



Framework Plan

The MSP Redevelopment Project

Appendices A, B, C, & D

M S P

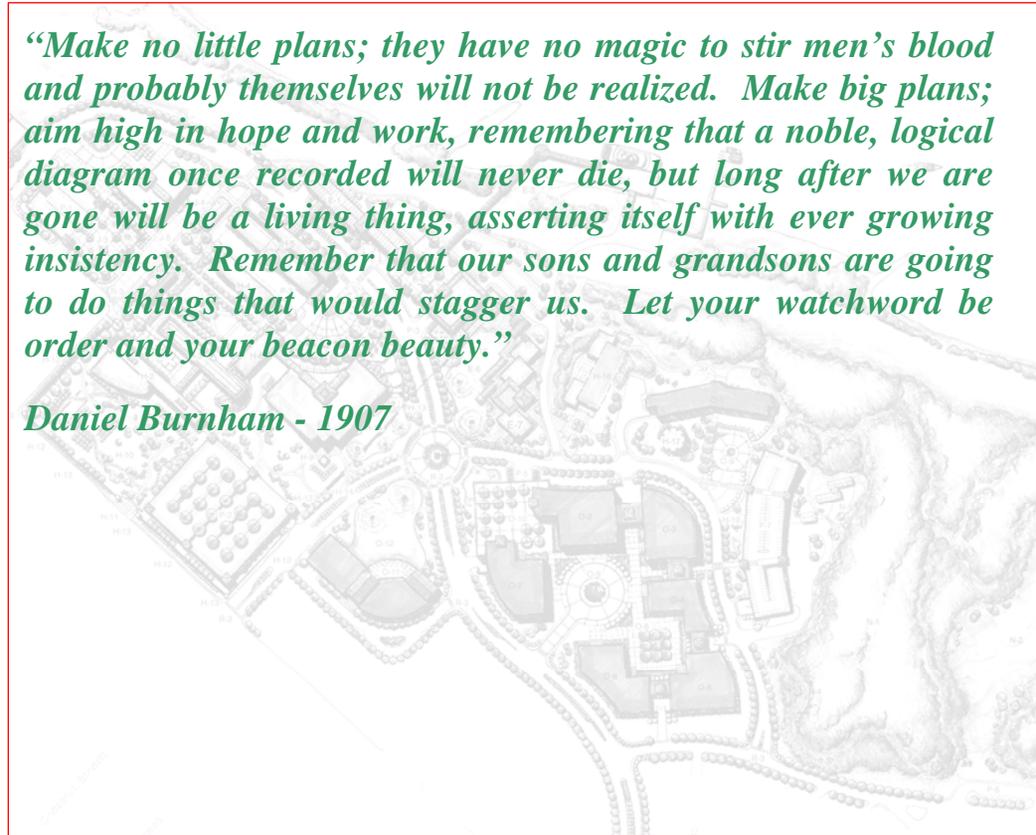


Bob Holden, Governor



“Make no little plans; they have no magic to stir men’s blood and probably themselves will not be realized. Make big plans; aim high in hope and work, remembering that a noble, logical diagram once recorded will never die, but long after we are gone will be a living thing, asserting itself with ever growing insistency. Remember that our sons and grandsons are going to do things that would stagger us. Let your watchword be order and your beacon beauty.”

Daniel Burnham - 1907



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M S P



October 2003

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Appendix A

M S P



PHASE I ENVIRONMENTAL ASSESSMENT

JEFFERSON CITY CORRECTIONAL FACILITY
631 EAST STATE STREET
JEFFERSON CITY, MISSOURI 65101

Prepared for:
Parson HBA
400 Woods Mill Road South, Suite 300
St. Louis, Missouri 63017



59th and Arsenal
Building C
Two Campbell Plaza
St. Louis, Missouri 63139

June 3, 2002



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Executive Summary

TSi Engineering, Inc. (TSi) performed a Phase I Environmental Site Assessment (ESA) in November, 2001 for the property known as the Jefferson City Correctional Facility located in Jefferson City, Cole County, Missouri. This Phase I ESA was conducted for Parson HBA, Inc. for the purpose of identifying potential recognized environmental conditions (RECs) associated with the property.

The subject property occupies approximately 150 acres in Cole County, Missouri. The main prison is bounded by; East State Street, Lafayette Street, and East Capitol Avenue to the east; Dulle and Hampton Towers to the north; Union Pacific and Missouri River to the west; and the Missouri Department of Surplus Properties to the south. The subject property consists primarily of grass and tree covered lots, asphalt and concrete lots, and limestone and brick buildings with concrete basements. Concrete sidewalk, streets, alleys, yards, and several underground utilities surround the subject property. The Missouri Department of Surplus Properties is located on the Jefferson City Correctional Facility property. TSi performed a Phase I ESA of this property and the adjoining undeveloped forested area to the southeast, to the extent accessible, in June of 2001. That Phase I ESA is presented in this report as appendix A.

The Environmental Data Resources (EDR) database search identified 33 facilities within their respective American Society for Testing Materials (ASTM) defined search distances from the subject property. Twelve UST (Underground Storage Tank) sites were located within the ¼-mile radius search of the subject property. These sites were Jefferson City Correctional Center, SIPI's 66, Former Medical Arts Building, Buescher Memorial Hone, Hocker Oil Company, Jefferson City Station, Phillip's 66/Pump Handle Snack Shop, Turner's Conoco, Central Maintenance Garage, Al's Tire Service, State of Missouri Surplus Property, and Cole County Courthouse. Ten LUST (leaking underground storage tank) sites were located within ½-mile of the subject property. These sites were Former Medical Arts Building, Hocker Oil Company, Jefferson City Station, Central Maintenance Garage, Al's Tire Service, State of Missouri Surplus Property, Sprint, Jefferson State Office Building, Central Education Facility, Fill and Wash and Clark and Elm. Seven Resource Conservation and Recovery Act Small Quantity Generator (RCRA SQG) sites were located within ¼-mile of the subject property. These sites were Jefferson City Correctional Center, Jefferson City Central Maintenance Center (820 East Miller Street), Jefferson City Central Maintenance Center (210 Monroe Street), Al's Tire Service, Missouri Bar Print, City of Jefferson City, and Firestone Tire and Rubber Company. One FINDS (Facility Index System) site was located as part of the search. This site was Jefferson City Correctional Center, the target property. One FTTS [FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) /TSCA (Toxic Substance Control Act) Tracking System] site was located. This site was also the Jefferson City Correctional Center. Three orphan sites were indicated by the EDR report. An orphan site is defined as a site unmappable with the information available. One site was Delong's, located on East Capitol Avenue in Jefferson City, Missouri 65101. This site was classified as a UST. A second site was SS 5634, located at 507 McCarty Street in Jefferson City, Missouri



65101. This site was also classified as a UST. A third site was the MO Highway and Transportation Dept., located on East McCarty Street in Jefferson City, Missouri 65101. This site was classified as an LUST. Information on the address location and activities on these sites was not provided.

In our opinion, the following RECs have been identified for the subject property as a result of this Phase I ESA:

- Potential asbestos-containing building materials (ACBM);
- Potential lead-based paint (LBP);
- Potential soil and groundwater impact from UST and LUST tank removal sites at topographically equal or lower elevations to the property located at the old boiler house, Surplus Properties, the garage facility, behind the Soap factory, and the new boiler house;
- Potential soil and groundwater impact from current and historical industrial sites located in two places within the prison. The current site is located in the west section in a topographically low area of the prison. The historical industrial site is located in the east section in a topographically high area of the prison where the current upper playing fields are located. Former chemical storage vaults located on the southeast side of the prison between the new boiler house and Surplus Properties would also be a target;
- Potential soil impact from unknown sources of backfill materials located in five locations in and around the prison. The first location is the current Administration Building and Garage Facility. The second location is outside the southeast prison wall along East Capital Drive. The third location is the terrace slope where the new boiler house is located. The fourth location is along the bluffs next to the former Lard house and Potato House. The fifth location is a soil hill trending northwest/southeast between the upper and lower playing fields.

Recognized environmental conditions relate to possible environmental impacts associated with historic land use and practices, and potential sources of environmental impacts associated with the existing building and/or current site practices.

Asbestos and lead-based paint inspections of existing structures must be performed by Missouri licensed inspectors. These inspections are required by federal, state and local regulations prior to disturbance of these structures. Environmental soil borings may be necessary for the subject property in the areas topographically lower or equal to former UST and AST sites; current and former industrial site locations within the prison; the former chemical storage vaults outside the prison; and the five backfill locations in and around the prison to determine if any environmental impact exists.



1.0 Introduction

1.1 Purpose

The purpose of this environmental site assessment is to address potential environmental concerns of the subject property by reviewing past usages of the subject property and adjacent properties, identifying recognized environmental conditions (RECs), and assessing the environmental impact of the RECs on the subject property. RECs are defined in ASTM E 1527-00 as “the presence or likely presence of any hazardous substances or petroleum products on a property under conditions that indicate an existing release, a past release, or a material threat of a release of any hazardous substances or petroleum products into structures on the property or into the ground, groundwater, or surface water of the property.” An additional purpose of this ESA is to address the relevance of the identified RECs to the subject property’s future development.

1.2 Methodology

This environmental site assessment was conducted in accordance with the ASTM Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process, ASTM E 1527-00. The Phase I ESA activities consist of:

- Records Review
- Site Reconnaissance
- Interviews
- Documentation

The conclusions included in this report were prepared with the understanding that the sites may be redeveloped in the near future.



2.0 Site Description

2.1 Location and Legal Description

The subject properties occupy approximately 150+ acres in Cole County, Missouri. The main prison is bounded by; East State Street, Lafayette Street, and East Capitol Avenue to the east; Dulle and Hampton Towers to the north; Union Pacific and Missouri River to the west; and the Missouri Department of Surplus Properties to the south. The Missouri Department of Surplus Properties is located on the Jefferson City Correctional Facility property and a Phase I Environmental Site Assessment (ESA) was performed by TSi Engineering June of 2001. The Missouri Department of Surplus Properties Phase I ESA report is presented in this report as Appendix A. The subject property consist primarily of grass and tree covered lots, asphalt and concrete lots, and limestone and brick buildings with concrete basements. Concrete sidewalk, streets, alleys, yards, and several underground utilities surround the subject property. The location of the subject property is shown in Figure 1, Topographic and Site Plan.

2.2 Site and Vicinity

The subject property is a prison facility with associated housing units, factories, and administrative buildings surrounded by several residential neighborhoods and light commercial businesses. The site is located on a bluff, over looking the Missouri River. The bluff slopes towards the river to the northeast with inter-tonguing ravines between summits.

2.3 Site Improvements

Due to the age of the facility, many changes in buildings and area of the prison have occurred. There have been several expansions to the prison site most notably expansions to the north and to the south. These expansions include demolition or pre-existing structures and construction of new buildings. Currently, the site consists of asphalt and concrete sidewalks and parking lots, paved streets, multistory brick and concrete buildings and underground utilities.

2.4 Current Uses of Property

The subject property is primarily a prison and prison support facilities.

2.5 Past Uses of the Property

The subject property has been used as a prison since the 1830's.



2.6 Current and Past Uses of Adjoining Property

2.6.1 Current Uses of Adjoining Property

The current uses of adjoining property consist of a mix of residential and commercial. There are also designated wetland areas along the Missouri River northeast of the prison between the riverbank and the Union Pacific Railroad.

2.6.2 Past Uses of Adjoining Property

According to the historical research, there has been little change in the uses of the adjoining property. The area has remained primarily residential and commercial. The International Shoe Factory was previously in operation south of the prison.

2.7 Site Physical Setting

2.7.1 Topography

The subject property is located on bluffs overlooking the Missouri River approximately 540 to 660 feet above sea level. A site topographic map is presented in Figure 1, Topographic and Site Plan.

2.7.2 Soil and Geology

Soil characteristics of the area are variable. The predominant soil type at the subject property is a silty clay to clay soil. The subject property is located on dolomite of the Paleozoic Era, Ordovician System, Canadian Series. These formations gently dip toward the north-northeast.

2.7.3 Groundwater and Surface water

Surface runoff is controlled primarily by the storm sewer system. Groundwater levels and flow vary due to influences of surface water flow and soil/rock type. The subject property is located on the high bluff area between two intermittent creeks flowing south to north on the northeast side of the property and on the southwest side of the property respectively. The Missouri River flows west to east on the northeast side of the prison. There are water supply wells located on prison property southeast of the prison.



3.0 Records Review

3.1 Environmental Record Sources

Environmental Data Resources, Inc. (EDR) was subcontracted to search available environmental record databases. The results of the environmental record database search are presented in a report titled The EDR – Radius Map with GeoCheck®, Jefferson City Correctional Facility, 631 East State Street, Jefferson City, MO 65101, Inquiry No: 708648.5s, prepared for TSi Engineering, Inc. and dated November 29, 2001. The distances used for searching the environmental record databases are in accordance with American Society for Testing and Materials (ASTM) Standard Practice for Environmental Site Assessments, ASTM E 1527-00.

3.1.1 EDR Environmental Database Search

The following federal and state agency databases were searched and reviewed for evidence of any potential environmental contamination issues, such as incidents or facilities that may have affected the environmental integrity of the subject property:

- National Priority List (NPL) – 1 mile search radius
- State Hazardous Waste Sites – 1 mile search radius
- Resource Conservation and Recovery Act (RCRA) Corrective Action Activity (CORRACTS) – 1 mile search radius
- Superfund (CERCLA) Consent Decrees (CONSENT) – 1 mile search radius
- Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS) – ½ mile search radius
- State Landfill – ½ mile search radius
- Resource Conservation and Recovery Act Transportation, Storage and Disposal (RCRA-TSD) – ½ mile search radius
- Leaking Underground Storage Tank (LUST) – ½ mile search radius
- Underground Storage Tank (UST) – ¼ mile search radius
- RCRIS Small Quantity Generator (RCRIS-SQG) – ¼ mile search radius
- RCRIS Large Quantity Generator (RCRIS-LQG) – ¼ mile search radius
- Delisted NPL Sites – Target Property
- CERCLA No Further Remedial Action Planned (CERC-NFRAP) – Target Property
- Above-ground Petroleum Storage Tanks (AST) – Target Property



- RCRA Administrative Action Tracking System (RAATS) – Target Property
- Hazardous Materials Information Reporting System (HMRIS) – Target Property
- PCB Activity Database System (PADS) – Target Property
- Emergency Response Notification System (ERNS) – Target Property
- Facility Index System (FINDS) – Target Property
- Toxic Chemical Release Inventory System (TRIS) – Target Property
- NPL Liens (NPL Lien) – Target Property
- Toxic Substance Control Act (TSCA) – Target Property
- FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) /TSCA (Toxic Substance Control Act) Tracking System (FTTS) – Target Property
- Material Licensing Tracking System (MLTS) – Target Property
- Certified Hazardous Waste Resources Recovery Facilities (MO RRC) – Target Property

3.1.2 Summary of EDR Environmental Database Search Results

The subject property was identified in the EDR Environmental Database search. Several surrounding property were identified within the ASTM specified search distances from the subject property. A listing of database search findings is presented below.

Database Searched	Search Distance (Miles)	Facilities Located
UST	¼	12
LUST	½	10
RCRIS-SQG	¼	7
FINDS	Target Property	1
FTTS	Target Property	1
Orphan Site	¼	3



Discrepancies between the information provided by government agencies and EDR may exist due to incomplete or non-updated databases of either resource. In addition, facilities may be listed in more than one category on the environmental screening report. A summary of the EDR sites identified within the above listed search distances follows.

UST (12 sites)

- Jefferson City Correctional Center, 631 State Street, Jefferson City, Missouri 65101. This site is the subject property. Three tanks have been removed. The subject property is not listed as a LUST property.
- SIPI's 66, 801 East High Street, Jefferson City, Missouri 65101. This site is located 0 to ¼ mile south-southwest of the subject property. Two tanks are currently in use.
- Former Medical Arts Building, 515 East High Street, Jefferson City, Missouri 65101. This property is located 0 to ¼ mile west of the subject property. One tank has been removed.
- Buescher Memorial Hone, 429 East Capitol Avenue, Jefferson City, Missouri 65101. This property is located 0 to ¼ mile west-northwest of the subject property. One tank has been removed.
- Hocker Oil Company, 501 East McCarty Street, Jefferson City, Missouri 65101. This site is located 0 to ¼ mile west-southwest of the subject property. Three tanks are currently in use and four tanks have been permanently closed in place.
- Jefferson City Station, 301 State Street, Jefferson City, Missouri 65101. This site is located 0 to ¼ mile northwest of the subject property. Two tanks have been removed.
- Phillip's 66/Pump Handle Snack Shop, 510 Cherry Street, Jefferson City, Missouri 65101. This site is located 0 to ¼ mile south-southwest of the subject property. Two tanks have been removed.



- Turner’s Conoco, 401 East McCarty Street, Jefferson City, Missouri 65101. This site is located 0 to ¼ mile west of the subject property. Three tanks have been removed.
- Central Maintenance Garage, 830 East Miller Street, Jefferson City, Missouri 65101. This site is located 0 to ¼ mile south-southwest of the subject property. Four tanks are currently in use and one tank has been removed.
- Al’s Tire Service, 1015 East McCarty Street, Jefferson City, Missouri 65101. This site is located 0 to ¼ mile south of the subject property. Four tanks are reported removed.
- Cole County Courthouse, 301 East High Street, Jefferson City, Missouri 63101. This site is located 0 to ¼ mile west-northwest of the subject property. One tank is currently in use.
- State of Missouri Surplus Property, 117 Riverside Drive, Jefferson City, Missouri 63102. This site is located 0 to ¼ mile east-southeast of the subject property. Two tanks have been removed.

**LUST (10 sites)**

- Former Medical Arts Building, 515 East High Street, Jefferson City, Missouri 65101. This property is located 0 to ½ mile west of the subject property. There was a release reported at this facility on 8/25/92. Remedial technique was reported as excavation. Spill cleanup began on 8/25/92 and ended on 10/12/95.
- Hocker Oil Company, 501 East McCarty Street, Jefferson City, Missouri 65101. This site is located 0 to ½ mile west-southwest of the subject property. There was a release reported on 4/8/92. The remedial technique was reported as excavation. Soil was listed as the contaminated media. Spill cleanup started on 4/8/92 and ended on 5/27/99.
- Jefferson City Station, 301 State Street, Jefferson City, Missouri 65101. This property is located 0 to ½ mile northwest of the subject property. There was a release reported on 10/23/96. Excavation, tank closure, and monitoring were the remedial techniques listed. Soil and groundwater were listed as the contaminated media. Spill cleanup began on 10/23/96 and ended on 11/03/96.
- Central Maintenance Garage, 830 East Miller Street, Jefferson City, Missouri 65101. This site is located 0 to ½ mile south-southwest of the subject property. There was a release reported on 12/13/94. Excavation was the remedial technique listed. Soil was listed as the contaminated media. Spill cleanup began on 12/13/94 and ended on 5/22/95.
- Al's Tire Service, 1015 East McCarty Street, Jefferson City, Missouri 65101. This site is located 0 to ½ mile south of the subject property. There was a release reported on 1/01/88. Excavation, tank closure, and landfill were the remedial techniques listed. Soil was listed as the contaminated media. Spill cleanup and completion dates were not provided.
- State of Missouri Surplus Property, 117 Riverside Drive, Jefferson City, Missouri 63102. This site is located 0 to ½ mile east-southeast of the subject property. There was a release reported on 7/2/93. Excavation was listed as the remedial technique. Spill cleanup began on 7/2/93 and ended on 12/15/93.
- Sprint, 319 Madison Street, Jefferson City, Missouri 65101. This site is located 0 to ½ mile west-northwest of the subject property. There was a release reported on 6/13/94. Excavation was listed as the remedial technique. Spill cleanup began on 7/27/94 and ended on 11/3/94.



- Jefferson State Office Building, 205 Jefferson, Jefferson City, Missouri 65102. This site is located 0 to ½ mile west-northwest of the subject property. There was a release reported on 8/24/98. Excavation and tank closure were the remedial techniques listed. Soil and groundwater were listed as the contaminated media. Spill cleanup began on 10/1/98 and no completion date was provided.
- Central Education Facility, 214 East Miller Street, Jefferson City, Missouri 65102. This site is located 0 to ½ mile west of the subject property. There was a release reported on 2/1/94. Excavation was the remedial technique listed. Spill cleanup began on 2/15/94 and ended on 5/6/94.
- Fill and Wash, Clark and Elm, Jefferson City, Missouri 65101. This site is located 0 to ½ mile south of the subject property. There was a release reported on 5/18/94. Site characterization was listed as the remedial technique. Groundwater was listed as the contaminated media. Spill cleanup began on 4/30/97 and ended 4/5/2000.

RCRIS-SQG (7 sites)

- Jefferson City Correctional Center, 631 State Street, Jefferson City, Missouri 65101. This site is the subject property. Two violations were reported on 2/9/90.
- Jefferson City Central Maintenance Center, 820 East Miller Street, Jefferson City, Missouri 65101. This site is located 0 to ¼ mile south-southwest of the subject property. No violations were reported.
- News Tribune Company, 210 Monroe Street, Jefferson City, Missouri 65102. This site is located 0 to ¼ mile west-northwest of the subject property. No violations were reported.
- Al's Tire Service, 1015 East McCarty Street, Jefferson City, Missouri 65101. This site is located 0 to ¼ south of the subject property. No violations were reported.
- Missouri Bar Print, 326 Monroe, Jefferson City, Missouri 65101. This site is located 0 to ¼ mile west-northwest of the subject property. No violations were reported.



- City of Jefferson City, 320 East McCarty Street, Jefferson City, Missouri 65101. This site is located 0 to ¼ mile west of the subject property. One violation was reported on 6/24/88.
- Firestone Tire and Rubber Company, 406 Monroe Street, Jefferson City, Missouri 65101. This site is located 0 to ¼ mile west of the subject property. No violations were reported.

FINDS (1 site)

- Jefferson City Correctional Center, 631 State Street, Jefferson City, Missouri 65101. This site is the subject property. This report identified pertinent environmental activity at the site with Facility Registry System, National Compliance Database, Resource Conservation and Recovery Act Information System, and Section Seven Tracking System. Details of any information found on the site were not provided.

FTTS (1 site)

- Jefferson City Correctional Center, 631 State Street, Jefferson City, Missouri 65101. This site is the subject property. This report indicated proposed penalties and a close out date of 6/3/91. Violations were listed as PCB storage and disposal.

Orphan site (3 sites)

- Delong's, East Capitol Avenue, Jefferson City, Missouri 65101. This site was classified as a UST. Information on the address location and activities on the site was not provided.
- SS 5634, 507 McCarty Street, Jefferson City, Missouri 65101. This site was classified as a UST. Information on activities on the site was not provided.
- Mo Highway and Transportation Dept., East McCarty Street, Jefferson City, Missouri 65101. This site was classified as a LUST. Information on the address location and activities on the site was not provided



Based on the findings of the database review, REC's were noted for the subject property in the form of lists previously located on site and violations associated with PCB's storage and disposal. Additionally, the prior LUST listing for the adjoining and up gradient State of Missouri Surplus Property is a REC. None of the other database listings appear to be a REC based on distance, groundwater gradient, and/or closure status.

3.1.3 Environmental Assessment Reports

The property owner indicated that no previous Phase I ESA was performed on the subject property. There were two sites which received five violations from the Missouri Department of Natural Resources (MDNR) in February of 1990 for EPA regulations. One site was located near to the northwest area of the Gas Chamber. Violations in this area were associated with waste disposal of Potassium Cyanide and Sulfuric Acid after executions. Analytical results of soil borings in the area revealed little to no impact from the storage of these chemicals. The other site was located at the old dumpsite on the bluffs near to the Potato House. Violations were associated with hazardous chemical drums, which were found. Analytical results of soil borings in the area indicated little to no impact from the chemicals.

3.2 Aerial Photographs

Aerial photographs were obtained and reviewed for the subject property and surrounding areas for the years 1961, 1965, 1970, 1980, 1989, and 1995.

3.2.1 1961 Aerial Photograph Review

The subject property appeared to be consistent with present day structures inside the prison with the exception of the Chapel and the Maximum Security Building. The interior wall (former exterior prison wall) of the prison is present. The property adjoining to the northwest is tree and grass covered with part of the area used for parking. Three residential structures are present to the northwest. The area to the southeast near the water tower is tree and grass covered and may have been used for farming. Southwest of the prison wall is primarily residential homes. There are three AST tanks located northeast of the Diesel Plant and four silo structures south of the Old Boiler Plant.

3.2.2 1965 Aerial Photograph Review

The area near to the water tower appears to be developed with buildings and parking lots. There appears to be debris in and around the Slaughter House and the Incinerator.



3.2.3 1970 Aerial Photograph Review

The interior wall of the prison is gone. An additional structure has been added to the north of the garage facility. Additional buildings have been added to the development to the southeast near the water tower. There appears to be debris along the bluff northeast of the Potato House.

3.2.4 1980 Aerial Photograph Review

The Chapel appears for the first time in the prison. Additional buildings have been added to the development to the southeast near the water tower. The Dulle & Hampton Towers appear on the property to the northwest.

3.2.5 1989 Aerial Photograph Review

The Maximum Security Building appears for the first time. The New Boiler Plant is present outside the southeast wall with two AST tanks associated with the building. The three residential houses near the prison property are no longer present and the area is now a parking lot

3.2.6 1995 Aerial Photograph Review

There were no significant changes observed in this photograph.

3.3 Local Directories

Polk and Haines directories are in the process of being reviewed. A summary of the review will be presented in Table 1 as this information is made available.

3.4 Local Zoning/Land-Use Records

The city zoning office was contacted for current zoning/land use of the subject property. The subject property is zoned RS-1 which represents residential single.

3.5 Sanborn Maps

Sanborn maps were obtained and reviewed for the subject property and surrounding areas for the years 1885, 1892, 1898, 1908, 1916, 1923, 1939, 1943, 1968, and 1984.

The Sanborn map of 1885 shows the prison with approximately 20 structures. Lafayette Street goes to the river and East State Street is named East Water Street. The map shows a deep ravine approximately 50 feet north of East Water Street and approximately 100 feet west



of Lafayette Street. A quarry outline is shown inside the prison on the southeast side. Warehouses and stables are present near Lafayette Street. The surrounding area appears to have small residential structures.

The Sanborn map of 1892 shows several structures (the print shop, machine shop, clothing department, and laundry) removed from the center section of the prison. There appears to be expansion of the prison to East Main Street (now East Capitol Avenue) towards the southwest with two additional boot and shoe factory structures.

The Sanborn map of 1898 shows two additional structures in the northeast section of the prison and the addition of a cell house in the middle of the prison. The Slaughter House is shown outside the east prison wall near Chestnut Street along the river. The surrounding area is being developed as residential.

The Sanborn map of 1908 shows a boiler plant outside the prison wall on the northeast side. The female department structures have been reconstructed and an additional factory was built in the southeast section. The shoe factory south of the prison appears for the first time.

The Sanborn map of 1916 shows little change from 1908. The residential properties surrounding the prison are developing. Capitol City Water Company appears along the river north of the prison.

The Sanborn map of 1923 shows the construction of an auditorium outside the southeast prison wall. The Centennial Building and one of the factories are no longer present and three smaller buildings are shown. A T.B. Hospital is indicated near the area where the quarry was previously located. Two tanks located on the north side of the boiler plant are labeled for crude oil. The shoe factory south of the prison has expanded to the rear.

The 1939 Sanborn map shows major changes in the prison site. The prison has been expanded to the northwest and southwest with approximately 14 structures including the prison wall. The structures in the northwest expansion include the Hospital, T.B. Ward, Kitchen and Dining Hall, Administration Building, dormitory outside the wall and the Garage Facility. This expansion went over the existing Lafayette Street and over a pre-existing deep ravine. The expansion to the southeast includes the Twine Factory, "I" Housing Unit, Shoe Factory, General Storage Building, Print and Tin Shop, Dry Cleaning, and 'Death House'. The Slaughter House remains outside the east prison wall. The Female Dormitory located southeast of the prison is shown and is near to the water tower.

The Sanborn Map of 1943 shows little change from the 1939 map.

The Sanborn Map of 1968 shows major changes in prison buildings. The Auditorium, all but one building in the south upper industrial area, and the south side of the boiler plant are no longer present. Two new recreational buildings are located in the south upper industrial area. The new Chapel is located in the courtyard area between housing units 3 and 4. Four oil tanks are located on the south side of the



boiler plant. The General Storage Building is now the Soap Factory with caustic pits located on the northwest side of the building. The Twine Factory is now the License Plate Factory. The Slaughter House on Chestnut Street has been removed. A new building (potentially the isolation cell house) located on the north side of the prison is indicated but no name is provided. The residential area to the southeast has undergone further development. The Female Dormitory on the hill near the water tower is now the Officer Training Center. The northeast portion of the building has been demolished along with several support buildings nearby. The property just south of the Officer Training Center is developed for the State Agency for Surplus Property. The map shows a new oil fueled power plant located outside the southeast prison wall. Southeast of the Power Plant are three buildings identified as the Paint and Chem Vault.

The Sanborn Map for 1984 shows little change from 1968.

The Sanborn map review indicates REC's in the form of historical industrial usage, bulk fuel storage, and chemical storage on the subject property.

3.6 Historical Topography Maps

Historical topography maps were obtained and reviewed for the subject property and surrounding areas for the years 1942, 1967, and 1974.

The historical topography map of 1942 shows a quarry located southeast of the prison wall along the hillside near the Potato House.

The historical topography map of 1967 shows the quarry located southeast of the prison wall near the Potato House has been removed and possibly backfilled. The interior prison wall has a berm of soil where the wall was removed.

The historical topography map of 1974 shows little change.

3.7 Audit Check Facility Report

An EDR AuditCheck facility report was obtained and reviewed for the subject property. This report indicated that the Jefferson City Correctional Facility is listed as a hazardous waste generator (RCRIS) and has had violations reported. It also indicated the facility manages registered Underground Storage Tanks (UST). The facility is a producer of pesticides and has notified the EPA under section 7 of FIFRA (SSTS). Disinfectants produced in the Soap Factory fall under this regulation. The report indicated that the facility is listed in the EPA's index system (FINDS). It also indicates the facility has inspections under FIFRA, TSCA, or EPCRA.

Based on a review of the Audit Check facility report, the prior manufacture and usage of FIFRA regulated disinfectants is a REC.



4.0 Site Reconnaissance

4.1 Site Survey Process

A site reconnaissance of the subject property was conducted by TSi Engineering, Inc. on November 14, 2001. Photographs of the subject property are presented in Appendix B. The site survey summary is presented in Appendix C.

4.2 Hazardous Materials and Petroleum Products

Due to the age of the buildings identified, suspect asbestos containing building materials and lead-based paint may be present. The Partition Factory uses paint, adhesives, and solvents for the partitions manufactured. The Metal Working Factory uses hydraulic fluids for machinery and cutting of metal. They also use paints and coatings. The Furniture Factory uses varnish and paint for furniture manufacturing. The Soap Factory uses dry cleaning fluid and caustics in their facility. The basement of the Shoe Factory is used for bulk storage of chemicals. The graphics arts department located on the second floor uses inks, solvents, and dyes. The Garage Facility uses a variety of products for the maintenance of vehicles. The New Boiler Plant uses a variety of products to maintain the boilers. Warehouse facilities store products manufactured at the prison as well as products used in manufacturing. A summary of Material Safety and Data Sheets is presented in Appendix D. The storage and usage of the above listed chemicals and petroleum products are REC's.

4.3 Storage Tanks

The Soap Factory has underground storage tanks used for storing potassium hydroxide and sodium hydroxide. These tanks are currently not in use. The Garage facility has two ASTs used for fuel. The New Boiler Plant has several ASTs used to store chemicals for the boiler plant. The Warehouse Facility located on Chestnut Street has one AST for diesel fuel. The chemical and fuel tanks listed on the subject property are REC's.

4.4 Drums

The Partition Factory stores paints and associated chemicals throughout the plant in 55 gallon drums. The Metal Working Factory stores oils and hydraulic fluids in designated areas throughout the plant in 55 gallon drums. The drums were undamaged and not leaking. The Furniture Factory stores paints and varnishes in 5 to 10 gallon containers primarily in the paint booth. Several flammable liquid cabinets are located throughout the plant. The containers were undamaged and not leaking. The Soap Factory stores dry cleaning fluid and caustics in 55-gallon drums throughout the plant. None of the containers or drums were damaged or leaking. The Shoe Factory has bulk storage in



plastic, metal and paper drums. These were in good condition. The Garage had drums and containers of lubricants and antifreeze, none of which were leaking. The New Boiler Plant had a storage room of lubricants, solvents, and cleaners used in maintenance of the plant. These were in good condition. Warehouse facilities stored soap products made in the prison. Pallets of goods were stored in undamaged condition.

4.5 Hazardous Waste

The Partition Factory, the Metal Working Factory, the Furniture Factory, the Soap Factory, the Shoe Factory, the Garage, the New Boiler Plant, and the Warehouse facilities all use and have chemicals stored in each of the facilities. Material Safety and Data Sheets summary are presented in Appendix D. The storage and usage of the above listed chemicals and petroleum products are REC's.

4.6 Solid Waste

The Jefferson City Correctional facilities all use, have chemicals stored, and generate solid waste in each of the facilities. The prison maintains and secures all solid waste activities at the site. Material Safety and Data Sheets summary are presented in Appendix D. The storage and usage of the above listed chemicals and petroleum products are REC's.

4.7 Wastewater

The Jefferson City Correctional facilities all use and have chemicals stored in each of the facilities. Records indicate that a discharge permit was issued to the prison and a pre-treatment facility is on the site. It is not clear whether the permit is still active and or to what extent the pre-treatment facility is being utilized. Material Safety and Data Sheets summary are presented in Appendix D. The storage and usage of the above listed chemicals and petroleum products are REC's.

4.8 Drains and Sumps

The Partition Factory, the Metal Working Factory, the Furniture Factory, the Soap Factory, the Shoe Factory, the Garage, the New Boiler Plant, and Warehouse facilities had floor drains that did not have stains other than normal water stains.

4.9 Stains and Pools of Liquid (Interior)

The Partition Factory, the Metal Working Factory, the Furniture Factory, the Soap Factory, the Shoe Factory, the Garage, the New Boiler Plant, and Warehouse facilities were kept clean. Any spills that occurred were attended to immediately.

4.10 Pits, Ponds, Lagoons



Evidence of pits, ponds or lagoons was not observed during the site visit.

4.11 Stained Soil or Pavement and Stressed Vegetation

Evidence of stained soils and stressed vegetation was not observed during the site visit.

4.12 Potential PCB-Containing Electrical or Hydraulic Equipment

The Metal Working Factory has oils and hydraulic fluids. Waste oils were drummed and labeled. The Garage uses lubricants and hydraulic equipment in the maintenance of Correctional Facility vehicles. Electrical transformers were located throughout the prison and are maintained by the prison. PCB information for electrical transformers maintained by Ameren UE at or near the subject property is presented in Appendix E.



5.0 Interviews and Questionnaire

5.1 Owner/Tenant Questionnaire

The purpose of the questionnaire is to obtain historical background information for the site. TSi Engineering, Inc. has forwarded this questionnaire to the appropriate persons and shall submit the response as part of the final report or an addendum to the report.

5.2 Local Fire Department

The Jefferson City Fire Department was contacted on December 3, 2001 to assess whether the local fire department had responded to any environmental emergencies at the property. According the Administrative Secretary, the Jefferson City Fire Department has not responded to any environmental emergencies at the subject property.

5.3 Local Utility Company

Ameren UE was contacted by TSi Engineering, Inc. regarding the polychlorinated biphenyls (PCB) status of electrical transformers at the site and surrounding areas. The Ameren UE search indicated 32 transformers in the vicinity of the Jefferson City Correctional Facility that are filled with mineral oil and are considered PCB contaminated until tested. A copy of the letter received from Ameren UE is presented in Appendix E.



6.0 Findings and Conclusions

Based on the information readily available to TSi Engineering, Inc., the following conclusions are pertinent to the subject property.

The buildings on the subject property are over 50 years old. Due to the age of the buildings and observed building materials, asbestos-containing building (ACBM) materials and lead-based paint may be present.

In our professional opinion, the following RECs have been identified for the subject property during this assessment:

- Potential asbestos-containing building materials (ACBM);
- Potential lead-based paint (LBP);
- Potential soil and groundwater impact from UST and LUST tank removal sites at topographically equal or lower elevations to the property located at the old boiler house, Surplus Properties, the garage facility, behind the Soap factory, and the new boiler house;
- Potential soil and groundwater impact from current and historical industrial sites located in two places within the prison. The current site is located in the west section in a topographically low area of the prison. The historical industrial site is located in the east section in a topographically high area of the prison where the current upper playing fields are located. Former chemical storage vaults located on the southeast side of the prison between the new boiler house and Surplus Properties would also be a target;
- Potential soil impact from unknown sources of backfill materials located in five places in and around the prison. The first location is the current Administration Building and Garage Facility. The second location is outside the southeast prison wall along East Capital Drive. The third location is the terrace slope where the new boiler house is located. The fourth location is along the bluffs next to the former Lard house and Potato House. The fifth location is a soil hill trending northwest/southeast between the upper and lower playing fields.

Recognized environmental conditions relate to possible environmental impacts associated with historic land use and practices, and potential sources of environmental impacts associated with the existing building and/or current site practices.

- Asbestos and lead-based paint inspections of existing structures must be performed by Missouri licensed inspectors. These inspections are required by federal, state and local regulations prior to disturbance of these structures. Environmental soil borings may be necessary for the subject property in the areas topographically lower or equal to former UST's and AST's; current and former industrial site locations within the prison; the former chemical storage vaults outside the prison; and the five backfill locations in and around the prison to determine if any environmental impact exists.



7.0 Signatures of Environmental Professionals

This Phase I Environmental Site Assessment was conducted by the following environmental professionals in accordance with ASTM E 1527-00.

