, since site-specific data was not gathered for analyses. No significant ecological risk was identified at that time and no new evidence of adverse ecological impact due to the site has been identified since then. In addition, data collected for the 2005 emergency removal action concluded that contaminants of concern, most notably chromium, have decreased orders of magnitude within the Oxbow Lake. However, there are concerns with elevated concentrations of ammonia and chlorides in surface water.

IDNR has reviewed current national pollutant discharge elimination system (NPDES) permitting which allows discharges into the Oxbow Lake from a company upstream. Data submitted by the company in accordance with the NPDES permit shows that the company is discharging levels of ammonia into the Oxbow Lake that may influence site conditions. IDNR is still evaluating data and will determine next steps upon completion of the investigation.

7.3.2 Natural Disaster Impacts

There have been no national disasters that would call into question the effectiveness of the source control remedy.

7.3.3 Any Other Information That Could Call into Question the Protectiveness of the Remedy

There are no other issues that could call into question the protectiveness of the remedy.

7.4 Technical Assessment Summary

Based on the documents reviewed and the site inspection, the remedy is functioning as intended by the ROD. Only minor maintenance issues were noted during the FYR site inspection conducted on April 30, 2008, none of which impact the protectiveness of the remedy. The removal action, initiated by the June 2005 release from the aeration lagoons, has served to enhance the protectiveness of the remedy by immobilizing the wastes in the aeration lagoons and providing a stable cover over the immobilized waste materials. The ARARs cited in the ROD have been met. Although there have been changes to the Water Quality Standards for Iowa, the baseline risk assessment deemed human health exposure pathways to surface water as incomplete or insignificant. In addition, the MCL for arsenic has changed from 50 μ g/L to 10 μ g/L, but the groundwater concentrations are still below the new MCL. Therefore, none of these changes impacts the protectiveness of the remedy. There is no other information that calls into question the protectiveness of the remedy.

8.0 Issues

TABLE 2: Issues

Issue No.	Issue	Affects Protectiveness (Y/N)		
		Current	Future	
1.	Minor erosion gullies at outer edges of lagoons	N	N	
. 2	Ponding Area on south central lagoon cap	N	N	
3	Potential ecological impact from sources not related to the Superfund Site	N	N	

9.0 Recommendations and Follow-Up Actions

Below is a list of recommended actions to address the issues identified in Section 7.0 above. Although none of the issues identified affect the current or future protectiveness of the remedy, failure to address these issues could lead to more serious conditions that are costly to repair or may lead to conditions that impact the protectiveness of the remedy.

TABLE 3: Recommendations and Follow-Up Actions

Issue No.	Recommendations/ Follow- up Actions	Party Responsible	Oversight Agency	Milestone Date	Affects Protectiveness (Y/N)	
-					Current	Future
1	Fill in and reseed erosion gullies	IDNR	EPA	9/2010	N	N
2	Add topsoil and reseed ponding area to promote cap drainage	. IDNR	ЕРА	9/2010	N	7
3	Complete investigation of permitted discharges into the Oxbow Lake	EPA/IDNR	EPA/ĬDNR	9/2009	N	N

10.0 Protectiveness Statements

The remedy at the site is protective of human health and the environment. All threats at the site have been addressed through capping of contaminated soils and wastes on-site and institutional controls to prevent unrestricted use of the site.

Long-term protectiveness of the RA will be verified by continuing inspections and maintenance, as specified in the 1998 Surveillance and Monitoring Plan as updated by the Post Removal Site Control Plan in 2006.

11. Next Review

The next FYR for the Mid-America Tanning Co. Site is required by September 2013, five years from the date of this review.

9.0 Recommendations and Follow-Up Actions

Below is a list of recommended actions to address the issues identified in Section 7.0 above. Although none of the issues identified affect the current or future protectiveness of the remedy, failure to address these issues could lead to more serious conditions that are costly to repair or may lead to conditions that impact the protectiveness of the remedy.

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10.0 Protectiveness Statements

