FINAL REPORT

Storm Water Pollution Prevention Plan

City of Appleton
Valley Transit Facility
801 Whitman Avenue
Appleton, WI 54914

Prepared for:

City of Appleton
100 North Appleton Street
Appleton, WI 54911

Prepared by:

Earth Tech, Inc.
4135 Technology Parkway
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December 7, 2004

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Sandra J. Kimmler, P.E.
Project Engineer

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STATEMENT OF CERTIFICATION

According to NR 216.29(8), all reports required under this subchapter require signature. The following "Statement of Certification" is identical to the statement on WDNR Form 3400-167 "Storm Water Pollution Prevention Plan Summary".

"I certify under penalty of law that this document and attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information contained in the plan. Based on my inquiry of the person, or persons, who manage the system, or those persons directly responsible for gathering the information, the information in this document is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations. In addition, I certify under penalty of law that, based upon inquiry of persons directly under my supervision, to the best of my knowledge and belief, the provisions of this document adhere to the provisions of the storm water permit for development and implementation of a Storm Water Pollution Prevention Plan and that the plan will be complied with."

Authorized Signature:

Charles Kamp
General Manager
Valley Transit
801 Whitman Avenue
Appleton, WI 54914

Date

1.0 INTRODUCTION

1.1 SITE DESCRIPTION

The City of Appleton Valley Transit Facility is located at 801 Whitman Avenue (the site), Appleton, Wisconsin, and is in the NW ¼ of Section 34 of Township 21 North, Range 17 East, Outagamie County, Wisconsin. The Facility is west of Whitman Avenue at the intersection of Whitman Avenue and Second Street. The location of the site is depicted on Figure 1. The Valley Transit Facility is bounded by Whitman Avenue to the east, Second Street to the south, the Whitman Yard Waste Center to the north, and residential areas to the west. The entire site encompasses approximately 4.4 acres. The Valley Transit Facility layout is depicted on Figure 2.

1.2 REGULATORY BACKGROUND

The United States Environmental Protection Agency (USEPA) developed the storm water regulatory program through the authority of the Clean Water Act amendments of 1987, to reduce discharges of contaminated storm water associated with industrial facilities. The National Pollutant Discharge Elimination System (NPDES) program is the means by which the USEPA regulates discharges of potentially contaminated wastewater and storm water into waters of the United States through the issuance of permits applicable to specific sources.

The Federal Clean Water Act and rules adopted by the USEPA require permits for storm water discharges where precipitation or storm water runoff come into contact with contaminants through industrial activity, at construction sites, or from municipal areas. The philosophy for implementing the permit requirements emphasizes pollution prevention, which provides substantial environmental benefit with minimum regulatory burden.

In Wisconsin, the Department of Natural Resources (WDNR) is the permitting authority for the Storm Water NPDES program. Storm Water regulations are located in Chapter 216 of the Wisconsin Administrative Code. All code references cited in this Storm Water Pollution Prevention Plan refer to the current NR 216 code, dated July 2004, effective August 1, 2004.

The Valley Transit Facility is considered to be a local and interurban passenger transit facility, and as such is required to obtain an Industrial Storm Water Discharge Permit (NR216.21(2)b2.), as a Tier 2 facility, and complete a Storm Water Pollution Prevention Plan.

1.3 OBJECTIVES AND SCOPE OF STORM WATER POLLUTION PREVENTION PLAN

This Storm Water Pollution Prevention Plan (SWPPP) identifies potential sources of storm water contamination, response and preventive measures utilized to reduce the risk of storm water contamination, and ongoing management practices designed to prevent storm water pollution at the subject facility. It complies with the provisions of the Wisconsin Pollutant Discharge Elimination System (WPDES) storm water permitting requirements outlined in the Wisconsin Administrative Code, Chapter NR 216.

The SWPPP focuses on two major objectives: (1) the identification of site activities that are potential sources of storm water pollution; and (2) the identification of practices that minimize and control pollutants in storm water runoff to comply with the terms of the Stormwater Permit.

The scope of this plan includes:

- Identifying Storm Water Team Coordinator and Team Members.
- Descriptions and maps showing applicable site features.
- An inventory of equipment used or stored at the facility.
- A description of exposed significant material.
- A list of significant spills and leaks over the last 3 years.
- A list of pollutant sources.
- A description of current and proposed Best Management Practices (BMPs).
- Implementation schedule for BMPs.
- Employee training documentation.
- A description of site compliance and monitoring.
- Recordkeeping and internal reporting requirements.

1.4 STORM WATER POLLUTION PREVENTION RESPONSIBILITY

Valley Transit's General Manager is responsible for all aspects of the Storm Water Pollution Prevention Plan at Valley Transit. A storm water pollution prevention team is responsible for implementation of this SWPPP. Team members are as listed on Table 1 and described in Section 2.0 of this Plan.

1.5 PLAN AVAILABILITY

A copy of this SWPPP is to be maintained at the Valley Transit Facility at all times and will be made available to USEPA and WDNR representatives at their request. A copy will also be available at the Appleton Department of Public Works.

1.6 PLAN COMPLIANCE AND MODIFICATIONS

This SWPPP is required to be updated and amended whenever there is a change in design, construction, operation, or maintenance that may impact the potential for pollutants to be discharged through storm water. This SWPPP also should be revised in accordance with the findings and recommendations of the annual Comprehensive Site Compliance Evaluation. In addition, if this SWPPP is found to be ineffective in controlling the discharge of pollutants, the Plan is required to be amended to correct the identified deficiencies.