Rick Whitney
Staff Geologist

Date

Sylvester Douglas
Manager, Environmental Services

Date



8.0 Qualifications of Environmental Professionals

Rick Whitney
Staff Geologist

Professional Summary:

As a geologist, Mr. Whitney has over 15 years of experience within the geological and environmental field. His project experience includes: Phase I/II environmental assessments; preparation of work plans; asbestos investigations; feasibility studies; soil sampling; UST/AST storage tank management; and groundwater, air quality, and well placement monitoring. These services have been performed for commercial, industrial, and residential property.

Areas of Expertise:

Subsurface Investigations
Soil Classifications
Groundwater Monitoring
Asbestos and Lead Sampling
Phase I, II and III ESA

Education:

B.S. in Geology, University of Missouri – Columbia, 1982

Sylvester Douglas
Environmental Group Manager

Professional Summary:

Mr. Douglas has over 14 years of experience in every facet of asbestos management including conducting AHERA inspections, identifying asbestos-containing materials, collecting bulk samples, preparing technical specifications and architectural drawings for asbestos abatement plans, performing air monitoring, determining and enacting engineering control methods to reduce potential hazards to abatement workers and the public, and preparing final reports. His background also includes management of a phase contrast microscopy (PCM) laboratory, including development of quality control programs, design of all reporting and recordkeeping systems, and management of air monitoring technicians and field personnel.

Areas of Expertise:

Phase I, II and III ESA
Asbestos and Lead Surveys
Regulatory Reviews
Environmental Audits
Process Safety Management Studies
EPA Risk Assessments



Rick Whitney

Staff Geologist (continued)

Registrations/Certifications:

ACI Certified Technician, American Concrete Institute
Certified Lead Inspector
Certified Asbestos Inspector
Certified Air Monitoring Technician
OSHA 40-Hour Health and Safety Training Certification

Professional Affiliations:

Geological Society of America

Sylvester Douglas

Environmental Group Manager (continued)

Education:

B.S. in Engineering and Public Policy, Washington University, 1988

Registrations/Certifications:

MoDNR Certified Air Sampling Professional
AHERA Inspector, MO
AHERA Management Planner, MO
AHERA Abatement Worker, MO
AHERA Project Designer
NIOSH 582 Sampling and Evaluating Airborne Asbestos Dust
(Method 7400)
Lead Inspector, KUVII43000-4



9.0 Limitations of Report

This report has been prepared on behalf of and for the exclusive use of the addressee, solely for use in an environmental assessment of the site. This report and the findings contained herein were prepared for Parsons HBA, Inc. expressly for their intended use of the property.

This site assessment was performed in accordance with generally accepted practices of other consultants undertaking similar studies at the same time and in the same geographical area and TSi Engineering, Inc. observed that degree of care and skill generally exercised by other consultants under similar circumstances and conditions. The findings and conclusions stated herein must be considered not as scientific certainties, but rather as professional opinions concerning the significance of the limited data gathered during the course of the environmental site assessment. No other warranty, express or implied, is made. Specifically, TSi Engineering, Inc. does not and cannot represent that the site contains no hazardous waste or material, oil (including petroleum products), or other latent condition beyond that observed by TSi Engineering, Inc. during their site assessments.

The observations described in this Report were made under the conditions stated herein. The conclusions presented in the Report were based solely upon the services described therein and not on scientific tasks or procedures beyond the scope of described services or the time and budgetary constraints imposed by the Client. Furthermore, such conclusions are based solely on site conditions and rules and regulations that were in effect, at the time of the study. The work described in this Report was carried out in accordance with the terms of contract language associated with TSi Engineering, Inc.'s contract agreement with Parsons HBA, Inc.

In preparing this report, TSi Engineering, Inc. has relied on certain information provided by state and local officials and other parties referenced herein and on information contained in the files of state and/or local agencies available to TSi Engineering, Inc. at the time of the site assessment. Although there may have been some degree of overlap in the information provided by these various sources, and attempt to independently verify the accuracy or completeness of all information reviewed or received during the course of this site assessment was not made.

Observations were made of the site and of structures on the site as indicated within the Report. Where access to portions of the site or to structures on the site was unavailable or limited, TSi Engineering, Inc. renders no opinion as to the presence of hazardous waste or material, oil or other petroleum products, or to the presence of indirect evidence relating to hazardous waste or material, oil or other petroleum products in that portion of the site or structure. In addition, TSi Engineering, Inc. renders no opinion as to the presence of hazardous waste or material, oil or other petroleum products or to the presence of indirect evidence relating to hazardous material, oil or



other petroleum products where direct observation of the interior walls, floor, roof or ceiling of a structure in a site was obstructed by objects or coverings on or over these surfaces. Unless otherwise specified in the Report, TSi Engineering, Inc. did not perform testing or analyses to determine the presence or concentrations of asbestos, radon, formaldehyde, lead-based paint, lead-in-drinking water, electromagnetic fields (EMFs), methane gas or polychlorinated biphenyls (PCBs) at the site or in the environment at the site.

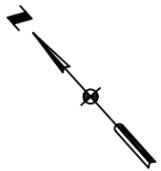
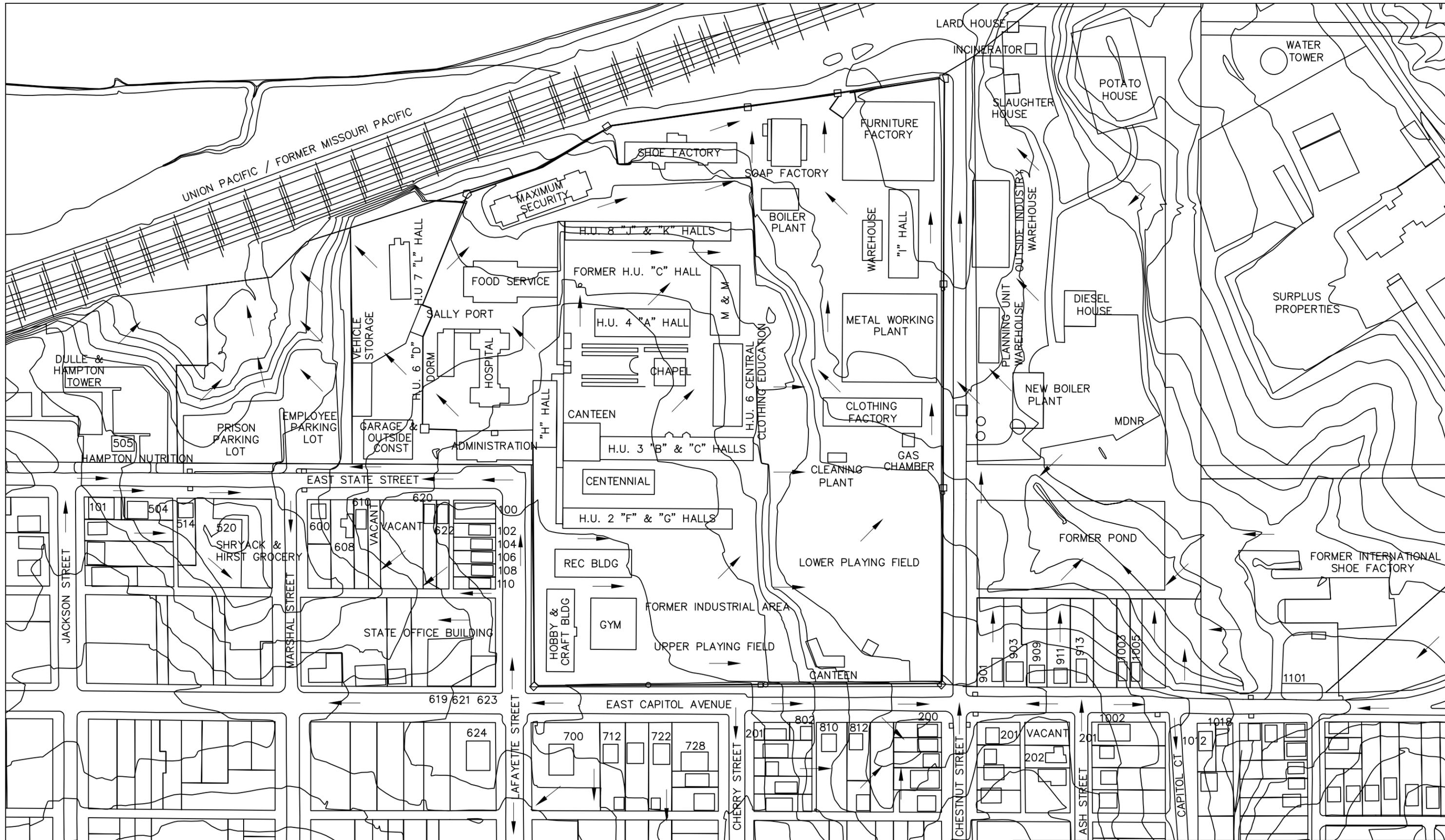
The purpose of this Report was to present the results of a Phase I Environmental Site Assessment performed in substantial conformance with ASTM E1527-00 and included assessing the physical characteristics of the subject site with respect to the presence in the environment of hazardous waste or material, oil, or petroleum products, as defined in 40 CFR Parts 261, 280-281, 302, 355 and 49 CFR Part 172. No specific attempt was made to check on the compliance of present or past owners or operators of the site with federal, state, or local laws and regulations, environmental or otherwise.

It is recommended that TSi Engineering, Inc. be retained to provide further engineering services during construction and/or implementation of any remedial measures recommended in this Report. This is to allow the TSi Engineering, Inc. to observe compliance with the concepts and recommendations contained herein and to allow the development of design changes in the event that subsurface conditions differ from those anticipated.



Figures

- 1 Topographic and Site Plan



DRAINAGE
 - STORM DRAINS

200 0 200



SCALE: 1"=200'



TOPOGRAPHIC AND SITE PLAN JEFFERSON CITY CORRECTIONAL FACILITY 631 EAST STATE STREET JEFFERSON CITY, MISSOURI	
Drawn By: EBS Project No. 2000077.03	Checked By: RHW Date: 12/11/2001 Figure 1



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Appendix A

State Agency for Surplus Property – Phase I Environmental Assessment (June 29, 2001), by reference only.



Appendix B

Site Reconnaissance Photographs



Truck gate northeast wall facing northwest



Area below incinerator and slaughterhouse facing south



Wastewater treatment plant facing south



Northeast wall and Union Pacific Railroad facing northwest



Abandoned incinerator facing north



Lard house facing northeast



Storage shed facing north



Abandoned slaughterhouse facing southwest



Abandoned slaughterhouse facing west



Abandoned slaughterhouse facing east



Rear of diesel plant facing southwest



Jefferson City Correctional Facility Administration Building Facing North



Fill soil bank between Upper and Lower Recreation yard Facing West



Lower Recreational yard Facing South



Lower Recreational yard Facing SouthEast



Drainage culvert along Lower recreation yard



Soil bank between partition factory and school facing North



Drainage South side of partition factory



Soil bank between lower recreation yard and partition factory facing East



Walkway to gas chamber facing East



Inside gas chamber



Gas chamber vent system



Front of gas chamber facing East



Steam lines between partition factory and metal plant facing North



Empty drum storage behind partition factory facing West



Steam lines between partition factory and metal plant facing West



Partition Factory construction plaque facing South



Area between metal Factory and East wall facing North



Pipe insulation Metal Factory



Pipe insulation Metal Factory



Duct Wrap on vents Metal Factory



Drum storage Metal Factory



Drum storage Metal Factory



Drum storage Metal Factory



Metal Factory floor and plate storage



Metal Factory floor and Box and pallet storage



Metal Factory water discharge between Metal Factory and I-Hall facing SouthWest



I-Hall (abandoned) facing North



Industry Warehouse facing North



Steam lines between M&M and warehouse facing West



Steam lines going into old boiler house facing NorthWest



Empty drum storage behind warehouse facing East



Steam lines over top of furniture factory facing North



Furniture Factory



Furniture Factory piping



Furniture Factory transformer on South side of building



Furniture Factory water discharge on South side of building



Furniture Factory



Furniture Factory Paint Booth



Furniture Factory Paint Storage



Furniture Factory Paint Booth



Furniture Factory Equipment



Furniture Factory Storage



Furniture Factory Pump



Loading bin and utility lines West side of Furniture Factory



Soap Factory equipment



Soap Factory piping and insulation



Soap Factory drum storage-dry cleaning area



Soap Factory dry clean area



Soap Factory 2nd floor



Soap Factory equipment



Soap Factory mixing vat



Soap Factory mixing vat



Soap Factory drum storage



Soap Factory drum storage



Soap Factory lab



Soap Factory lab



Soap Factory lab



Soap Factory lab



Soap Factory lab



Area between Soap Factory and boiler house facing west



Soil along North side old boiler house facing South west



Inside old boiler house



Inside old boiler house



Inside old boiler house



Inside old boiler house



Inside old boiler house



Covers over water main valve



Area behind Soap Factory facing North



Underground storage for NaOH and POH behind Soap Factory not in use



Area between Shoe Factory and North wall



Water main piping in tunnel



Inside Shoe Factory-Garment Manufacturing



Inside Shoe Factory-Garment Manufacturing



Basement storage Shoe Factory



Basement storage Shoe Factory



Basement storage Shoe Factory



Basement storage Shoe Factory



Basement storage Shoe Factory



Basement piping Shoe Factory



3rd floor Shoe Factory graphic arts storage



3rd floor Shoe Factory graphic arts storage



Area between Shoe Factory and H.U.5C facing North



Chapel and H.U.4 facing East



Area between H.U.4 and H.U.5C facing East



Tunnel next to H.U.3 piping



Tunnel next to H.U.3 piping insulation



Tunnel next to M&M piping insulation



Tunnel next to M&M piping insulation



Tunnel next to H.U.1 piping insulation



Tunnel next to H.U.1 piping insulation



Upper recreation yard facing South



Upper recreation yard facing South



Upper recreation yard facing East



AST at Garage facing West



AST at Garage lower area facing North



Front of Salley Port facing North



Rear of Garage facing West



Inside Garage



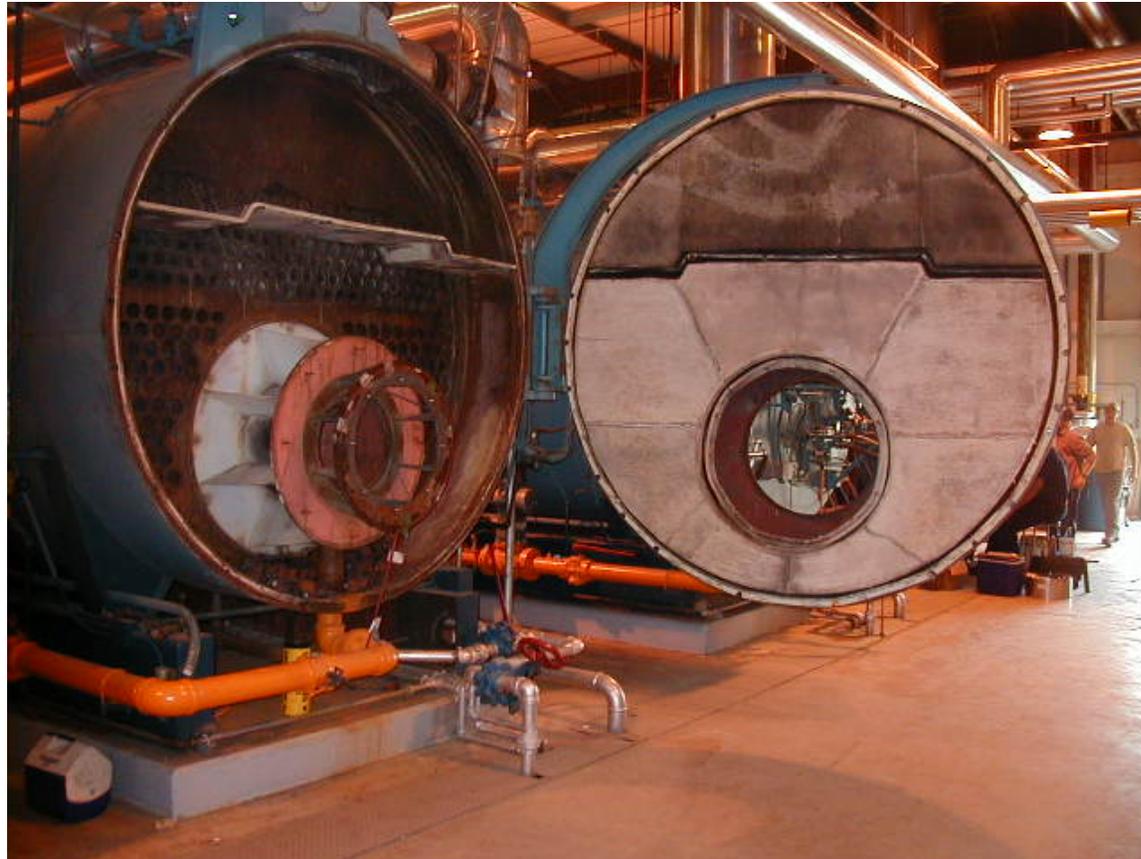
Inside Garage



Inside Garage



Inside new Boiler Plant



Inside new Boiler Plant



Inside new Boiler Plant Storage Area



Inside new Boiler Plant Lab



Inside new Boiler Plant



Inside new Boiler Plant



Inside new Boiler Plant Machine Shop



Rear new Boiler Plant facing North



AST Tanks next to New Boiler Plant facing North



Manhole water discharge (unknown source) East of New Boiler Plant



AST next to Industries warehouse facing East



Inside Industries warehouse



Inside Industries warehouse



Inside Industries warehouse



Steam lines, fill soil, and manhole behind new Boiler Plant facing East



Dulle and Hamilton Tower facing North



505 East State Street-Hamilton Nutritional Center facing North



520 East State Street-Shryack-Hirst Grocery Co. facing SouthWest



520 East State Street-Shryack-Hirst Grocery Co. facing SouthWest



Prison parking lot facing East



Drainage area behind Prison parking lot facing North



Side of 100 Lafayette and 620-622 East State Street facing West



100 Lafayette Street facing West



102-110 Lafayette Street facing North



636 East Capitol Avenue (vacant) facing north



621 and 619 East Capital – State Tax Division and Division of Administration Support respectively, facing northwest



624 East Capitol facing southwest



700 East Capitol facing south-Capitol Center Law Office



700 East Capitol facing southwest-Capitol Center Law Office



712-722 East Capitol facing west



West Prison wall on Lafayette facing North



South Prison wall on East Capital facing East



728 East Capitol Street facing SouthWest



201 Cherry Street at corner of Cherry and East Capitol facing South



South Prison wall on East Capitol Street facing East



802, 810, 812 East Capitol Street facing West



Low area behind 200 Chestnut Street facing West



East Prison wall facing North



901 East Capitol Street facing East



201 Chestnut Street facing SouthEast



200 Chestnut Street facing SouthWest



Rear lots of 901-913 East Capitol Street facing SouthEast



Drainage area East side Chestnut behind 901-913 East Capitol facing East



911 and 913 East Capitol facing North



Vacant lot 200 Ash Street facing West



201 Ash Street Apartments facing South



1002 East Capitol Street Apartments facing SouthWest (same building as 201)



Parking lot behind Apartment building facing South



Drainage area West of former International Shoe Factory facing NorthEast



1003 and 1005 East Capitol Street facing NorthEast



Drainage area behind 1003 and 1005 East Capitol facing East



Drainage area behind 1003 and 1005 East Capitol facing NorthEast



Drainage area behind 1003 and 1005 East Capitol facing North



1101 East Capital former International Shoe Factory facing NorthEast



MDNR Compost behind new Boiler House facing SouthEast



Appendix C

Site Survey Summary Form

Site Survey Summary

Address: 631 East State Street
Jefferson City Correctional Facility

Description of Site: State Prison site since ~1835. Manufacturing
of Soap, Furniture, Metal license plates, Partitions, Graphic
arts Printing, and Garments. Houses maximum security
State prisoners.

1. Is the Property or any adjoining property used for an industrial, commercial or manufacturing use?

	<u>Land Use</u>	<u>Photograph?</u>
Property:	Prison	✓
Adjoining Properties North:	Union Pacific RR	
Adjoining Properties South:	Residential + light Commercial	✓
Adjoining Properties East:	Surplus Properties + Residential	✓
Adjoining Properties West:	Residential + light Commercial	✓

1

2. Has the Property or any adjoining property been used for an industrial, commercial or manufacturing use in the past?

	<u>Owner</u>	<u>Use</u>	<u>Dates</u>
Previous Use of Property	Prison	Manufacturing	Upper Rec area before 1954
Previous Use of Properties to North			
Previous Use of Properties to South			
Previous Use of Properties to East			
Previous Use of Properties to West			

3. Is there evidence that there are currently, or have been previously, any pesticides, automotive or industrial batteries, paints, or other chemicals stored on or used at the Property or at the facility other than undamaged containers of consumer products of under five gallons in total volume?

Finding: 55 gallon Drums of paint, Lubricants, Hydraulic fluid, Cleaning Supplies (Dry Cleaning fluid)

Source: Site Visit

4. Is there evidence that there are currently, or have been previously, any industrial drums (typically 55-gallon) or sacks of chemicals located on the Property or at the facility?

Finding: 55 gallon Drums + Sacks of supply chemicals are stored in and around Manufacturing area

Source: Site Visit

5. Is there evidence that fill dirt has been brought onto the site which originated from a contaminated site or of an unknown origin?

Finding: Fill Dirt along removed Prison wall, Fill Dirt around New Boiler house area, Fill Dirt along East Capitol Street out Side of wall
Source:

6. Is there evidence that there are currently, or have been previously, any pits, ponds or lagoons located on the Property in connection with waste treatment or waste disposal?

Finding: Pondered storm water in area South of New Boiler house was being Pumped
Source:

7. Is there evidence that there is currently, or has been previously, any stained soil or stressed vegetation on the Property?

Finding: No evidence
Source:

8. Is there evidence that there are currently, or have been previously, any registered or unregistered storage tanks (above or underground) located on the Property?

Finding: There are 2 AST's by garage facility, 4 AST's around New Boiler house. UST's removed from garage area. UST's removed from New Boiler house
Source:

9. Is there evidence that there are currently, or have been previously, any vent pipes, fill pipes or access ways indicating a fill pipe protruding from the ground on the Property or adjacent to any structure located on the Property?

Finding: No evidence
Source:

10. Is there evidence that there are currently, or have been previously, any flooring, drains, or walls located within the facility that are stained by substances other than water or are emitting foul odors?

Finding: *Paint Booth in Furniture Shop*

Source:

11. Is there evidence that the Property is served by a private well or non-public water system, and if so, has the well or system been designated as contaminated by any governmental environmental/health agency?

Finding: *Water Tower has previously served as private water for prison.*

Source:

12. Does the owner of the Property or operator of the facility have any knowledge of environmental liens or governmental notification relating to past or current violations of environmental laws with respect to the Property or any facility located on the Property?

Finding: *N/A*

Source:

13. Has the owner of the Property or operator of any facility at the Property been informed of any past or current existence of hazardous substances or environmental violations with respect to the Property or any facility located on the Property?

Finding: *None to the knowledge of the staff*

Source:

14. Does the Property owner or facility operator have any knowledge of any environmental assessment of the Property or facility that indicated the presence of hazardous substances on the site or recommended further assessment of the Property?

Finding: *No Knowledge from Staff*

Source:

15. Does the owner of the Property or any operator of a facility at the Property know of any past, threatened, or pending lawsuits or administrative proceedings concerning a release or threatened release of any hazardous substance involving the Property by any owner or tenant of the Property?

Finding: *N/A*

Source:

16. Is there evidence that the Property discharges wastewater, other than storm water, directly to a ditch, stream, septic system, or sump on or adjacent to the Property?

Finding: *No evidence*

Source:

17. Is there evidence that any construction debris, substances identified as hazardous, unidentified waste materials, tires, automotive or industrial batteries or any other waste materials, trash, debris or refuse been dumped above grade, buried and/or burned on the site?

Finding: *Old Boiler house has asbestos + Lead Paint. No evidence of debris, trash or open burning*

Source:

18. Is there evidence of any electrical or hydraulic equipment (such as compressors, transformers and large capacitors), now on the site or that have been on the site in the past, known to contain PCBs? If so, describe the equipment, identify its location, approximate dates of use of the equipment, and whether it has been registered as PCB containing material, and actual knowledge of leaks.

Finding: Possible Building Debris from The 1954 Prison riot may be in Fill areas and may contain electrical/hydraulic equipment
No surface evidence of material

Source:

19. Is there evidence that equipment containing PCBs has been removed? If so, obtain the approximate dates of removal, location removed from, and name of the removal contractor.

Finding: No evidence

Source:

20. Is there evidence that there have been any fires on the Property involving PCBs? If so, describe and provide the dates(s) of the occurrence and remediation methods.

Finding: No Knowledge of fires involving PCB's or Electrical/hydraulic equipment

Source:

This Site Survey Summary Was Completed By:

Name: Rick Whitney Title: Staff Geologist
Firm: TSI Date: 11/14/01
Address: _____ Phone Number: _____

Preparer represents that to the best of the Preparer's knowledge the above statements and facts are true and correct and that to the best of the Preparer's knowledge no material facts have been suppressed or misstated.

Signed:  Date: 11/14/01



Appendix D

Material Safety Data Sheet Summary

JCCC Raw Materials MSDS

FD & C yellow #5	Kathon CG/ICP preservative
Eastman DE-HG Solvent	Rhodamine 6GDN Extra
TBEP (Tributoxyethyl phosphate)	Isopropanol
Ammonia Hydroxide	Bio-Soft S-100
Blankophor (Stilbene optical brightner)	Bio-terge 804
Meto pentabead 20	Stepanol ABHS-15C
Acusol 445ND polymer	Bio-Soft LD-95
Sodium Perborate	Sodium Orthosilicate
Methyl Salicylate	Ethylene Glycol
10% Antifoam emulsion	Sulfochem B-209
Pylaklor acid blue LX-9738	ACL 56
Pylaklor sea green S-432	Valfor ® zeolite
Pylaklor brilliant blue S-566	Monosodium Phosphate
TEXANOL ester alcohol	Sodium Bicarbonate
FC-120 Fluorad brand fluorchemical surfactant	Metso beads 2048 sodium Metasilicate
Zonyl FSJ fluorosurfactant	Sipernat 22S
RHOPLEX B-60A emulsion	Sodium Tripolyphosphate
RHOPLEX B-85 emulsion	Tetrapotassium pyrophosphate
Duraplex 2 emulsion	Ninol 40-CO
Glycol ester DESG	Mercol
Concentrated Deodorant fragrance	Diethanolamine
Rosin ester solution	Soda ash
Dowper solvent (perchloroethylene)	Morpholine
Primfix resin	Triethanolamine
BTC 1010	Lemon fragrance
Stepan SXS	Sodium Sulfate
Tergitol NP-9 Surfactant	Urea
BTC 2125M P40	FB Sodium Percarbonate
Arosurf TA-100	Sun ripened raspberry fragrance
SO/SAN 30M	Nacconol 40G
Shellflex ® 1210	T DET N 14
Carboxymethyl Cellulose	Butyl cellosolve solvent
Sokalan ® PA 30	Pantene type fragrance
Cedephos FA-800	Tide w/ bleach
Sodium Silicofluoride	Pine oil disinfectant
Sodium Silicate	
Ban Soap	
Caustic Potash – liquid	
Versene 100 chelating agent	
Caustic Soda	
Poly emulsion 43 N 40	
Ploy emulsion 371N35	
Michem emulsion 80540	
Antapox BL-225 surfactant	
IGEPAL DM 970 Flakes	
Makon NF-5	

JCCC Finished Goods MSDS

All purpose cleaner
Neutral floor cleaner
Window and mirror cleaner
High speed burnishable floor finish
Floor finish
Floor sealer
Heavy duty floor cleaner
Polymer floor stripper
Dust mop treatment
Pine oil disinfectant
Special deodorant
Disinfectant and sanitizer 205M 7.5%
Machine dishwashing compound
Hand dishwashing compound
Rinse aid
Pot and Pan degreaser
Machine dishwashing detergent
Laundry soap compound
Non-phosphate laundry detergent
Automatic laundry detergent
Break laundry detergent
Bleach, X-tra bright chloral
Laundry detergent with bleach
Non-phosphate chloral bleach
Automatic laundry detergent heavy duty
Built soap compound tallow base
Laundry sour
Blue laundry sour
Oxygen safe dry bleach
Household fabric softener and sanitizer
Powered fabric softener and sanitizer
Toilet bar soap
Liquid hand soap
Liquid shampoo
Liquid dishwashing soap
Antibacterial hand soap

JCCC Furniture Factory MSDS

Con-bond 330
Titebond wood glue
Dark oak stain
Pre-cat Laquer topcoat
Pre-cat 35 sheen
#2 dark oak stain
Resistovar Topcoat
#1048 Catalyst
Oak stain
Sanding sealer
Regalite (sandpaper)
Catalyst
Lacquer reducers (thinner)
Ball heavy hitter cleaner
Bates Boothcoating/Glue release
330 green neoprene contact cement
#1 dark oak stain
Wood-tex face grade synthetic wood/all

JCCC License Plate Factory MSDS

Scotchlite dip tank thinners
Kester Solder
Bingham roller and blanket wash
Scotchlite roll coating clear 260
Scotchlite transparent printing ink 200
Scotchlite roll coating thinner 270
Toluene
Scotchlite roll coat thinner 4905
Scotchlite roll coat color 4806V blue
Acetylene
Oxygen
Oak cool (coolant)
Scotchlite roll coat color 4805V black
Carbon Dioxide
Byk-catalyst (p-toluene sulfonic acid)
Kleer kote #6004
Premium contact cleaner
GVYL (Gloss vinyl)
Scotchlite roll coat color 4815V purple
Scotchlite clear coat thinner 746
Reflecto-lite brand 754 clear
Xylene

JCCC Maintenance Engineering MSDS

Polybac #1183
5018 dual purpose sulfite indicator powder
5015,5016 potassium iodide-iodate
5007 phenolphthalein indicator
5000, 5001 hardness titrating solution
5004,5005 sulfuric acid
5002 hardness buffer solution
5003 hardness indicator solution
6057 neutralizing solution
5031 5032 bromcresol green-methyl red
4770 cooling water treatment
453 steamline treatment
Caustic soda liquid
595 oxygen scavenger
1659 boiler compound
1147 alkaline boil out
Weather seal siloxane WB
Propane
Acetylene
Carbon dioxide
Helium
DPD free chlorine reagent
Fluorescent marking paint
Paintstik
Foaminator
Dem-Kote metallic finish
HP cleaner
Leak detector low temp
Blowout
Brite Alum
Foaming cooling coil
No Sweat
Argon
Nitrogen
Plus
Scale remover
TT-P-1511 Semi-gloss paint
Spray adhesive
Stargold C-25 shielding gas
Argon Carbon Dioxide Helium mixture
Oxygen
Upper limits
Buckeye floor sealer
Rough tough scrubs in a bucket
Gojo natural orange hand cleaner
Hydrochloric acid

Qwik traffic stripe aerosol (white, yellow, blue)
Lime-a-way
Carbon steel electrode
Flo-glaze cleaner
DAP kwik foam
Rayovac batteries
Kester solder
Valve action paint marker
Coated abrasive product (sandpaper)
"44" rosin flux solder
CRC Contact cleaner
Mercury (quicksilver)
Halstead contact adhesive
W/R Epoxy pastel base
Silicon Carbide abrasive (sandpaper)
Aluminum Oxide grinding wheel
Aluminum Grease
LPS heavy duty Silicone lubricant
Makon NF-5
LPS themaplex hi-temp grease
LPS 2 industrial strength lubricant
Silicone aerosol
Beat the nails (adhesive)
Plumber pipe dope
Poly temp VSP (TFE Valve Stem Pack)

PRODUCT

1. WHITE LICENSE PLATE INK
2. TOULENE
3. AROMATIC A-150
4. SCOTCHLITE THINNER
5. BLUE INK
6. THINNER
7. CLEANING SOLVENT
8. OAK KOOL
9. WELDING WIRE
10. 453 STEAMLINER TREATMENT
11. CAUSTIC SODA LIQUID
12. 595 OXYGEN SCAVENGER
13. 1659 BOILRER COMPOUND
14. BLANKET CLEANING SOLVENT
15. 320 CLEANER
16. CON-BOND 330
17. PRESSET
18. WOOD GLUE
19. LACQUER THINNER
20. SEALER
21. SUPER SPRAY ADHESIVE
22. WD-40
23. MOLYLUBE GREASE
24. SHELL ALVANIA GREASE
25. CHAIN LIFE
26. TOP-COTE
27. DRY COTE
28. SWEEPING COMPOUND
29. PARTICLE BOARD
30. TOUCH-UP PAINT
31. ACETONE
32. CEMENT THINNER
33. CEMENT, CONTACT, SPRAY
34. CEMENT, RUBBER
35. CLEANER, CHOKE, SPRAY
36. CLEANER, ELECTRIC, SPRAY
37. CONDITIONER, LEATHER

AREA STORED IN

1. TAG PLANT
2. TAG PLANT
3. TAG PLANT
4. TAG PLANT
5. TAG PLANT
6. TAG PLANT
7. TAG PLANT
8. TAG PLANT
9. TAG PLANT
10. POWER PLANT
11. POWER PLANT
12. POWER PLANT
13. POWER PLANT
14. GRAPHIC ARTS
15. GRAPHIC ARTS
16. PANEL FACTORY
17. PANEL FACTORY
18. PANEL FACTORY
19. PANEL FACTORY
20. PANEL FACTORY
21. PANEL FACTORY
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25. PANEL FACTORY
26. PANEL FACTORY
27. PANEL FACTORY
28. PANEL FACTORY
29. PANEL FACTORY
30. PANEL FACTORY
31. HOBBIE CRAFT
32. HOBBIE CRAFT
33. HOBBIE CRAFT
34. HOBBIE CRAFT
35. HOBBIE CRAFT
36. HOBBIE CRAFT
37. HOBBIE CRAFT

38. DYE SOLVENT	HOBBIE CRAFT
39. DYE, OIL	HOBBIE CRAFT
40. DYE, SPIRIT	HOBBIE CRAFT
41. DYE, SPRAY	HOBBIE CRAFT
42. DYE, THINNER	HOBBIE CRAFT
43. FILLER, WOOD	HOBBIE CRAFT
44. FINISH, LIQUID	HOBBIE CRAFT
45. FINISH, SPRAY	HOBBIE CRAFT
46. GLUE, LIQUID	HOBBIE CRAFT
47. GLUE, SPRAY	HOBBIE CRAFT
48. LACQUER THINNER	HOBBIE CRAFT
49. LACQUER, LIQUID	HOBBIE CRAFT
50. LACQUER, SPRAY	HOBBIE CRAFT
51. MINERAL SPIRITS	HOBBIE CRAFT
52. PAINT, LIQUID	HOBBIE CRAFT
53. PAINT, SPRAY	HOBBIE CRAFT
54. POLISH, WOOD, SPRAY	HOBBIE CRAFT
55. PRIMER	HOBBIE CRAFT
56. RETARDER, PAINT	HOBBIE CRAFT
57. SEALER, WATER	HOBBIE CRAFT
58. SEALER, SANDING WOOD	HOBBIE CRAFT
59. SEALER, SANDING, SPRAY	HOBBIE CRAFT
60. SILICONE SPRAY	HOBBIE CRAFT
61. STAIN, WOOD	HOBBIE CRAFT
62. THINNER, PAINT	HOBBIE CRAFT
63. TULONAL	HOBBIE CRAFT
64. URETHANE, LIQUID	HOBBIE CRAFT
65. URETHANE, SPRAY	HOBBIE CRAFT
66. VARNISH, LIQUID	HOBBIE CRAFT
67. VARNISH, SPRAY	HOBBIE CRAFT
68. WAX, LEATHER	HOBBIE CRAFT
69. WAX, WOOD	HOBBIE CRAFT
70. WD-40	HOBBIE CRAFT
71. CARBITOL SOLVENT	CHEMICAL PRODUCTS
72. TRIBUTOXYETHYL PHOSPHATE	CHEMICAL PRODUCTS
73. AMONIUM HYDROXIDE	CHEMICAL PRODUCTS
74. FLOURESCENT BRIGHTNER	CHEMICAL PRODUCTS
75. HEXYLENE GLYCOL	CHEMICAL PRODUCTS
76. METHYL SALICYLATE	CHEMICAL PRODUCTS