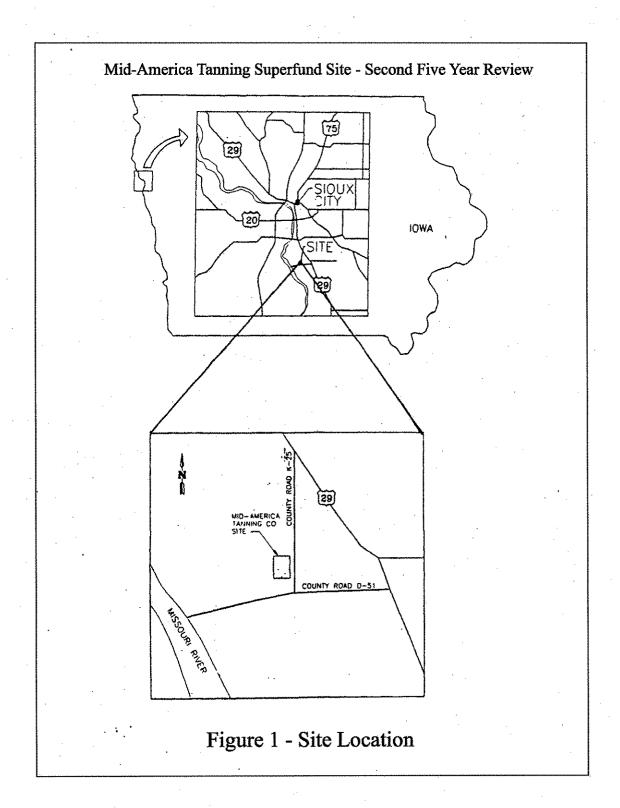
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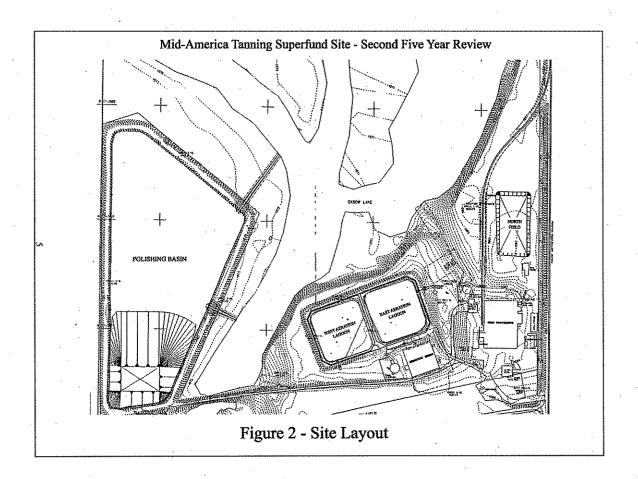
Long-term protectiveness of the RA will be verified by continuing inspections and maintenance, as specified in the 1998 Surveillance and Monitoring Plan as updated by the Post Removal Site Control Plan in 2006.

11. Next Review

The next FYR for the Mid-America Tanning Co. Site is required by September 2013, five years from the date of this review.

FIGURES





Attachment 1

Deeds and Notices

September 13, 2001- Deed

Sternid: B

IU #10DD

Break: 1.

Other:

RULL 506 MAGE 1209 **WOODBURY COUNTY TREAJURER TAX** COUNTY AS PUBLIC BIDDER

DEED NO. 1500

Tax Statement: USA MANAGEMENT I.L.C. C/O CENTRAL STATES TIRE RECYCLING

SIOUX CITY IA 51106-5129

Proposed by: Dalwai Paule Woodbury County Treasurer's Office 620 Douglas Street, Room 102 Sioux City IA 51101 712-279-6495

5112

WOODBURY COUNTY, IOWA OTTYN
Enfered upon the transfer book and
for taxation on

SEP 13,2001

KNOW ALL MEN BY THESE PRESENTS: Parcel #769650

That the following described parcel W OF RR R/W S OF A LINE BEG AT NW COR TO A PT 800 FT S OF N LINE & N OF S 1865 FT IN N 1/2 NE & N 600 FT S 800 FT EX E 400 FT LYING W OF RR R/W S 1/2 NE & N 1065 FT S 1865 FT E 400 FT LYING W OF RR R/W NE 1/4 19-87-47 SERGEANT BLUFF-LUTON LIBERTY ADDITION situated in the County of Woodbury and the State of Iowa, was subject to taxes for the year(s) A.D. payable in 1989-1990, 1990-1991, 1991-1992, 1992-1993, 1993-1994, 1994-1995, AND 1995-1996; and the taxes on the parcel for the year (or years) stated remained due and ungaid at the date of the sale, and the Treasurer of the County, on the ITTH day of June, A.D. 1996, by virtue of the authority vested by law in the TREASURER of WOODBURY COUNTY, SIOUX CITY IOWA 5100 at (an adjournment of) the sale begun and publicly held on the third Monday of June, A.D. 1996, exposed to public sale at the office of the County Treasurer in the County named, in substantial conformity with all the requirements of the statute, the parcel above described; for the payment of the total amount then due and remaining unpaid on that pureel.

And at the time and place, no acceptable bid was received, the County of WOODBURY through its Board of Supervisors, did bid on the parcel in accordance with the provisions of Section 446,9 of the Code for FIVE THOUSAND FOUR HUNFRED SIXTY SIX DOLLARS AND NO CENTS, being the total amount then due and remaining unpaid on the parcel for 100 percent undivided interest of the above described parcel, which was the least quantity bid for, and payment of that sum was made by that person to the Treasurer, the parcel was stricken off to the County.

And WOODBURY COUNTY did, on the 17TH day of OCTOBER, A.D. 2000, assign the certificate of the sale of the parcel and all right, title, and interest to the parcel to USA TIRE MANAGEMENT SYSTEM INC of the County of WOODBURY and State of IOWA.

County of WCRODBURY and State of LOWA.