77. ANTI FG-10 EMULSION	CHEMICAL PRODUCTS
78. TEXANOL	CHEMICAL PRODUCTS
79. FC-120 FLUORAD	CHEMICAL PRODUCTS
80. RHOPLEX B-60A EMULSION	CHEMICAL PRODUCTS
81. RHOPLEX B-85 EMULSION	CHEMICAL PRODUCTS
82. DURAPLUS 2 EMULSION	CHEMICAL PRODUCTS
83. DOWANOL	CHEMICAL PRODUCTS
84. FRESH LEMON #1356-MB, OS	CHEMICAL PRODUCTS
85. TIDE/W BLEACH	CHEMICAL PRODUCTS
86. PYLAKLOR BRILLAIANT BLUE	CHEMICAL PRODUCTS
87. FD&C YELLOW #5	CHEMICAL PRODUCTS
88. RHODAMINE 6GDN EXTRA	CHEMICAL PRODUCTS
89. PYLAKLOR ACID BLUE LX-9738	CHEMICAL PRODUCTS
90. PYLAKLOR ACID BLUE LX 7257B	CHEMICAL PRODUCTS
91. PYLAKLOR ACID SEA GREEN S-432	CHEMICAL PRODUCTS
92. DOWPER* SOLVENT	CHEMICAL PRODUCTS
93. PINE OIL DISINFECTANT CONCENTRATE PF	CHEMICAL PRODUCTS
94. BTC 1010	CHEMICAL PRODUCTS
95. STEPANATE SXS	CHEMICAL PRODUCTS
96. TERGITOL NP-9 SURFACTANT	CHEMICAL PRODUCTS
97. GLYCOL ETHER	CHEMICAL PRODUCTS
98. AROSURF TA-100	CHEMICAL PRODUCTS
99. MINERAL SEAL OIL	CHEMICAL PRODUCTS
100. CARBOXYMETHYL CELLULOSE, SODIUM (CMC)	CHEMICAL PRODUCTS
101. RHODAFAC RA-600	CHEMICAL PRODUCTS
102. SODIUM SILICOFLUORIDE (SSF)	CHEMICAL PRODUCTS
103. HIGH TITER SOAP	CHEMICAL PRODUCTS
104. CAUSTIC POTASH, LIQUID	CHEMICAL PRODUCTS
105. VERSENE* 100 CHELATING AGENT	CHEMICAL PRODUCTS
106. CAUSTIC SODA BEADS	CHEMICAL PRODUCTS
107. POLY EMULSION 43 N 40	CHEMICAL PRODUCTS
108. MICHEM EMULSION 80540	CHEMICAL PRODUCTS
109. ANTAROX BL-225	CHEMICAL PRODUCTS
110. IGEPAL DM 970 FLAKE	CHEMICAL PRODUCTS
111. KATHON CG/ICP	CHEMICAL PRODUCTS
112. ISOPROPANOL 99%	CHEMICAL PRODUCTS
113. D.D.B.S.A.	CHEMICAL PRODUCT
114. BIOTERGE 804	CHEM/SHOE FACTORY
115. STEPHANOL ABHS-15C	CHEM/SHOE FACTORY

116.BIOSOFT LD-95	CHEM/SHOE FACTORY
117.SODIUM ORTHOSILICATE	OUTSIDE WAREHOUSE
8.LIQUID CAUSTIC SODA	CHEMICAL PRODUCTS
119.ETHYLENE GLYCOL	CHEM/SHOE FACTORY
120.SODIUM DICHLORISOCYANURATE	CHEM/SHOE FACTORY
121.VALFOR 100	CHEM/SHOE FACTORY
122.MONOSODIUM PROSPHATE	CHEM/SHOE FACTORY
123.SODIUM BICARBONATE	CHEM/SHOE FACTORY
124.SODIUM METASILICATE	CHEM/SHOE FACTORY
125.SIPERNAT 22 S	CHEM/SHOE FACTORY
126.SODIUM TRIPOLYPHOSPHATE	CHEM/SHOE FACTORY
127.TETRAPOTASSIUM PYROPHOSPHATE	CHEM/SHOE FACTORY
128.NINOL 40-CO	CHEM/SHOE FACTORY
129.MERCOL 30	CHEM/SHOE FACTORY
130.DIETHANOLAMINE	CHEM/SHOE FACTORY
131.MONETHANOLAMINE	CHEMICAL PRODUCTS
132.SODIUM CARBONATE	CHEM/SHOE FACTORY
133.MORPHOLINE	CHEM/SHOE FACTORY
134.TRITHANOLAMINE 99%	CHEM/SHOE FACTORY
135.LEMON PERFUME	CHEMICAL PRODUCTS
136.SODIUM SULFATE	CHEM/SHOE FACTORY
137.UREA INDUSTRIAL GRADE	CHEM/SHOE FACTORY
138.SODIUM PERCARBONATE	CHEM/SHOE FACTORY
139.T-DET-N-14	CHEM/SHOE FACTORY
140.BUTYL CELLOSOLVE	CHEM/SHOE FACTORY
141.TIDE W/ BLEACH FRAGRANCE	CHEMICAL PRODUCTS
142.SUPREME SALT FINES	CHEMICAL PRODUCTS
143.PINE OIL	CHEM/SHOE FACTORY
144.GILDCO PF PINE OIL DISINFECTANE CONCENTRATE	CHEM/SHOE FACTORY
145.BTC-1010	CHEM/SHOE FACTORY
146.SODIUM XYLENE SULFONATE	CHEM/SHOE FACTORY
147.NONIONIC SURFACANT	CHEM/SHOE FACTORY
148.STEPAN BTC 2125M P-40	CHEM/SHOE FACTORY
149.AEROSURF TA-100	CHEM/SHOE FACTORY
150.STEPAN SO/SAN 30M	CHEM/SHOE FACTORY
151.SHELLFLEX 2210	CHEM/SHOE FACTORY
152.SODIUM CARBOXYMETHYL	CHEM/SHOE FACTORY
153.SOKALAN PA-30 CL 45% SOLUTION	CHEM/SHOE FACTORY
154.CEDEPHOS FA 600	CHEM/SHOE FACTORY

155.SODIUM SILICOFLUORIDE	CHEM/SHOE FACTORY
156.H.T. SOAP POWDER	CHEM/SHOE FACTORY
157.LT. DRYER FLAKES	CHEM/SHOE FACTORY
158.POTASSIUM HYDROXIDE	CHEM/SHOE FACTORY
159.E.D.T.A.	CHEM/SHOE FACTORY
160.SODIUM HYDROXIDE BEADS	CHEM/SHOE FACTORY
161.EPOLENE E-43N 40%	CHEM/SHOE FACTORY
162.POLYEMULSION 371N35	CHEM/SHOE FACTORY
163.AC 325N 35%	CHEM/SHOE FACTORY
164.ANTOROX BL-225	CHEM/SHOE FACTORY
165.IGEPAL DM-790	CHEM/SHOE FACTORY
166.MAKON NF-5	CHEM/SHOE FACTORY
167.KATHON CG ICP	CHEMICAL PRODUCTS
168.ISOPROPANOL	OUTSIDE WAREHOUSE
169.CARBITOL SOLVENT	CHEM/SHOE FACTORY
170.KP-140 PLASTICIZER T-BEP	CHEM/SHOE FACTORY
171.AQUA AMMONIA	CHEM/SHOE FACTORY
172.BLAKOPHOR DML OPTICAL BRIGHTNER	CHEM/SHOE FACTORY
173.HEXELENE GLYCOL	CHEM/SHOE FACTORY
174.METHYL SALICYLATE	CHEMICAL PRODUCTS
175.ANTIFOAM	CHEMICAL PRODUCTS
176.TEXANOL	CHEM/SHOE FACTORY
177.FC-120	CHEMICAL PRODUCTS
178.RHOPLEX B-60A	CHEM/SHOE FACTORY
179.RHOPLEX B-85	CHEM/SHOE FACTORY
180.DURAPLUS 2	CHEM/SHOE FACTORY
181.DIPROPYLENE GLYCOL METHYL ETHER	CHEM/SHOE FACTORY
182.SPECIAL DEODORANT CONCENTRATE	CHEMICAL PRODUCTS
183.RESINALL 802 25%	CHEM/SHOE FACTORY
184.PERCHLOROETHYLENE	CHEM/SHOE FACTORY



Appendix E

Ameren UE Correspondence

AmerenUE
Capital District Office

1310 Industrial Drive
PO Box 1558
Jefferson City, MO 65102-1558
800.552.7583

February 8, 2002

Mr. Rick Whitney
TSI Engineering, Inc.
59th & Arsenal
Building C, 2 Campbell Plaza
St. Louis, MO 63139



Re: Transformer Information – Jefferson City Correctional Facility, 631 East State St, Jefferson City, MO

Dear Mr. Whitney:



This is in response to your request for information regarding the status of transformers located at or near 631 E. State St. in Jefferson City, Missouri.

Our records indicate AmerenUE owns 32 transformers in the vicinity of the adjoining addresses listed in your letter dated November 30, 2001.

These transformers are of the type filled with mineral based insulating oil. They are not filled with PCB fluid and are not defined as a PCB transformer under EPA rules. Under these rules, mineral oil transformers that have not been tested are classified as "PCB contaminated transformers." This means that since it is possible that they may have been accidentally contaminated with low levels of PCB's, they are assumed to contain 50 to 499 PPM unless tested. The term 50 PPM means 50 parts per million or 1/200 of 1%, an extremely small amount of contamination.

Although the majority of our transformers are free of PCB's, it is not uncommon to find slight levels of contamination in some, typically 50 PPM or less. We have no plans for routine testing of these transformers because of the cost and service outages that are involved. EPA does not require any special precautions with transformers of this type, and we feel that they do not present any exposure problem from a health or environmental standpoint.

We have no records of any problems with these or any other transformers at or near this site.

If you have questions concerning this matter, please advise.

Sincerely,


David L. Hagan, P.E.
Supervising Engineer



PHASE I ENVIRONMENTAL ASSESSMENT

STATE AGENCY FOR SURPLUS PROPERTY
117 NORTH RIVERSIDE DRIVE
JEFFERSON CITY, MISSOURI

Prepared for:
Berkebile Nelson Immenschuh McDowell Architects
106 West 14th Street Suite 200
Kansas City, Missouri 64105



59th and Arsenal
Building C
Two Campbell Plaza
St. Louis, Missouri 63139

June 29, 2001



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Executive Summary

TSi Engineering, Inc. performed a Phase I Environmental Site Assessment (ESA) in June 2001 for the property known as the State Agency for Surplus Property located at 117 North Riverside Drive, City of Jefferson, Missouri (subject property). This Phase I ESA was conducted for State Agency for Surplus Property for the purpose of identifying potential recognized environmental conditions (RECs) associated with the property.

The subject property occupies approximately 8 acres in the City of Jefferson, Missouri and is bounded: to the north by the Missouri Pacific Railroad and Missouri River; to the east by additional Missouri Correctional Facility properties and Riverside Park; to the west by the Missouri State Penitentiary; and to the south by Renn Residential Neighborhood and International Shoe Factory. The subject property consists primarily of 9 major structures built of sheet metal with steel framing and supports. The Administration Building located on the property is constructed of cinder block walls and steel framing. The lots between the buildings are composed primarily of concrete. Additional gravel lots surround the facility. Tree covered hillsides and grassy areas surround the fenced area of property.

The Environmental Data Resources (EDR) database search identified seven facilities within their respective American Society for Testing Materials (ASTM) defined search distances from the subject property. One UST (Underground Storage Tank) site was located within the ¼ mile radius search of the subject property. This site was the State of Missouri Surplus Property (subject property). Two LUST (leaking underground storage tank) sites were located within ½ mile of the subject property. These two sites were State of Missouri Surplus Property (subject property) and Al's Tire Service. Two orphan sites were listed that could be within ASTM defined search distances, however, insufficient information exists on these site as to their exact location and remediation status. An orphan site by definition is a site which complete records are not available regarding location or remediation status. The two orphan sites listed were Missouri Highway and Transportation Department and Delong's, Inc.

In our opinion, the following RECs have been identified for the subject property as a result of this Phase I ESA:

- Potential asbestos-containing materials (ACM);
- Potential lead-based paint (LBP).
- Potential soil and groundwater impact from LUST tank removal on site.
- Potential soil and groundwater impact from open dumping of chemicals.
- Potential soil and groundwater impact from former firing range.
- Potential soil and groundwater impact from former landfill.



Potential ACM and LBP present at existing structures at the subject property should be inspected by U. S. Environmental Protection Agency (EPA) and State of Missouri certified and licensed inspectors. Asbestos inspections are required by federal, state and local regulations prior to any disturbance of these materials. Environmental subsurface investigations may be necessary for the subject property at locations which are at topographically lower elevations than the former LUST sites. Environmental subsurface investigations may also be necessary to properly characterize subsurface conditions for the former dumping site, the former firing range site and the former landfill site.

Recognized environmental conditions relate to possible environmental impacts associated with historic land use and practices, and potential sources of environmental impacts associated with the existing buildings and/or current site practices.



1.0 Introduction

1.1 Purpose

The purpose of this environmental site assessment is to address potential environmental concerns of the subject property by reviewing past usages of the subject property and adjacent property, identifying recognized environmental conditions (RECs), and assessing the environmental impact of the RECs on the subject property. RECs are defined in ASTM E 1527-00 as “the presence or likely presence of any hazardous substances or petroleum products on a property under conditions that indicate an existing release, a past release, or a material threat of a release of any hazardous substances or petroleum products into structures on the property or into the ground, groundwater, or surface water of the property.” An additional purpose of this ESA is to address the relevance of the identified RECs to the subject property’s future development.

1.2 Methodology

This environmental site assessment was conducted in accordance with the ASTM Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process, ASTM E 1527-00. The Phase I ESA activities consist of:

- Records Review
- Site Reconnaissance
- Interviews
- Documentation

The conclusions included in this report were prepared with the understanding that the sites may be redeveloped in the near future.



2.0 Site Description

2.1 Location and Description

The subject property occupies approximately 8 acres in the City of Jefferson, Missouri and is bounded: to the north by the Missouri Pacific Railroad and Missouri River; to the east by additional Missouri Correctional Facility properties and Riverside Park; to the west by the Missouri State Penitentiary; and to the south by Renn Residential Neighborhood and International Shoe Factory. The subject property consists primarily of 9 major structures built of sheet metal with steel framing and supports. The Administration Building located on the property is constructed of cinder block walls and steel framing. The lots between the buildings are primarily paved with concrete. Additional gravel lots surround the facility. Tree covered hillsides and grassy areas surround the fenced area of property.

2.2 Site and Vicinity

The subject property is located on a bluff overlooking the Missouri River. The bluff is relatively level on the top portion and slopes steeply to the west, north, and east. The site consists of the State Agency for Surplus Property (Surplus Property) and the Old Training Academy. The Surplus Property facility is comprised primarily of sheet metal buildings with steel out buildings used for warehouse storage. The Administration Building of Surplus Property is built of cinder block and steel framing. The Old Training Academy is a two-story brick building with concrete block basement walls. The structure was built in 1937 as the Women's Correctional Facility. Storm drains are located throughout the area and service the subject property.

2.3 Site Improvements

The subject property consists primarily of concrete, asphalt, and gravel covered lots. Some areas to the north are grass and tree covered. Minimal change has occurred on the property since the Surplus Property structures were built in the 1960's.

2.4 Current Uses of Property

The subject property is primarily used by Surplus Property as a storage facility for federal and state surplus goods. The Old Training Academy is used as living quarters for the guards at the state penitentiary. There are also offices for guard supervisors. The basement houses dogs used for identifying drugs.



2.5 Past Uses of the Property

The subject property was previously used by the Women’s Correctional Facility until approximately 1965. The Surplus Property site was used as a farm and gardens for the women inmates.

2.6 Current and Past Uses of Adjoining Property

2.6.1 Current Uses of Adjoining Property

The adjoining property to the west is the state penitentiary. The adjoining properties to the south are the International Shoe Factory and the Renn Residential Neighborhood. The adjoining property to the east is undeveloped and is owned by the state corrections office. Missouri Pacific railroad tracks and the Missouri River are located to the north of the subject property.

2.6.2 Past Uses of Adjoining Property

According to the historical research, past uses of the adjoining properties are consistent with the current uses.

2.7 Site Physical Setting

2.7.1 Topography

The sites are located on steeply rolling bluffs approximately 640 to 660 feet above sea level. The Missouri River borders to the north and all drainage from the site flows to the river. A site topographic map is presented in Figure 1, Site Location and Topography (USGS).

2.7.2 Soil and Geology

Soil characteristics of the area are predominantly silty clay to clay soil. The subject property is located on dolomite formation of the Paleozoic Era, Lower Ordovician System, Canadian Series. These formations gently dip toward the northeast.

2.7.3 Groundwater and Surface water

Surface runoff is controlled primarily by the storm sewer system located on the site. Groundwater levels and flow vary due to influences of surface water flow and soil/rock type. The subject property is located on the high bluff overlooking the Missouri River and surface water flows away from the property.



3.0 Records Review

3.1 Environmental Record Sources

Environmental Data Resources, Inc. (EDR) was subcontracted to search available environmental record databases. The results of the environmental record database search are presented in a report titled The EDR – Radius Map with GeoCheck®, Surplus Property, 117 North Riverside Drive, Jefferson City, Missouri 65101, Inquiry No: 639486.3s, prepared for TSi Engineering, Inc. and dated June 1, 2001. The distances used for searching the environmental record databases are in accordance with American Society for Testing and Materials (ASTM) Standard Practice for Environmental Site Assessments, ASTM E 1527-00.

3.1.1 EDR Environmental Database Search

The following federal and state agency databases were searched and reviewed for evidence of any potential environmental contamination issues, such as incidents or facilities that may have affected the environmental integrity of the subject property:

- National Priority List (NPL) – 1 mile search radius
- State Hazardous Waste Sites – 1 mile search radius
- Resource Conservation and Recovery Act (RCRA) Corrective Action Activity (CORRACTS) – 1 mile search radius
- Superfund (CERCLA) Consent Decrees (CONSENT) – 1 mile search radius
- Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS) – ½ mile search radius
- State Landfill – ½ mile search radius
- Resource Conservation and Recovery Act Transportation, Storage and Disposal (RCRA-TSD) – ½ mile search radius
- Leaking Underground Storage Tank (LUST) – ½ mile search radius
- Underground Storage Tank (UST) – ¼ mile search radius
- RCRIS Small Quantity Generator – ¼ mile search radius
- RCRIS Large Quantity Generator – ¼ mile search radius
- Delisted NPL Sites – Target Property
- CERCLA No Further Remedial Action Planned (CERC-NFRAP) – Target Property
- Above-ground Petroleum Storage Tanks (AST) – Target Property
- RCRA Administrative Action Tracking System (RAATS) – Target Property



- Hazardous Materials Information Reporting System (HMRIS) – Target Property
- PCB Activity Database System (PADS) – Target Property
- Emergency Response Notification System (ERNS) – Target Property
- Facility Index System (FINDS) – Target Property
- Toxic Chemical Release Inventory System (TRIS) – Target Property
- NPL Liens (NPL Lien) – Target Property
- Toxic Substance Control Act (TSCA) – Target Property
- Material Licensing Tracking System (MLTS) – Target Property
- Certified Hazardous Waste Resources Recovery Facilities (MO RRC) – Target Property

3.1.2 Summary of EDR Environmental Database Search Results

The subject property was identified in the EDR Environmental Database search as UST and LUST sites. Additional surrounding properties were also identified within the ASTM specified search distances from the subject property. A listing of database search findings is presented below.

Database Searched	Search Distance (Miles)	Facilities Located
UST	¼	1
LUST	½	2

Discrepancies between the information provided by government agencies and EDR may exist due to incomplete or non-updated databases of either resource. In addition, facilities may be listed in more than one category on the environmental screening report. A summary of the EDR sites identified within the above listed search distances follows.

UST (1 site)

- State of Missouri Surplus Property (subject property), 117 North Riverside Drive, Jefferson City, Missouri 65102. Records indicate that 2 tanks were removed.



LUST (2 sites)

- State of Missouri Surplus Property (subject property), 117 North Riverside Drive, Jefferson City, Missouri 65102. There was a release reported at this facility on 7/2/93. Excavation was listed as the remediation technique. Spill cleanup started on 7/2/93 and ended 12/15/93.
- Al's Tire Service, 1015 East McCarty, Jefferson City, Missouri 65101. This site is located 1/4 to 1/2 mile west southwest of the subject property. There was a release reported on 4/13/93. Excavation, tank closure and landfill are listed as the remedial techniques. Soil was listed as the contaminated media. Spill cleanup dates were not given.

Orphan sites (2 sites)

- Missouri Highway and Transportation Department, East McCarty Street, Jefferson City, Missouri. This site is listed as a LUST. There is insufficient information on this site as to its exact location and remediation status.
- Delong's, Inc., East Capitol Street, Jefferson City, Missouri. This site is listed as a UST. There is insufficient information on this site as to its exact location and remediation status.

3.1.3 Environmental Assessment Reports

The property owner indicated that previous Phase I, II and III environmental assessment work was performed at the subject property beginning in January of 1990 by Sverdrup, Inc. A summary of these reports follows:

In a report titled Site Investigation Phase I Environmental Investigation at the State Agency for Surplus Property dated December 1990, Sverdrup Environmental Inc. began an investigation as a result of an anonymous complaint to the U. S. Environmental Protection Agency (EPA) in January 1990 and a site inspection by Missouri Department of Natural Resources (MDNR) on January 26, 1990. The result of the inspection indicated open dumping of chemicals on the site. Interviews with individuals associated with the Surplus Property conducted in February 1990 indicated that open dumping of chemicals on the site took place anywhere from 1 to 14 years ago. From February to August 1990, soil and groundwater samples were taken by Maecorp and Sverdrup at locations of presumed contamination to delineate the extent of environmental impact on and off site. The result of the investigation concluded elevated levels of organic and



inorganic compounds primarily from the surface discharge of hazardous chemicals. Further investigation was recommended.

In October 1993, Sverdrup proposed a work plan for additional sampling to the MDNR. In a report titled Phase II Environmental Investigation Results, State Agency for Surplus Property dated July 1994; Sverdrup continued the soil and groundwater investigation of the site from January to June 1994. The results of the investigation concluded, in general, that migration of the chemical impact off site was minimal while locations on the site would require remedial soil removal.

From July 22, 1996 to August 8, 1996 Sverdrup contracted P.W. Stevens to perform remedial excavations at the subject property under the supervision of Sverdrup. In a report titled Site Remediation Report at the State Agency for Surplus Property, four locations on the site were excavated 1 to 2 feet deep. Confirmation samples were taken to document the cleanup.

From July 1996 to January 1998, groundwater monitoring was performed on a semi-annual basis. The last report dated September 30, 1998 indicated groundwater impact from the site was low. The report also indicated that site closure could be pursued if groundwater results remained low after a 2 year interval. Many of the groundwater wells were recommended for abandonment. This report was the last report filed with the MDNR.

3.2 Aerial Photographs

Aerial photographs were obtained and reviewed for the subject property and surrounding areas for the years 1961, 1965, 1981, and 1990.

3.2.1 1961 Aerial Photograph Review

The subject property appeared to be used for farming. No Surplus Property buildings are present. The Old Training Academy and storage building are present. A water tower and the shoe factory to the south are present.

3.2.2 1965 Aerial Photograph Review

Buildings #1 and #8 are present on the Surplus Property lot. The Old Training Academy and storage building are also present. The water tower and shoe factory to the south remain.

3.2.3 1981 Aerial Photograph Review

All current buildings for the Surplus Property are identifiable. Significant drainage erosion is observed on the hillside east of Lay Down Yard (see Figure 2. Site Location and Topography Detail). The Old Training Academy and storage building are present along with the water tower and the shoe factory to the south.



3.2.4 1991 Aerial Photograph Review

There were no significant changes observed in this photograph.

3.3 Local Directories

Mullin-Kille, Johnson, and Polk directories were reviewed for the years 1938 through the present. A summary is presented below.

Tenants	Date
Division of Purchasing Surplus Property	2000
Mo. State Surplus Property	1990
Mo. State Surplus Property	1986
State Department of Education Agency for Surplus Property	1971
No Listing	1967
No Listing	1961
No Listing	1955
No Listing	1948
No Listing	1943
No Listing	1938

3.4 Local Zoning/Land-Use Records

The city zoning office was contacted for current zoning/land use of the subject property. The subject property is zoned RS-1 which represents residential single family.

3.5 Sanborn Maps

Sanborn Maps of the subject property were obtained for the years 1939, 1943, and 1968. The subject property is vacant in 1939 and in 1943. The surrounding area to the south appears under development for residential use. The International Shoe Factory is present to the



south. In 1968, the property is developed with seven structures shown. There were no Sanborn Maps available for the Old Training Academy to the north.

3.6 Historical Topography Maps

Historical topography maps of the subject property were obtained for the years 1942, 1967, and 1974. The 1942 topography map shows the Old Training Academy/ Women Correctional Facility and the water tower. The International Shoe Factory is present to the south. No other structures are shown. The 1967 topography map shows a change in topography in the northwest portion of the subject property. The change in topography is in the form of a fill area that once was a drainage gully. The Administration Building and Building #8 are present. The 1974 topography map shows no change in topography. Buildings #3, #5, and #6 are shown.



4.0 Site Reconnaissance

4.1 Site Survey Process

A site reconnaissance of the subject property was conducted by TSi Engineering, Inc. on June 4, 2001. Photographs of the subject property are presented in Appendix A. The site survey summary is presented in Appendix B.

4.2 Hazardous Materials and Petroleum Products

Due to the age of the buildings identified, suspect asbestos containing materials and lead-based paint may be present. Suspect asbestos fireproofing was observed on some of the structural steel members of a garage. Suspect asbestos was also noticed on thermal system insulation. Additional materials which may contain asbestos include floor tiles, ceiling tiles, surfacing materials and roofing materials. Potential lead-based paint was found on horizontal and vertical surfaces and mechanical equipment. Lead dust and contaminated soil may also be present at an assumed former firing range. Tires, furniture, and containers of antifreeze, oil and cleaning products were observed in and around the subject property. These items were found in various quantities. Copies of material safety data sheets (MSDS) are presented in Appendix C.

4.3 Storage Tanks

Evidence of former underground storage tanks was observed at the subject property. These tanks were located under the current above ground storage tanks and have been removed according to reviewed records.

4.4 Drums

Evidence of 55-gallon drums was observed at the subject property. These drums were located in the garage area and in the rear of the property. The drums in the garage area were used for lubricants in the maintenance of equipment. These drums were in good condition. The drums located in the rear of the lot were empty.

4.5 Hazardous Waste

Evidence of hazardous waste activities was observed at the subject property. Used car and equipment batteries were stored in a properly contained area of the garage.



4.6 Solid Waste

During interviews of site personal, a possible landfill was discussed located in the northwest corner of the subject property between the Old Training Academy and the Potato House (see Figure 2. Site Location and Topography). The landfill activities occurred prior to the employment of the current staff.

4.7 Wastewater

Storm drains located throughout the area were observed.

4.8 Drains and Sumps

Evidence of stained drains or sumps in the area was not observed.

4.9 Stains and Pools of Liquid (Interior)

Evidence of stains and pools of liquid inside the buildings was not observed.

4.10 Pits, Ponds, Lagoons

Evidence of pits, ponds and lagoons was not observed at the subject property.

4.11 Stained Soil or Pavement and Stressed Vegetation

Evidence of minor stains under some of the vehicles and equipment was observed. Stressed vegetation was not observed.

4.12 Potential PCB-Containing Electrical or Hydraulic Equipment

Evidence of potential PCB-containing electrical or hydraulic equipment was observed. Hydraulic floor lifts and forklifts were located in the Lay Down Yard with no evidence of leakage observed.



5.0 Interviews and Questionnaire

5.1 Owner/Tenant Questionnaire

The purpose of the questionnaire is to obtain historical background information for the site. TSi Engineering, Inc. submitted a questionnaire to Mr. Mark Schreiber of the State of Missouri Corrections. As of the date of this report, Mr. Schreiber has not returned the questionnaire. As soon as this information becomes available, TSi Engineering will submit the responses as an addendum to this report. In an interview on June 4, 2001 with Mr. Schreiber, he was able to impart historical information about the site. The area along the bluffs between the Old Training Academy and the Potato House may have been a landfill utilized by the state correctional facility. He did not see the landfill in use during his tenure which started in the 1960's. Cyanide was stored in the basement of the Old Training Academy during the 1960's but it was never used on the site. The area to the east and down the hill from the Old Academy was used as a firing range. He had no knowledge of any of the activities taking place on the State Agency for Surplus Property facility. Ms. Marilyn Stephen of the State Agency for Surplus Property indicated the locations of the former LUST's and provided MSDS sheets on items currently being used on site. Her knowledge of the activities at the site prior to 1990 was limited.

5.2 Local Fire Department

The Jefferson City Fire Department was contacted on June 5, 2001 to assess whether the local fire department had responded to any environmental emergencies at the subject property. According to Fire Chief Robert Rennick, the City Fire Department has responded to a major fire in the Administration Building #1 on October 31, 1981. The fire started in the typewriter repair section of building, destroying most of it. The cause of the fire remains unknown.

5.3 Local Utility Company

Ameren UE was contacted by TSi Engineering, Inc. regarding the polychlorinated biphenyls (PCB) status of electrical transformers at the site and surrounding areas. The response from Ameren UE indicated that there are three-pole mounted transformers, the oldest of which is 1986. These transformers are certified by the manufacturer as non-PCB containing. A copy of the Ameren UE correspondence is presented in Appendix D.



6.0 Findings and Conclusions

Based on the information readily available to TSi Engineering, Inc., the following conclusions are pertinent to the subject property.

The buildings on the subject property are over 30 years old. Due to the age of the buildings and observed building materials, asbestos-containing materials (ACM) and lead-based paint may be present at the site. A former LUST was identified along with a former firing range, potential chemical dumping and a former landfill. Past reports support previous subsurface contamination at the subject property.

In our professional opinion, the following RECs have been identified for the subject property during this assessment:

- Potential asbestos-containing building materials (ACBM).
- Potential lead-based paint (LBP).
- Potential soil and groundwater impact from LUST tank removal on site.
- Potential soil and groundwater impact from open dumping of chemicals.
- Potential soil and groundwater impact from former firing range.
- Potential soil and groundwater impact from former landfill.

Potential ACM and LBP present at existing structures at the subject property should be inspected by U. S. Environmental Protection Agency (EPA) and State of Missouri certified and licensed inspectors. Asbestos inspections are required by federal, state and local regulations prior to any disturbance of these materials. Environmental subsurface investigations may be necessary for the subject property at locations which are at topographically lower elevations than the former LUST sites. Environmental subsurface investigations may also be necessary to properly characterize subsurface conditions for the former dumping site, the former firing range site and the former landfill site.



7.0 Signatures of Environmental Professionals

This Phase I Environmental Site Assessment was conducted by the following environmental professionals in accordance with ASTM E 1527-00.

Rick Whitney
Staff Geologist

Date

Sylvester Douglas
Manager, Environmental Services

Date



8.0 Qualifications of Environmental Professionals

Rick Whitney Staff Geologist

Professional Summary:

As a geologist, Mr. Whitney has over 15 years of experience within the geological and environmental field. His project experience includes: Phase I/II environmental assessments; preparation of work plans; asbestos investigations; feasibility studies; soil sampling; UST/AST storage tank management; and groundwater, air quality, and well placement monitoring. These services have been performed for commercial, industrial, and residential property.

Areas of Expertise:

- Subsurface Investigations
- Soil Classifications
- Groundwater Monitoring
- Asbestos Sampling
- Phase I, II and III ESA

Education:

B.S. in Geology, University of Missouri – Columbia, 1982

Sylvester Douglas Environmental Group Manager

Professional Summary:

Mr. Douglas has over 11 years of experience in every facet of asbestos management including conducting AHERA inspections, identifying asbestos-containing materials, collecting bulk samples, preparing technical specifications and architectural drawings for asbestos abatement plans, performing air monitoring, determining and enacting engineering control methods to reduce potential hazards to abatement workers and the public, and preparing final reports. His background also includes management of a phase contrast microscopy (PCM) laboratory, including development of quality control programs, design of all reporting and recordkeeping systems, and management of air monitoring technicians and field personnel.

Areas of Expertise:

- Phase I, II and III ESA
- Asbestos and Lead Surveys
- Regulatory Reviews
- Environmental Audits
- Process Safety Management Studies
- EPA Risk Assessments



Rick Whitney
Staff Geologist

Registrations/Certifications:

- ACI Certified Technician, American Concrete Institute
- Certified Asbestos Inspector
- Certified Air Monitoring Technician
- OSHA 40-Hour Health and Safety Training Certification

Professional Affiliations:

- Geological Society of America

Sylvester Douglas
Environmental Group Manager

Education:

B.S. in Engineering and Public Policy, Washington University, 1988

Registrations/Certifications:

- MoDNR Certified Air Sampling Professional
- AHERA Inspector, MO
- AHERA Management Planner, MO
- AHERA Abatement Worker, MO
- AHERA Project Designer
- NIOSH 582 Sampling and Evaluating Airborne Asbestos Dust (Method 7400)
- Lead Inspector, KUVII43000-4



9.0 Limitations of Report

This report has been prepared on behalf of and for the exclusive use of the addressee, solely for use in an environmental assessment of the site. This report and the findings contained herein were prepared for Berkebile, Nelson, Immenschuh and McDowell Architects (BNIM) expressly for their intended use of the property.

This site assessment was performed in accordance with generally accepted practices of other consultants undertaking similar studies at the same time and in the same geographical area and TSi Engineering, Inc. observed that degree of care and skill generally exercised by other consultants under similar circumstances and conditions. The findings and conclusions stated herein must be considered not as scientific certainties, but rather as professional opinions concerning the significance of the limited data gathered during the course of the environmental site assessment. No other warranty, express or implied, is made. Specifically, TSi Engineering, Inc. does not and cannot represent that the site contains no hazardous waste or material, oil (including petroleum products), or other latent condition beyond that observed by TSi Engineering, Inc. during their site assessments.

The observations described in this Report were made under the conditions stated herein. The conclusions presented in the Report were based solely upon the services described therein and not on scientific tasks or procedures beyond the scope of described services or the time and budgetary constraints imposed by the Client. Furthermore, such conclusions are based solely on site conditions and rules and regulations that were in effect, at the time of the study. The work described in this Report was carried out in accordance with the terms of contract language associated with TSi Engineering, Inc.'s contract agreement with BNIM.

In preparing this report, TSi Engineering, Inc. has relied on certain information provided by state and local officials and other parties referenced herein and on information contained in the files of state and/or local agencies available to TSi Engineering, Inc. at the time of the site assessment. Although there may have been some degree of overlap in the information provided by these various sources, and attempt to independently verify the accuracy or completeness of all information reviewed or received during the course of this site assessment was not made.

Observations were made of the site and of structures on the site as indicated within the Report. Where access to portions of the site or to structures on the site was unavailable or limited, TSi Engineering, Inc. renders no opinion as to the presence of hazardous waste or material, oil or other petroleum products, or to the presence of indirect evidence relating to hazardous waste or material, oil or other petroleum products in that portion of the site or structure. In addition, TSi Engineering, Inc. renders no opinion as to the presence of



hazardous waste or material, oil or other petroleum products or to the presence of indirect evidence relating to hazardous material, oil or other petroleum products where direct observation of the interior walls, floor, roof or ceiling of a structure in a site was obstructed by objects or coverings on or over these surfaces.

Unless otherwise specified in the Report, TSi Engineering, Inc. did not perform testing or analyses to determine the presence or concentrations of asbestos, radon, formaldehyde, lead-based paint, lead-in-drinking water, electromagnetic fields (EMFs), methane gas or polychlorinated biphenyls (PCBs) at the site or in the environment at the site.

The purpose of this Report was to present the results of a Phase I Environmental Site Assessment performed in substantial conformance with ASTM E1527-00 and included assessing the physical characteristics of the subject site with respect to the presence in the environment of hazardous waste or material, oil, or petroleum products, as defined in 40 CFR Parts 261, 280-281, 302, 355 and 49 CFR Part 172. No specific attempt was made to check on the compliance of present or past owners or operators of the site with federal, state, or local laws and regulations, environmental or otherwise.

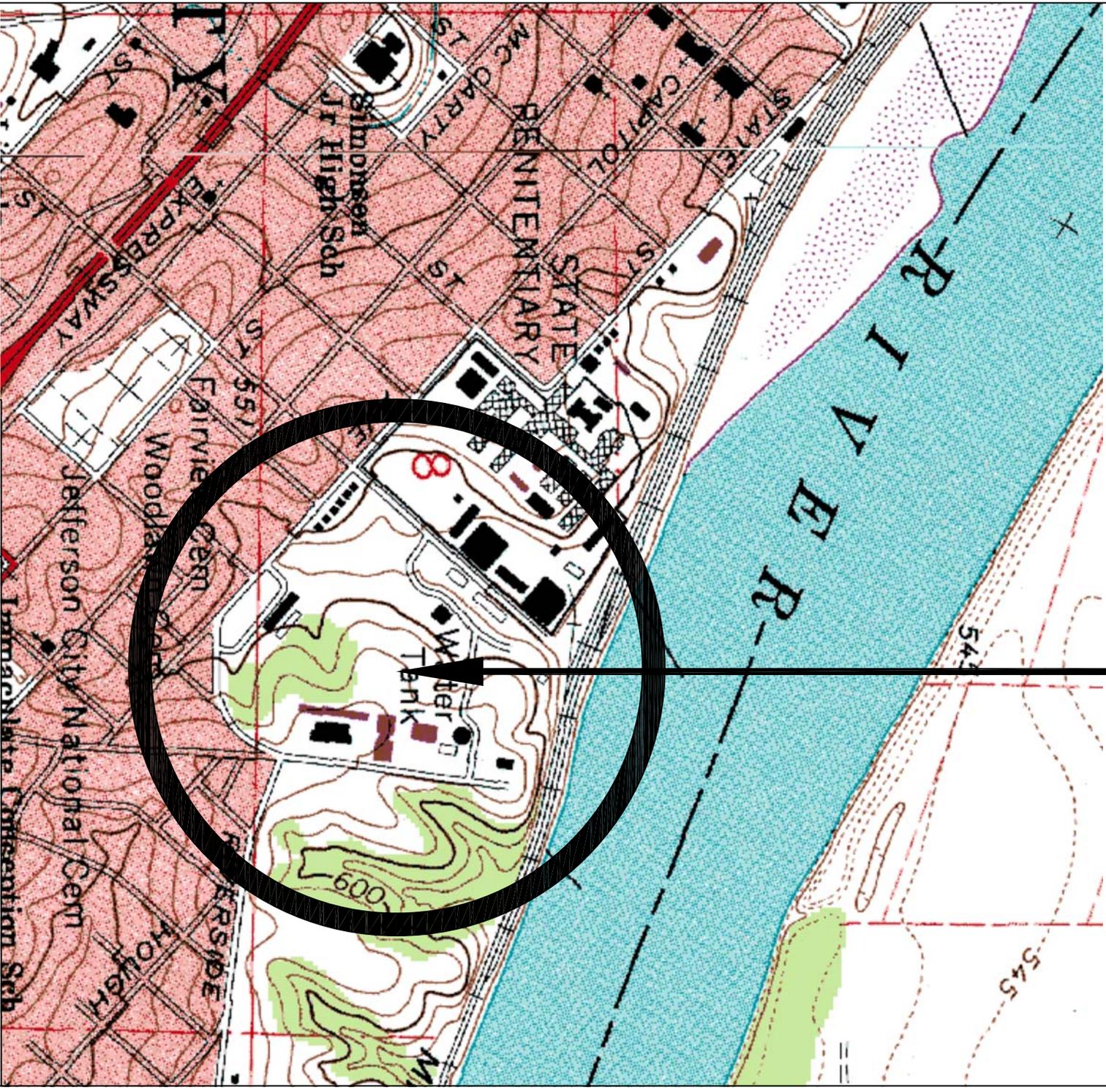
It is recommended that TSi Engineering, Inc. be retained to provide further engineering services during construction and/or implementation of any remedial measures recommended in this Report. This is to allow the TSi Engineering, Inc. to observe compliance with the concepts and recommendations contained herein and to allow the development of design changes in the event that subsurface conditions differ from those anticipated.



Figures

- 1 Site Location and Topography (USGS)
- 2 Site Location and Topography (Detail)

SITE LOCATION
SURPLUS PROPERTIES



NOT TO SCALE



engineers, inc.

59TH AND ARSENAL, BUILDING C
ST. LOUIS, MISSOURI 63139

SITE LOCATION AND TOPOGRAPHY

SURPLUS PROPERTIES
JEFFERSON CITY, MISSOURI

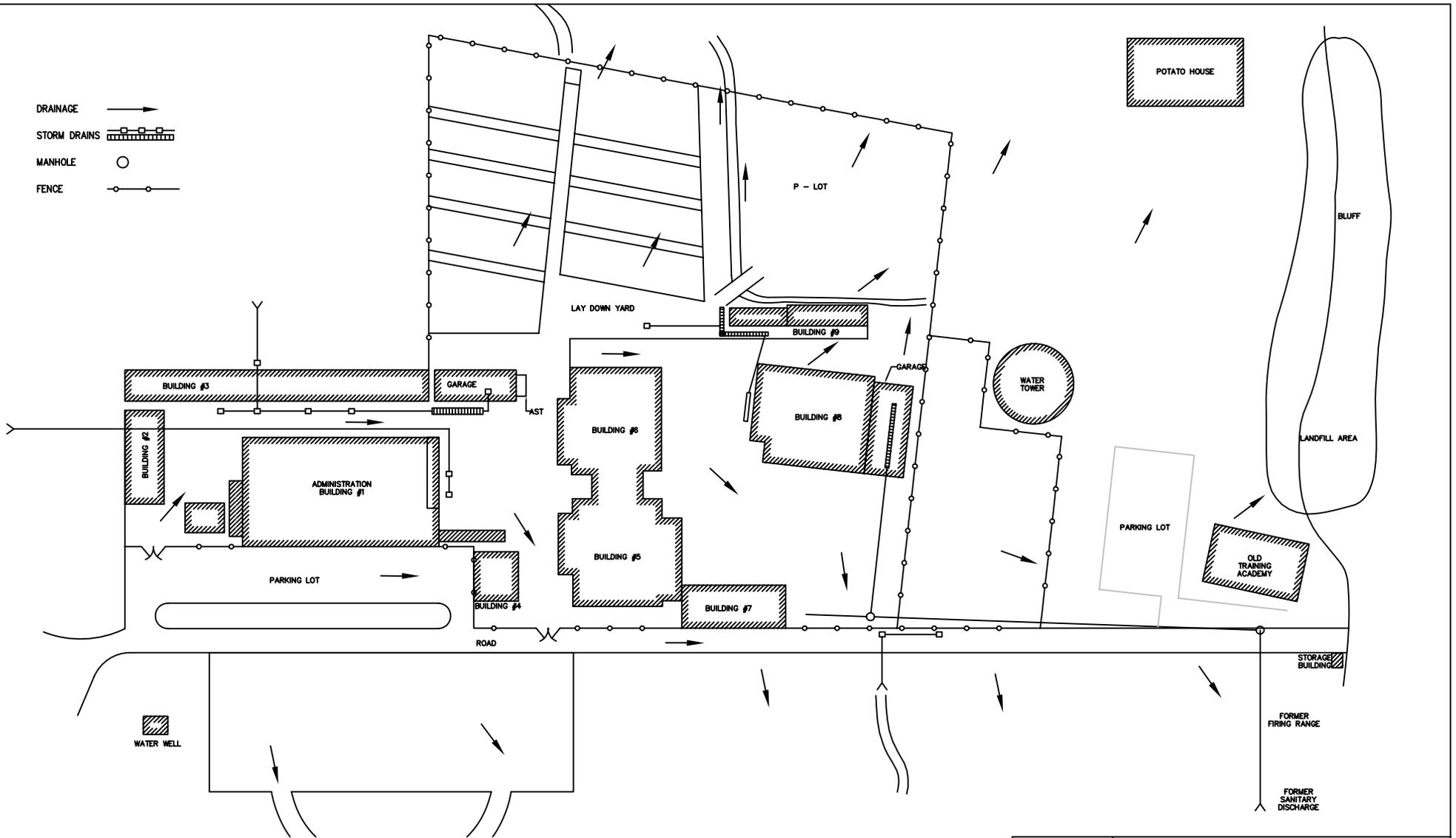
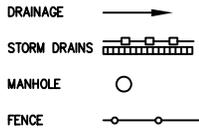
Drawn By: EBS

Checked By: RW

Project No. 2001026.00

Date: 06/07/01

Figure 1



 <small>TSI engineers, inc. 6074 AND ARDENAL, BUILDING C 2 CAMPBELL PLAZA ST. LOUIS, MISSOURI 63139</small>	SITE LOCATION AND TOPOGRAPHY		
	SURPLUS PROPERTIES JEFFERSON CITY, MISSOURI		
	Drawn By: EBS	Checked By: RW	
	Project No. 2001026.00	Date: 06/07/01	Figure 2



Appendix A

Site Reconnaissance Photographs



P1010001 – Boiler room – Old Training Academy



P1010002 – Basement floor and drains – Old Training Academy



P1010003 – Basement floor – filled floor drains



P1010004 – Inside Potato House



P1010005 – Exterior Potato House



P1010006 – Inside Potato House



P1010007 – Exterior Southside Potato House



P1010008 – Water Tower



P1010009 – East side Old Training Academy



P1010010 – Storage Building



P1010011 – West side Old Training Academy



P1010012 – Southside Old Training Academy



P1010013 – Parking lot East side of Surplus Property



P1010014 – Water Well House



P1010015 – Front Administration Building #1



P1010016 – Front Surplus Property facing North



P1010017 – Overflow parking lot east of Surplus Property



P1010018 – Building #4 storage north shed



P1010019 – Building #4 storage north shed



P1010020 – Building #5 storage south side



P1010021 – Building #5 storage south side



P1010022 – Building #4 south shed



P1010023 – Building #6 and #5 south side



P1010024 – Building #3 storage



P1010025 – AST fuel storage



P1010026 – Drain in front of garage next to building #3



P1010027 – Building #6 storage south side



P1010028 – Rear loading dock Administration Building #1



P1010029 – West side Building #6



P1010030 – Forklift in Lay Down Yard



P1010031 – Hydraulic lifts in Lay Down Yard



P1010032 – Storage in Lay Down Yard



P1010033 – Storage in Lay Down Yard



P1010034 – West end of Lay Down Yard



P1010035 – Empty drums storage west end of Lay Down Yard



P1010036 – Generator Storage Lay Down Yard



P1010037 – Fluorescent light fixtures Lay Down Yard



P1010038 – Empty bins west end Lay Down Yard



P1010039 – Storage west end Lay Down Yard



P1010040 – Pumps in Lay Down Yard



P1010041 – Outboard motors Lay Down Yard



P1010042 – Empty tanks in Lay Down Yard



P1010043 – Empty cylinders in Lay Down Yard



P1010044 – Empty tanks in Lay Down Yard



P1010045 – Generators in Lay Down Yard



P1010046 – Storage on P-Lot



P1010047 – Storage on P-Lot

P1010048 – (skipped)



P1010049 – Cars on Lay Down Lot



P1010050 – Storm drain west of building #6



P1010051 – Area between building #9 and #8



P1010052 – Storage building #9



P1010053 – Surplus refrigerators between building #6 and #8



P1010054 – Storage around building #8



P1010055 – Surplus cars in front of building #7



P1010056 – Area east of building #8 and garage



P1010057 – Empty cylinders east of garage



P1010058 – Large Equipment lot north of garage



P1010059 – Interior of garage



P1010060 – Battery storage



P1010061 – Interior of garage



P1010062 – Interior of garage



P1010063 – Interior of storage area behind garage



P1010064 - Interior of storage area behind garage



P1010065 - Interior of storage area behind garage



P1010066 – West side Building #5

P1010067 – (skipped)



P1010068 – North side building #9 storage



P1010069 - North side building #9 storage



P1010070 – North side building #8 storage



P1010071 – Building #9 (also called C-Barn)



P1010072 – Manhole to Oil/water separator east of building #8



P1010073 – Storage north side building #7



P1010074 – Storage in building #7



P1010075 – Storage in building #7



P1010076 – Storage in building #6



P1010077 – Storage in building #5



P1010078 – Storage area behind Administration Office building #1



P1010079 – South side of Administration Building #1



P1010080 – Computer Storage Building #2



P1010081 – Chair shed south side building #1

P1010082 - ?



P1010083 – Storage area behind Administration building #1



P1010084 – Storage area next to water tower



P1010085 – Storage area next to water tower



P1010086 – Storage area next to water tower



P1010087 – Storage area next to water tower



P1010088 – Storage area next to water tower



P1010089 – Area west of Old Training Academy facing north



P1010090 – Area west of Old Training Academy facing north looking down hill



P1010091 - Area west of Old Training Academy facing north looking down hill



P1010092 – Road along East side of Surplus Properties



P1010093 – Missouri State Agency for Surplus Property



P1010094 – Correction Property East of Surplus Property

P1010095 – (skipped)



P1010096 – Corrections Property east of Surplus Property facing north



P1010097 – Residential dwellings south of surplus property facing south



P1010098 - Residential dwellings south of surplus property facing south



P1010099 - Residential dwellings south of surplus property facing south



P1010100 - State Penitentiary to the west



P1010101 – State Penitentiary to the west



P1010102 – International Shoe Factory to the south



P1010103 - International Shoe Factory to the south



Appendix B

Site Survey Summary Form

- Surplus Property
- Old Training Academy + Storage, Potato House

Site Survey Summary

Address: Surplus Property

Description of Site: Site has 9 major buildings numbered as such. Admin. #1 is cinder block steel structure on concrete #2 - Sheet Metal Barrack Type w/ steel structure on concrete #3 as #2 #4 as #2 #5 #6 - Sheet Metal warehouse w/ steel structure, #7 as #2 #8 - as #5 #9 - as #2 w/ more shed in structure. The area is mostly paved in concrete + asphalt. Gravel lots are located on the far north area. Grass, trees, and weeds surround the fenced site

1. Is the Property or any adjoining property used for an industrial, commercial or manufacturing use?

	<u>Land Use</u>	<u>Photograph?</u>
Property:	Surplus Storage (State + Federal)	✓
Adjoining Properties North:	Old Training Academy	✓
Adjoining Properties South:	Remn Residential / Antenna Tower Antenna Tower Shoe	✓
Adjoining Properties East:	State Correctional	✓
Adjoining Properties West:	Riverside Park	

2. Has the Property or any adjoining property been used for an industrial, commercial or manufacturing use in the past?

	<u>Owner</u>	<u>Use</u>	<u>Dates</u>
Previous Use of Property	Womans Correctional	Farm	
Previous Use of Properties to North	Missouri River	Waterway	
Previous Use of Properties to South	Rein / International Shoe	Residential / Factory	
Previous Use of Properties to East	State Corrections		
Previous Use of Properties to West	Park		

3. Is there evidence that there are currently, or have been previously, any pesticides, automotive or industrial batteries, paints, or other chemicals stored on or used at the Property or at the facility other than undamaged containers of consumer products of under five gallons in total volume?

Finding: Batteries, lubricants, solvents found in garage maintenance areas, MSDS sheets available. These are in small single can quantities to large 55 gallon drums. Antifreeze

Source:

4. Is there evidence that there are currently, or have been previously, any industrial drums (typically 55-gallon) or sacks of chemicals located on the Property or at the facility?

Finding: Area 12+13 of laydown yard has empty 55 gallon drums. Various Containers and Storage Tanks, from 5 gallons to 2000 gallons in size are located in the lay down yard area - All ARE EMPTY.

Source:

10. Is there evidence that there are currently, or have been previously, any flooring, drains, or walls located within the facility that are stained by substances other than water or are emitting foul odors?

Finding: *No evidence*

Source:

11. Is there evidence that the Property is served by a private well or non-public water system, and if so, has the well or system been designated as contaminated by any governmental environmental/health agency?

Finding: *Water Tower is ground water - Non Potable*

Source:

12. Does the owner of the Property or operator of the facility have any knowledge of environmental liens or governmental notification relating to past or current violations of environmental laws with respect to the Property or any facility located on the Property?

Finding: *State Property*

Source:

13. Has the owner of the Property or operator of any facility at the Property been informed of any past or current existence of hazardous substances or environmental violations with respect to the Property or any facility located on the Property?

Finding: *Environmental violations reported in early 1990 revealed numerous illegal hazardous substances dumping on Property*

Source:

14. Does the Property owner or facility operator have any knowledge of any environmental assessment of the Property or facility that indicated the presence of hazardous substances on the site or recommended further assessment of the Property?

Finding: Phase I, II, + III were performed from 1990 - 1996 with respect to the illegal activities

Source:

15. Does the owner of the Property or any operator of a facility at the Property know of any past, threatened, or pending lawsuits or administrative proceedings concerning a release or threatened release of any hazardous substance involving the Property by any owner or tenant of the Property?

Finding:

Source:

16. Is there evidence that the Property discharges wastewater, other than storm water, directly to a ditch, stream, septic system, or sump on or adjacent to the Property?

Finding: No Evidence -

Source:

17. Is there evidence that any construction debris, substances identified as hazardous, unidentified waste materials, tires, automotive or industrial batteries or any other waste materials, trash, debris or refuse been dumped above grade, buried and/or burned on the site?

Finding: As part of the illegal activities, burning pits located west of lay down yard were found and cleaned up

Source:

18. Is there evidence of any electrical or hydraulic equipment (such as compressors, transformers and large capacitors), now on the site or that have been on the site in the past, known to contain PCBs? If so, describe the equipment, identify its location, approximate dates of use of the equipment, and whether it has been registered as PCB containing material, and actual knowledge of leaks.

Finding: Multiple compressor-type equipment - NOT known to contain PCBs

Source:

19. Is there evidence that equipment containing PCBs has been removed? If so, obtain the approximate dates of removal, location removed from, and name of the removal contractor.

Finding: No Evidence -

Source:

20. Is there evidence that there have been any fires on the Property involving PCBs? If so, describe and provide the dates(s) of the occurrence and remediation methods.

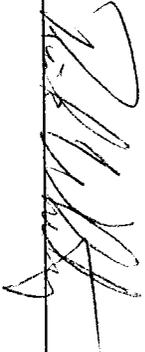
Finding: No Evidence - Remediation by removal of soil in drainage and burn pits was conducted in 1996 NOT exclusively for PCBs

Source:

This Site Survey Summary Was Completed By:

Name: Rick Wh. Iney Title: Staff Geologist
Firm: ISI Engineering Date: 6/4/01
Address: _____ Phone Number: _____

Preparer represents that to the best of the Preparer's knowledge the above statements and facts are true and correct and that to the best of the Preparer's knowledge no material facts have been suppressed or misstated.

Signed:  Date: 6/4/01

Site Survey Summary

Address: Old Training Academy + Storage, Pata House

Description of Site: 2 Story Brick Bldg w/ Basement; 4 Story Brick Storage shed w/ Basement; 1 limestone construction Pata's House located on the Northern half of the Area

1. Is the Property or any adjoining property used for an industrial, commercial or manufacturing use?

	<u>Land Use</u>	<u>Photograph?</u>
Property:	<u>CorrelTena</u>	<input checked="" type="checkbox"/>
Adjoining Properties North:	<u>Missouri River</u>	
Adjoining Properties South:	<u>Remn's Residential</u>	<input checked="" type="checkbox"/>
Adjoining Properties East:	<u>State CorrelTena</u>	<input checked="" type="checkbox"/>
Adjoining Properties West:	<u>State CorrelTena/Riverside Park</u>	<input checked="" type="checkbox"/>

2. Has the Property or any adjoining property been used for an industrial, commercial or manufacturing use in the past?

	<u>Owner</u>	<u>Use</u>	<u>Dates</u>
Previous Use of Property	Womens Correctional	~ 1960's	
Previous Use of Properties to North	River	Water	
Previous Use of Properties to South	Residential/Farm	Agri.	
Previous Use of Properties to East	STATE PRISON	1824	
Previous Use of Properties to West	STATE Correctional	Vacant	

3. Is there evidence that there are currently, or have been previously, any pesticides, automotive or industrial batteries, paints, or other chemicals stored on or used at the Property or at the facility other than undamaged containers of consumer products of under five gallons in total volume?

Finding: In The 1960's, CN was stored in Basement.

3/4 gallon Disinfectant Produced @ Prison used for cleaning products - Small Quantities

Source: Interview

4. Is there evidence that there are currently, or have been previously, any industrial drums (typically 55-gallon) or sacks of chemicals located on the Property or at the facility?

Finding: No evidence

Source:

5. Is there evidence that fill dirt has been brought onto the site which originated from a contaminated site or of an unknown origin?

Finding: *No evidence - Rumored landfill to East of Building*

Source: *Interview*

6. Is there evidence that there are currently, or have been previously, any pits, ponds or lagoons located on the Property in connection with waste treatment or waste disposal?

Finding: *No Evidence*

Source:

7. Is there evidence that there is currently, or has been previously, any stained soil or stressed vegetation on the Property?

Finding: *No Evidence*

Source:

8. Is there evidence that there are currently, or have been previously, any registered or unregistered storage tanks (above or underground) located on the Property?

Finding: *None*

Source:

9. Is there evidence that there are currently, or have been previously, any vent pipes, fill pipes or access ways indicating a fill pipe protruding from the ground on the Property or adjacent to any structure located on the Property?

Finding: *None*

Source:

10. Is there evidence that there are currently, or have been previously, any flooring, drains, or walls located within the facility that are stained by substances other than water or are emitting foul odors?

Finding: *No Stains around drains - water from rain leak
into Basement NE corner*

Source:

11. Is there evidence that the Property is served by a private well or non-public water system, and if so, has the well or system been designated as contaminated by any governmental environmental/health agency?

Finding: *Water Tower - Groundwater - non Potable
IT has been designated " "*

Source:

12. Does the owner of the Property or operator of the facility have any knowledge of environmental liens or governmental notification relating to past or current violations of environmental laws with respect to the Property or any facility located on the Property?

Finding: *None*

Source:

13. Has the owner of the Property or operator of any facility at the Property been informed of any past or current existence of hazardous substances or environmental violations with respect to the Property or any facility located on the Property?

Finding: *None*

Source:

14. Does the Property owner or facility operator have any knowledge of any environmental assessment of the Property or facility that indicated the presence of hazardous substances on the site or recommended further assessment of the Property?

Finding: *None*

Source:

15. Does the owner of the Property or any operator of a facility at the Property know of any past, threatened, or pending lawsuits or administrative proceedings concerning a release or threatened release of any hazardous substance involving the Property by any owner or tenant of the Property?

Finding: *None*

Source:

16. Is there evidence that the Property discharges wastewater, other than storm water, directly to a ditch, stream, septic system, or sump on or adjacent to the Property?

Finding: *No evidence Observed*

Source:

17. Is there evidence that any construction debris, substances identified as hazardous, unidentified waste materials, tires, automotive or industrial batteries or any other waste materials, trash, debris or refuse been dumped above grade, buried and/or burned on the site?

Finding: *Removal Landfill East of Building / None above grade*

Source:

18. Is there evidence of any electrical or hydraulic equipment (such as compressors, transformers and large capacitors), now on the site or that have been on the site in the past, known to contain PCBs? If so, describe the equipment, identify its location, approximate dates of use of the equipment, and whether it has been registered as PCB containing material, and actual knowledge of leaks.

Finding: *None*

Source:

19. Is there evidence that equipment containing PCBs has been removed? If so, obtain the approximate dates of removal, location removed from, and name of the removal contractor.

Finding: *None*

Source:

20. Is there evidence that there have been any fires on the Property involving PCBs? If so, describe and provide the dates(s) of the occurrence and remediation methods.

Finding: *None*

Source:

This Site Survey Summary Was Completed By:

Name: Rick Whitney Title: Staff Geologist
Firm: TSI Engineering Date: 6/4/01
Address: _____ Phone Number: _____

Preparer represents that to the best of the Preparer's knowledge the above statements and facts are true and correct and that to the best of the Preparer's knowledge no material facts have been suppressed or misstated.

Signed:  Date: 6/4/01



Appendix C
MSDS Sheets



MATERIAL SAFETY DATA SHEET

AND SAFE HANDLING AND DISPOSAL INFORMATION

06/17/92
PAGE 1 OF 5

MANUFACTURING COMPANY
MAINTENANCE PRODUCTS

ISSUE DATE: 05/12/92 ZEP DIVISION
SUPERSEDES: 05/01/92 PRODUCT NUMBER: 1901

Floor Finish

SECTION I - E M E R G E N C Y C O N T A C T S

ZEP MANUFACTURING COMPANY TELEPHONE (404)352-6800 BETWEEN 9:00 AM-5:00 PM (EST)
P O BOX 2015 NON-OFFICE HOURS, WEEKENDS, AND HOLIDAYS: AREA CODE 770
ATLANTA GEORGIA 30301 407-4200, 292-1480, 455-8160, 532-6836, 432-2873, 424-3789

TRANSPORTATION EMERGENCY CHEMTREC: TOLL FREE 1-800-424-9300 ALL CALLS RECORDED
(770)921-0723 or DISTRICT OF COLUMBIA (202)492-7616 ALL CALLS RECORDED

SECTION II - H A Z A R D O U S I N G R E D I E N T S

DESIGNATIONS

TLV EFFECTS
(PPM) (SEE REVERSE) PROD

*** DIETHYL PHTHALATE xx phthalic acid, dibutyl ester: 0.44 IRR

5-15

1,2-benzenedicarboxylic acid, dibutyl ester: DBP:

N/D EIR CBL

CAS# 84-74-2; RTECS# T10875000; OSHA PEL: 5 mg/m3

*** DIETHYLENE GLYCOL MONOMETHYL ETHER ** 2-(2-methoxyxy)-ethanol; methyl carbitol; CAS# 111-77-3; RTECS#

KL6125000

IDENTITIES CHEMICALS LISTED UNDER SARA-SECTION 310 FOR RELEASE REPORTING
SECTION III - H E A L T H H A Z A R D D A T A

SPECIAL NOTE: MSDS data pertains to the product as dispensed from the container.
Adverse health effects would not be expected under recommended conditions
of use (diluted) so long as prescribed safety precautions are practiced.

ACUTE EFFECTS OF OVEREXPOSURE
THIS PRODUCT MAY IRRITATE EYES AND SKIN UPON CONTACT. INFLAMMATION OF
THE EYE IS CHARACTERIZED BY REDNESS, WATERING, AND ITCHING. SKIN INFLAMMATION IS
CHARACTERIZED BY ITCHING, SCALING, REDDENING, OR OCCASIONALLY, BLISTERING

MATERIAL SAFETY DATA SHEET

1252
AND SAFE HANDLING AND DISPOSAL INFORMATION



CLEAN ACROSS AMERICA AND
THROUGHOUT THE WORLD™

ZEP MANUFACTURING COMPANY
P.O. BOX 2015
ATLANTA, GEORGIA 30301

06/18/96

ISSUE DATE: 10/26/95
SUPERSEDES: 01/11/91
ZEP VELVET

PRODUCT NO.: 0958

Hand Cleaner - Lotonized

SECTION I - EMERGENCY CONTACTS

TELEPHONE:

(404) 352-1680

BETWEEN 8:00 AM - 5:00 PM (EST)

MEDICAL EMERGENCY:

(770) 439-4200

NON-OFFICE HOURS, WEEKENDS
AND HOLIDAYS, PLEASE CALL YOUR
LOCAL POISON CONTROL

(770) 432-2873

(770) 424-4789

(770) 392-1480

(770) 455-8160

(770) 552-8836

TRANSPORTATION EMERGENCY:

(770) 922-0923

CHEMTREC:
1-800-424-9300

DISTRICT OF COLUMBIA:
(202) 483-7616

TOLL-FREE - ALL CALLS RECORDED

ALL CALLS RECORDED

SECTION II - HAZARDOUS INGREDIENTS

DESIGNATIONS

* SODIUM LAURYL SULFATE * (sulfuric acid monododecyl ester, sodium salt); sodium monododecyl sulfate, CAS # 151-21-3; RTECS # WT1050000; OSHA PEL/MD

TLV (P/PM) EFFECTS (SEE REVERSE) EIR % IN PROD. 30-40

SECTION III - HEALTH HAZARD DATA

Special Note: MSDS data pertains to the product as dispensed from the container. Adverse health effects would not be expected under recommended conditions of use (diluted) so long as prescribed safety precautions are practiced.

Acute Effects of Overexposure:

This product can be an eye irritant. Inflammation of eye tissue is characterized by redness, watering, and/or itching.

Chronic Effects of Overexposure:

Prolonged skin contact (4-8 hrs.), without rinsing, may result in irritation characterized by itching or reddening of the skin. No medical conditions are known to be aggravated by exposure to ingredients in this product. None of the ingredients are listed as carcinogens by IARC, NTP, or OSHA.

Est'd PEL/TLV: Not established

Primary Routes of Entry: N/A

HMS Codes: HEALTH 0:FLAM. 0:REACT. 0:PERS. PROTECT. N/A;CHRONIC HAZ. NO

RST AID PROCEDURES:

Skin: This product is formulated for use on the skin, but it should be rinsed off with water.

Eyes: Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting upper and lower lids. Get medical attention at once.

Inhale: This route of exposure is not likely due to product nature.

Ingest: If this product is swallowed, do not induce vomiting. If victim is conscious give plenty of water to drink. Get medical attention at once.

SECTION IV - SPECIAL PROTECTION INFORMATION

Protective Clothing: No special measures are required.

Eye Protection: No special measures are required.

Respiratory Protection: No special measures are required.

Ventilation: No special measures are required.

SECTION V - PHYSICAL DATA

Boiling Point (°F): 220

Specific Gravity: 1.10

Vapor Pressure (mmHg): N/D

Percent Volatile by Volume (%): 84

Vapor Density (air = 1): N/D

Evaporation Rate (WATER = 1): 1

Solubility in Water: COMPLETE

pH (concentrate): 7.7

pH (use dilution of APPROX. 5%): 7.2

Appearance and Odor: WHITE PEARLIZED LIQUID WITH PLEASANT FRAGRANCE

SECTION VI - FIRE AND EXPLOSION DATA

Flash Point (°F) (method used): None (N/A)

LEL N/A UEL N/A

Extinguishing Media: Carbon dioxide, dry chemical, water.

Special Fire Fighting: None

Unusual Fire Hazards: None



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ZEP MANUFACTURING COMPANY
P.O. BOX 2015
ATLANTA, GEORGIA 30301

MATERIAL SAFETY DATA SHEET

AND SAFE HANDLING AND DISPOSAL INFORMATION

12/16/97
ISSUE DATE: 05/12/97
SUPERSEDES: 07/26/89
ZEP GREASE MONKEY
PRODUCT NO. 0060

Aerosol Lubricating Grease

SECTION I - EMERGENCY CONTACTS

TELEPHONE: (404) 352-1680
BETWEEN 8:00 AM - 5:00 PM (EST)
MEDICAL EMERGENCY: (770) 439-4200
NON-OFFICE HOURS, WEEKENDS
AND HOLIDAYS, PLEASE CALL YOUR
LOCAL POISON CONTROL (770) 432-2873
(770) 424-4789
(770) 392-1480
(770) 455-8160
TRANSPORTATION EMERGENCY: (770) 552-8836
(770) 922-0923
CHEMTREC: 1-800-424-9300
TOLL-FREE - ALL CALLS RECORDED
DISTRICT OF COLUMBIA: ALL CALLS RECORDED
(202) 483-7616

MISSOURI SURPLUS (317)
PROPERTY-JANITORIAL
117 N RIVERSIDE DR
JEFFERSON CITY, MO 65101

SECTION II - HAZARDOUS INGREDIENTS

DESIGNATIONS
@ METHYLENE CHLORIDE = dichloromethane/methylene dichloride; CAS # 75-09-2; RTECS # PA8050000; OSHA PEL - 500
25 ppm; OSHA STEL (15 MIN. TWA) - 125 ppm
* PROPRIETARY LUBRICANT BLEND = CAS # 8052-41-3; RTECS # WJ89225000

TLV (PPM)	EFFECTS (SEE REVERSE)	% IN PROD.
50	CNS IRR CAR	50-60
500	IRR	20-30

@ Identifies chemicals listed under SARA-Section 313 for release reporting

SECTION III - HEALTH HAZARD DATA

Special Note: MSDS data pertains to the product as dispensed from the container. Adverse health effects would not be expected under recommended conditions of use (diluted) so long as prescribed safety precautions are practiced.

Acute Effects of Overexposure:

Inhalation of vapor can produce central nervous system depression, characterized by dizziness, headache, nausea, cardiac and/or respiratory depression, and stu-por. In some cases, unconsciousness or death could result in poorly ventilated or confined spaces. Exposure to high concentrations of vapor can be irritating to mucous membranes, such as eyes and upper respiratory tract. Severe eye exposure to liquid can cause reversible eye damage. Skin contact may cause a burning sensation and dermatitis. Ingredients in this product may aggravate existing skin, eye, or respiratory disorders. One of the ingredients in this product may cause tumors in laboratory animals. The relevance of these studies to humans has not been established.

Chronic Effects of Overexposure:

Repeated or prolonged contact by inhalation or skin absorption may produce liver or kidney damage or damage to the central nervous system, characterized by tingling or numbness in the extremities, blurred vision or confusion. Skin, which is debilitated by repeated exposure to solvents, is more susceptible to irritation, infection, and dermatitis. Ingredients in this product may aggravate existing skin, eye, or respiratory disorders. One of the ingredients in this product may cause tumors in laboratory animals. The relevance of these studies to humans has not been established.

Primary Routes of Entry: Inh., Skin.

HMS Codes: HEALTH 2;FLAM. 3;REACT. 1;PERS. PROTECT. B ;CHRONIC HAZ. YES

FIRST AID PROCEDURES:

Skin: Wash contaminated skin thoroughly with soap or a mild detergent. Apply a skin cream with lanolin. Get medical attention if irritation persists.
Eyes: Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting upper and lower lids. Get medical attention immediately.
Inhale: Move exposed person to fresh air at once. If breathing has stopped, perform artificial respiration. Get medical attention immediately.
Ingest: If swallowed, do not induce vomiting. If vomiting occurs, keep head below hip level. Get emergency medical attention immediately.

SECTION IV - SPECIAL PROTECTION INFORMATION

Wear viton gloves or use gloves with demonstrated resistance to the ingredients in this product.

Eye Protection: Use light-fitting safety glasses. Contact lenses should not be worn when working with this material.

Respiratory Protection: If ventilation is inadequate, wear a properly fitting MSHA or OSHA-approved respirator.

Ventilation: Ventilation should be equivalent to outdoors. Use exhaust fans and open windows in enclosed spaces.

SECTION V - PHYSICAL DATA

Boiling Point (°F): 104
Specific Gravity: 0.820
Vapor Pressure (mmHg): APPROX. 340
Solubility in Water: 85
Vapor Density (air = 1): N/D
Evaporation Rate (EPA = 1): 2.5
pH (concentrate): N/A
pH (use dilution of): N/A

Appearance and Odor: CLEAR, RED SLIGHTLY VISCOUS FLUID WITH A HYDROCARBON ODOR

SECTION VI - FIRE AND EXPLOSION DATA

Flash Point (°F) (method used): Extremely Flammable (CSMA)

Flammable Limits: LEL 13.0 UEL 22.0

Extinguishing Media: Carbon dioxide, dry chemical and foam.

Special Fire Fighting: Wear self-contained positive pres. breathing apparatus.

Unusual Fire Hazards: Concentrated vapor may ignite if exposed to spark.



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ZEP MANUFACTURING COMPANY
P. O. BOX 2015
ATLANTA, GEORGIA 30301

MISSOURI SURPLUS
PROPERTY - JANITORIAL
117 NO RIVERSIDE DR.
JEFFERSON CITY, MO 65101

MATERIAL SAFETY DATA SHEET

AND SAFE HANDLING AND DISPOSAL INFORMATION

08/26/92
ISSUE DATE: 08/07/91
SUPERSEDES: 03/26/90
ZEP M.L. LUBRICANT
PRODUCT NO.: 0047

Aerosol Lubricant

SECTION I - EMERGENCY CONTACTS

TELEPHONE: (404) 352-1680 BETWEEN 8:00 AM - 5:00 PM (EST)
MEDICAL EMERGENCY: (404) 435-2973 NON-OFFICE HOURS, WEEKENDS
(404) 351-2952 AND HOLIDAYS, PLEASE CALL YOUR
(404) 432-2873 LOCAL POISON CONTROL
TRANSPORTATION EMERGENCY: (404) 922-0923
CHEMTRAC: 1-800-424-9300 TOLL-FREE - ALL CALLS RECORDED
DISTRICT OF COLUMBIA: (202) 483-7616 ALL CALLS RECORDED

SECTION II - HAZARDOUS INGREDIENTS

DESIGNATIONS	TLV (PPM)	EFFECTS (SEE REVERSE)	% IN PROD.
ASPHALT™ CAS # 8062-42-4; RTECS # C19900000; OSHA PEL - 0.2 mg/m ³ ; ACGIH TLV - 5 mg/m ³	N/D	IRR	40-50
BLEND OF HYDROTREATED AND DEWAXED RESIDUAL OILS ~ CAS # 64742-56-0/64742-62-7; RTECS # NONE;	N/D	IRR	5-15
OSHA PEL-N/D			
1,1,1-TRICHLOROETHANE ~ methyl chloroform chloroethene; CAS # 71-55-6; RTECS # KJ2975000; OSHA PEL-350	350	IRR CNS	10-20
PPM; ACGIH/OSHA STEL-450 PPM			
PARAFFIN OIL ~ blend of heavy and light naphthenic petroleum distillate; CAS # 64742-52-5; and CAS # 64742-53-6;	N/D	IRR	10-20
RTECS # NONE; OSHA PEL-N/D; ACGIH OIL MIST LIMIT = 5mg/m ³			
BLEND OF ISOBUTANE; CAS # 75-28-5; RTECS # TZ4300001 & [PROPANE; CAS # 74-98-6; RTECS # TX2775000]	800	COR FBL	10-20
& [n-BUTANE; CAS # 106-97-8; RTECS # E44200000] OSHA PEL-1000 ppm			

@ Identifies chemicals listed under SARA-Section 313 for release reporting

SECTION III - HEALTH HAZARD DATA

Special Note: MSDS data pertains to the product as dispensed from the container. Adverse health effects would not be expected under recommended conditions of use (diluted) so long as prescribed safety precautions are practiced.

Acute Effects of Overexposure:

Inhalation of vapor can produce central nervous system depression, characterized by dizziness, headache, nausea, cardiac and/or respiratory depression, stupor, unconsciousness and death in extreme cases. Exposure to high concentrations of vapor by direct contact or inhalation can be irritating to mucous membranes, such as eyes and upper respiratory tract. Severe eye exposure to liquid can cause reversible eye damage. Skin contact may cause a burning sensation and reddening of the skin. Introduction of solvent to the lungs, as in aspiration of vomitus fluids, may cause chemical pneumonia. Exposure to this product may aggravate existing respiratory and cardiac conditions. Inhalation of aerosol mist may produce chemical pneumonia.

Chronic Effects of Overexposure:

Repeated or prolonged contact by inhalation or skin absorption may produce liver or kidney damage or damage to the central nervous system, characterized by tingling or numbness in the extremities, blurred vision or confusion. Skin, which is dehydrated by repeated exposure to solvents, is more susceptible to irritation, infection, and dermatitis. Exposure to some ingredients in this product can aggravate existing liver disease or heart rhythm disorders. None of the ingredients are listed as carcinogens by IARC, NTP, or OSHA.

Primary Routes of Entry: Inh., Skin.

Est'd PEL/TLV: APPROX. 200 PPM

HMS Codes: HEALTH 2:FLAM 1; REACT. 1; PERS. PROTECT. X; CHRONIC HAZ YES

FIRST AID PROCEDURES:

Skin: Wash contaminated skin thoroughly with soap or a mild detergent. Apply a skin cream with lanolin. Get medical attention if irritation persists.
Eyes: Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting upper and lower lids. Get medical attention at once.
Inhale: Move exposed person to fresh air at once. If breathing has stopped, perform artificial respiration. Get medical attention immediately.
Ingest: If swallowed, do not induce vomiting. If vomiting occurs, keep head below hip level. Get emergency medical attention immediately.

SECTION IV - SPECIAL PROTECTION INFORMATION

Protective Clothing:

Wear nylon gloves or use gloves with demonstrated resistance to the ingredients in this product.

Eye Protection:

Use tight-fitting safety glasses. Contact lenses should not be worn when working with this material.

Respiratory Protection:

If ventilation is inadequate, wear a properly fitting MSHA or OSHA-approved respirator.

Ventilation:

Ventilation should be equal to outdoors. Use exhaust fans and/or exhaust hood in enclosed spaces.