And by the affidavit of the Woodbury County Treasurer filed in said Treasurer's office on the 4th day of JANUARY, A.D. 2001, it appears that notice has been given more than ninety days before the execution of this deed to U.S. TANNING CO., INC. FIZE AMD PARTY IN WHOSE NAME THE PARCEL IS TAXED; BANK OF CHIMA, NEW YORK BRANCH, MORTGAGEE AND ASSIGNEE OF LEASES AND RENTALS (MORTGAGOR AND ASSIGNE" - U.S. TANNING CO., INC.); STATE OF IOWA - JOB SERVICE OF IOWA, HOLDER OF LIEN FOR EMPLOYER CONTRIBUTIONS (TAX PAYER: U.S. TANNING DIVIA U.S. TANNING, INC.; U.S. DEPARTMENT OF TREASURY-INTERNAL REVENUE SHERVICE, HOLDER OF LIEN FOR NON-PAYMENT OF TAXES, (TYPE OF TAX - 94); FOR TAX PERIOD ENDING 630/89; TAN PAYER: U.S. TANNING CO., INC.); STATE OF IOWA-IOWA DEPARTMENT OF NATURAL RESOURCES, ISSUER OF NOTICE THAT REAL ESTATE HAS BEEN USED FOR DISPOSAL OF HAZARDOUS WASTES OR SUBSTANCES (NOTICE ISSUED TO MID-AMERICA TANNING CO., INC.): DISPOSAL OF HAZARIDUS WASHES ON BUISTANCES (NUTICE ISSUE) IT MILITAMERICA TANNING CO. ISSUE, UNITED STATES OF AMERICA-ENVIROMENTAL PROTECTION A GENCY, ISSUER OF NOTICE THAT THE UNITED STATES OF AMERICAN HOLDS A LIEN ON LANDS TO SECURE PAYMENT FOR DAMAGES UNDER SECTION 107(A) OF CERCLA - NOTICE PROVIDED TO U.S. TANNING COMPANY, INC. AVIA MID-AMERICAN TANNING; UNITED STATES OF AMERICA-C/O OFFICE OF U.S. ATTORNEY, JUDGMENT LIENHOLDER (JUDGMENT IN CASE NO C66-4097 AGAINST US TANNING CO., INC. ET AL.); PATRICIA MONTROSS, JUDGMENT LIENHOLDER (JUDGMENT IN CASE NO. 165094C AGAINST U.S. TANNING COMPANY, INC., ET AL. AND JUDGMENT IN CASE NO C89-4097 AGAINST U.S. TANNING COMPANY, INC., ET AL. AND JUDGMENT IN CASE NO C89-4097 AGAINST U.S. TANNING CO. (INC. ET AL.) (I TANNING LIENT LIENT AND LIENT OF THE AMERICAN LIENT AND LI AGAINST U.S. TANNING CO., INC., ET AL);, of the expiration of the time of redemption allowed by kee; and FIVE years and THREE months having clapsed since the date of the sole; and the pared has not been redeemed.

Now 1, Bob Knowler, Treasurer of Woodbury County, for the consideration of the stated sum paid to the

Treasurer and by virtue of law, have granted, burgained, and sold, and by these presents do grant, burgain and sell to USA MANAGEMENT LLC. C/O CENTRAL STATES THE RECYCLING 4444'S YORK STREET SIGHLY CITY IN SHOE 5129, the parcel described to have and to hold, forever, subject, however to all the rights of redemption provided by law.

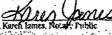
In Witness Whereof, I. Bob Knowler, Treasurer of Woodbury County by virtue of the authority vested in me, have subscribed my name on the 13th day of SEPTEMBER, A.D. 2001.

State of lowa, Woodbury County, ss.

I hereby certify that before me. Karen James, a Notary Public in and for Woodbury County, lows, personally appeared the above named Bob Knowler, Treasurer of the County, personally known to me to be the Treasurer of the County at the date of the execution of the above conveyance, and to be the identical person whose name is affixed to and who executed the above conveyance as Treasurer of the County, and acknowledged the execution of the conveyance to be the Treasurer's voluntary act and deed as Treasurer of the County, for the purposes expressed in the conveyance

Given under my hand and scal this 13th day of SEPTEMBER, A.D 2001





lob Knowler, Woodbury County Treasurer



WOODBURY COUNTY TREATURER TAX COUNTY AT PUBLIC BIDDER

DEED NO: 1501

USA MANAGEMENT LLC C/O CENTRAL STATES TIRE RECYCLING

4444 S YORK SIOUX CITY IA 51106-5129

Prepared by: Dale. Woodbury County Treasurer's Office 620 Douglas Street, Room 102 Sioux City 1A 51101 712-279-6495 5113

SEP 1 3 2001

WOODBURY COUNTY, KNWA Enlared upon the transfer book and

SEP 13 2001

KNOW ALL MEN BY THESE PRESENTS: Parcel #769665

That the following described parcel N 600 FT S 800 FT E 400 FT W OF RR/W SE NE & EX E 400 FT N 1065 FT S 1865 FT W OF RR R/W NE 19-87-47 SERGEANT BLUFF-LUTON LIBERTY ADDITION situated in the County of Woodbury and the State of lows, was subject to taxes for the year(s) A.D. payable in 1989-1990, 1990-1991, 1991-1992, 1992-1993, 1993-1994, 1994-1995, AND 1995-1996; and the taxes on the parcel for the year (or years) stated remained due and unpaid at the date of the sale, and the Treasurer of the County, on the 17TH day of June, A.D. 1996, by virtue of the authority vested by law in the TREASURER of WOODBURY COUNTY, SIOUX CITY IOWA 51101 at (an adjournment of) the sale begun and publicly held on the third Monday of June, A.D. 1996, exposed to public sale at the office of the County Treasurer in the County named, in substantial conformity with all the requirements of the statute, the parcel above described; for the payment of the total amount then due and remaining

And at the time and place, no acceptable bid was received, the County of WOODBURY through its Board of Supervisors, did bid on the purcel in accordance with the provisions of Section 446.19 of the Code for TWO HUNDRED THIRTY SEVEN THOUSAND EIGHTY ONE DOLLARS AND NO CENTS, being the total amount then due and remaining unpaid on the purcel for 100 percent undivided interest of the above described parcel, which was the least quantity bid for, and payment of that sum was made by that person to the Treasurer, the parcel was stricken off to the County.

And WOODBURY COUNTY did, on the 17TH day of OCTOBER, A.D. 2000, assign the certificate of the sale of the pancel and all right, title, and interest to the parcel to USA TIRE MANAGEMENT SYSTEM INC of the County of WOODBURY and State of IOWA.

And by the affidavit of the Woodbury County Treasurer. Ifled in said Treasurer's office on the 4th day of JANUARY, A.D. 2001, it appears that notice has been given more than ninety days before the execution of this deed to u.s. Tanning Co., inc., Fix and party in whose name the parcel is taxed; Bank of China, new York Brancht, Mortgagee and assignee of leases and Rentals (Mortgagor and Assignor – u.s. tanning Co., inc.); State of Iowa – Job Service of Iowa, Holder of Lien for employer contributions (tax paver: us tanning of play us tanning, inc; us department of treasury:internal revenue shervice, holder of Lien for Non-payment of taxes (type of tax – 94); for tax period ending 6/30/89; tax paver: us tanning co., inc.); state of Iowa-Iowa Department of taxes (type of tax – 94); for tax period ending 6/30/89; tax paver: us tanning co., inc.); state of Iowa-Iowa Department of natural resources, issuer of notice that real estate has been used for Disposal of hazardous wastes or substances (notice issue) to mid-america tanning co., inc.); united states of america-environmental protection agency, issuer of notice that the united of carcia – notice provided to u.s. tanning company, inc alka mid-american tanning; united states of america-c/o office of u.s. attorney; judgment lienholder (udgment in case no co-4097 against us tanning co., inc., et al.); patricla montross, judgment lienholder (udgment in case no co-4097 against us tanning co., inc., et al.); patricla montross, judgment lienholder (udgment in case no co-4097 against us tanning co., inc., et al.); patricla montross, judgment lienholder (udgment in case no co-4097 against us tanning company, inc., et al.); patricla montross, judgment lienholder (udgment in case no co-4097 against us. tanning company, inc., et al., and judgment lienholder (udgment in case no co-4097 against us. tanning company, inc., et al., and judgment lienholder (udgment in case no co-4097 against us. tanning capsed since the date of the safe; and the parcel has not been redeemed.

Now 1, And by the affidavit of the Woodhury County Treasurer filled in said Treasurer's office on the 4th day of

Treasurer and by virtue of law, have granted, languined, and sold, and by these presents do grant, burgain and sell to USA MANAGEMENT 11.C C/O CENTRAL STATES TIRE RECYCLING 4444 SYORK STREET SIOUX CITY IA SHO65129. the parcel described to have and to hold, forever, subject, however to all the rights of redemption provided by law.

In Witness Whereof, I, Bob Knowler, Treasurer of Woodbury County, by virtue of the authority vested in me, have subscribed my name on the 13th day of SEPTEMBER, A.D. 2001.

Knowler Woodbury County Treasurer

State of Iowa, Woodbury County, ss.

I hereby certify that before me, Keren James, a Notary Public in and for Woodbury County, lowa, personally appeared the above named Bob Knowler, Treasurer of the County, personally known to me to be the Treasurer of the County at the date of the execution of the above conveyance, and to be the identical person whose name is affixed to and who executed the above conveyance as Treasurer of the County, and acknowledged the execution of the conveyance to be the Treasurer's voluntary act and deed as Treasurer of the County, for the purposes expressed in the conveyance.