SECTION V - PHYSICAL DATA

Boiling Point (°F): 105-285F Specific Gravity: 1.014 Vapor Pressure (mmHg): APPROX. 315
Percent Volatile by Volume (%): ~33 Vapor Density (air=1): N/D Evaporation Rate (CCL4 = 1): 2.5
Solubility in Water: NEGLIGIBLE PH (concentrate): N/A pH (use dilution of N/A): N/A
Appearance and Odor: A VISCOUS, BLACK OIL WITH A STRONG, SWEET CHLORINATED ODOR

SECTION VI - FIRE AND EXPLOSION DATA

Flash Point (°F) (method used): FLAMMABLE (OSMA)
Flammable Limits: LEL/N/D UEL/N/D
Extinguishing Media: Carbon dioxide, dry chemical, water fog, foam.
Special Fire Fighting: Wear self-contained positive pres. Breathing apparatus.
Unusual Fire Hazards: Direct water onto intact containers to prevent bursting.

KA-POW
DN 4530

MATERIAL SAFETY DATA SHEET
ESSENTIALLY SIMILAR TO OSHA FORM 174

MANUFACTURED FOR:
Drummond American Corporation
600 Corporate Woods Pkwy.
Vernon Hills, IL 60061

IN CASE OF EMERGENCY CALL:
ROCKY MOUNTAIN POISON & DRUG CENTER
COLLECT AT: (303) 623-5716

DATE OF PREPARATION:
02/01/98

INFORMATION TELEPHONE NUMBER
(847) 913-9313

SECTION I - IDENTITY

PRODUCT NUMBER DN 4530
PRODUCT NAME KA-POW
PRODUCT CLASS CLEANERS

SECTION II - INGREDIENTS

INGREDIENT	CAS NUMBER	%	ACGIH TLV PPM	MG/ M ³	PEL PPM	STEL PPM
D-LIMONENE	5989-27-5		ND	ND	ND	ND
EDTA	64-02-8		ND	ND	ND	ND
TETRAPOTASSIUM PYROPHOSPHATE	7320-34-5		ND	ND	ND	ND
SODIUM METASILICATE	6834-92-0		ND	ND	ND	ND

S.A.R.A. TITLE III, SECTION 313:
THIS PRODUCT CONTAINS NO LISTED
CHEMICALS SUBJECT TO REPORTING.

SECTION III - PHYSICAL/CHEMICAL CHARACTERISTICS

BOILING POINT (degrees F): N/A
VAPOR DENSITY: N/A
EVAPORATION RATE: N/A
PERCENT VOLATILE (By Weight): N/A WEIGHT PER GALLON (LBS): N/A

OPTIONAL INFORMATION:
Appearance/Odor: Orange free-flowing granular powder / Citrus scent
Solubility in water: Complete
Specific Gravity: 60 lbs/cu ft

KA-POW
DN 4530

MATERIAL SAFETY DATA SHEET
ESSENTIALLY SIMILAR TO OSHA FORM 174

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

FLAMMABILITY CLASSIFICATION: U.N. CLASSIFICATION:
OSHA CLASS N/A PER DOT N/A
DOT CLASS N/A PER IMCO N/A

FLASH POINT: N/A

LEL: N/A

UEL: N/A

METHOD: N/A

EXTINGUISHING MEDIA: N/A

UNUSUAL FIRE AND EXPLOSION HAZARDS:
None known. Addition of water generates heat.

SPECIAL FIREFIGHTING PROCEDURE:
Do not use water on material itself. Use media suitable for surrounding fire. If large quantities of combustibles are involved, use water in flooding quantity as spray or fog. Use adequate personnel protection. Avoid breathing dust and fumes from burning material.

SECTION V - REACTIVITY DATA

STABILITY: STABLE

HAZARDOUS POLYMERIZATION: WILL NOT OCCUR

HAZARD DECOMPOSITION PRODUCTS:
Carbon dioxide upon acid contact.

CONDITIONS TO AVOID:
Contact with acids, acidic solutions, and soft metals.

INCOMPATIBILITY (MATERIALS TO AVOID):
Acids, soft metals.

D.O.T. EMERGENCY RESPONSE INFORMATION:
*** NOT APPLICABLE ***

CORE
DA 6631

MATERIAL SAFETY DATA SHEET
ESSENTIALLY SIMILAR TO OSHA FORM 174

MANUFACTURED FOR:
Drummond American Corporation
600 Corporate Woods Pkwy.
Vernon Hills, IL 60061

IN CASE OF EMERGENCY CALL:
ROCKY MOUNTAIN POISON & DRUG CENTER
COLLECT AT: (303) 623-5716

DATE OF PREPARATION:
02/01/98

INFORMATION TELEPHONE NUMBER
(847) 913-9313

SECTION I - IDENTITY

PRODUCT NUMBER DA 6631
PRODUCT NAME CORE
PRODUCT CLASS LUBRICANTS

SECTION II - INGREDIENTS

INGREDIENT	CAS NUMBER	%	ACGIH			
			TLV PPM	MG/ M ³	PEL PPM	STEL PPM
HEXANE *	110-54-3	1-10	50	N/D	50	N/D
PROPANE/ISOBUTANE/N-BUTANE	74-98-6	10-20	1000	N/D	1000	N/D
NAPHTHENIC OIL	64742-52-5	40-50	5	N/D	N/D	N/D
RESIDUAL OIL	64742-62-7	40-50	5	N/D	N/D	N/D

*THIS CHEMICAL IS SUBJECT TO
S.A.R.A. TITLE III, SECTION 313
REPORTING.

SECTION III - PHYSICAL/CHEMICAL CHARACTERISTICS

BOILING POINT (degrees F): 159
VAPOR DENSITY: HEAVIER THAN AIR
EVAPORATION RATE: SLOWER THAN ETHER
PERCENT VOLATILE (By Weight): N/A WEIGHT PER GALLON (LBS): N/A

OPTIONAL INFORMATION:

Appearance and Odor: Black oil, solvent odor.
Specific Gravity: 0.8
Solubility in Water: Nil
Evaporation Rate (Butyl Acetate=1): >1

CORE
DA 6631

MATERIAL SAFETY DATA SHEET
ESSENTIALLY SIMILAR TO OSHA FORM 174

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

FLAMMABILITY CLASSIFICATION:

OSHA CLASS N/A
DOT CLASS N/A

U.N. CLASSIFICATION:

PER DOT N/A
PER IMCO N/A

FLASH POINT: < 0°F

LEL: 1.8

UEL: 9.5

METHOD: TAG OPEN CUP

AEROSOL PRODUCT: TREAT AS CYLINDER OF COMPRESSED GAS

EXTINGUISHING MEDIA: CO2 DRY CHEMICAL WATER FOG

UNUSUAL FIRE AND EXPLOSION HAZARDS:
Heated cans may burst.

SPECIAL FIREFIGHTING PROCEDURE:
Aerosol cans may rupture when heated.

SECTION V - REACTIVITY DATA

STABILITY: STABLE

HAZARDOUS POLYMERIZATION: WILL NOT OCCUR

HAZARD DECOMPOSITION PRODUCTS:
In fire will decompose to carbon dioxide and water.

CONDITIONS TO AVOID:
Avoid contact with any source of ignition.

INCOMPATIBILITY (MATERIALS TO AVOID):
Strong oxidizing agents, strong acids or bases.

D.O.T. EMERGENCY RESPONSE INFORMATION:
NOT APPLICABLE

SECTION VI - HEALTH HAZARD DATA

EFFECTS OF OVEREXPOSURE:

INHALATION: Shortness of breath, dizziness, and lightheadedness.
EYE CONTACT: May cause irritation.
SKIN CONTACT: May cause slight irritation, can lead to dermatitis.
INGESTION: May cause chemical pneumonia if aspirated into lungs.

PRIMARY ROUTE(S) OF ENTRY: DERMAL INHALATION INGESTION EYES

MEDICAL CONDITIONS PRONE TO OVEREXPOSURE:
None known.

TARGET ORGANS AFFECTED:
Kidney, Eye, Liver, and Nervous System (in laboratory animals with chronic overexposure).

CARCINOGENICITY:
None of the chemicals in this product are list by NTP, IARC, or OSHA as a carcinogen.

EMERGENCY AND FIRST AID PROCEDURES:
EYES: Flush with large amounts of water and seek medical attention.
INGESTION: Do not induce vomiting. Give water and seek medical attention.
SKIN: Remove contaminated clothing and wash with soap and water.
INHALATION: Move to fresh air.
*** If irritation persists, seek medical attention. ***

SECTION VII - SPILL OR LEAK PROCEDURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED:
Ventilate area. Remove all sources of ignition. Clean up with inert material and place in a container for disposal.

WASTE DISPOSAL METHOD:
Dispose of in accordance with local, state, and federal regulations.

SECTION VIII - SAFE HANDLING AND USE INFORMATION

RESPIRATORY PROTECTION:

None necessary under normal conditions. If the TLV is exceeded, a NIOSH/OSHA approved respirator is recommended.

VENTILATION:

Use ventilation as necessary to control vapor concentrations.

PROTECTIVE GLOVES:

Chemical resistant gloves (polyvinyl alcohol, polyethelene) are recommended.

EYE PROTECTION:

Safety glasses or goggles are recommended.

OTHER PROTECTIVE EQUIPMENT:

None known.

HYGIENIC PRACTICES:

WASH HANDS BEFORE EATING OR USING THE WASHROOM. SMOKE ----
IN SMOKING AREAS ONLY.

SECTION IX - SPECIAL PRECAUTIONS

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING:

Do not store in direct sunlight, near open flames, or at temperatures exceeding 120°F. Do not smoke while using this product.

OTHER PRECAUTIONS:

Keep out of reach of children. Read entire label prior to use.

SECTION X - OTHER INFORMATION

-----NFPA INDEX-----	PREPARED BY:	Heather Buck
HEALTH 1		Drummond American Corporation
FLAMMABILITY 3		600 Corporate Woods Parkway
REACTIVITY 0		Vernon Hills, Illinois 60061
TLV Threshold Limit Value	ND No Data	..NFPA HAZARD INDEX..
PEL Permissible Exposure Level	LEL Lower Explosive Level	SEVERE HAZARD 4
NFPA National Fire Protection Association	NE Not Established	SERIOUS HAZARD 3
CAS Chemical Abstract Service	PPM Parts Per Million	MODERATE HAZARD 2
NTP National Toxicology Program	D.O.T. Department of Transportation	SLIGHT HAZARD 1
OSHA Occupational Safety and Health Admin.	N/A Not Applicable	MINIMAL HAZARD 0
IARC International Agency for Research on Cancer	M ³ Approximate milligrams of substance per cubic meter of air	
STEL Short Term Exposure Limit, duration is for 15 minutes		

STOP-GAP GRAY
DN 4520

MATERIAL SAFETY DATA SHEET
ESSENTIALLY SIMILAR TO OSHA FORM 174

MANUFACTURED FOR:
Drummond American Corporation
600 Corporate Woods Pkwy.
Vernon Hills, IL 60061

IN CASE OF EMERGENCY CALL:
ROCKY MOUNTAIN POISON & DRUG CENTER
COLLECT AT: (303) 623-5716

DATE OF PREPARATION:
02/01/98

INFORMATION TELEPHONE NUMBER
(847) 913-9313

SECTION I - IDENTITY

PRODUCT NUMBER DN 4520
PRODUCT NAME STOP-GAP GRAY
PRODUCT CLASS PATCHING

SECTION II - INGREDIENTS

INGREDIENT	CAS NUMBER	%	ACGIH TLV PPM	MG/ M ³	PEL PPM	STEL PPM
CALCIUM CARBONATE	1317-65-3		ND	ND	ND	ND
POLYURETHANE RESIN	N/A		ND	ND	ND	ND
DIISODECYL PHTHALATE	26761-40-0		ND	ND	ND	ND
HYDROGENATED CASTOR WAX	N/A		ND	ND	ND	ND
BUTYL ACETATE*	123-86-4	1-3	150	ND	150	200

* THIS CHEMICAL IS SUBJECT TO
S.A.R.A. TITLE III, SECTION 313
REPORTING.

SECTION III - PHYSICAL/CHEMICAL CHARACTERISTICS

BOILING POINT (degrees F): N/A
VAPOR DENSITY: Heavier than air
EVAPORATION RATE: = n-Butyl Acetate
PERCENT VOLATILE (By Weight): 2.100 WEIGHT PER GALLON (LBS): 13.50

OPTIONAL INFORMATION:

Appearance/Odor: gray polyurethane paste-like sealant; mild odor.
Volatiles volume %: 1.3
Liquid Density: Heavier than Water
V.O.C: 0.3 lb/gal

STOP-GAP GRAY
DN 4520

MATERIAL SAFETY DATA SHEET
ESSENTIALLY SIMILAR TO OSHA FORM 174

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

FLAMMABILITY CLASSIFICATION: OSHA CLASS N/A
DOT CLASS N/A
U.N. CLASSIFICATION: PER DOT N/A
PER IMCO N/A

FLASH POINT: 72°F

LEL: 1.4

UEL: 7.5

METHOD: TAG CLOSED CUP

EXTINGUISHING MEDIA: FOAM CO2 DRY CHEMICAL SAND

UNUSUAL FIRE AND EXPLOSION HAZARDS:
None Known.

SPECIAL FIREFIGHTING PROCEDURE:
Self contained breathing apparatus and protective clothing should be worn in fighting fires involving chemicals.

SECTION V - REACTIVITY DATA

STABILITY: STABLE

HAZARDOUS POLYMERIZATION: WILL NOT OCCUR

HAZARD DECOMPOSITION PRODUCTS:
Thermal decomposition may produce carbon monoxide, carbon dioxide, sulfur dioxide, and nitrogen dioxide.

CONDITIONS TO AVOID:
Extreme heat, sparks, flames.

INCOMPATIBILITY (MATERIALS TO AVOID):
Strong oxidizing agents.

D.O.T. EMERGENCY RESPONSE INFORMATION:
NOT APPLICABLE



MATERIAL SAFETY DATA SHEET

AND SAFE HANDLING AND DISPOSAL INFORMATION

01/21/98
PAGE 1 OF 3

MANUFACTURING COMPANY
IN MAINTENANCE PRODUCTS

ISSUE DATE: 04/23/90 ZEP CINCINNATI CONSUMER
SUPERSEDES: 06/15/88 PRODUCT NUMBER: 1783

Deadweight - Liquid

SECTION I - EMERGENCY CONTACTS

ZEP MANUFACTURING COMPANY TELEPHONE: (404) 852-1490 BETWEEN 8:00 AM-5:00 PM (EST)
P.O. BOX 2015 NON-OFFICE HOURS, WEEKENDS, AND HOLIDAYS: AREA CODE 770
ATLANTA, GEORGIA 30301 432-4200, 392-1480, 485-8160, 552-8886, 432-2873, 424-4789
LOCAL POISON CONTROL CENTER
TRANSPORTATION EMERGENCY: CHEMTEC: TOLL FREE 1-800-424-9300 ALL CALLS RECORDED
(770) 922-0923 OR DISTRICT OF COLUMBIA (202) 483-7616 ALL CALLS RECORDED

SECTION II - HAZARDOUS INGREDIENTS

DESIGNATIONS	TLV (PPM)	EFFECTS (SEE REVERSE)	% IN PROD.
--------------	--------------	--------------------------	---------------

** ISOPROPYL ALCOHOL; ** ipa; dimethylcarbinol; 2-pro- 400	IRR FBL	5-10	
panel; CASE 67-63-0; RIEDEL N18050000; OSHA PEL-400			
PPM; OSHA/ACGIH STEL-500 PPM			

SECTION III - HEALTH HAZARD DATA

SPECIAL NOTE: MSDS data pertains to the product as dispensed from the container. Adverse health effects would not be expected under recommended conditions of use (diluted) so long as prescribed safety precautions are practiced.

ACUTE EFFECTS OF OVEREXPOSURE:

Eye irritant. Eye contact may produce stinging, burning, inflammation, and in extreme cases may produce corneal damage. Exposure may be irritating to skin, and upper respiratory tract. Accumulation of harmful quantities of vapor is predicted by severe irritation which makes overexposure unlikely. Overexposure can result in mild narcotic effects, including flushing, headache, dizziness, and nausea.

Ingredients in this product may aggravate existing skin, eye, or respiratory disorders.



ES125 -01
 Effective: 05/13/86

Ethylene Glycol

Page: 1
 Issued: 05/13/86

SECTION I - PRODUCT IDENTIFICATION

Product Name: Ethylene Glycol
 Formula: HOCH₂CH₂OH
 Formula Wt: 62.07
 CAS No.: 00107-21-1
 NIOSH/RTCS No.: KW2975000
 Common Synonyms: 1,2-Ethanediol; EG; Glycol; 1,2-Dihydroxyethane
 Product Codes: 9140, L715, 9300, 5387

PRECAUTIONARY LABELLING

BAKER SAF-T-DATA™ System

HEALTH	FLAMMABILITY	REACTIVITY	CONTACT
1	1	1	1
SLIGHT	SLIGHT	SLIGHT	SLIGHT

Laboratory Protective Equipment



Precautionary Label Statements

WARNING!
 CAUSES IRRITATION
 HARMFUL OR FATAL IF SWALLOWED
 Avoid contact with eyes, skin, clothing.
 Keep in tightly closed container. Wash thoroughly after handling.

SECTION II - HAZARDOUS COMPONENTS

Component	%	CAS No.
-----------	---	---------

Ethylene Glycol 90-100 00107-21-1

SECTION III - PHYSICAL DATA

Boiling Point: 197°C (387°F) Vapor Pressure(mmHg): 0.06
 Melting Point: -13°C (9°F) Vapor Density(air=1): 2.1

Continued on Page: 2



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MATERIAL SAFETY DATA SHEET AND SAFE HANDLING AND DISPOSAL INFORMATION

1-877-1-BUY-ZEP (1-877-428-9937)

ZEP MANUFACTURING COMPANY
P.O. BOX 2015
ATLANTA, GEORGIA 30301

SOLD TO:

00652

(3177)
MISSOURI SURPLUS PROPERTY
117 N RIVERSIDE DR
JEFFERSON CITY MO 65101

ISSUE DATE: 05/31/00
SUPERSEDES: 11/29/89
ZEP FORMULA 4358 E
Prod No: 0378 Car Wash - Powder

Date printed: 08/05/00

SECTION I - EMERGENCY CONTACTS

TELEPHONE: (404) 352-1680
MEDICAL EMERGENCY: (770) 439-4200
(770) 432-2873
(770) 424-4789
(770) 424-2048
(770) 455-8160
(770) 552-8836
TRANSPORTATION EMERGENCY: (770) 922-0923
CHEMTREC: (800) 424-9300
DISTRICT OF COLUMBIA: (202) 483-7616
TOLL FREE-CALLS RECORDED
ALL CALLS RECORDED

A25224

SECTION II - HAZARDOUS INGREDIENTS

** SODIUM CARBONATE ** soda ash; carbonic acid; disodium salt;
CAS# 497-19-8; RTECS# VZ4050000; OSHA/ACGIH DUST LIMIT =
15mg/m3
** SODIUM DODECYLBENZENE SULFONATE ** linear alkyl amyl sodium
sulfonate; CAS# 25155-30-0; RTECS# DB6825000; OSHA PEL/N/D

(PPM) (SEE NOTICE) % IN
N/D IRR 5-15
N/D IRR < 5

SECTION III - HEALTH HAZARD DATA

SPECIAL NOTE: MSDS data pertains to the product as dispensed from the container. Adverse health effects would not be expected under recommended conditions of use (diluted) so long as prescribed safety precautions are practiced.
ACUTE EFFECTS OF OVEREXPOSURE:
This product can be an eye irritant. Inflammation of eye tissue is characterized by redness, watering, and/or itching.
CHRONIC EFFECTS OF OVEREXPOSURE:
There are no known effects from chronic exposure to this product.
None of the ingredients are listed as carcinogens by IARC, NTP, or OSHA.
PEL/TLV: Not established. PRIMARY ROUTES OF ENTRY: N/A

Hazus CODES: HEALTH: 0; FLAM: 0; REACT: 0; PERS: PROTECT. A; CHRONIC HAZ: NO

FIRST AID PROCEDURES

SKIN: Flush contaminated skin with plenty of water. Consult a physician if irritation develops.
EYES: Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting upper and lower lids. Get medical attention at once.
INHALE: Move exposed person to fresh air. If irritation persists, get medical attention promptly.
INGEST: If this product is swallowed, do not induce vomiting. If victim is conscious give plenty of water to drink. Get medical attention at once.

SECTION IV - SPECIAL PROTECTION INFORMATION

PROTECTIVE CLOTHING: The use of neoprene, nitrile or natural rubber gloves is strongly recommended, especially for prolonged contact.
EYE PROTECTION: Use of light-fitting safety glasses or goggles is strongly recommended, especially when wearing contact lenses.
RESPIRATORY PROTECTION: No special measures are required.
VENTILATION: No special measures are required.

SECTION V - PHYSICAL DATA

BOILING POINT (°F): N/A
VAPOR PRESSURE (mmHg): N/A
VAPOR DENSITY(AIR=1): N/A
SOLUBILITY IN WATER: 12G/100ML MAX.
VOC CONTENT (CONCENTRATE): N/A
APPEARANCE AND ODOR: A RED, FREE FLOWING PLEASANTLY SCENTED POWDER

SPECIFIC GRAVITY: N/A
EVAPORATION RATE (=1): N/A
PH(CONCENTRATE): N/A
PH(USE DILUTION OF 1%): 9.4

SECTION VI - FIRE AND EXPLOSION DATA (N/A)

FLASH POINT(F) (METHOD USED): None
FLAMMABLE LIMITS: LEL: N/A UEL: N/A
EXTINGUISHING MEDIA: Noncombustible.
SPECIAL FIRE FIGHTING: None
UNUSUAL FIRE HAZARDS: None

SECTION VII - REACTIVITY DATA

STABILITY: Stable
INCOMPATIBILITY(AVOID): None
POLYMERIZATION: Will not occur.
HAZARDOUS DECOMPOSITION: NONE

SECTION VIII - SPILL AND DISPOSAL PROCEDURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED:
Observe safety precautions in sections 4 & 9 during clean-up. Sweep up uncontaminated product and place in a container for reuse. Place contaminated materials in a suitable waste container and rinse area well with water.
WASTE DISPOSAL METHOD:
Product is not considered a hazardous waste under RCRA. Unusable material should be drummed and taken to a chemical or industrial landfill, or if permitted put into solution with water and flushed into a sanitary sewer. Neutralization of pH may be a prerequisite for sewer disposal. Consult local, state, and federal agencies for proper method of disposal in your area.
RCRA HAZ. WASTE NOS: N/A

SECTION IX - SPECIAL PRECAUTIONS

AUTONS TO BE TAKEN WHEN HANDLING AND STORING:
Do not breathe dust.
Keep out of the reach of children.

SECTION X - REGULATORY INFORMATION

DOT PROPER SHIPPING NAME: INDUSTRIAL CLEANERS, NODRY
NOTE: DOT information applies to larger package sizes of affected products. For some products, DOT may require alternate names and labeling in accordance with packaging group requirements.
DOT HAZARD CLASS: DOT PACKING GROUP:
DOT ID NUMBER: DOT LABEL/PLACARD:
EPA TSCA CHEMICAL INVENTORY - ALL INGREDIENTS ARE LISTED
(Continued on Page: 2)

MATERIAL SAFETY DATA SHEET

AND SAFE HANDLING AND DISPOSAL INFORMATION



CLEAN ACROSS AMERICA AND
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ZEP MANUFACTURING COMPANY
P.O. BOX 2015
ATLANTA, GEORGIA 30301

10/30/92
ISSUE DATE: 03/03/90
SUPERSEDES: 06/05/89
ZEPION
PRODUCT NO.: 9278

Aerosol Lubricant

MISSOURI SURPLUS
PROPERTY - JANITORIAL
117 NO RIVERSIDE DR
JEFFERSON CITY, MO 65101

SECTION I - EMERGENCY CONTACTS

TELEPHONE: (404) 352-1380 BETWEEN 8:00 AM - 5:00 PM (EST)
MEDICAL EMERGENCY: (404) 433-2973 NON-OFFICE HOURS, WEEKENDS
(404) 351-2552 AND HOLIDAYS, PLEASE CALL YOUR
(404) 432-2873 LOCAL POISON CONTROL
TRANSPORTATION EMERGENCY: (404) 922-0923
CHEMTREC: 1-800-424-9300 TOLL-FREE - ALL CALLS RECORDED
DISTRICT OF COLUMBIA: (202) 483-7616 ALL CALLS RECORDED

SECTION II - HAZARDOUS INGREDIENTS

DESIGNATIONS	TLV (PPM)	EFFECTS (SEE REVERSE)	% IN PROD.
@ ~ 1,1,1-TRICHLOROETHANE ~ methyl chloroform chloroethene, CAS # 71-55-6, RTECS # KJ2975000, OSHA PEL-350	350	IRR CNS	70-80
@ ~ 1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE ~ fluorocarbon 113, freon 113, freon 11, CAS # 76-13-1, RTECS # KJ4000000, OSHA PEL 1000 PPM	1000	EIR CNS	<5

@ Identifies chemicals listed under SARA-Section 313 for release reporting

SECTION III - HEALTH HAZARD DATA

Special Note: MSDS data pertains to the product as dispensed from the container. Adverse health effects would not be expected under recommended conditions of use (diluted) so long as prescribed safety precautions are practiced.

Acute Effects of Overexposure:

Inhalation of vapor can produce central nervous system depression, characterized by dizziness, headache, nausea, cardiac and/or respiratory depression, stupor, unconsciousness and death, in extreme cases. Exposure to high concentrations of vapor, by direct contact or inhalation, can be irritating to mucous membranes, such as nose and upper respiratory tract. Severe eye exposure to liquid can cause reversible eye damage. Skin contact may cause a burning sensation and reddening of the skin. Ingestion of solvent to the lungs, as in aspiration of vomitus fluids, may cause chemical pneumonia. Exposure to this product may aggravate existing respiratory and chronic conditions. Inhalation of aerosol mist may produce chemical pneumonitis.

Chronic Effects of Overexposure:

Repeated or prolonged contact by inhalation or skin absorption may produce liver or kidney damage or damage to the central nervous system, characterized by tingling or numbness in the extremities, blurred vision or confusion. Skin, which is defatted by repeated exposure to solvents, is more susceptible to irritation, infection, and dermatitis. Exposure to some ingredients in this product can aggravate existing liver disease or heart rhythm disorders. None of the ingredients are listed as carcinogens by IARC, NTP, or OSHA.

Est'd PEL/TLV: 350 PPM (NIOSH)

Primary Routes of Entry: inh.

HMIS Codes: HEALTH 2; FLAM 1; REACT 1; PERS PROTECT X; CHRONIC HAZ YES

FIRST AID PROCEDURES:

Skin: Wash contaminated skin thoroughly with soap or a mild detergent. Apply a skin cream with lanolin. Get medical attention if irritation persists.
Eyes: Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting upper and lower lids. Get medical attention at once.
Inhale: Move exposed person to fresh air at once. If breathing has stopped, perform artificial respiration. Get medical attention immediately.
Ingest: If swallowed, do not induce vomiting. If vomiting occurs, keep head below hip level. Get emergency medical attention immediately.

SECTION IV - SPECIAL PROTECTION INFORMATION

Protective Clothing: Wear viton gloves or use gloves with demonstrated resistance to the ingredients in this product.
Eye Protection: Use tight-fitting safety glasses. Contact lenses should not be worn when working with this material.
Respiratory Protection: If ventilation is inadequate, wear a properly fitting MSHA or OSHA-approved respirator.
Ventilation: Ventilation should be equal to outdoors. Use exhaust fans and/or exhaust hood in enclosed spaces.

SECTION V - PHYSICAL DATA

Boiling Point (°F):	165F	Specific Gravity:	1.3	Vapor Pressure (mmHg):	100
Percent Volatile by Volume (%):	98%	Vapor Density (air = 1):	4.6	Evaporation Rate (BUTYL ACETATE = 1):	~ 6
Solubility in Water:	NEGLIGIBLE	pH (concentrate):	N/A	pH (use dilution of N/A.):	N/A
Appearance and Odor:	MILKY-TINNY LIQUID HAVING A MILD SOLVENT ODOR				

SECTION VI - FIRE AND EXPLOSION DATA

Flash Point (°F) (method used): NOT FLAMMABLE (CSMA)
Flammable Limits: LEL 6% UEL 16.7%
Extinguishing Media: NOT COMBUSTIBLE
Special Fire Fighting: DIRECT STREAM OF WATER ONTO INTACT CONTAINERS
Unusual Fire Hazards: Wear self-contained positive pres. Breathing apparatus.



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ZEP MANUFACTURING COMPANY
P.O. BOX 2015
ATLANTA, GEORGIA 30301
SOLD TO:

(317)
MISSOURI SURPLUS
PROPERTY - JANITORIAL
JEFFERSON CITY MO 65101

MATERIAL SAFETY DATA SHEET

AND SAFE HANDLING AND DISPOSAL INFORMATION

ISSUE DATE: 12/03/96
SUPERSEDES: 06/23/93
ZEP GROOVY
Prod No: 0239

Date printed: 09/29/96

Aerosol Anti-Seize Agent

SECTION I - EMERGENCY CONTACTS

TELEPHONE: (404) 352-1680
MEDICAL EMERGENCY: (770) 439-4200
(770) 432-2873
(770) 424-4789
(770) 424-2048
(770) 455-8160
(770) 552-8836
TRANSPORTATION EMERGENCY: (770) 922-0923
CHEMTRAC: (800) 424-9300
DISTRICT OF COLUMBIA: (202) 483-7616

BETWEEN 8:00 AM - 5:00 PM (EST)
NON OFFICE HOURS, WEEKENDS
AND HOLIDAYS, PLEASE CALL
LOCAL POISON CONTROL

TOLL FREE-CALLS RECORDED
ALL CALLS RECORDED

A25224

SECTION II - HAZARDOUS INGREDIENTS

DESIGNATIONS	(PPM)	EFFECTS (SEE NOTICE)	% IN PROD.
** ISOPARAFFINIC SOLVENT (BOILING RANGE 113-143C) ** Isopar E, hydroreated heavy naphtha (petroleum), CAS# 64742-46-9; RTECS# NONE	400	FBL CNS	< 30
@** COPPER ** copper metal; CAS# 7440-50-8; RTECS# GL5325000; OSHA PEL : TWA (dust/mist): 1 mg/m3; ACGIH TLV (dust, mist): 1 mg/m3	100	TOX	10-20
** ODORLESS ALIPHATIC NAPHTHA ** heavy alkylate petroleum naphtha; odorless mineral spirits; CAS# 64741-65-7; RTECS# NONE; OSHA PEL - 100ppm	1000	CBL CNS	< 5
** HYDROCARBON PELLELANT ** CAS# 64741-65-7; RTECS# NONE; OSHA PEL 1000 ppm		FBL	< 40
@ IDENTIFIED CHEMICALS LISTED UNDER SARA-SECTION 313 FOR RELEASE REPORTING.			

SECTION III - HEALTH HAZARD DATA

SPECIAL NOTE: MSDS data pertains to the product as dispensed from the container. Adverse health effects will not be expected under recommended conditions of use (diluted) so long as prescribed safety precautions are followed.

EFFECTS OF OVEREXPOSURE:

Eye solvents in this product, when inhaled, or absorbed through the skin in harmful quantities, may produce central nervous system depression characterized by headache, nausea, dizziness and stupor. Vapors or spray mists may be irritating to nasal and respiratory tract. Product may be irritating to skin and eyes resulting in redness, itching or burning. Introduction of solvents, as in aspiration of vomitus fluid, may produce chemical pneumonia. Existing respiratory disorders and skin diseases may be aggravated by exposure.

CHRONIC EFFECTS OF OVEREXPOSURE: Skin which is repeatedly irritated by contact with this product may be more susceptible to irritation, infection, or dermatitis. Some of the ingredients are listed as carcinogens by IARC, NTP, or OSHA. EST'D PEL/TLV: Not established PRIMARY ROUTES OF ENTRY: Skin

HMS CODES: HEALTH 2; FLAM. 4; REACT. 0; PERS. PROTECT. B ; CHRONIC HAZ. NO

FIRST AID PROCEDURES:

SKIN: Wash contaminated skin with soap or a mild detergent. Get medical attention if irritation develops.
EYES: Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting upper and lower lids. Get medical attention at once.
INHALE: Move exposed person to fresh air at once. If breathing has stopped, perform artificial respiration. Get medical attention immediately.
INGEST: If swallowed, do not induce vomiting. If vomiting occurs, keep head below hip level. Get emergency medical attention immediately.

SECTION IV - SPECIAL PROTECTION INFORMATION

PROTECTIVE CLOTHING: The use of natural rubber, neoprene, or nitrile gloves is recommended if prolonged skin contact is expected.
EYE PROTECTION: Use of light-fitting safety glasses or goggles is strongly recommended, especially when wearing contact lenses.
RESPIRATORY PROTECTION: Wear a properly fitting MSHA or OSHA-approved respirator when using this product or when working in a use area.
VENTILATION: Provide local exhaust/ventilation as needed to keep concentration of vapors below exposure limits (PEL/TLV).

SECTION V - PHYSICAL DATA

BOILING POINT (F): 102
VAPOR PRESSURE (mmHg): N/D
VAPOR DENSITY(AIR=1): N/D
SOLUBILITY IN WATER: NEGLIGIBLE
VOC CONTENT (CONCENTRATED): 75.0%
APPEARANCE AND ODOR: GRAY; VISCOUS LIQUID WITH MILD, SWEETISH ODOR

SPECIFIC GRAVITY: N/D
EVAPORATION RATE (N/D=1): N/A
PH(CONCENTRATED): N/A
PH(USE DILUTION OF N/A): N/A

SECTION VI - FIRE AND EXPLOSION DATA

FLASH POINT (C) (METHOD USED): Extremely Flammable (CSMA)
FLAMMABLE LIMITS: LEL: N/D UEL: N/D
EXTINGUISHING MEDIA: Carbon dioxide, dry chemical and foam.
SPECIAL FIRE FIGHTING: Wear self-contained positive pres. breathing apparatus.
UNUSUAL FIRE HAZARDS: Direct water onto intact containers to prevent bursting.

SECTION VII - REACTIVITY DATA

STABILITY: Stable
INCOMPATIBILITY(AVOID): Strong alkalis, oxidizers, and active metals.
POLYMERIZATION: Will not occur.
HAZARDOUS DECOMPOSITION: Carbon dioxide, carbon monoxide, and other unidentified organic compounds.

SECTION VIII - SPILL AND DISPOSAL PROCEDURES

DO NOT BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED:
Do not take any safety precautions in sections 4 & 9 during spill clean-up. Large spills are unlikely due to packaging. Spill may be absorbed on an inert absorbent material (eg Zep-O-Zorb), and placed in a suitable container for disposal. Wash area thoroughly with a detergent solution and rinse well with water.
WASTE DISPOSAL METHOD: Product is consumed in use. Do not crush, puncture or incinerate spent containers. Large numbers of aerosol containers may require handling as a hazardous waste, but in most states total hazardous waste quantities less than 220 lbs per month may allow disposal in a chemical or industrial waste landfill. Consult local, state and federal agencies for the proper disposal method in your area.
RCRA HAZ. WASTE NOS.: D001

MATERIAL SAFETY DATA SHEET

AND SAFE HANDLING AND DISPOSAL INFORMATION

5205



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ZEP MANUFACTURING COMPANY
P.O. BOX 2015
ATLANTA, GEORGIA 30301

MISSOURI SUPRPLUS (317)
PROPERTY-JANITORIAL
1172 RIVERSIDE
JEFFERSON CITY, MO 65101

1/128/96
ISSUE DATE: 04/07/95
SUPERSEDES: 11/16/93
ZEP IRONCLAD
PRODUCT NO.: 0152

Aerosol Corrosion Inhibitor

SECTION I - EMERGENCY CONTACTS

TELEPHONE: (404) 352-1680
MEDICAL EMERGENCY: (770) 439-4200
(770) 432-2873
(770) 424-4789
(770) 392-1480
(770) 455-8160
(770) 552-8836
TRANSPORTATION EMERGENCY: (770) 922-0923
CHEMTREC: 1-800-424-9300
DISTRICT OF COLUMBIA: (202) 483-7616
TOLL-FREE - ALL CALLS RECORDED
ALL CALLS RECORDED

BETWEEN 8:00 AM - 5:00 PM (EST)

NON-OFFICE HOURS, WEEKENDS
AND HOLIDAYS, PLEASE CALL YOUR
LOCAL POISON CONTROL

SECTION II - HAZARDOUS INGREDIENTS

DESIGNATIONS
** PETROLEUM SPIRITS ** and naphtha: refined solvent naphtha; CAS # 8032-32-4; RTECS # O16180000; OSHA PEL-300 PPM; OSHA STEL-400 PPM
** BLEND OF (ISOBUTANE; CAS # 75-28-5; RTECS # TZ4300001 & [PROPANE; CAS # 74-98-6; RTECS # TX2775000] & (n-BUTANE; CAS # 106-97-8; RTECS # E4200000) OSHA PEL-1000 ppm **

TLV (PFM)	EFFECTS (SEE REVERSE)	% IN PROD.
300	FBL CNS IRR	30-40
800	COR FBL	25-35

SECTION III - HEALTH HAZARD DATA

Special Note: MSDS data pertains to the product as dispensed from the container. Adverse health effects would not be expected under recommended conditions of use (diluted) so long as prescribed safety precautions are practiced.

Acute Effects of Overexposure:

The solvents in this product, when inhaled or absorbed in harmful quantities, may produce central nervous system depression characterized by headache, nausea, dizziness and stupor. Vapors or spray mists may be irritating to nasal and respiratory tract. Product may be irritating to skin and eyes resulting in redness, itching or burning. Introduction of solvents, as in aspiration of vomitus fluid, may produce chemical pneumonia. Existing respiratory disorders and skin diseases may be aggravated by exposure. Existing respiratory disorders or skin diseases may be aggravated by exposure.