Given under my hand and seal this 13th day of SEFTEMBER, A.D 2001

MARRIE JAMES K

ren James, Notary Public

December 3, 2002 – Deed

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37	Dollar(s) and other valuable consideration, USA Management LLC c/o Central States Tire Recycling	
	* * * * * * * * * * * * * * * * * * * *	
	do hereby Convey to	
2)	Larry Eisenhauer	
	the following described real estate in Moodbury County, lowe:	
	RECORDANG COSCIOCO CON CONTROL	W-442
	SEE COPY OF ATTACHED LEGAL DESCRIPTION	
15.5%		
	Subject to easements and restrictions of record, if any.	
200		
	Grantors do Hereby Covenant with grantees, and successors in interest, that granters hold the real estate	
	by title in fee simple; that they have good and lawful authority to sell and convey the real estate; that the real estate is Free and Cleur of all Liens and Encombrances except as may be above stated; and grantors	
	Covenant to Warrant and Defend the real estate against the lawful claims of all persons except as may be	
	above stated. Each of the undersigned hereby refinquishes all rights of dower, homestead and distributive share in and to the real estate.	
	Words and phrases licrein, including acknowledgment heroof, shall be construed as in the singular or	
of holds	plural number, and as masculine or leminine gentler, according to the context.	
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	to me known to be the identical persons named in Title: (Sealer (Grantot)	
	and who executed the foregoing instrument and	
	acknowledged that they executed the same as their voluntary act and deed. (Granter)	
n de la compa		
99 W		
	Notary Public (Grantor) (This torm of active-integrinent for individual grantor(s) endy)	
	© 1 he love Strip 6th Association 2001 On the love Strip 6th Association 2001 On the love Strip 6th Association 2001 On the love Strip 6th Association 2001	

ROLL 566 IMAGE 462 STATE OF _______O COUNTY OF westbury The Nativer and and acknowledg the execution of said instrument to be the voluntary act and deed of said limited liability company by them and by it voluntarily executed. PAMELA M. ECHROEDER Commission Number 22422

ROLL 566 PRAGE 463

PARCEL I: Beginning at a point Eight Handred (teet (\$00') South and Six Hundred Eigen feet (\$11') West of the Northeast corner of Section Nineteen (19). Tewnship Eighty-seven (\$7) North, Range Fony-seven (47), West of the Fifth Principal Meridian. Woodbury County, lowa; thence Southwesterly parallel to and approximately Ten feet (10') Easterly and Southerly from the high bank of the old lake shore to a point One Thousand Eight Hundred Forty-one feet (1.841') West and Two Hundred feet (200') North of the Southeast corner of the Northeast Quarter (NE ½) of Section Nineteen (19); thence West parallel to and Two Hundred feet (200') North from the South line of the Northeast Quarter (NE ½) of Section Nineteen (19), Eight Hundred Sixty-five and Seven tenths feet (\$65.7') to a point Two Hundred feet (200') North from the Southwest corner of the Northeast Quarter (NE ½) of Section Nineteen (19); thence North along the West line of the Northeast Quarter (NE ½) of Section Nineteen (19); thence Northwest corner of the Northeast Quarter (NE ½) of Section Nineteen (19); thence Northwest corner of the Northeast Quarter (NE ½) of Section Nineteen (19); thence Southeasterly on a straight line to the point of beginning.

Parcel II: A parcel of land described as follows: Beginning at a point Eight Hundred feet (800') South and Six Hundred Eleven feet (611') West of the Northeast corner of Section Nineteen (19), Township Eighty-seven (87) North, Range Forty-seven (47), West of the Fifth Principal Meridian. Woodbury County, Iowa; thence Southwesterly parallel to and approximately Ten feet (10') Easterly and Southerly from the high bank of the old take shore to a point One Thousand Eight Hundred Forty-one feet (1,841') West and Two Hundred feet (200') North of the Southeast corner of the Northeast Quarter (NE W) of Section Nineteen (19); thence East parallel to and Two Hundred feet (200') North from the South line of the Northeast Quarter (NE W) of Section Nineteen (19) to the West right-of-way line of the Chicago and North Western Railroad; thence North along the West right-of-way line of the Chicago and North Western Railroad to the point of beginning.

Letter from State of Iowa Regarding Transfer of Property



CON 12-15

Middin Doc # 5713

STATE OF 10 YVA

Thomas J. Vilsack, Governor Sally J. Pederson, Lt. Governor DEPARTMENT OF NATURAL RESOURCES
JEFFREY R. VONK, DIRECTOR

October 18, 2002

ROBERT J REHAN ATTORNEY AT LAW 700 FOURTH STREET STE 504 PO BOX 5326 SIOUX CITY IA 51106

Re: Request for transfer of ownership.
Mid-America Tanning site.

Dear Mr. Rehan,

I am writing in response to your client's request for approval to transfer the fittle of the property known as the Mid America Tanning site located in the South ½ of the NE ¼ of Section 19, Township 87N, Range 47W in Woodbury County, Iowa. This site is listed on Iowa's Registry of Hazardous Waste or Hazardous Substance Disposal Sites. Pursuant to 455B.430(2), such sites can not be transferred without the approval of the department.

The department is willing to allow the transfer of ownership of this site under certain conditions. Bob Drustrup, of our Contaminated Sites Section, has reviewed your statement of intended uses and activities on the site and they do not appear to conflict with the site management requirements. At this time the department can authorize the transfer based upon a broad statement of the conditions of transfer. If this is acceptable, please proceed with transfer.

There are two specific areas of concern. One area consists of the location on which solls containing contaminants were consolidated and capped. The second area is a lagoon that has a floating membrane cap and is currently protected by a fence. The general conditions of transfer are as follows:

- The landowner shall maintain fences and other access restrictions around the specific areas of hazardous waste disposal as identified by the department.
- 2. The landowner shall not disturb the soil in the capped landfill area.
- 3. The landowner shall not drain or otherwise disturb the restricted-access lagoon containing the floating cap.

WALLACE STATE OFFICE BUILDING / DES MOINES, IOWA 50319 515-281-5918 TDD 515-242-5987 FAX 515-281-6794 www.stete.la.ue/dnr

- 4. The landowner shall take necessary actions to prevent and correct erosion within the specific areas of disposal of contaminated soils.5. The landowner may install a well or wells in accordance with applicable regulations.
- The landowner may install a well or wells in accordance with applicable regulations. It is recommended that the water from any such well be tested prior to use as drinking water.
- 6. The landowner shall not disturb onsite monitoring wells.
- The landowner shall allow the department, U.S. EPA, and their designated representatives to have access to the site for monitoring and remediation activities.
- The landowner shall take no action that is contrary to U.S. EPA's Operation and Maintenance Plan, a'copy of which is attached.
- The landowner is responsible for any necessary moving or weed control on site.
 The department has no specific requirements for moving or weed control at this location.

A map designating the location of the area of disposal of contaminated soils and the lagoon containing the floating cap is attached. If you have any questions, please call Jon Tack at 515-281-8889.

Sincerely,

Jeffred R. Vonk Director

Copy to:

Contaminated Sites Section, IDNR Bob Stewart, Region VII, U.S. EPA Notice of Intent to Include Property on Registry of Confirmed Abandoned or Uncontrolled Disposal Sites



Iowa Department of Natural Resources

Wallace State Office Building

502 East 9th Street

Dcs Moines, Iowa 50319-0034

SileMid: Amsulus Tans ID # IADOS S 8 3 1 10 8 8 Break: O Othor:

FAX SHEET

DELIVER TO: Bob Drustrup

PHONE: 913/551-7654

FAX NUMBER:

913/551-7063

FROM:

Bob Drustrup

NUMBER OF PAGES (including this cover sheet):

¥ 7

MESSAGE:

40240332



SUPERFUND RECORDS

Our Fax Phone Number is 515/281-8895

Any problems with transmission call: 515/281-8941

revited 1/2000(pa)



542-1352.4

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BEFORE THE IOWA DEPARTMENT OF NATURAL RESOURCES

IN THE MATTER OF:

Mid-America Tanning Co., Inc.

NOTICE OF INTENT TO INCLUDE PROPERTY ON REGISTRY OF CONFIRMED ABANDONED OR UNCONTROLLED DISPOSAL SITES

TO: Simon S. Wong
Registered Agent
3204 Rebecca Street
Sioux City, IA 51103

Pursuant to Iowa Code section 455B.426, the director of the Department of Natural Resources is required to maintain a registry of confirmed abandoned or uncontrolled disposal sites located in Iowa. Iowa Code section 455B.429(1) provides that thirty days prior to the addition of a site to the registry, the director of the Department shall notify the owner of any part of the site. You are hereby notified of the proposed addition of the site described below to the registry of abandoned or uncontrolled sites, effective 30 days from your receipt of this notice, for the reasons stated below.

1. Mid-America Tanning Co., Inc. is the owner of real property which is legally described as:

Beginning at a point 800 feet south and 611 feet west of the northeast corner of Section 19, Township 87 North, Range 47, West of the 5th P.M., Woodbury County, Iowa; thence southwesterly parallel to and approximately 10 feet easterly and southerly from the high bank of the old lake shore to a point 1,841 feet west and 200 feet north of the southeast corner of the NE 1/4 of Section 19; thence east parallel to and 200 feet north from the south line of the NE 1/4 of Section 19 to the west right-of-way line of the Chicago and North Western Railroad to the point of beginning, and



Beginning at a point 800 feet south and 611 feet west of the northeast corner of Section 19, Township 87 North, Range 47, West of the 5th P.M., Woodbury County, Iowa; thence southwesterly parallel to and approximately 10 feet easterly and southerly from the high bank of the old lake shore to a point

1.841 feet west and 200 feet north of the southeast corner of the NE 1/4 of Section 19; thence west parallel to and 200 feet north from the south line of the NE 1/4 of Section 19, 865.7 feet to a point 200 feet north from the southwest corner of the NE 1/4 of Section 191; thence north along the west line of the NE 1/4 of Section 19 to the northwest corner of the NE 1/4 of Section 19; thence southeasterly on a straight line to the point of beginning.

- 2. The director has evidence that wastes containing chromium were disposed of at a landfill located on this site from 1979 to 1985. These substances constitute "hazardous substances" as is defined by Iowa Code section 455B.411(1).
- 3. Because of the types, amounts and location of these substances, the director classifies this site as a "b" significant threat to the environment action required.

You may petition the director for deletion of the site from the registry, modification of the site classification, or modification of any information regarding the site. Such a petition will constitute an appeal of the director's decision. Within 90 days of an appeal, this Department shall conduct a hearing to review the determination.