Chronic Effects of Overexposure:

1) which is repeatedly detailed by contact with this product may be more susceptible to irritation, infection, or dermatitis. None of the ingredients are listed as carcinogens by IARC, NTP, or OSHA.

Est'd PEL/TLV: Not established

Primary Routes of Entry: Inh.

HMS Codes: HEALTH 2;FLAM. 3;REACT. 0;PERS. PROTECT. B ;CHRONIC HAZ. NO

FIRST AID PROCEDURES:

Skin: Wash contaminated skin thoroughly with soap or a mild detergent. Apply a skin cream with lanolin. Get medical attention if irritation persists.
Eyes: Immediately flush eyes with plenty of water for at least 15 minutes; occasionally lifting upper and lower lids. Get medical attention at once.
Inhale: Move exposed person to fresh air at once. If breathing has stopped, perform artificial respiration. Get medical attention immediately.
Ingest: If swallowed, do not induce vomiting. If vomiting occurs, keep head below hip level. Get emergency medical attention immediately.

SECTION IV - SPECIAL PROTECTION INFORMATION

Protective Clothing: Wear nitrile gloves or use gloves with demonstrated resistance to the ingredients in this product.
Eye Protection: Wear splash-proof safety goggles especially if contact lenses are worn.
Respiratory Protection: In the unlikely event that exposure levels exceed the PEL/TLV, use an organic vapor respirator (eg Zep 22 11).
Ventilation: Provide local exhaust/ventilation as needed to keep concentration of vapors below exposure limits (PEL/TLV).

SECTION V - PHYSICAL DATA

Boiling Point (°F):	N/D	Specific Gravity:	0.845	Vapor Pressure (mmHg):	N/D
Percent Volatile by Volume (%):	~ 80	Vapor Density (air = 1):	N/D	Evaporation Rate (ND = 1):	N/D
Solubility in Water:	NEG/LIGIBLE	pH (concentrate):	N/A	pH (use dilution of N/A):	N/A
Appearance and Odor:	SLIGHTLY VISCOUS TAN, OPAQUE LIQUID WITH SOLVENT ODOR				

SECTION VI - FIRE AND EXPLOSION DATA

Flash Point (°F) (method used): Extremely Flammable (CSMA)
Flammable Limits: LEL N/D UEL N/D
Extinguishing Media: Carbon dioxide, dry chemical and foam.
Special Fire Fighting: Wear self-contained positive pres. breathing apparatus.
Unusual Fire Hazards: Direct water onto intact containers to prevent bursting.



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MATERIAL SAFETY DATA SHEET AND SAFE HANDLING AND DISPOSAL INFORMATION

1-877-1-BUY-ZEP (1-877-428-9937)

ZEP MANUFACTURING COMPANY
P.O. BOX 2015
ATLANTA, GEORGIA 30301

SOLD TO:

00020

(317)
MISSOURI SURPLUS PROPERTY
117 N RIVERSIDE DR
JEFFERSON CITY MO 65101

ISSUE DATE: 09/28/00
SUPERSEDES: 10/06/95
ZEP 50
Prod No: 0150
Aerosol Engine Degreaser

Date printed: 10/28/00

SECTION I - EMERGENCY CONTACTS

TELEPHONE: (404) 352-1680
MEDICAL EMERGENCY: (770) 439-4200
(770) 432-2873
(770) 424-4789
(770) 424-2048
(770) 455-8160
(770) 552-8836
TRANSPORTATION EMERGENCY: (770) 922-0923
CHEMTRAC: (800) 424-9300
DISTRICT OF COLUMBIA: (202) 483-7616

BETWEEN 8:00 AM - 5:00 PM (EST)
NON OFFICE HOURS, WEEKENDS
AND HOLIDAYS, PLEASE CALL
LOCAL POISON CONTROL

TOLL FREE CALLS RECORDED
ALL CALLS RECORDED

A25224

SECTION II - HAZARDOUS INGREDIENTS

DESIGNATIONS

** MONOETHANOLAMINE ** 2-aminoethanol; MEA; CAS# 141-43-5;
RTECS# K15775000; OSHA PEL-3 PPM; OSHA/MACGIH STEL-6 PPM
** D-LIMONENE ** orange distillate; citrus terpene;
cyclohexene, 1-methyl-4-(1-methyl-2-propenyl)-; (R); CAS#
5989-27-5; RTECS# GW6360000; OSHA PEL N/D
** HEAVY AROMATIC NAPHTHA ** solvent naphtha (petroleum), heavy
aromatics; CAS# 64742-94-5; RTECS# NONE; Supplier TWA - 100 ppm;
OSHA PEL N/D
** BLEND OF ISOBUTANE; GAS# 75-28-5; RTECS# TZ43000001 &
[PROPANE; GAS# 74-98-6; RTECS# TX2750001] & [n-BUTANE; GAS#
106-97-8; RTECS# E14200000] OSHA PEL-1000 ppm

(PPM)	EFFECTS (SEE NOTICE)	% IN PROD.
3	COR CNS CBL	< 5
N/D	CBL SEN	5-15
N/D	CNS CBL	5-15
800	FBL	< 10

SECTION III - HEALTH HAZARD DATA

SPECIAL NOTE: MSDS data pertains to the product as dispensed from the container. Adverse health effects would not be expected under recommended conditions of use (diluted) so long as prescribed safety precautions are followed.

EFFECTS OF OVEREXPOSURE:

Contact with this product may irritate eyes and skin. Inflammation of the eye is characterized by redness, watering, and itching. Skin inflammation is characterized by itching, scaling, reddening, or occasionally, blistering.
One of the ingredients in this product has caused sensitization reactions in a small percentage of the general population.
CHRONIC EFFECTS OF OVEREXPOSURE:
Repeated or prolonged exposure by inhalation or skin absorption may produce liver or kidney damage, or damage to the central nervous system. Skin which is repeatedly contacted with this product may be more susceptible to irritation, infection, or dermatitis.
EST D PEL/TLV: Not established PRIMARY ROUTES OF ENTRY: Inh. Skin.

HMS CODES: HEALTH 1; FLAM. 2; REACT. 0; PERS. PROTECT. B; CHRONIC HAZ NO

FIRST AID PROCEDURES:

SKIN: Wash contaminated skin thoroughly with soap or a mild detergent. Apply a skin cream with lanolin. Get medical attention if irritation persists.
EYES: Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting upper and lower lids. Get medical attention if irritation persists.
INHALE: Move exposed person to fresh air. If irritation persists, get medical attention promptly.
INGEST: If swallowed, do not induce vomiting. If vomiting occurs, keep head below hip level. Get emergency medical attention immediately.

SECTION IV - SPECIAL PROTECTION INFORMATION

PROTECTIVE CLOTHING: Wear neoprene, nitrile, or natural rubber gloves or gloves with proven resistance to the ingredients listed.
EYE PROTECTION: Wear tight-fitting safety glasses when using or handling this product.
RESPIRATORY PROTECTION: Avoid inhalation of spray mists, and do not direct spray toward people.
VENTILATION: Provide local exhaust/ventilation as needed to keep concentration of vapors below exposure limits (PEL/TLV).

SECTION V - PHYSICAL DATA

BOILING POINT (F):	212	SPECIFIC GRAVITY:	0.996
VAPOR PRESSURE (mmHg):	N/D	EVAPORATION RATE (N/D=1):	N/D
VAPOR DENSITY(AIR=1):	N/D	PH(CONCENTRATION):	N/A
SOLUBILITY IN WATER:	N/D	PH(USE DILUTION OF):	N/A
VOC CONTENT (CONCENTRATE):	27.4%		
APPEARANCE AND ODOR: A THIN, MILKY LIQUID WITH AN ORANGE/CITRUS ODOR.			

SECTION VI - FIRE AND EXPLOSION DATA

FLASH POINT (F) (METHOD USED): Nonflammable
FLAMMABLE LIMITS, LEL: N/D UEL: N/D
EXTINGUISHING MEDIA: Carbon dioxide, dry chemical, water fog, foam.
SPECIAL FIRE FIGHTING: Wear self-contained positive pres. breathing apparatus.
UNUSUAL FIRE HAZARDS: Direct water onto intact containers to prevent bursting.

SECTION VII - REACTIVITY DATA

STABILITY: Stable
INCOMPATIBILITY (AVOID): Heat, open flame, spark, and oxidizing agents.
POLYMERIZATION: Will not occur.
HAZARDOUS DECOMPOSITION: Carbon dioxide, carbon monoxide, and other unidentified organic compounds.

SECTION VIII - SPILL AND DISPOSAL PROCEDURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED:
Use safety precautions in sections 4 & 9 during spill clean-up. Large spills are unlikely due to packaging. Spill may be absorbed on an inert inert material (eg Zep-O-Zorb), and placed in a suitable container for disposal. Wash area thoroughly with a detergent solution and rinse well with water.

WASTE DISPOSAL METHOD:

Product is consumed in use. Do not crush, puncture or incinerate spent containers. Large numbers of aerosol containers may require handling as a hazardous waste, but in most states total hazardous waste quantities less than 220 lbs per month may allow disposal in a chemical or industrial waste landfill. Consult local state and federal agencies for the proper disposal method in your area.
RCHA HAZ. WASTE NOS.: N/A

SECTION IX - SPECIAL PRECAUTIONS

PRECAUTIONS TO BE TAKEN WHEN HANDLING AND STORING:
Do not store at temperatures above 120F (39C) or in direct sunlight. Do not puncture or incinerate container. Keep product away from skin and eyes.



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MATERIAL SAFETY DATA SHEET AND SAFE HANDLING AND DISPOSAL INFORMATION

1-877-1-BUY-ZEP (1-877-428-9937)

ZEP MANUFACTURING COMPANY
P.O. BOX 2015
ATLANTA, GEORGIA 30301

SOLD TO:

01362

(317)
MISSOURI SURPLUS PROPERTY
117 N RIVERSIDE DR
JEFFERSON CITY MO 65101

ISSUE DATE: 01/24/01
SUPERSEDES: 04/23/90
ZEP 40
Prod No: 0144

Date printed: 03/03/01

Aerosol Glass Cleaner

SECTION I - EMERGENCY CONTACTS

TELEPHONE: (404) 352-1680 BETWEEN 8:00 AM - 5:00 PM (EST)
MEDICAL EMERGENCY: (770) 439-4200 NON OFFICE HOURS, WEEKENDS AND HOLIDAYS, PLEASE CALL LOCAL POISON CONTROL
(770) 432-2873
(770) 424-4789
(770) 424-2048
(770) 453-8160

TRANSPORTATION EMERGENCY:

(770) 552-8836

CHEMTREC: (800) 424-9300 TOLL FREE-CALLS RECORDED
(770) 922-0923 DISTRICT OF COLUMBIA: (202) 483-7616 ALL CALLS RECORDED

A25224

SECTION II - HAZARDOUS INGREDIENTS

DESIGNATIONS
** ISOPROPYL ALCOHOL ** ipa, dimethylcarbinol; 2-propanol; CAS# 67-63-0; RTECS# NT8050000; OSHA PEL-400 PPM; OSHA/ACGIH STEL-500 PPM
@** ETHYLENE GLYCOL MONOETHYL ETHER ** 2-butylcellosolve; CAS# 111-76-2; RTECS# K18575000; OSHA PEL (SKIN); 25 ppm
** BLEND OF ISOBUTANE: CAS # 75-28-5; RTECS# T743000001 & 1-PROPANE: CAS# 74-98-6; RTECS# TX2720000 & n-BUTANE: CAS# 106-97-8; RTECS# E34200000 - OSHA PEL-1000 ppm
@ IDENTIFIERS CHEMICALS LISTED UNDER SARAA-SECTION 313 FOR RELEASE REPORTING.

SECTION III - HEALTH HAZARD DATA

SPECIAL NOTE: MSDS data pertains to the product as dispensed from the container. Adverse health effects would not be expected under recommended conditions of use (diluted) so long as prescribed safety precautions are practiced.

IRITANT EFFECTS OF OVEREXPOSURE:

Irritant: Eye contact may produce stinging, burning, inflammation, and in extreme cases may produce corneal damage. Exposure may be irritating to and upper respiratory tract. Accumulation of harmful quantities of vapor is precluded by severe irritation which makes overexposure unlikely.

Upper exposure can result in mild narcotic effects, including flushing, headache, dizziness, and nausea.

Ingredients in this product may aggravate existing skin, eye, or respiratory disorders.

CHRONIC EFFECTS OF OVEREXPOSURE:

Repeated or prolonged, skin contact may produce some dryness of skin. Chronic effects from alcohol vapors are rare and would result from severe, prolonged, and repeated contact, which is usually precluded by irritation. In most extreme cases, narcosis, unconsciousness, and death could result. Animal studies indicate a potential for liver, kidney, or red blood cell damage. Relevance of these studies or exposure levels which might produce these effects in humans has not been established.

None of the hazardous ingredients are listed as carcinogens by IARC, NTP, & OSHA
ESTD PELTV: Not established PRIMARY ROUTES OF ENTRY: Inh, Skin

HMS CODES: HEALTH 1; FLAM 1; REACT: 0; PERS. PROTECT. A; CHRONIC HAZ. YES

FIRST AID PROCEDURES:

SKIN: Immediately flush contaminated skin with plenty of water for at least 15 minutes. Get medical attention if irritation develops.
EYES: Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting upper and lower lids. Get medical attention at once.
INHALE: Move exposed person to fresh air. If irritation persists, get medical attention promptly.
INGEST: If this product is swallowed, do not induce vomiting. If individual is alert, give plenty of water to drink. Get medical attention at once.

SECTION IV - SPECIAL PROTECTION INFORMATION

PROTECTIVE CLOTHING: As with all chemical products, prolonged skin contact should be avoided. Implement protective measures under conditions of prolonged use or exposure.

EYE PROTECTION: To prevent accidental eye contact, the use of safety glasses or goggles is recommended when using any aerosol product.
RESPIRATORY PROTECTION: Avoid inhalation of spray mists, and do not direct spray toward people.
VENTILATION: Ventilation should be equal to outdoors. Use exhaust fans and/or exhaust hood in enclosed spaces.

SECTION V - PHYSICAL DATA

BOILING POINT (°F):	185-215	SPECIFIC GRAVITY:	1.10
VAPOR PRESSURE (mmHg):	N/D	EVAPORATION RATE (WATER=1):	1.0
VAPOR DENSITY(AIR=1):	N/D	PH(CONCENTRATE):	10.5-11.0
SOLUBILITY IN WATER:	COMPLETE	PH(USE DILUTION OF N/A):	N/A
VOC CONTENT (CONCENTRATE):	27.4%		
APPEARANCE AND ODOR: CLEAR, COLORLESS FOAMY LIQUID HAVING A MILD PLEASANT ODOR			

SECTION VI - FIRE AND EXPLOSION DATA

FLASH POINT(F) (METHOD USED): Nonflammable
FLAMMABLE LIMITS: LEL: N/D UEL: N/D
EXTINGUISHING MEDIA: Carbon dioxide, dry chemical and foam.
SPECIAL FIRE FIGHTING: Wear self-contained positive pres. breathing apparatus.
UNUSUAL FIRE HAZARDS: Direct water onto inlaid containers to prevent bursting.

SECTION VII - REACTIVITY DATA

STABILITY: Stable
INCOMPATIBILITY(AVOID): Strong oxidizing agents.
POLYMERIZATION: Will not occur.
ARDOUS DECOMPOSITION: Carbon dioxide, carbon monoxide, and other unidentified organic compounds.

SECTION VIII - SPILL AND DISPOSAL PROCEDURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED:
Observe safety precautions in sections 4 & 9 during spill clean-up. Large spills are unlikely due to packaging. Spill may be absorbed on an inert absorbent material (eg Zep-O-Zorb), and placed in a suitable container for disposal. Wash area thoroughly with a detergent solution and rinse well with water.

WASTE DISPOSAL METHOD:

Product is consumed in use. Do not crush, puncture or incinerate spent containers. Large numbers of aerosol containers may require handling as a hazardous waste, but in most states total hazardous waste quantities less than 220 lbs per month may allow disposal in a chemical or industrial waste landfill. Consult local, state and federal agencies for the proper disposal method in your area.
RCRA HAZ. WASTE NOS.: NA



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ZEP MANUFACTURING COMPANY
P.O. BOX 2015
ATLANTA, GEORGIA 30301

MATERIAL SAFETY DATA SHEET

AND SAFE HANDLING AND DISPOSAL INFORMATION

3-09

1/12/8/96
ISSUE DATE: 09/01/95
SUPERSEDES:
TIRELESS SHINE
PRODUCT NO. 0063

Arrested Tire Dressing

SECTION I - EMERGENCY CONTACTS

MISSOURI SURPLUS (317)
PROPERTY-JANITORIAL
1172 RIVERSIDE
JEFFERSON CITY, MO 65101

TELEPHONE: (404) 352-1680
BETWEEN 8:00 AM - 5:00 PM (EST)

MEDICAL EMERGENCY: (770) 439-4200
(770) 432-2873
(770) 424-4789
(770) 392-1480
(770) 455-8160
(770) 552-8836
NON-OFFICE HOURS, WEEKENDS
AND HOLIDAYS, PLEASE CALL YOUR
LOCAL POISON CONTROL

TRANSPORTATION EMERGENCY:
(770) 922-0923

CHEMTRAC: 1-800-424-9300
DISTRICT OF COLUMBIA: TOLL-FREE - ALL CALLS RECORDED
(202) 483-7616 ALL CALLS RECORDED

SECTION II - HAZARDOUS INGREDIENTS

DESIGNATIONS	TLV (PPM)	EFFECTS (SEE REVERSE)	% IN PHOD.
** PROPRIETARY SOLVENT BLEND ** CAS # PROPRIETARY; RTECS # NONE; OSHA PEL- 200 ppm (skin); STEL- 250	200	FBL IRR CNS	70-80

SECTION III - HEALTH HAZARD DATA

Special Note: MSDS data pertains to the product as dispensed from the container. Adverse health effects would not be expected under recommended conditions of use (diluted) so long as prescribed safety precautions are practiced.

Acute Effects of Overexposure:

The solvents in this product, when inhaled or absorbed in harmful quantities, may produce central nervous system depression characterized by headache, nausea, dizziness and stupor. Vapors or spray mists may be irritating to nasal and respiratory tract. Product may be irritating to skin and eyes resulting in redness, itching or burning. Introduction of solvents, as in aspiration of vomitus fluid, may produce chemical pneumonia. Existing respiratory disorders and skin diseases may be aggravated by exposure.

Chronic Effects of Overexposure:

Skin which is repeatedly defatted by contact with this product may be more susceptible to irritation, infection, or dermatitis. None of the ingredients are listed as carcinogens by IARC, NTP, or OSHA.

std PEL/TLV: Not established

Primary Routes of Entry: Inh.

HMS Codes: HEALTH 2:FLAM. 4:REACT. 0:PERS. PROTECT. B. CHRONIC HAZ. YES

FIRST AID PROCEDURES:

Skin: Wash contaminated skin thoroughly with soap or a mild detergent. Apply a skin cream with lanolin. Get medical attention if irritation persists.
Eyes: Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting upper and lower lids. Get medical attention at once.
Inhale: Move exposed person to fresh air at once. If breathing has stopped, perform artificial respiration. Get medical attention immediately.
Ingest: If swallowed, do not induce vomiting. If vomiting occurs, keep head below hip level. Get emergency medical attention immediately.

SECTION IV - SPECIAL PROTECTION INFORMATION

Protective Clothing: Wear neoprene, nitrile, or natural rubber gloves or gloves with proven resistance to the ingredients listed.
Eye Protection: Wear light-fitting safety glasses when using or handling this product.

Respiratory Protection: When exposure levels exceed PEL/TLV (likely in confined areas) use an organic vapor respirator (eg Zep 2211).
Ventilation: Provide local exhaust/ventilation as needed to keep concentration of vapors below exposure limits (PEL/TLV).

SECTION V - PHYSICAL DATA

Boiling Point (°F):	290 INITIAL	Specific Gravity:	0.733	Vapor Pressure (mmHg):	N/D
Percent Volatile by Volume (%):	75	Vapor Density (air = 1):	N/D	Evaporation Rate (BUTYL ACETATE = 1):	> 1
Solubility in Water:	NEGUGIBLE	pH (concentrate):	N/A	pH (use dilution of N/A):	N/A
Appearance and Odor:	A CLEAR, COLORLESS LIQUID WITH A SOLVENT ODOR.				

SECTION VI - FIRE AND EXPLOSION DATA

Flash Point (°F) (method used): Extremely Flammable (CSMA)
Flammable Limits: LEL N/D UEL N/D
Extinguishing Media: Carbon dioxide, dry chemical and foam.
Special Fire Fighting: Wear self-contained positive pres. breathing apparatus.
Unusual Fire Hazards: Direct water onto intact containers to prevent bursting.



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ZEP MANUFACTURING COMPANY
P.O. BOX 2015
ATLANTA, GEORGIA 30301

MATERIAL SAFETY DATA SHEET

AND SAFE HANDLING AND DISPOSAL INFORMATION

3535

05/12/93
ISSUE DATE: 11/25/91
SUPERSEDES: 04/21/89
ZEP FORMULA 50
PRODUCT NO. 0859

General Purpose Cleaner

SECTION I - EMERGENCY CONTACTS

TELEPHONE: (404) 352-1680 BETWEEN 8:00 AM - 5:00 PM (EST)
MEDICAL EMERGENCY: (404) 435-2973 NON-OFFICE HOURS, WEEKENDS
(404) 351-2952 AND HOLIDAYS, PLEASE CALL YOUR
(404) 432-2873 LOCAL POISON CONTROL
TRANSPORTATION EMERGENCY: (404) 922-0923
CHEMTREC: (404) 922-0923
TOLL-FREE - ALL CALLS RECORDED
1-800-424-9300
DISTRICT OF COLUMBIA: ALL CALLS RECORDED
(202) 483-7616

MISSOURI SURPLUS
PROPERTY-JANITORIAL
1172 RIVERSIDE
JEFFERSON CITY, MO 65101

SECTION II - HAZARDOUS INGREDIENTS

DESIGNATIONS	TLV (PPM)	EFFECTS (SEE REVERSE)	% IN PROD.
@ * ETHYLENE GLYCOL MONOBUTYL ETHER * 2-butoxyethanol; butyl cellosolve; CAS # 111-76-2; RTECS # KJ8575000;	25	TOX IRR CBL	< 5
* SODIA PEL (SKIN)- 25 ppm			
* SODIUM METASILICATE * silicic acid (H ₂ SiO ₃) disodium salt; water glass; CAS # 6834-92-0; RTECS # VV9275000;	N/D	COR	< 5
OSHA Dust Limit: 2mg/m ³ (for powders only).			
* SODIUM DODECYLBENZENE SULFONATE * linear alkyl aryl sodium sulfonate; CAS # 25155-30-0; RTECS # DB6825000; OSHA PEL N/D	N/D	IRR	< 5

@ Identifies chemicals listed under SARA-Section 313 for release reporting

SECTION III - HEALTH HAZARD DATA

Special Note: MSDS data pertains to the product as dispensed from the container. Adverse health effects would not be expected under recommended conditions of use (diluted) so long as prescribed safety precautions are practiced.

Acute Effects of Overexposure:
Product is considered non-toxic orally according to 16 CFR, 1500.3 (Code of Federal Regulations 16, Federal Hazardous Substances Act Regulations, Part 1500.3). However, no product should be intentionally ingested. Ingestion of an excessive amount of the product may cause complications. Product in concentrated form is a severe eye irritant. Overexposure may lead to eye tissue damage which can be permanent. This product may cause slight skin irritation. Overexposure by inhalation may cause respiratory irritation. Existing eye or respiratory disorders may be aggravated by exposure.

Chronic Effects of Overexposure:
Repeated eye exposure may produce chronic inflammation of the eye or corneal damage. Animal studies indicate a potential for liver, kidney, or red blood cell damage. Relevance of these studies or exposure levels which might produce these effects in humans has not been established. None of the ingredients are listed as carcinogens by IARC, NTP, or OSHA.

Est'd PEL/TLV: Not established
Primary Routes of Entry: inh, Skin.

HMIS Codes: HEALTH 2;FLAM. 0;REACT. 0;PEHS. PROTECT. B. CHRONIC HAZ. YES

FIRST AID PROCEDURES:

Skin: Flush contaminated skin with plenty of water. Consult a physician if irritation develops.
Eyes: Immediately flush eyes with plenty of water for at least 15 minutes; occasionally lifting upper and lower lids. Get medical attention at once.
Inhale: Move exposed person to fresh air. If irritation persists, get medical attention promptly.
Ingest: If this product is swallowed, do not induce vomiting. If victim is conscious give plenty of water to drink. Get medical attention at once.

SECTION IV - SPECIAL PROTECTION INFORMATION

Protective Clothing: Wearing neoprene or nitrile gloves is recommended when prolonged excessive contact occurs (eg immersing hands)
Eye Protection: Wear tight-fitting splash-proof safety glasses especially if contact lenses are worn.
Respiratory Protection: In the unlikely event that exposure levels exceed the PEL/TLV, use an organic vapor respirator (eg Zep 2211).
Ventilation: Provide local exhaust/ventilation as needed to keep concentration of vapors below exposure limits (PEL/TLV).

SECTION V - PHYSICAL DATA

Boiling Point (°F):	~220	Specific Gravity:	1.07	Vapor Pressure (mmHg):	N/D
Percent Volatile by Volume (%):	85%	Vapor Density (air = 1):	N/D	Evaporation Rate (WATER = 1):	1.0
Solubility in Water:	COMPLETE	pH (concentrate):	12.5-13.0	pH (use dilution of 1% SOLUTION):	11.0-11.5
Appearance and Odor:	A THIN, DARK BLUE LIQUID WITH SLIGHT "BUTYL" ODOR.				

SECTION VI - FIRE AND EXPLOSION DATA

Flash Point (°F) (method used): N/D (TCC)
Flammable Limits: LEL N/A UEL N/A
Extinguishing Media: Noncombustible
Special Fire Fighting: Wear self-contained positive pres. breathing apparatus.
Unusual Fire Hazards: None



CLEAN ACROSS AMERICA AND
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MATERIAL SAFETY DATA SHEET AND SAFE HANDLING AND DISPOSAL INFORMATION

ZEP MANUFACTURING COMPANY
P.O. BOX 2015
ATLANTA, GEORGIA 30301

SOLD TO:

00006

MISSOURI SURPLUS (317)
PROPERTY - JANITORIAL
117 N RIVERSIDE DR
JEFFERSON CITY MO 65101

ISSUE DATE: 05/06/98

Date printed: 12/08/98

SUPERSEDES:

ZEP DIESEL FUEL ADDITIVE

Prod No.: 0583 Diesel Fuel Additive

SECTION I - EMERGENCY CONTACTS

TELEPHONE: (404) 352-1680 BETWEEN 8:00 AM - 5:00 PM (EST)
MEDICAL EMERGENCY: (770) 439-4200 NON OFFICE HOURS, WEEKENDS
(770) 432-2873 AND HOLIDAYS, PLEASE CALL
(770) 424-4789 LOCAL POISON CONTROL
(770) 424-2048
(770) 455-8160
(770) 552-8836

TRANSPORTATION EMERGENCY:
(770) 922-0923

CHEMTRAC:
(800) 424-9300

DISTRICT OF COLUMBIA: TOLL FREE-CALLS RECORDED
(202) 483-7616 ALL CALLS RECORDED

A25224

SECTION II - HAZARDOUS INGREDIENTS

DESIGNATIONS
** ALIPHATIC NAPHTHA ** liquid, CAS# 8052-41-3; RTECS# WJ895200; OSHA PEL - 100 ppm
** HEAVY AROMATIC NAPHTHA ** solvent naphtha (petroleum), heavy aromatics; CAS# 64742-94-5; RTECS# NONE; Supplier TWA - 100 ppm; OSHA PEL-N/D.

(PPM)	EFFECTS (SEE NOTICE)	% IN PROD.
100	CNS CBL	50-60
N/D	IRR CBL	20-30

SECTION III - HEALTH HAZARD DATA

SPECIAL NOTE: MSDS data pertains to the product as dispensed from the container. Adverse health effects would not be expected under recommended conditions of use (diluted) so long as prescribed safety precautions are practiced.

ACUTE EFFECTS OF OVEREXPOSURE:

Overexposure to the vapors from this product may produce mucous membrane irritation, particularly of the eye and respiratory tract. Overexposure to vapors may also produce mild central nervous system depression characterized by headache, dizziness, nausea, and stupor, leading to unconsciousness in extreme cases. Introduction of solvents, as in aspiration of vomitus fluid, may produce chemical pneumonia. Existing respiratory disorders and lung diseases may be aggravated by inhalation of vapors.

Ingredients in this product may aggravate existing skin, eye, or respiratory disorders.

Repeated or prolonged inhalation exposure may produce reversible lung damage. Skin which is repeatedly contacted by contact with solvents may be more susceptible to irritation, infection, and dermatitis.

None of the ingredients are listed as carcinogens by IARC, NTP, or OSHA. ESTD PEL TV: Not established PRIMARY ROUTES OF ENTRY: Inh, Skin.

HMIS CODES: HEALTH 2; FLAM. 2; REACT. 0; PERS. PROTECT. 8; CHRONIC HAZ NO

FIRST AID PROCEDURES:

SKIN: Wash contaminated skin thoroughly with soap or a mild detergent. Apply a skin cream with lanolin. Get medical attention if irritation persists.
EYES: Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting upper and lower lids. Get medical attention at once.
INHALE: Move exposed person to fresh air at once. If breathing has stopped, perform artificial respiration. Get medical attention immediately.
INGEST: If swallowed, do not induce vomiting. If vomiting occurs, keep head below hip level. Get emergency medical attention immediately.

SECTION IV - SPECIAL PROTECTION INFORMATION

PROTECTIVE CLOTHING: Wear neoprene, nitrile, or natural rubber gloves or gloves with proven resistance to the ingredients listed.
EYE PROTECTION: Use of light-fitting safety glasses or goggles is strongly recommended, especially when wearing contact lenses.
RESPIRATORY PROTECTION: When exposure levels exceed PEL/TLV (likely in confined areas) use an organic vapor respirator (eg Zep 2211).
VENTILATION: Provide local exhaust/ventilation as needed to keep concentration of vapors below exposure limits (PEL/TLV).

SECTION V - PHYSICAL DATA

BOILING POINT (F):	355	SPECIFIC GRAVITY:	0.85
VAPOR PRESSURE (mmHg):	N/D	EVAPORATION RATE (BUTYL ACETATE=1):	< 0.1
VAPOR DENSITY(AIR=1):	> 1.0	PH(CONCENTRATED):	N/A
SOLUBILITY IN WATER:	INSOLUBLE	PH(DILUTION OF NA):	N/A
VOC CONTENT (CONCENTRATED):	82.0%		
APPEARANCE AND ODOR: A CLEAR, AMBER LIQUID WITH A SOLVENT ODOR			

SECTION VI - FIRE AND EXPLOSION DATA

FLASH POINT(G) (METHOD USED): 110
FLAMMABLE LIMITS, LEL: 1.0 **UEL:** 6.0
EXTINGUISHING MEDIA: Carbon dioxide, dry chemical, water fog, foam.
SPECIAL FIRE FIGHTING: Wear self-contained positive pres. breathing apparatus.
UNUSUAL FIRE HAZARDS: Fire exposed drums should be cooled with stream of water.

SECTION VII - REACTIVITY DATA

STABILITY: Stable
INCOMPATIBILITY(AVOID): Heat, open flame, spark, and oxidizing agents.
POLYMERIZATION: Will not occur.
HAZARDOUS DECOMPOSITION: Carbon dioxide, carbon monoxide, and other unidentified organic compounds.

SECTION VIII - SPILL AND DISPOSAL PROCEDURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED:
Immediately eliminate all flame, ignition and high-heat sources. Absorb spill on inert absorbent material (eg Zep-0-Zorb). Pick up and place residue in a clean, D.O.T. specification container for disposal. Wash area thoroughly with a detergent solution and rinse well with water.
WASTE DISPOSAL METHOD:
Liquids cannot be sent to landfills unless solidified. Unusable product and collected spent material may require disposal as a hazardous waste at a notified treatment/storage/disposal facility. Solvent wastes may require treatment to meet the appropriate standards before disposal in a chemical industrial waste landfill. Consult local, state, and federal agencies for proper disposal method in your area.

RA HAZ WASTE NOS.: D001

SECTION IX - SPECIAL PRECAUTIONS

PRECAUTIONS TO BE TAKEN WHEN HANDLING AND STORING:
Combustible! Store and use away from heat, sparks, open flame, or any source of ignition
Store tightly closed container in a dry area at temps. between 40-120 degrees F.
Keep product away from skin and eyes.
Do not breathe spray mists or vapors.
Clothing or shoes which become contaminated with substance should be removed promptly and not re worn until thoroughly cleaned.
Vapors are heavier than air and will accumulate at low points. Ventilation should include floor level exhausting.

(Continued on Page 2)



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MATERIAL SAFETY DATA SHEET

1805

AND SAFE HANDLING AND DISPOSAL INFORMATION

01/07/95

ISSUE DATE: 12/03/93

SUPERSEDES:

DIESEL FUEL ADDITIVE W/O DYE

PRODUCT NO.: 0573

Diesel Fuel Additive

SECTION I - EMERGENCY CONTACTS

TELEPHONE:

(404) 352-1680

BETWEEN 8:00 AM - 5:00 PM (EST)

MEDICAL EMERGENCY:

(404) 435-2973

NON-OFFICE HOURS, WEEKENDS

(404) 432-2873

AND HOLIDAYS, PLEASE CALL YOUR

(404) 424-4789

LOCAL POISON CONTROL

(404) 319-6151

(404) 242-3561

TRANSPORTATION EMERGENCY:

(404) 922-0923

CHEMTREC:

1-800-424-9300

DISTRICT OF COLUMBIA:

(202) 483-7616

TOLL-FREE - ALL CALLS RECORDED

ALL CALLS RECORDED

SECTION II - HAZARDOUS INGREDIENTS

DESIGNATIONS

™ KEROSENE ™ kerosene; fuel oil # 1; coal oil; CAS # 8008-20-6; RTECS # OAS500000; OSHA PEL-N/D
™ 2-ETHYLHEXYL NITRATE ™ CAS # 27247-96-7; RTECS # 1 NONE; OSHA PEL-N/D; MANUFACTURER'S TWA:10 PPM

TLV (PPM)	EFFECTS (SEE REVERSE)	% IN PRUD.
N/D	IRR CBL	70-80
N/D	TOX FBL	15-25

SECTION III - HEALTH HAZARD DATA

Special Note: MSDS data pertains to the product as dispensed from the container. Adverse health effects would not be expected under recommended conditions of use (diluted) so long as prescribed safety precautions are practiced.

Acute Effects of Overexposure:

Overexposure to the vapors from this product may produce mucous membrane irritation, particularly of the eye and respiratory tract. Overexposure to vapors may also produce mild central nervous system depression characterized by headache, dizziness, nausea, and stupor, leading to unconsciousness in extreme cases. Introduction of solvents, as in aspiration of vomitus fluid, may produce chemical pneumonia. Existing respiratory disorders and lung diseases may be aggravated by inhalation of vapors.

Chronic Effects of Overexposure:

Repeated or prolonged inhalation exposure may produce reversible lung damage. Skin which is repeatedly derailed by contact with solvents may be more susceptible to raction, infection, and dermatitis. None of the ingredients are listed as carcinogens by IARC, NTP, or OSHA.

•D PELTLV: Not established

Primary Routes of Entry: Inh

HMIS Codes: HEALTH 2;FLAM. 2;REACT. 0;PERS. PROTECT. B;CHRONIC HAZ. YES

FIRST AID PROCEDURES:

Skin: Wash contaminated skin thoroughly with soap or a mild detergent. Apply a skin cream with lanolin. Get medical attention if irritation persists.

Eyes: Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting upper and lower lids. Get medical attention at once.

Inhale: Move exposed person to fresh air. If irritation persists, get medical attention promptly.

Ingest: If swallowed, do not induce vomiting. If vomiting occurs, keep head below hip level. Get emergency medical attention immediately.

SECTION IV - SPECIAL PROTECTION INFORMATION

Protective Clothing: Wear neoprene, nitrile, or natural rubber gloves or gloves with proven resistance to the ingredients listed.

Eye Protection: Wear tight-fitting splash-proof safety glasses especially if contact lenses are worn.

Respiratory Protection: When exposure levels exceed PEL/TLV (likely in confined areas) use an organic vapor respirator (eg Zep 2211).

Ventilation: Provide local exhaust/ventilation as needed to keep concentration of vapors below exposure limits (PEL/TLV).

SECTION V - PHYSICAL DATA

Boiling Point (°F): 350-500

Specific Gravity: 0.84

Vapor Pressure (mmHg): 0.4 mmHg

Percent Volatile by Volume (%): 95

Vapor Density (air = 1): N/D

Evaporation Rate (BUTYL ACETATE = 1): <0.1

Solubility in Water: EMULSIFIERS

pH (concentrate): N/A

pH (use dilution of N/A): N/A

Appearance and Odor: A CLEAR, THIN AMBER LIQUID WITH A STRONG "SOLVENT" ODOR.

SECTION VI - FIRE AND EXPLOSION DATA

Flash Point (°F) (method used): 126F (TCC)

LEL 1.0 UEL 8.0

Flammable Limits:

Carbon dioxide, dry chemical and foam.

Extinguishing Media:

Wear self-contained positive pres. breathing apparatus.

Special Fire Fighting:

Concentrated vapor may ignite if exposed to spark.

Unusual Fire Hazards:



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MATERIAL SAFETY DATA SHEET

AND SAFE HANDLING AND DISPOSAL INFORMATION

02/02/96

ISSUE DATE: 10/20/94

SUPERSEDES:

ZEP DYNAMITE

PRODUCT NO.: 0566

Truck and Trailer Wash

SECTION I - EMERGENCY CONTACTS

TELEPHONE:

(404) 352-1680 BETWEEN 8:00 AM - 5:00 PM (EST)

MEDICAL EMERGENCY:

(770) 435-4200 NON-OFFICE HOURS, WEEKENDS
(404) 432-2873 AND HOLIDAYS, PLEASE CALL YOUR
(404) 424-4789 LOCAL POISON CONTROL
(404) 392-1480
(404) 455-8160
(404) 552-8836

TRANSPORTATION EMERGENCY:

(770) 922-0923

1-800-424-9300 TOLL-FREE - ALL CALLS RECORDED

CHEMTREC:
DISTRICT OF COLUMBIA:
(202) 463-7616

ALL CALLS RECORDED

MISSOURI SURPLUS (317)
PROPERTY-JANITORIAL
1172 RIVERSIDE
JEFFERSON CITY, MO 65101

SECTION II - HAZARDOUS INGREDIENTS

DESIGNATIONS

@ SODIUM LAURYL ETHER SULFATE ~ SODIUM LAURETH SULFATE: CAS # 9004-82-4; RTECS # WB7350000; OSHA PEL N/D	TLV (PPM) N/D	EFFECTS (SEE REVERSE) EIR	% IN PROD. < 5
ALCOHOLS, C9-11, ETHOXYLATED ~ linear primary alcohol ethoxyate (6 moles) EO); CAS # 68439-46-3; RTECS # NONE; OSHA PEL N/D	N/D	IRR	< 5
TETRASODIUM ETHYLENEDIAMINE TETRAACETATE ~ ethylenedinitrilo tetracetic acid, tetrasodium salt; EDTA; CAS # 64-02-8; RTECS # AH4025000; OSHA PEL N/D	N/D	IRR	5-15

@ Identifies chemicals listed under SARA-Section 313 for release reporting

SECTION III - HEALTH HAZARD DATA

Special Note: MSDS data pertains to the product as dispensed from the container. Adverse health effects would not be expected under recommended conditions of use (diluted) so long as prescribed safety precautions are practiced.

Acute Effects of Overexposure:

This product may irritate eyes and skin upon contact. Inflammation of the eye is characterized by redness, watering, and itching. Skin inflammation is characterized by ching, scaling, reddening, or, occasionally, blistering. Overexposure by inhalation may cause respiratory irritation. Ingredients in this product may aggravate existing skin, eye, or respiratory disorders.

Chronic Effects of Overexposure:

Repeated or prolonged skin contact may produce chronic inflammation or dermatitis characterized by redness, scaling, or itching. Repeated eye exposure may produce chronic inflammation of the eye or corneal damage. None of the ingredients are listed as carcinogens by IARC, NTP, or OSHA.

Est'd PEL/TLV: Not established

Primary Routes of Entry: Inh

HMIS Codes: HEALTH 2:FLAM 2:REACT 0:PERS. PROTECT. B:CHRONIC HAZ NO

FIRST AID PROCEDURES:

Skin: Immediately flush contaminated skin with plenty of water for at least 15 minutes. Get medical attention immediately.
Eyes: Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting upper and lower lids. Get medical attention at once.
Inhale: Move exposed person to fresh air. If irritation persists, get medical attention promptly.
Ingest: If swallowed, do not induce vomiting. If vomiting occurs, keep head below hip level. Get emergency medical attention immediately.

SECTION IV - SPECIAL PROTECTION INFORMATION

Protective Clothing:

Wear neoprene, nitrile or natural rubber gloves or gloves with proven resistance to the ingredients listed.

Eye Protection:

Wear splash-proof safety goggles especially if contact lenses are worn.

Respiratory Protection:

Provide local exhaust/ventilation as needed to keep concentration of vapors below exposure limits (PEL/TLV).

SECTION V - PHYSICAL DATA

Boiling Point (°F): ~ 220	Specific Gravity: 1.053	Vapor Pressure (mmHg): N/D
Percent Volatile by Volume (%): 84	Vapor Density (air = 1): N/D	Evaporation Rate (WATER = 1): 1.0
Solubility in Water: COMPLETE	pH (concentrate): 12.9	pH (use dilution of 1 %): 11.2
Appearance and Odor: A CLEAR, YELLOW-GREEN, THIN LIQUID WITH A DETERGENT ODOR.		

SECTION VI - FIRE AND EXPLOSION DATA

Flash Point (°F) (method used): 164 (TCC)

Flammable Limits:

LEL N/D UEL N/D

Extinguishing Media:

Carbon dioxide, dry chemical, water, and foam

Special Fire Fighting:

Wear self-contained positive pres. breathing apparatus.

Unusual Fire Hazards:

Fire exposed drums should be cooled with stream of water.

MATERIAL SAFETY DATA SHEET

AND SAFE HANDLING AND DISPOSAL INFORMATION



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06/26/93

ISSUE DATE: 02/14/90
SUPERSEDES: 08/16/89

ZEP AUTO GLAZE
PRODUCT NO.: 0458

Auto Polishing Compound

SECTION I - EMERGENCY CONTACTS

TELEPHONE: (404) 352-1680 BETWEEN 8:00 AM - 5:00 PM (EST)
MEDICAL EMERGENCY: (404) 435-2973 NON-OFFICE HOURS, WEEKENDS
(404) 351-2952 AND HOLIDAYS, PLEASE CALL YOUR
(404) 432-2873 LOCAL POISON CONTROL
TRANSPORTATION EMERGENCY: (404) 922-0923
CHEMTREC: 1-800-424-9300 TOLL-FREE - ALL CALLS RECORDED
DISTRICT OF COLUMBIA: (202) 483-7616 ALL CALLS RECORDED

TAGGART GARY
117 N RIVERSIDE
PO DRAWER 1310
JEFFERSON CITY, MO 65102

SECTION II - HAZARDOUS INGREDIENTS

DESIGNATIONS

* MINERAL SPIRITS * ligroin, aliphatic naphtha. CAS # 8052-41-3. RTECS # WJ8952000. OSHA PEL-100 PPM
* HYDRATED ALUMINUM SILICATE * kaolin, china clay. CAS # 1332-58-7. RTECS # NONE. OSHA PEL-10 mg/m³
(nuisance dust)

TLV (PPM)	EFFECTS (SEE REVERSE)	% IN PROD.
100	CNS,CBL	20-30
N/D	IRR	5-10

SECTION III - HEALTH HAZARD DATA

Special Note: MSDS data pertains to the product as dispensed from the container. Adverse health effects would not be expected under recommended conditions of use (diluted) so long as prescribed safety precautions are practiced.

Acute Effects of Overexposure:

Overexposure to the vapors from this product may produce mucous membrane irritation, particularly of the eye and respiratory tract. Overexposure to vapors may also produce mild central nervous system depression characterized by headache, dizziness, nausea, and stupor, leading to unconsciousness in extreme cases. Introduction of solvents, as in aspiration of vomitus fluid, may produce chemical pneumonia. Existing respiratory disorders and lung diseases may be aggravated by vapors. Ingredients in this product may aggravate existing skin, eye, or respiratory disorders.

*Chronic Effects of Overexposure:

extended or prolonged inhalation exposure may produce reversible lung damage. Skin which is repeatedly defatted by contact with solvents may be more susceptible to ation, infection, and dermatitis. None of the ingredients are listed as carcinogens by IARC, NTP, or OSHA.

Est'd PEL/TLV: Not established

Primary Routes of Entry: Inh, Skin

HMIS Codes: HEALTH 1;FLAM: 3;REACT: 0;PERS: PROTECT B ;CHRONIC HAZ: YES

FIRST AID PROCEDURES:

Skin: Wash contaminated skin thoroughly with soap or a mild detergent. Apply a skin cream with lanolin. Get medical attention if irritation persists.
Eyes: Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting upper and lower lids. Get medical attention at once.
Inhale: Move exposed person to fresh air. If irritation persists, get medical attention promptly.
Ingest: If swallowed, do not induce vomiting. If vomiting occurs, keep head below hip level. Get emergency medical attention immediately.

SECTION IV - SPECIAL PROTECTION INFORMATION

Protective Clothing:

Wear neoprene, nitrile, or natural rubber gloves or gloves with proven resistance to the ingredients listed.

Eye Protection:

Wear tight-fitting splash-proof safety glasses especially if contact lenses are worn.

Respiratory Protection:

Use NIOSH-approved dust mask if dust is present. Ventilation should be equivalent to outdoors. Use exhaust fans and open windows in enclosed spaces.

SECTION V - PHYSICAL DATA

Boiling Point (°F):	220 (INITIAL)	Specific Gravity:	0.98	Vapor Pressure (mmHg):	N/D
Percent Volatile by Volume (%):	87	Vapor Density (air = 1):	N/D	Evaporation Rate (WATER = 1):	>1.0
Solubility in Water:	EMULSIFIES	pH (concentrate):	9.0-9.5	pH (use dilution of):	N/A
Appearance and Odor:	A WHITE, THICK CREAMY LIQUID WITH SOLVENT ODOR.				

SECTION VI - FIRE AND EXPLOSION DATA

Flash Point (°F) (method used): 98F (TCC)
LEL 1.0% UEL 7.0%
Flammable Limits:
Extinguishing Media: CO₂, DRY CHEMICAL, WATER FOG
Special Fire Fighting: Wear self-contained positive pres. Breathing apparatus.
Unusual Fire Hazards: Concentrated vapor may ignite if exposed to spark.



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MATERIAL SAFETY DATA SHEET

AND SAFE HANDLING AND DISPOSAL INFORMATION

04-07-94
ISSUE DATE: 04-23-90
SUPERSEDES: 07-09-89
ZEP PRO FINISH
PRODUCT NO.: 0428

Auto Polishing Compound

SECTION I - EMERGENCY CONTACTS

TELEPHONE: (404) 352-1680 BETWEEN 8:00 AM - 5:00 PM (EST)
MEDICAL EMERGENCY: (404) 435-2973 NON-OFFICE HOURS, WEEKENDS
(404) 351-2952 AND HOLIDAYS, PLEASE CALL YOUR
(404) 432-2873 LOCAL POISON CONTROL
TRANSPORTATION EMERGENCY: (404) 922-0923
CHEMTREC: 1-800-424-9300 TOLL-FREE - ALL CALLS RECORDED
DISTRICT OF COLUMBIA: (202) 483-7616 ALL CALLS RECORDED

MISSOURI SURPLUS
PROPERTY-JANITORIAL
1172 RIVERSIDE
JEFFERSON CITY, MO 65101

SECTION II - HAZARDOUS INGREDIENTS

DESIGNATIONS	TLV (PPM)	EFFECTS (SEE REVERSE)	% IN PROD.
~ LOW ODOR PARAFFINIC SOLVENT ~ odorless base oil; dispersol; CAS # 64742-47-8; RTECS # NONE; OSHA PEL-500 ppm	500	CNS CBL	5-10
~ MINERAL SEAL OIL ~ (mineral oil); petrolatum; CAS # 64741-44-2; RTECS # PY8030000; ACGIH/OSHA OIL MIST LIMIT = 5mg/M3	N/A	IRR	1-5
~ ISOPROPYL ALCOHOL ~ ipa; dimethylcarbinol; 2-propanol; CAS # 67-63-0; RTECS # NT8050000; OSHA PEL-400 ppm; OSHA/ACGIH STEL-500 PPM	400	IRR FBL	1-5

SECTION III - HEALTH HAZARD DATA

Special Note: MSDS data pertains to the product as dispensed from the container. Adverse health effects would not be expected under recommended conditions of use (diluted) so long as prescribed safety precautions are practiced.

Acute Effects of Overexposure:

This product may irritate eyes and skin upon contact. Inflammation of the eye is characterized by redness, watering, and itching. Skin inflammation is characterized by itching, scaling, reddening, or, occasionally, blistering. This product is not sufficiently volatile to constitute a significant inhalation hazard. Severe overexposure to concentrated vapor may produce mild central nervous system depression, characterized by headache and stupor. Introduction of solvents, as in aspiration of vomitus, may produce chemical pneumonia.

Chronic Effects of Overexposure:

Contact, especially if prolonged or repeated, may cause redness, itching, or blistering of the skin. Skin which is repeatedly irritated by contact with this product may be more susceptible to irritation, infection, or dermatitis. None of the ingredients are listed as carcinogens by IARC, NTP, or OSHA.

Primary Routes of Entry: Inh.

EST'D PEL/TLV: Not established
HMIS Codes: HEALTH 2, FLAM 2, REACT 0, PERS. PROTECT. B, CHRONIC HAZ YES

FIRST AID PROCEDURES:

Skin: Wash contaminated skin thoroughly with soap or a mild detergent. Apply a skin cream with lanolin. Get medical attention if irritation persists.
Eyes: Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting upper and lower lids. Get medical attention at once.
Inhale: Move exposed person to fresh air. If irritation persists, get medical attention promptly.
Ingest: If this product is swallowed, do not induce vomiting. If victim is conscious give plenty of water to drink. Get medical attention at once.

SECTION IV - SPECIAL PROTECTION INFORMATION

Protective Clothing: The use of neoprene, nitrile or natural rubber gloves is strongly recommended, especially for prolonged contact.
Eye Protection: Use of tight-fitting safety glasses or goggles is strongly recommended, especially when wearing contact lenses.
Respiratory Protection: If ventilation is inadequate, wear a properly fitting MSHA or OSHA-approved respirator.
Ventilation: If vapors are detected, ventilate work area by opening windows and using exhaust fans.

SECTION V - PHYSICAL DATA

Boiling Point (°F):	N/D	Specific Gravity:	0.97	Vapor Pressure (mmHg):	N/D
Percent Volatile by Volume (%):	~ 87	Vapor Density (air = 1):	> 1	Evaporation Rate (ETHYL ETHER = 1):	>> 1
Solubility in Water:	DISPERSIBLE	pH (concentrate):	9.2	pH (use dilution of N/A):	N/A
Appearance and Odor: OPAQUE, VISCIOUS, YELLOWISH LIQUID WITH SOLVENT ODOR					

SECTION VI - FIRE AND EXPLOSION DATA

Flash Point (°F) (method used): 185 (TCC)
Flammable Limits: LEL N/D UEL N/D
Extinguishing Media: CO2, DRY CHEMICALS, FOAM
Special Fire Fighting: Direct water onto intact containers to prevent bursting
Unusual Fire Hazards: Wear self-contained positive pres. Breathing apparatus



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MATERIAL SAFETY DATA SHEET

AND SAFE HANDLING AND DISPOSAL INFORMATION

12:28:94

ISSUE DATE: 06 20 94
SUPERSEDES: 07 12 89
ZEP BIG ORANGE
PRODUCT NO.: 0415

Industrial Solvent Degreaser

MISSOURI SURPLUS
PROPERTY-JANITORIAL
1172 RIVERSIDE
JEFFERSON CITY, MO 65101

SECTION I - EMERGENCY CONTACTS

TELEPHONE: (404) 352-1680 BETWEEN 8:00 AM - 5:00 PM (EST)
MEDICAL EMERGENCY: (404) 435-2973 NON-OFFICE HOURS, WEEKENDS
(404) 432-2873 AND HOLIDAYS, PLEASE CALL YOUR
(404) 424-4789 LOCAL POISON CONTROL
(404) 319-6151
(404) 242-3561
TRANSPORTATION EMERGENCY: (404) 922-0923
CHEMTREC: 1-800-424-9300 TOLL-FREE - ALL CALLS RECORDED
DISTRICT OF COLUMBIA: (202) 483-7616 ALL CALLS RECORDED

SECTION II - HAZARDOUS INGREDIENTS

DESIGNATIONS	TLV (PPM)	EFFECTS (SEE REVERSE)	% IN PROD.
** D-LIMONENE ** orange distillate; citrus terpene; cyclohexene, 1-methyl-4-(1-methylethyl)-. (R)-CAS # 5989-27-5;	N/D	CBL SEN	> 90
RTECS # GW6360000; OSHA PEL N/D			
** ALCOHOLS, C11-C15-SECONDARY, ETHOXYLATED ** CAS # 68131-40-8; RTECS # WZ5200000; OSHA PEL N/D	N/D	EIR	< 5
** NONYLPHENOXYPOLYETHYLENEOXYPETHANOL ** poly(oxy-1,2-ethanediyl), alpha-(nonylphenyl)-omega-hydroxy;	N/D	EIR	< 5
CAS # 9016-45-9; RTECS # MD905000; OSHA PEL-N/D			

SECTION III - HEALTH HAZARD DATA

Special Note: MSDS data pertains to the product as dispensed from the container. Adverse health effects would not be expected under recommended conditions of use (diluted) so long as prescribed safety precautions are practiced.

Acute Effects of Overexposure:

This product can be an eye irritant. Inflammation of eye tissue is characterized by redness, watering, and/or itching. One of the ingredients in this product has caused sensitization reactions in a small percentage of the general population.

Chronic Effects of Overexposure:

contact, especially if prolonged or repeated, may cause redness, itching, or blistering of the skin. None of the hazardous ingredients are listed as carcinogens by IARC, I.P. & OSHA

Est'd PEL/TLV: Not established

Primary Routes of Entry: N/A

HMS Codes: HEALTH 1:FLAM, 2:REACT, 0:PERS, PROTECT A, CHRONIC HAZ, NO

FIRST AID PROCEDURES:

Skin: Wash contaminated skin thoroughly with soap or a mild detergent. Apply a skin cream with lanolin. Get medical attention if irritation persists.
Eyes: Immediately flush eyes with plenty of water for at least 15 minutes; occasionally lifting upper and lower lids. Get medical attention at once.
Inhalation: Move exposed person to fresh air. If irritation persists, get medical attention promptly.
Ingest: If this product is swallowed, do not induce vomiting. If victim is conscious give plenty of water to drink. Get medical attention at once.

SECTION IV - SPECIAL PROTECTION INFORMATION

Protective Clothing: Wear nitrile gloves or use gloves with demonstrated resistance to the ingredients in this product.
Eye Protection: Wear tight-fitting splash-proof safety glasses especially if contact lenses are worn.
Respiratory Protection: No special measures are required.
Ventilation: No special measures are required.

SECTION V - PHYSICAL DATA

Boiling Point (°F):	338-375	Specific Gravity:	0.853	Vapor Pressure (mmHg):	N/A
Percent Volatile b. volume (%):	93.8	Vapor Density (air = 1):	N/A	Evaporation Rate (CCL4 = 1):	~33
Solubility in Water:	EMULSIFIES	pH (concentrate):	N/A	pH (use dilution of 1:20):	7.6
Appearance and Odor:	ORANGE LIQUID WITH A CITRUS ODOR				

SECTION VI - FIRE AND EXPLOSION DATA

Flash Point (°F) (method used): 121 (TCC)
Flammable Limits: LEL N/A UEL N/A
Extinguishing Media: Carbon dioxide, dry chemical and foam
Special Fire Fighting: Fire exposed drums should be cooled with stream of water.
Unusual Fire Hazards: None



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MATERIAL SAFETY DATA SHEET AND SAFE HANDLING AND DISPOSAL INFORMATION

1-877-1-BUY-ZEP (1-877-428-9937)

ZEP MANUFACTURING COMPANY
P.O. BOX 2015
ATLANTA, GEORGIA 30301

SOLD TO:

00820

(317)
MISSOURI SURPLUS PROPERTY
117 N RIVERSIDE DR
JEFFERSON CITY MO 65101

ISSUE DATE: 10/02/00
SUPERSEDES: 10/04/89
ZEP FAST GASKET BLUE
Prod No: 0413
Silicone Gasket Compound and Sealant

Date printed: 10/29/00

SECTION I - EMERGENCY CONTACTS

TELEPHONE: (404) 352-1680
MEDICAL EMERGENCY: (770) 439-4200
(770) 432-2873
(770) 424-4789
(770) 424-2048
(770) 455-8160
(770) 552-8836
TRANSPORTATION EMERGENCY: (770) 922-0923
CHEMTRAC: (800) 424-9300
DISTRICT OF COLUMBIA: (202) 483-7616

BETWEEN 8:00 AM - 5:00 PM (EST)
NON OFFICE HOURS, WEEKENDS
AND HOLIDAYS, PLEASE CALL
LOCAL POISON CONTROL

TOLL FREE CALLS RECORDED
ALL CALLS RECORDED

A25224

SECTION II - HAZARDOUS INGREDIENTS

** METHYLTRIACTOXYSILOXANE ** acetoxy silane; CAS# 4253-34-3;
OSHA/ACGIH PEL/TLV 10 PPM (for acetic acid only)
** ETHYLTRIACTOXYSILOXANE ** acetoxy silane; CAS# 17689-77-9;
OSHA/ACGIH/ PEL/TLV 10 PPM (for acetic acid only)
** SILICA AMORPHOUS ** CAS# 7631-86-9; OSHA PEL: TWA 20 MPPCF;
ACGIH TLV 10 mg/m3

(PPM)	EFFECTS (SEE NOTICE)	% IN PROD.
N/D	IRR	< 10
N/D	IRR	< 10
N/D	IRR	5-15

SECTION III - HEALTH HAZARD DATA

SPECIAL NOTE: MSDS data pertains to the product as dispensed from the container. Adverse health effects would not be expected under recommended conditions of use (diluted) so long as prescribed safety precautions are practiced.

ACUTE EFFECTS OF OVEREXPOSURE:

This product can be an eye irritant. Inflammation of eye tissue is characterized by redness, watering, and/or itching. Overexposure to the vapors from this product may produce mucous membrane irritation, particularly of the eye and respiratory tract.

CHRONIC EFFECTS OF OVEREXPOSURE:

Some of the hazardous ingredients are listed as carcinogens by IARC, NTP & OSHA.

ESTD PEL/TLV: Not established PRIMARY ROUTES OF ENTRY: inh, Skin.

HMS CODES: HEALTH 1; FLAM: 1; REACT: 0; PERS: PROTECT; CHRONIC HAZ: NO

FIRST AID PROCEDURES:

SKIN: Wash contaminated skin with soap or a mild detergent. Get medical attention if irritation develops.
EYES: Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting upper and lower lids. Get medical attention at once.
INHALE: Move exposed person to fresh air. If irritation persists, get medical attention promptly.
INGEST: If this product is swallowed, do not induce vomiting. If victim is conscious give plenty of water to drink. Get medical attention at once.

SECTION IV - SPECIAL PROTECTION INFORMATION

PROTECTIVE CLOTHING: The use of neoprene, nitrile or natural rubber gloves is strongly recommended, especially for prolonged contact.
EYE PROTECTION: Use of tight-fitting safety glasses or goggles is strongly recommended, especially when wearing contact lenses.
RESPIRATORY PROTECTION: If ventilation is inadequate, wear a properly fitting MSHA or OSHA-approved respirator.
VENTILATION: Ventilation should be equivalent to outdoors. Use exhaust fans and open windows in enclosed spaces.

SECTION V - PHYSICAL DATA

BOILING POINT (F): ~ 300
VAPOR PRESSURE (mmHg): N/D
VAPOR DENSITY(AIR=1): N/A
SOLUBILITY IN WATER: <0.1%
VOC CONTENT (CONCENTRATE): 0.09%
APPEARANCE AND ODOR: BLUE PASTE WITH ACETIC ACID-TYPE ODOR

SPECIFIC GRAVITY:
EVAPORATION RATE (BUTYL ACETATE=1):
PH(CONCENTRATE):
PH(USE DILUTION OF N/A):

1.04
<1
N/A
N/A

SECTION VI - FIRE AND EXPLOSION DATA

FLASH POINT(F) (METHOD USED): 212
FLAMMABLE LIMITS: LEL: N/A UEL: N/A
EXTINGUISHING MEDIA: Carbon dioxide, dry chemical, and water fog.
SPECIAL FIRE FIGHTING: Wear self-contained positive pres. breathing apparatus.
UNUSUAL FIRE HAZARDS: Direct water onto intact containers to prevent bursting.

SECTION VII - REACTIVITY DATA

STABILITY: Stable
INCOMPATIBILITY(AVOID): Strong oxidizing agents.
POLYMERIZATION: Will not occur.
HAZARDOUS DECOMPOSITION: Carbon dioxide and fumes of acetic acid and silicon dioxide.

SECTION VIII - SPILL AND DISPOSAL PROCEDURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED:
Observe safety precautions in sections 4 & 9 during spill clean-up. Large spills are unlikely due to packaging. Spill may be absorbed on an inert absorbent material (eg Zep-O-Zorb), and placed in a suitable container for disposal. Wash area thoroughly with a detergent solution and rinse well with water.

WASTE DISPOSAL METHOD:

Product is consumed in use. Large numbers of small containers may require handling as a hazardous waste, but in most states, total hazardous waste quantities less than 220 lbs. per month may be disposed of in a chemical or industrial waste landfill. Consult local, state and federal agencies for proper disposal method in your area.
HAZ WASTE NOS: N/A

SECTION IX - SPECIAL PRECAUTIONS

PRECAUTIONS TO BE TAKEN WHEN HANDLING AND STORING:
Do not store at temperatures above 120F (50C) or in direct sunlight. Do not puncture or incinerate container.
Avoid direct inhalation of vapors.
Clothing or shoes which become contaminated with substance should be removed promptly and not re-worn until thoroughly cleaned.
Keep product out of eyes.
Keep out of the reach of children.



CLEAN ACROSS AMERICA AND
THROUGHOUT THE WORLD™

MATERIAL SAFETY DATA SHEET

AND SAFE HANDLING AND DISPOSAL INFORMATION

ZEP MANUFACTURING COMPANY
P.O. BOX 2015
ATLANTA, GEORGIA 30301

SOLD TO:

MISSOURI SURPLUS (317)
PROPERTY - JANITORIAL
117 N RIVERSIDE DR
JEFFERSON CITY MO 65101

ISSUE DATE: 06/15/88
SUPERSEDES: 06/06/88

Date printed: 12/08/98

ZEP-O-SHINE
Prod No: 0382

Car Wash - Liquid

SECTION I - EMERGENCY CONTACTS	
TELEPHONE: (404) 352-1680	BETWEEN 8:00 AM - 5:00 PM (EST)
MEDICAL EMERGENCY: (770) 439-4200	NON OFFICE HOURS, WEEKENDS AND HOLIDAYS, PLEASE CALL LOCAL POISON CONTROL
(770) 432-2873	
(770) 424-4789	
(770) 424-2048	
(770) 455-8160	
(770) 552-8836	
TRANSPORTATION EMERGENCY: (770) 922-0923	
CHEMTRAC: (800) 424-9300	TOLL FREE CALLS RECORDED
DISTRICT OF COLUMBIA: (202) 483-7616	ALL CALLS RECORDED

A25224

DESIGNATIONS

** NONYL PHENOXYPOLYETHYLENEOXYPOLYETHANOL ** npe:
Poly(oxy-1,2-ethanediyl)-alpha-(nonylphenyl)-omega-hydroxy;
CAS# 9016-45-9; RTECS# MD0900000; OSHA PEL- M/D

SECTION II - HAZARDOUS INGREDIENTS

(PPM)	EFFECTS (SEE NOTICE)	% IN PROD.
ND	EIR	20-30

SECTION III - HEALTH HAZARD DATA

SPECIAL NOTE: MSDS data pertains to the product as dispensed from the container. Adverse health effects would not be expected under recommended conditions of use (diluted) so long as prescribed safety precautions are practiced.

ACUTE EFFECTS OF OVEREXPOSURE:

This product in concentrated form may be an eye irritant. Inflammation of eye tissue is characterized by redness, watering, and/or itching.

CHRONIC EFFECTS OF OVEREXPOSURE:

There are no known effects from chronic exposure to this product.
None of the hazardous ingredients are listed as carcinogens by IARC, NTP, & OSHA
ESTD PELTV: Not established. PRIMARY ROUTES OF ENTRY: N/A

MS CODES: HEALTH 0; FLAM 0; REACT 0; PERS PROTECT A ; CHRONIC HAZ NO

FIRST AID PROCEDURES:

SKIN: Flush contaminated skin with plenty of water. Consult a physician if irritation develops.
EYES: Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting upper and lower lids. Get medical attention at once.
INHALE: Move exposed person to fresh air. If irritation persists, get medical attention promptly.
INGEST: If this product is swallowed, do not induce vomiting. If victim is conscious give plenty of water to drink. Get medical attention at once.

SECTION IV - SPECIAL PROTECTION INFORMATION

PROTECTIVE CLOTHING: No special measures are required.
EYE PROTECTION: Use of light-fitting safety glasses or goggles is strongly recommended, especially when wearing contact lenses.
RESPIRATORY PROTECTION: No special measures are required.
VENTILATION: No special measures are required.

SECTION V - PHYSICAL DATA

BOILING POINT (F):	215	SPECIFIC GRAVITY:	1.01
VAPOR PRESSURE (mmHg):	N/A	EVAPORATION RATE (WATER=1):	1
VAPOR DENSITY(AIR=1):	N/A	PH(CONCENTRATE):	6.5-7.0
SOLUBILITY IN WATER:	COMPLETE	PH(USE DILUTION OF 1%):	7.0

SECTION VI - FIRE AND EXPLOSION DATA

FLASH POINT(O) (METHOD USED): None
FLAMMABLE LIMITS: LEL: N/A UEL: N/A
EXTINGUISHING MEDIA: Noncombustible.
SPECIAL FIRE FIGHTING: None
UNUSUAL FIRE HAZARDS: None

SECTION VII - REACTIVITY DATA

STABILITY: Stable
INCOMPATIBILITY(AVOID): None
POLYMERIZATION: Will not occur.
HAZARDOUS DECOMPOSITION: NONE

SECTION VIII - SPILL AND DISPOSAL PROCEDURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED:
Observe safety procedures in section 4 & 9 during clean-up. Absorb spill on inert absorbent material (eg Zep-O-Zorb). Pick up and place residue in a suitable waste container or if permitted, flush to sewer. Thoroughly rinse spill area with water.
WASTE DISPOSAL METHOD:
Liquid wastes are not permitted in landfills. This product is not considered a hazardous waste under RCRA. Unusable liquid may be absorbed on an inert absorbent material (eg Zep-O-Zorb), drummed, and taken to a chemical or industrial landfill in some areas disposal by flushing into a sanitary sewer with plenty of water may be permissible. Consult local, state, and federal agencies for proper disposal method in your area.
RCRA HAZ. WASTE NOS.: N/A

SECTION IX - SPECIAL PRECAUTIONS

PRECAUTIONS TO BE TAKEN WHEN HANDLING AND STORING:
"Keep product out of eyes.
ep out of the reach of children.

SECTION X - REGULATORY INFORMATION

DOT PROPER SHIPPING NAME: INDUSTRIAL CLEANERS N.O.L.LIQUID KEEP FROM FREEZING
NOTE: DOT information applies to larger package sizes of affected products. For some products, DOT may require alternate names and labeling in accordance with packaging group requirements.
DOT HAZARD CLASS: DOT PACKING GROUP:
DOT I.D. NUMBER: DOT LABEL/PLACARD:
DOT HAZARD CLASS: DOT PACKING GROUP:
EPA TSCA CHEMICAL INVENTORY - ALL INGREDIENTS ARE LISTED
EPA CWA 40CFR PART 117 SUBSTANCE(R) IN A SINGLE CONTAINER: NONE
(Continued on Page: 2)

OPEN & SHUT
DA 6151

MATERIAL SAFETY DATA SHEET
ESSENTIALLY SIMILAR TO OSHA FORM 174

MANUFACTURED FOR:
Drummond American Corporation
600 Corporate Woods Pkwy.
Vernon Hills, IL 60061

IN CASE OF EMERGENCY CALL:
ROCKY MOUNTAIN POISON & DRUG CENTER
COLLECT AT: (303) 623-5716

DATE OF PREPARATION:
02/01/98

INFORMATION TELEPHONE NUMBER
(847) 913-9313

SECTION I - IDENTITY

PRODUCT NUMBER DA 6151
PRODUCT NAME OPEN & SHUT
PRODUCT CLASS SOLVENTS

SECTION II - INGREDIENTS

INGREDIENT	CAS NUMBER	%	ACGIH TLV PPM	MG/ M ³	PEL PPM	STEL PPM
PETROLEUM DISTILLATE	64742-47-8	5-20	500	ND	ND	ND
PETROLEUM OIL	64742-52-5	5-20	ND	5	ND	ND
TRICHLOROETHYLENE *	79-01-6	50-75	50	ND	50	100
CARBON DIOXIDE	124-38-9	1-5	5000	ND	10M	30M

* THIS CHEMICAL IS SUBJECT TO
S.A.R.A TITLE III SECTION 313
REPORTING

SECTION III - PHYSICAL/CHEMICAL CHARACTERISTICS

BOILING POINT (degrees F): 165
VAPOR DENSITY: Heavier than air
EVAPORATION RATE: > Butyl Acetate
PERCENT VOLATILE (By Weight): N/A WEIGHT PER GALLON (LBS): 10.33

OPTIONAL INFORMATION:

Appearance/ Odor: Clear brown liquid, sweet odor.
Specific Gravity (Water=1): 1.24
Solubility in Water: Negligible
Vapor Pressure (mm Hg): 89

CALIFORNIA PROPOSITION 65 WARNING: THIS PRODUCT CONTAINS A CHEMICAL
KNOWN TO THE STATE OF CALIFORNIA TO CAUSE CANCER.

OPEN & SHUT
DA 6151

MATERIAL SAFETY DATA SHEET
ESSENTIALLY SIMILAR TO OSHA FORM 174

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

FLAMMABILITY CLASSIFICATION: OSHA CLASS N/A
DOT CLASS ORM-D U.N. CLASSIFICATION:
PER DOT N/A
PER IMCO N/A

FLASH POINT: N/A

LEL: 7.0

UEL: 13.0

METHOD: TAG CLOSED CUP

AEROSOL PRODUCT: TREAT AS CYLINDER OF COMPRESSED GAS

EXTINGUISHING MEDIA: WATER FOG

UNUSUAL FIRE AND EXPLOSION HAZARDS:
At elevated temperatures (over 120°F) containers may vent, rupture,
or burst.

SPECIAL FIREFIGHTING PROCEDURE:
Keep containers cool. Use shielding to protect personnel against
bursting, rupturing or venting containers. Wear a positive pressure
self-contained breathing apparatus.

SECTION V - REACTIVITY DATA

STABILITY: STABLE

HAZARDOUS POLYMERIZATION: WILL NOT OCCUR

HAZARD DECOMPOSITION PRODUCTS:
Hydrogen chloride, oxides of carbon, and minute traces of phosgene
and chlorine may be formed upon combustion or thermal decomposition.

CONDITIONS TO AVOID:
None Known.

INCOMPATIBILITY (MATERIALS TO AVOID):
Strong bases, oxidizing materials, metallic aluminum, and zinc
powders.

D.O.T. EMERGENCY RESPONSE INFORMATION:
NOT APPLICABLE

LIVE-WIRE
DA 6030

MATERIAL SAFETY DATA SHEET
ESSENTIALLY SIMILAR TO OSHA FORM 174

MANUFACTURED FOR:
Drummond American Corporation
600 Corporate Woods Pkwy.
Vernon Hills, IL 50061

IN CASE OF EMERGENCY CALL:
ROCKY MOUNTAIN POISON & DRUG CENTER
COLLECT AT: (303) 623-5716

DATE OF PREPARATION:
09/01/95

INFORMATION TELEPHONE NUMBER
(847) 913-9313

SECTION I - IDENTITY

PRODUCT NUMBER DA 6030
PRODUCT NAME LIVE-WIRE
PRODUCT CLASS CLEANERS

SECTION II - INGREDIENTS

INGREDIENT	CAS NUMBER	%	ACGIH TLV PPM	MG/ M ³	PEL PPM	STEL PPM
2-BUTOXYETHANOL *	111-76-2	1-5	25	N/D	50	N/D
PROPELLANT: C3-C4 ALKANE BLEND	68475-59-2	1-10	N/D	N/D	ND	N/D

* THIS CHEMICAL IS SUBJECT TO
S.A.R.A TITLE III SECTION 313
REPORTING. THE REMAINING
INGREDIENTS AND THEIR
PERCENTAGES ARE PROPRIETARY.

SECTION III - PHYSICAL/CHEMICAL CHARACTERISTICS

BOILING POINT (degrees F): 212
VAPOR DENSITY: LIGHTER THAN AIR
EVAPORATION RATE: SLOWER THAN ETHER
PERCENT VOLATILE (By Weight): N/A WEIGHT PER GALLON (LBS): N/A

OPTIONAL INFORMATION:

Appearance/Odor: clear, thin liquid with a mild ammonia odor.
Specific Gravity: 1.01 Soluble in water: complete. Vapor Density: <1
Evaporation Rate (Butyl Acetate=1): <1. Vapor Pressure: 18

LIVE-WIRE
DA 6030

MATERIAL SAFETY DATA SHEET
ESSENTIALLY SIMILAR TO OSHA FORM 174

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

FLAMMABILITY CLASSIFICATION: OSHA CLASS N/A DOT CLASS N/A
U.N. CLASSIFICATION: PER DOT N/A PER IMCO N/A

FLASH POINT: N/A

LEL: N/A

UEL: N/A

METHOD: TAG CLOSED CUP

AEROSOL PRODUCT: TREAT AS CYLINDER OF COMPRESSED GAS

EXTINGUISHING MEDIA: WATER FOG

UNUSUAL FIRE AND EXPLOSION HAZARDS:
At elevated temperatures (over 130 degrees Fahrenheit) containers
may vent, rupture or burst.

SPECIAL FIREFIGHTING PROCEDURE:
Keep containers cool. Use shielding to protect personnel against
bursting, rupturing or venting containers.

SECTION V - REACTIVITY DATA

STABILITY: STABLE

HAZARDOUS POLYMERIZATION: WILL NOT OCCUR

HAZARD DECOMPOSITION PRODUCTS:
Thermal decomposition may produce oxides of carbon and nitrogen.

CONDITIONS TO AVOID:
Avoid heating to abnormal temperatures.

INCOMPATIBILITY (MATERIALS TO AVOID):
NONE.