Any questions regarding this notice may be directed to:

07/18/00 13:49 FAX 515 281 8895

DNR

13004/007

Mark Landa Legal Services Iowa Department of Natural Resources Henry A. Wallace Building 900 East Grand Avenue Des Moines, IA 50319-0034 515/281-6243

LARRY J. WISSON, DIRECTOR DEPARTMENT OF NATURAL RESOURCES 5/5/89

SENDER: Complete frame 1 and 2 when additional and 4. Pur your address in the "RETURN TO" Space on the recent from Beiling returned to you. The joint needs for applying 10 and the Artis of deliberty. For additional frame performance for feature of their additional desired. 1. Il show to schom patiented, date, and addresses a order to the feature charge!!	erse side. Fellure to do this will present the will project you the name of the garge the following privines are available. Consults requested.
HON 04 T14150741 05/15/89 HONG PO BOX 668 A SERGEANT BLUF IA 51054	A Arricle Number 15 1 I Service: Istered Insured Iffed COD ress Mail CDD ress Mail obtain signature of a dressee or eight and DATE DELIVERED.
Signature — Addressee Signature — Addres Date of Delivery 5-18-89	8. Addresses's Address (ONEY If requested and fee paid)

ML:1b/ML-14.LSB

3

P04

07/13/00 13:49 FAX 315 281 8895

DNR

Ø905/007



TERRY E. BRANSTAD, GOVERNOR

DEPARTMENT OF NATURAL RESOURCES

August 21, 1989

Mose Yanney Woodbury County Recorder Woodbury County Courthouse Sioux City, IA 51101

Dear Mr. Yanney:

Iowa Code section 455B.426 provides that the director of the Department of Natural Resources shall maintain a registry of sites used for the disposal of hazardous wastes or hazardous substances. Pursuant to Iowa Code section 455B.431, when the director places a site on the registry, he must then file with the county recorder of the county in which the property is located, a statement disclosing the period during which the site was used as a disposal site. Upon receipt of evidence that the site no longer poses a present or potential adverse impact, this determination will also be filed with your office.

Please find enclosed the Notice which is to be attached to the proof of ownership of property described in the Notice. The owner of record is identified at the botton of the Notice. If there are filing fees, please submit a bill to the Department.

Thank you for your cooperation. If you have any questions regarding this request, please contact me at 515/281-6243.

/ Vanle/

Mark Landa Compliance Officer Legal Services

ML:mjg

ATTACHMENT

cc: Morris Preston

.

07/18/00 13:49 FAX 515 281 8885

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M006/007

NOTICE

The director of the Department of Natural Resources provides notice that the real property owned by Mid-America Tanning Co., Inc. which is legally described as:

Beginning at a point 800 feet south and 611 feet west of the northeast corner of Section 19, Township 87 North, Range 47, West of the 5th P.M., Woodbury County, Iowa; thence southwesterly parallel to and approximately 10 feet easterly and southerly from the high bank of the old lake shore to a point 1,841 feet west and 200 feet north of the southeast corner of the NE 1/4 of Section 19; thence east parallel to and 200 feet north from the south line of the NE 1/4 of Section 19 to the west of right-of-way line of the Chicago and North Western Railroad to the point of beginning, and beginning at a point 800 feet south and 611 feet west of northeast corner of Section 19, Township 87 North, Range 47, West of the 5th P.M., Woodbury County, Iowa; thence southwesterly parallel to and approximately 10 feet easterly and southerly from the high bank of the old lake shore to a point 1,841 feet west and 200 feet north of the southeast corner of the NE 1/4 of Section 19; thence west parallel to and 200 feet north from the south line of the NE 1/4 of Section 19; and 200 feet north from the south line of the NE 1/4 of Section 19, 865.7 feet to a point 200 feet north from the southwest corner of the NE 1/4 of Section 19; thence north along the west line of the NE 1/4 of Section 19 to the northwest corner of the NE 1/4 of Section 19; thence southeasterly on a straight line to the point of beginning

has been used for the disposal of hazardous wastes or hazardous substances. The director has determined that wastes containing chromium were disposed of on the above-described site from 1979 The site is classified pursuant to Iowa Code section as "b" - significant threat to the environment - action to 1985. 455B.426 required.

For these reasons, the director has placed this site on the registry of abandoned or uncontrolled disposal sites which is compiled in accordance with Iowa Code sections 455B.411 through Be advised that this property may not be sold, con-455B.440. veyed or transferred without the written approval of the director, pursuant to Iowa Code section 455B.430(2).

Questions regarding this Notice may be directed to the Department of Natural Resources, 900 East Grand Avenue, Henry A. Wallaca-Building, Des Moines, Iowa 50319-0034, Ph. 515-281-8690.

TILSON, DIRECTOR LARR

IOWA DEPARTMENT OF NATURAL RESOURCES

.cc: Mid-America Tanning Co., Inc.

Dated this 22 day of

, 1989

07/19/00 13:49 FAX 515 281 8895

Ø007:007

PAGE 2

STATE OF IOWA

) ss:

COUNTY OF POLK

On this 22 day of Accept, 1989, before me, a notary public in and for said county, personally appeared Larry J. Wilson who stated that he is the duly appointed and acting director of the Iowa Department of Natural Resources, and that he was authorized to execute the foregoing on behalf of the Iowa Department of Natural Resources pursuant to Iowa Code section 4558.431. Code section 455B.431.