D.O.T. EMERGENCY RESPONSE INFORMATION:
NOT APPLICABLE



Appendix D

Ameren UE Correspondence



CAPITAL DISTRICT
 AMERENUE
 P.O. BOX 1558
 JEFFERSON CITY, MO 65102-1558

DATE: 6-22-01

PLEASE DELIVER TO: RICK WHITNEY

COMPANY: TSI

FACSIMILE NUMBER: 314-644-3135

FROM: MARK LUCKENHOFF

FACSIMILE NUMBER: 573-681-7510

TELEPHONE NUMBER: 573-681-7530

PAGES TO FOLLOW: 1

MESSAGE: TRANSFORMER INFO AT SURPLUS PROPERTY

117 N. RIVERSIDE DR, JEFFERSON CITY, MO

Are You Feb TRANSFORMERS AT THE 3 LOCATIONS

WITHE OWNER By AMEREN UE



Appendix B

M S P

OBSERVATION OF THE ENCLOSURE WALLS

MSP

Jefferson City, MO

On the date of April 17, 2002, I visited the site of the Jefferson City Correctional Center in Jefferson City, Missouri. The purpose of the trip was to observe the condition of the enclosure walls on the east and south sides of the facility, which are experiencing some signs of deterioration as well as a partial collapse. The wall is built of locally quarried limestone and is approximately 30-36 inches thick. No testing of the material was done. In visual observation the stone is fairly dense with naturally occurring, thin visible seams in it. The height varies, but is generally in the range of 20-25 feet in height. It is three wythes thick, with the outer two wythes being cut stone and the inner wythe being rough uncoursed stone. At each coursed level of the inner and outer wythe there is a thick mortar layer which bonds the three wythes together. This can be seen as a horizontal white line in photos of the collapsed wall section. The top of the wall on the south has been extended vertically about 68 inches with a reinforced concrete section. There is a stone veneer on the exterior face of the concrete. The wall in this area is said to have been built about 1885; the extension was done at a later date. The wall is capped with a sloped layer of concrete parging, which varies from 0 to 3 inches thick. It is curved on top for drainage. For the purposes of identification, the wythe of stone on the interior of the prison will be referred to as the interior wythe and the wythe on the public side of the wall will be referred to as the exterior wythe.

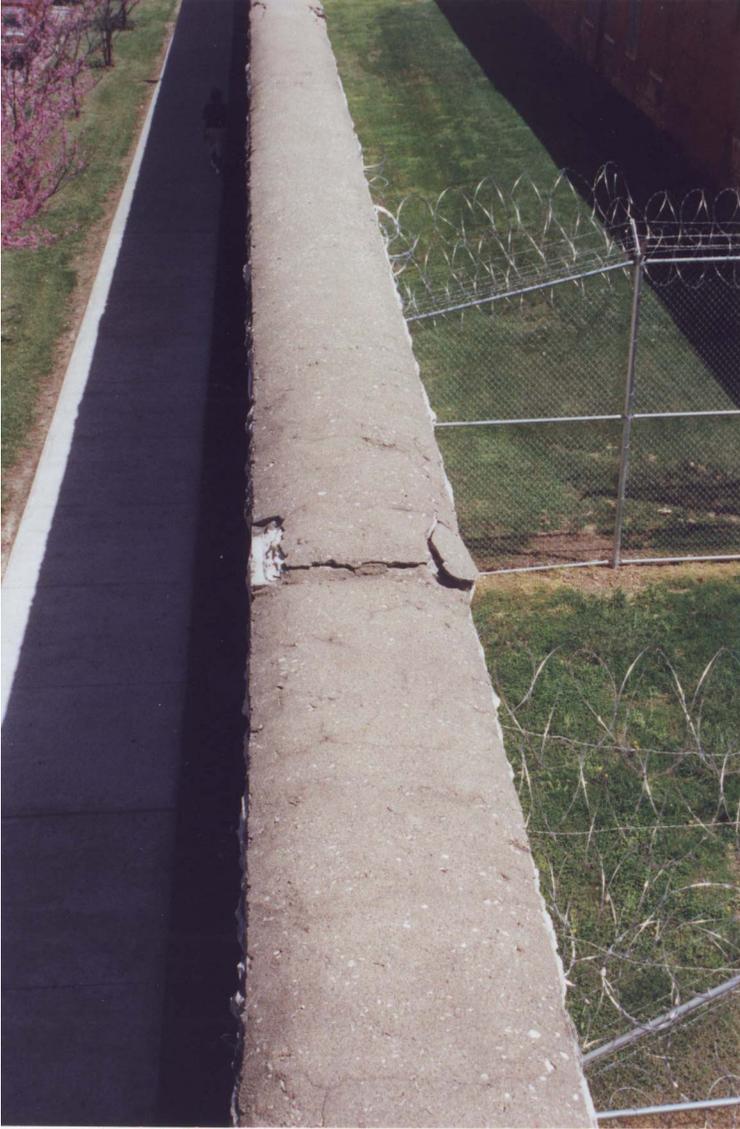
The wall has two areas of concern, water infiltration and horizontal earth pressure. The two types of deterioration can be best exemplified by the damage on the east and south walls. The east wall shows several areas of water infiltration damage. The water infiltration shows up as two distinct types of damage. The stone in several areas have had the faces spalled off. Also, several portions show the entire interior face wythe to be delaminated from the inner wythe. The stone, which is laid with the natural seams running horizontally, shows less distress than those seams laid vertically. This is because the pressure of the wall weight is holding the seams in compression. The water appears to be entering the wall through the cap parging and eroded mortar joints. The water then moves vertically between wythes and is trapped inside and saturates the stone. The water inside the wall will freeze and push the outer wythe away from the inner wythe. Where the stones are spalling, the saturated stone has split at a natural seam where the water has collected and frozen.



Spalled Stone Face



Area of Wall Delamination



Cracked Concrete Cap



Cross Section of Wall Showing Construction

The wall on the south side of the facility has a large area of localized collapse. The collapse is only of the inner wythe of the stone wall. In this area the wall shows both rotation about the axis of the wall footing and a horizontal displacement between the two guard towers in the southwest corner of the facility. The wall is failing in overturning as well as possibly horizontal sliding. The damage appears to have been ongoing for many years. There are cracks associated with this movement which have been tuckpointed several years ago. The wall in this area retains 6 – 8 feet of soil; the grade being higher on the exterior side. There have been several types of utility work on the outside of the wall, which are in the influence zone of the backfill. It is possible that this utility work could have increased horizontal earth pressure on the wall, due to backfill compaction or water entering an open excavation. The wall is currently stable and is being restrained by the reinforced concrete band on the top acting as a tension strut. The portion of the wall,

which fell, appears to have delaminated from the middle and exterior wythes, which are still intact. The delamination would have been a consequence of the water infiltration as discussed in previous portions of this report. After the inner wythe was loose, it became unstable due to the angle of rotation of the entire wall. This wall should have a temporary bracing system installed to prevent overturning and complete collapse.



Collapsed Wall Section with Concrete on Top



Horizontal Displacement of Wall at Grade



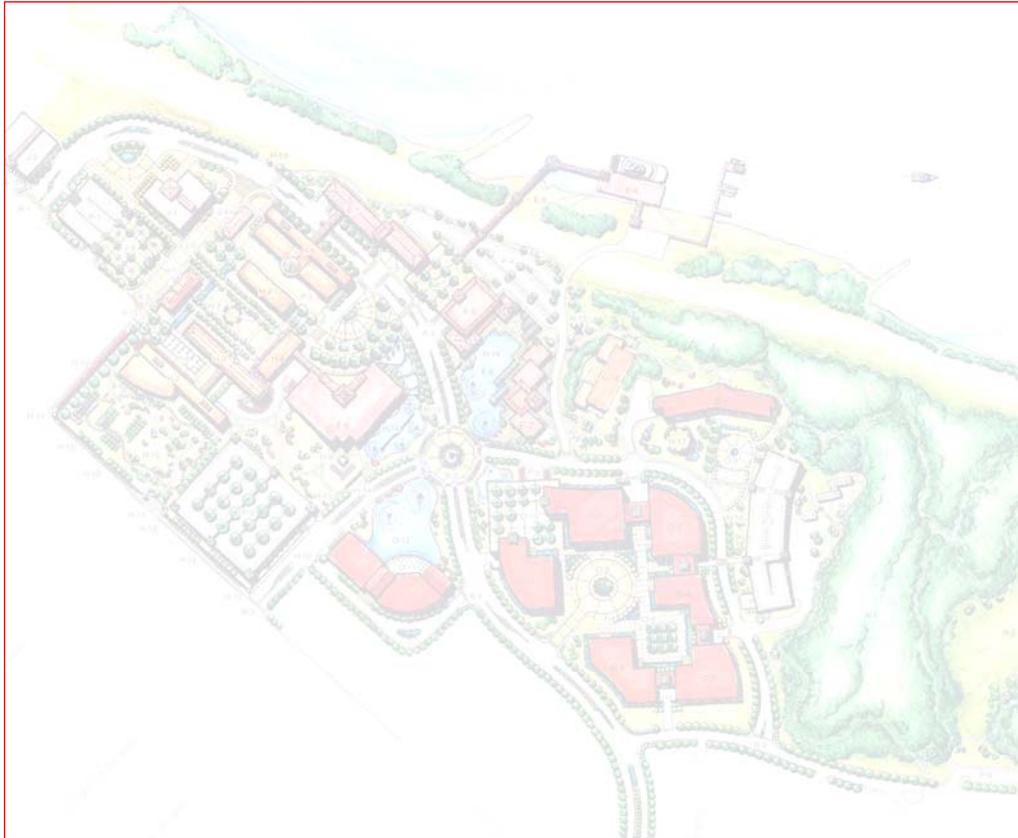
Wall Rotation

To conclude, the primary cause of distress in the wall is water infiltration of the wall. The horizontal earth pressure has caused a section of the wall to rotate to the point where the loose wythe of stone collapsed. The portion of the south wall, which has partially collapsed, should be braced with a temporary frame to ensure public safety until a permanent bracing system is installed and repairs can be made. From the standpoint of economy and site logistics a steel frame on the interior side of the wall would seem to be the optimal solution. Care should be taken during the installation of the bracing to ensure the safety of the construction crew. Work should proceed from the guard towers towards the center and the concrete beam at the top should not be disturbed until the shoring is in place.

Hopefully this addresses the concerns of all regarding this structure. If you have any questions please do not hesitate to call.

Sincerely,
Wallace Engineering

Steven Huey, P.E.
Principal



Appendix C

M S P

February 11, 2003

MSP Redevelopment Project

A Presentation To The Citizens of

Jefferson City , Cole County and The State of Missouri

A Review and Discussion of the Framework Plan For The MSP Redevelopment Project

Jefferson City, Missouri



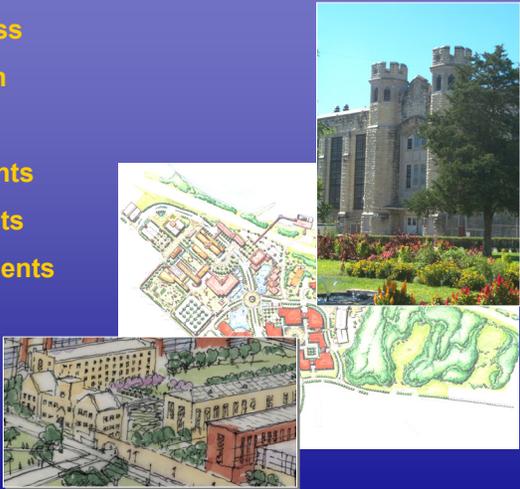
The State of Missouri . Division of Design & Construction

Framework Plan

MSP Redevelopment Project

Review

- The Planning Process
- The Consensus Plan
- Market Analysis
- Architectural Elements
- Engineering Elements
- Environmental Elements
- The Master Plan



PARSONS HBA in association with
Development Strategies . Trivers Associates . TSI Engineering . William Tao & Associates . George Dickie Associates

Process Definition Plan

MSP Redevelopment Project

The Preamble

“The Planning Process is On-going”



PARSONS HBA in association with
Development Strategies . Trivers Associates . TSI Engineering . William Tao & Associates . George Dickie Associates

Process Definition Plan

MSP Redevelopment Project

Consensus Plan

Task Force Results Concepts, Values and Priorities

- Part A – Historic Value of the Property
- Part B – Historic Value of the Buildings
- Part C – Planning Values
- Part D – Potential Uses

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Process Definition Plan
Consensus Plan

MSP Redevelopment Project

Review & Input

- Task Force Review & Input
- Public Comment
- Planning Advisory Team



Multiple uses seen for seven areas in prison plan

By KRIS HILGEBECK
 News Tribune
 After 16 months of work by task force members and architectural consultants, a consensus plan has



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Process Definition Plan
Consensus Plan Program Statement

MSP Redevelopment Project

Program Statement

- Historic Area
- Judicial Center Area
- Community Area
- Office Area
- Landing Area
- Entertainment Area
- Natural Resources Area
- Additional Program Items



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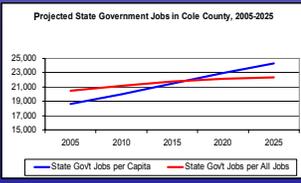
Framework Plan MSP Redevelopment Project
Market Analysis

Market Analysis





Year Range	Value
1950 to 1960	4,463
1960 to 1970	11,094
1970 to 1980	7,524
1980 to 1990	13,843
1990 to 2000	13,507
2000	13,721



Projected State Government Jobs in Cole County, 2005-2025

Year	State Govt Jobs per Capita	State Govt Jobs per All Jobs
2005	~17,000	~18,000
2010	~18,000	~19,000
2015	~19,000	~20,000
2020	~20,000	~21,000
2025	~21,000	~22,000

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Framework Plan MSP Redevelopment Project
Market Analysis

Methodology and Rationale

- Realistic basis for planning and financing
- Projections of market absorption and timing
- Analysis of regional, state & national economic context
- Interviews of public and private officials
- Correlations of past growth with data indicators
- Projections of growth based on indicators
- Conversion of trends to building and land area needs

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Market Analysis

Cole County Office & Related Projections

- **Mid-Missouri should continue to attract population and job holders.**
~Attraction is key because of low unemployment rate.
- **Impetus is continued growth of state government employment.**
~Strong multiplier effect creates jobs in other sectors.
- **State government will grow because state population will grow.**
~More government jobs will be needed to support more residents.
- **Net state office space growth in Cole County should range from 755,000 to 935,000 square feet by 2025.**
~Total state office space in the county would be around 3.3 million square feet by 2025.
~Possibly more square feet if historic trends prevail.
- **Private market would add 600,000 sf of office space.**

Market Analysis

Conditions for Success: Public Assembly Facility

- **Center of State Government**
- **Statewide and Mid-America associations growth**
 - ~ Religious
 - ~ Social
 - ~ Professional
 - ~ Athletic
 - ~ Political
- **Central location, Ease of Access**
- **State economic growth: More reasons to meet**
- **Sufficient and convenient hotel rooms**

Market Analysis

Public Assembly Facility

- **Single Open Floor Space to Accommodate up to 2,500 participants**
 - ~ Exhibits
 - ~ Ballroom
 - ~ Large group meetings
- **Separate, Divisible Meeting Areas**
 - ~ 10-15 rooms
 - ~ Combinable
- **Possible performing arts venue**
- **Full service kitchen**
- **Large and well-appointed lobby and pre-event area**
- **Appropriate number of parking spaces**

Market Analysis

Conclusions

- **Jefferson City area needs more sites for office development**
 - ~ State government alone could *add* over 750,000 square feet by 2025
 - ~ Private market adds perhaps another 600,000 square feet
 - ~ Plus land for campus settings, parking, road system
- **Public Assembly Facility appears to be a crucial need for accommodating demand & diversifying the local economy**
 - ~ Need to resolve location issues
 - ~ Absolutely need support good quality and walkable hotel rooms
- **MSP site offers solutions to these opportunities**
 - ~ Little else will be ready and available in time
 - ~ Fulfills Governor's order to concentrate state facilities in existing cities (Smart Growth philosophy)

Framework Plan

MSP Redevelopment Project

Architectural Elements

Architectural Elements



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Framework Plan

MSP Redevelopment Project

Architectural Elements

Task Force Evaluation

- Top 10 Buildings with Historical Value

1. Housing Unit 4
2. Housing Unit 1
3. Housing Unit 3A & 3B
4. The Wall & Towers (Upper Yard)
5. Gas Chamber
6. Centennial Cells
7. I-Hall
8. The Wall & Towers (Lower Yard)
9. Shoe Factory
10. Potato House



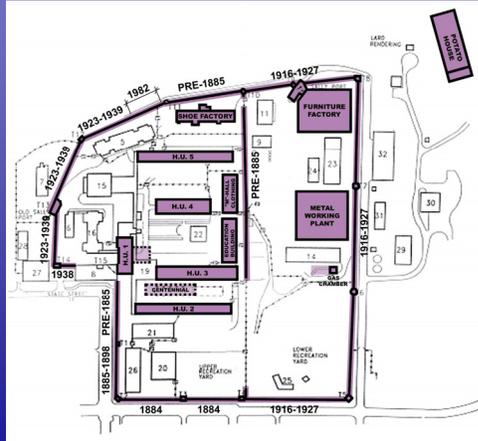
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Framework Plan

MSP Redevelopment Project

Architectural Elements

Buildings Analyzed



- Housing Unit 1
- Housing Unit 2
- Housing Unit 3
- Housing Unit 4
- Housing Unit 5
- Shoe Factory
- Furniture Factory
- Metal Working Plant
- Centennial Cells
- Gas Chamber
- Potato House
- Education Building & Maintenance Building
- Stone Walls

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Framework Plan

MSP Redevelopment Project

Architectural Elements

Buildings Re-Use

- 3 APPROACHES TO BUILDING RE-USE
 - ~ Preserve & Restore (HU 4)
 - ~ Combination Restore and Adaptive Re-Use (HU 1)
 - ~ Adaptive Re-Use (HU 2)



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Framework Plan MSP Redevelopment Project

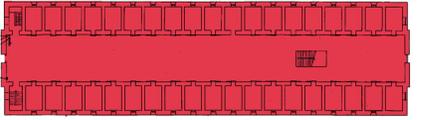
Architectural Elements

Housing Unit 4

Existing Information



View of typical window



Existing First Floor Plan

0' 25' 50'

Preservation Zones

- **Level 1 - Preservation Zone**
The character & qualities of this zone should be maintained & preserved as the highest priority.
- **Level 2 - Preservation Zone**
Every effort should be made to maintain and preserve the character and qualities of this zone.
- **Level 3 - Rehabilitation Zone**
Undertake all work in this zone as sensitive as possible. However, contemporary methods, materials, & designs may be selectively incorporated.
- **Level 4 - Free Zone**
Treatments in this zone, while sympathetic to the historic qualities & character of the building, may incorporate extensive changes or total replacement through the introduction of contemporary methods, materials & designs.



Interior View



View from Northwest

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Framework Plan MSP Redevelopment Project

Architectural Elements

Housing Unit 4

Possible Uses

Redevelopment Issues

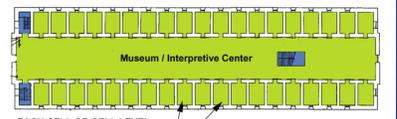
1. What period should the building be restored? Many modifications have occurred to the building since it's construction.
2. It appears that the roof overhang and soffits were removed exposing brick backup material above the stone walls, these should be restored.
3. Stone restoration will be necessary. There are crushed stones at various locations and missing stone mullions in the window openings that should be restored.
4. Integrating modern mechanical systems could be completely hidden. The extent to which this is done will be dependant on the interpretive philosophy for this building.

Potential Uses

1. Prison Museum / Interpretive Center. Each floor level could be restored and furnished to represent distinct time periods of prison life as shown in the Alternate Section above.

Possible Use Zones

- **Primary Use**
This area identifies the primary use for the building.
- **Secondary Use**
This area identifies additional uses for the building beyond the primary use.
- **Circulation**
This area identifies a zone for potential hallways, new required stairs, lobbies and elevator cores.
- **Possible Addition**
This area identifies a zone for potential development attached to this historic building and suggestion as to how it could be done in a sensitive manner.



Proposed First Floor Plan

0' 25' 50'

EACH CELL OR CELL LEVEL COULD BE RESTORED TO REPRESENT VARIOUS PERIODS UP TO DECOMMISSIONING



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Framework Plan

MSP Redevelopment Project

Architectural Elements

Architectural Summary

- 1. Preserving the context of the site from a “public” view and a “user” view
- 2. Preserving the “Essence of the Prison”
- 3. Potential Building Uses Based On:
 - Structural Considerations
 - Architectural/Historic Value
 - Consensus Plan Proposed Land Uses



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Framework Plan

MSP Redevelopment Project

Engineering Elements

Engineering Elements



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Framework Plan MSP Redevelopment Project

Engineering Elements

Findings

- Existing Infrastructure Minimal and Antiquated
- Building Systems (MEPF) are not suitable for commercial development



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Engineering Elements

Findings

- New Utility Infrastructure required
 - Electric
 - Gas
 - Water
 - Sewer
 - Data/Communications



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Framework Plan

MSP Redevelopment Project

Environmental Elements

Environmental Elements

...Understanding the basics



The Built Environment

The Natural Resources

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Framework Plan

MSP Redevelopment Project

Environmental Elements

Environmental Investigations ...the Built Environment

- Site Investigations
- Building Investigations
- HazMat Testing
- Records Search
- Interviews
- Phase I Environmental Assessment



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Process Definition Plan MSP Redevelopment Project
Consensus Plan Program Statement

Program Statement

- Historic Area
- Judicial Center Area
- Community Area
- Office Area
- Landing Area
- Entertainment Area
- Natural Resources Area
- Additional Program Items

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Framework Plan MSP Redevelopment Project
The Master Plan Updated Program Statement

Program Statement

- **MSP Historic Area**
(Historic Area & Community Area)
- **Public Service Campus**
(Judicial Center Area)
- **Public Assembly Campus**
(Entertainment Area & Landing Area)
- **Office Campus**
(Office Area)
- **Natural Resources Area**

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Framework Plan MSP Redevelopment Project

The Master Plan Program Statement

14. Public Assembly Campus	15. Office Campus
16. Public Service Campus	17. MSP Historic Area & Community Area
18. Natural Resources Area	19. Office Building Parking and P
20. Public Assembly Campus	21. Office Building Parking
22. Office Campus	23. Office Building
24. Public Service Campus	25. MSP Historic Area & Community Area
26. Natural Resources Area	27. Office Building Parking and P
28. Public Assembly Campus	29. Office Building Parking
29. Office Campus	30. Office Building
31. Public Service Campus	32. MSP Historic Area & Community Area
33. Natural Resources Area	34. Office Building Parking and P
35. Public Assembly Campus	36. Office Building Parking
36. Office Campus	37. Office Building
38. Public Service Campus	39. MSP Historic Area & Community Area
40. Natural Resources Area	41. Office Building Parking and P
42. Public Assembly Campus	43. Office Building Parking
44. Office Campus	45. Office Building
46. Public Service Campus	47. MSP Historic Area & Community Area
48. Natural Resources Area	49. Office Building Parking and P
50. Public Assembly Campus	51. Office Building Parking
52. Office Campus	53. Office Building
54. Public Service Campus	55. MSP Historic Area & Community Area
56. Natural Resources Area	57. Office Building Parking and P
58. Public Assembly Campus	59. Office Building Parking
60. Office Campus	61. Office Building
62. Public Service Campus	63. MSP Historic Area & Community Area
64. Natural Resources Area	65. Office Building Parking and P
66. Public Assembly Campus	67. Office Building Parking
68. Office Campus	69. Office Building
70. Public Service Campus	71. MSP Historic Area & Community Area
72. Natural Resources Area	73. Office Building Parking and P
74. Public Assembly Campus	75. Office Building Parking
76. Office Campus	77. Office Building
78. Public Service Campus	79. MSP Historic Area & Community Area
80. Natural Resources Area	81. Office Building Parking and P
82. Public Assembly Campus	83. Office Building Parking
84. Office Campus	85. Office Building
86. Public Service Campus	87. MSP Historic Area & Community Area
88. Natural Resources Area	89. Office Building Parking and P
90. Public Assembly Campus	91. Office Building Parking
92. Office Campus	93. Office Building
94. Public Service Campus	95. MSP Historic Area & Community Area
96. Natural Resources Area	97. Office Building Parking and P
98. Public Assembly Campus	99. Office Building Parking
100. Office Campus	101. Office Building

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Framework Plan MSP Redevelopment Project

The Master Plan Vehicular Circulation

Legend

14. Public Assembly Campus	15. Office Campus
16. Public Service Campus	17. MSP Historic Area & Community Area
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Framework Plan

MSP Redevelopment Project

The Master Plan



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Framework Plan

MSP Redevelopment Project

The Master Plan Vehicular Circulation



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Framework Plan MSP Redevelopment Project

The Master Plan Program Statement

Program Statement Summary

Master Plan District	Proposed/Reuse Area	Master Plan Parking	
• MSP Historic Area	310,048 GFA	600 Structured Spaces	P-2
• Public Service Campus	225,000 GFA	485 Structured Spaces	P-1
• Public Assembly Campus	605,500 GFA	650 Structured Spaces 100 Structured Spaces 300 Structured Spaces 250 Surface Spaces	P-2 P-3 P-3 P-4
• Office Campus	1,000,000 GFA	850 Structured Spaces 600 Structured Spaces	P-5 P-7
• Natural Resources Area	NA	15 Surface Spaces	P-6
Total Master Plan	2,140,548 GFA	3,850 Spaces	

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Framework Plan MSP Redevelopment Project

The Master Plan Program Statement

MSP Historic Area

Administration Building (HU #1) Museum/Interpretative MSP Commission Offices Redevelopment Office Support Retail / Commercial Tourist Information Center Film Site or Studio Educational	Office Building (HU #3) State Offices Record Storage Prison Museum (40%)	The Gas Chamber Community Area MSP Interpretative Garden Pedestrian Linkages Open Space Urban Plaza (interpretative plaza)
Office Building (HU #2) Corrections Offices New Building Addition	MSP Museum (HU #4) Conference Center Historic Dining Hall (Basement) Power Plant (Basement) Dining Rooms & Kitchen Conference Center	
Centennial Cells Historic Display	The Wall Guard Tower Reconstruction The Old Wall Pedestrian Openings Vehicular Openings	
Total - MSP Historic Area 310,048 GFA 600 Structured Spaces P-2		

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Framework Plan MSP Redevelopment Project

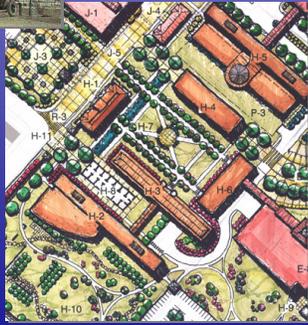
The Master Plan MSP Historic Area



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Framework Plan MSP Redevelopment Project

The Master Plan MSP Historic Area



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Framework Plan

MSP Redevelopment Project

The Master Plan Program Statement

Public Service Campus

Justice/Office Center
 Court Rooms
 Offices
 Holding Space

Justice/Office Center Annex
 Administrative Offices
 Library
 Museum

Public Service Office Building
 Private Office Space
 Support Retail/Commercial
 Art Gallery
 Science Center

Other
 Streetscape
 Pedestrian Entry Plaza

Total - Public Service Campus 225,000 GFA 485 Structured Spaces P-1

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Framework Plan

MSP Redevelopment Project

The Master Plan Public Service Campus



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Framework Plan

MSP Redevelopment Project

The Master Plan Program Statement

Public Assembly Campus

Hotel #1 (HU #5)
Hotel (250 Rooms)

Hotel #1 Conference Center
Building Addition
Meeting Rooms

Hotel #2
Hotel (275 Rooms)

Hotel #3
Hotel (275 Rooms)

Public Assembly Facility
Auditorium (25,000 sf)
Exhibition (70,000 sf)
Multi-Purpose Space (25,000 sf)
Support (5,000 sf)

The Landing
Support Tourism Retail Shops
Restaurants
Excursion / Riverboat Landing
Observation Deck / Tower (Pedestrian Only)
Amtrak Station
Pedestrian Linkages & Access to Adrian's Island

Potato House
Commercial / Retail
Farmers Market
Interpretative Center
Trail Head
Greenway Trail Connection

Other
Streetscape
Public Plaza & Pedestrian Linkages
Open Space, Lakes & Fountains

Total – Public Assembly Campus 605,500 GFA 1300 Spaces

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Framework Plan

MSP Redevelopment Project

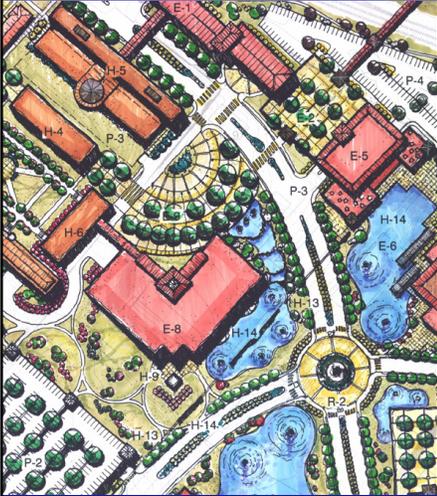
The Master Plan Public Assembly Campus



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Framework Plan MSP Redevelopment Project

The Master Plan *Public Assembly Campus*




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Framework Plan MSP Redevelopment Project

The Master Plan *Program Statement*

Office Campus

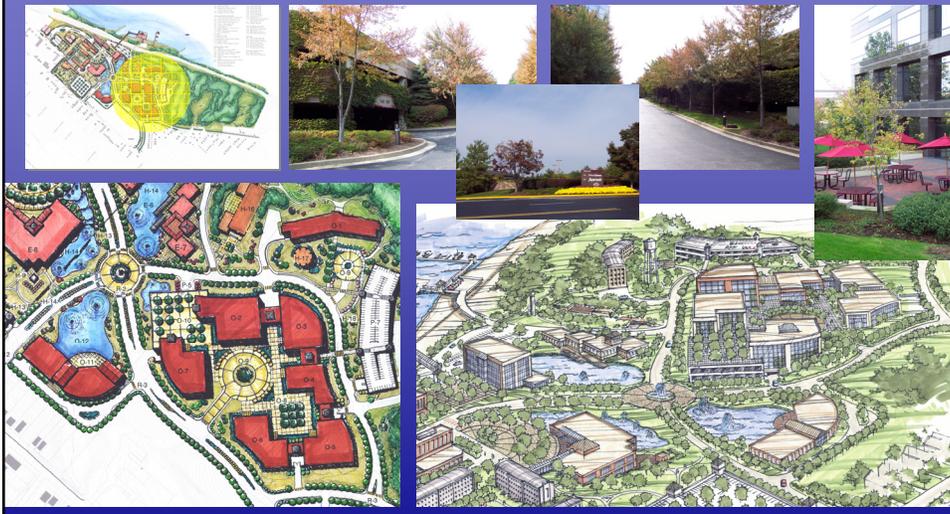
<p>State Government Office (750,000 GFA) General Office Space (550,000 sf) DNR Green Building (120,000 sf) Health Lab (80,000 sf) Support Commercial / Retail Service Area Shuttle Access</p> <p>Private Business Office (250,000 GFA) General Office Space Support Commercial / Retail Service Area Shuttle Access</p>	<p>Other Streetscape Public Plaza Pedestrian Linkages Transportation Linkages</p>
---	--

Total – Office Campus 1,000,000 GFA 1450 Spaces

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Framework Plan MSP Redevelopment Project

The Master Plan Office Campus



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The Master Plan Office Campus



The exterior profile of the green office building helps capture and reflect light into the building significantly reducing the need for interior lighting.

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Framework Plan

MSP Redevelopment Project

The Master Plan Program Statement

Natural Resources Area

- Grounds Maintenance
- Riverfront Park
- Active and Passive Recreation
- Picnic Areas
- Public Land Open Space
- Greenway Trail Connection
- Botanical Gardens
- Amphitheater
- Reserve Land For Future

Total – Natural Resources Area NA 15 Surface Spaces P-6

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Framework Plan

MSP Redevelopment Project

The Master Plan Natural Resources Area



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Framework Plan

MSP Redevelopment Project

The Master Plan



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Framework Plan

MSP Redevelopment Project

The Next Steps

Planning + Design



Archeological Investigations (I & II)

- DNR Site
- Lab Site
- Remaining Site

Phase II Archeological Investigations

- Remaining Site

Natural Resource Analysis

- Flora & Fauna
- Threatened & Endangered

Historic Designations

- Section 106 - Districts, Buildings & The Wall

Environmental Investigation (I & II)

- Remaining Site

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Framework Plan

MSP Redevelopment Project

The Next Steps

Planning + Design



Decommission Existing Facility
Demolition Phasing Plan (timeline / strategies)

Site & Building Demolition Plan
Demolition Material Recycle
Wall Stabilization

New & Existing Infrastructure
New & Existing Infrastructure Implementation Plan

Historic District Heating/Cooling

Site Improvements
On-site Road Plan
Parking Plan
Grading Plan
Landscape Plan

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Framework Plan

MSP Redevelopment Project

The Next Steps

Planning + Design



Implementation Strategies & Planning
Site & Architectural Design Guidelines
Delivery Systems Guidelines
Design / Build
Lease Purchase
Conventional
Phasing Plan
Facility Interim Use
Public Access
Decision Timeline

Financial Guidelines & Planning
Project Feasibility
Development Fees
Development Incentives
Funding
Revenue Generation

Surplus Property Relocation
Relocation Program
Site Selection

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Framework Plan

MSP Redevelopment Project

Questions & Answers



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MSP Redevelopment Project

The Master Plan



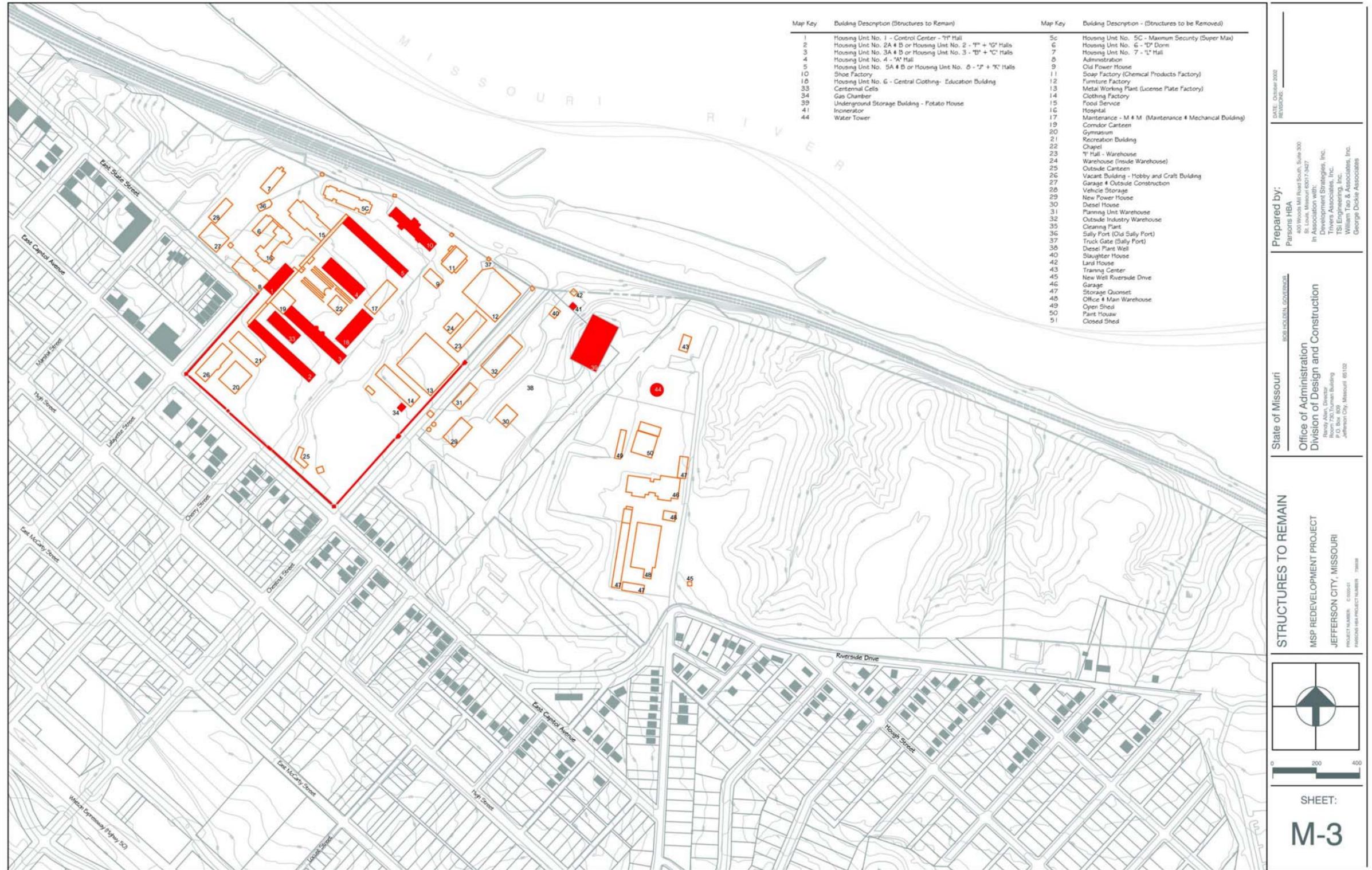
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Appendix D

M S P

The Master Plan



DATE: October 2002
REVISIONS:

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State of Missouri
8028 HICKLELL GOVERNOR
Office of Administration
Division of Design and Construction
Henry Adams Building
P.O. Box 809
Jefferson City, Missouri 65102

STRUCTURES TO REMAIN
MSP REDEVELOPMENT PROJECT
JEFFERSON CITY, MISSOURI
PROJECT NUMBER: 0200041
PARSONS HBA PROJECT NUMBER: 730008

0 200 400

SHEET:
M-3

The Master Plan



The Master Plan



The Master Plan



Proposed Master Plan Looking West