Notary Public in and for State of Iowa

Attachment 2

Site Inspection Photographs



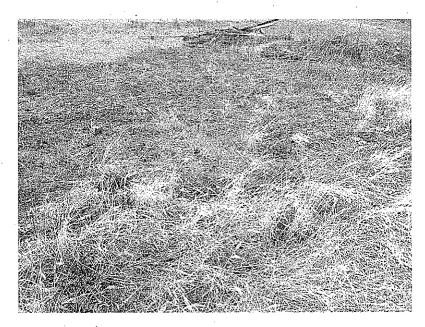
Northfield Landfill Cover



Top of Northfield Landfill Cover



Northfield Landfill Cover – Sparse Vegetation in Some Areas



Northfield Landfill Cover - Southwest Side Slope



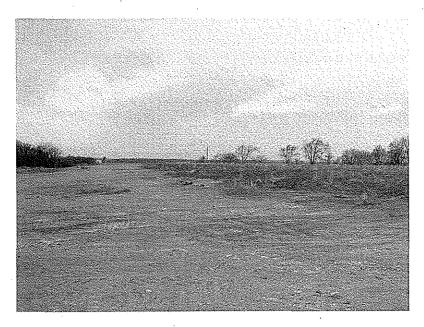
Sludge Lagoon Cover – Panoramic Photo 1 of 4 – southeast corner looking north



Sludge Lagoon Cover – Panoramic Photo 2 of 4 – southeast corner looking north-northwest



Sludge Lagoon Cover - Panoramic Photo 3 of 4 - southeast corner west-northwest



Sludge Lagoon Cover - Panoramic Photo 4 of 4 - southeast corner looking west



Sludge Lagoon Cover – Minor Erosion Gully on east side



Sludge Lagoon Cover – Vegetative Cover Not Yet Fully Established



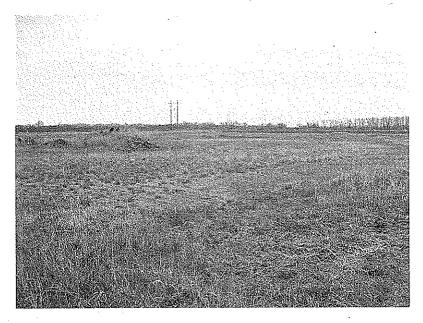
Sludge Lagoon Cover – Ponding in Low Spot on South-Center of Lagoons



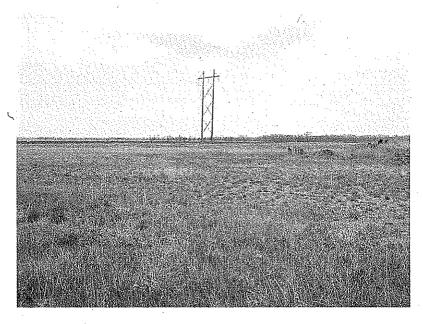
Oxbow Lake - South Side Looking North



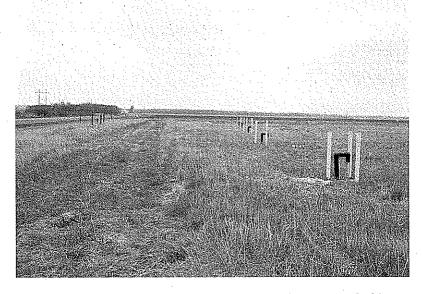
Polishing Basin Cover - Panoramic Photo 1 of 4 - southeast corner looking north



 ${\bf Polishing\ Basin\ Cover-Panoramic\ Photo\ 2\ of\ 4-southeast\ corner\ looking\ north-northwest}$



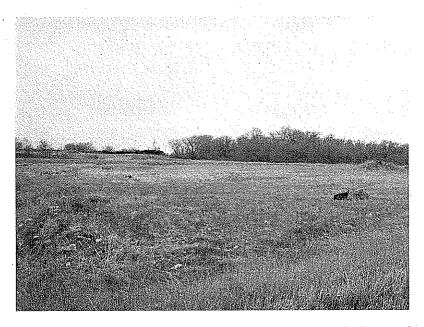
Polishing Basin Cover – Panoramic Photo 3 of 4 - southeast corner looking west-northwest



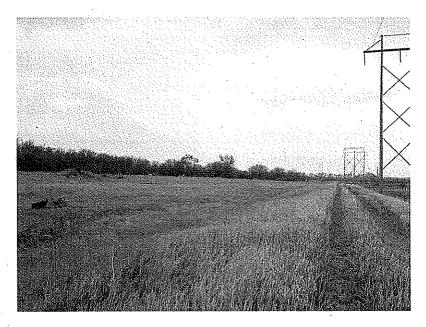
Polishing Basin Cover - Panoramic Photo 4 of 4 - southeast corner looking west



Polishing Basin Cover - Panoramic Photo 1 of 3 - northwest corner looking east



Polishing Basin Cover – Panoramic Photo 2 of 3 - northwest corner looking southeast



Polishing Basin Cover - Panoramic Photo 3 of 3 - northwest corner looking south