If the WDNR provides notification that this SWPPP does not meet the minimum requirements of the Storm Water Permit or NR 216 after an inspection of the facility and Plan, then the SWPPP must be modified accordingly within 30 days, and written certification that the changes were made must be provided to WDNR.

1.7 PREVIOUSLY DEVELOPED STORM WATER MANAGEMENT PLANS

No other prior storm water management plans have been developed for the subject site.

2.0 STORM WATER POLLUTION PREVENTION TEAM

The storm water pollution prevention team consists of a team coordinator and team members who are assigned various responsibilities for implementing the SWPPP. Implementation of this SWPPP includes ongoing assessment of potential sources of contamination and associated BMPs, response to spill events, if any, employee training, and the annual plan evaluation. The current team roster is provided in Table 1.

2.1 TEAM COORDINATOR

The storm water pollution prevention coordinator has the ongoing responsibility for implementation of this SWPPP. Specifically, this includes implementation of inspection schedules, records preservation, coordinating responses to spill emergencies, employee training, and annual updates to the SWPPP, if required. The team coordinator serves as a point of contact for facility personnel and for those outside the facility (such as regulatory officials) who may wish to discuss aspects of the SWPPP or to obtain other information. The coordinator oversees the re-evaluation and modification of the SWPPP annually and following a potential major spill event. These modifications may include relocation or alteration of material storage or handling areas, BMP revisions, altering drainage patterns, addition of structural control measures, or documentation of significant leaks or spill events. The coordinator must be familiar with all phases of facility operation in order to evaluate potential sources of pollution during implementation and periodic reevaluation of the SWPPP.

If a new coordinator must be assigned, that selection will be made by the General Manager of Valley Transit.

2.2 TEAM MEMBERS

Members of the team have the responsibility for conducting inspections, implementing and maintaining BMPs, conducting annual employee training and new employee training, and responding to spill events, if any. Pollution prevention team members will meet with the coordinator annually and following spill events to reevaluate and modify the SWPPP as needed. If individual team members must be replaced, equally qualified personnel will be assigned by the team coordinator to assume the previous member's responsibilities. If this cannot be accomplished immediately, the current team members will be assigned to those responsibilities during the interim.

3.0 POTENTIAL POLLUTANT SOURCES

3.1 INITIAL SITE EVALUATION SUMMARY

The site evaluation includes an assessment of potential pollutant sources to determine which areas, activities, and materials may contribute pollutants to storm water runoff. The evaluation determines the necessity for BMPs and helps guide the selection of the most appropriate BMPs to prevent or control pollutants from these areas, activities, and materials.

The site evaluation conducted by Earth Tech, Inc. (Earth Tech) on September 29, 2003 indicated that the Valley Transit Facility generally practices good housekeeping. No equipment or materials are stored outdoors, and no maintenance activities are conducted outdoors. Solid waste and recycling collection containers are stored outdoors. Some of the containers were covered at the time of site evaluation; other containers were not covered. The parking areas consist of bituminous asphalt. The grassed areas of the site are well-maintained which helps to prevent erosion and filter storm water. Roof runoff generally occurs on asphalted areas.

No staining, pools, puddles, or other evidence of significant quantities of oils, greases, or other chemicals were observed on the facility surface.

Earth Tech conducted an inventory of areas potentially exposed to storm water and identified the following based upon storm water flow and area usage:

- Asphalt Drives and Parking Areas.
- Fuel and Oil Loading and Unloading Area
- Refuse and Recycling Containers.

3.2 STORM WATER DRAINAGE AND OUTFALLS

The Valley Transit Facility is approximately 4.4 acres in size. Five main drainage basins exist at the facility. Basins 1, 4 and 5 have discharges to the municipal storm sewer along with overland flow in lawn areas. Basins 2 and 3 have overland storm water flow to the north. Figure 2 identifies the drainage basins, overland flow patterns, buildings, drainage structures, fueling area and parking area. Table 2 lists the drainage basins, area uses, approximate amount of land cover and conveyance type.

TABLE 2

STORM WATER AREAS AND ACTIVITY INVENTORY
VALLEY TRANSIT FACILITY
APPLETON, WISCONSIN

Area ID.	Area (sq ft)	% Impervious	Uses
1	79,580	60%	Underground Storage Tanks; Roof Runoff; Driveway; Lawn; Trash Dumpsters
2	19,667	30%	Underground Storage Tanks; Driveway; Lawn
3	30,360	35%	Driveway; Lawn
4	23,198	90%	Roof Runoff; Driveway; Lawn

Area ID.	Area (sq ft)	% Impervious	Uses
5	39,090	70%	Employee and Customer Parking Area; Lawn

3.3 AREAS OF POTENTIAL STORM WATER CONTAMINATION

3.3.1 Asphalt Drives and Parking Areas

Asphalt-paved drives and parking areas are present in all drainage areas.

Inventory of Exposed Materials/Risk identification

- Equipment and vehicles in these areas are exposed to precipitation. Traffic includes customer, vendor, and employee vehicles well as transit facility vehicles.

- These areas have the potential to contribute solids, salt, and oil and grease from vehicles that may leak during transit, as well as from parked vehicles and equipment.

- Potential Pollutant Parameters: total suspended solids (TSS), total dissolved solids (TDS), total oil and grease (TOG), and chlorides.

3.3.2 Fuel and Used Oil Storage Area

Fuel for transit vehicles and used oil from maintenance activities are stored in underground storage tanks located north of the Valley Transit building. All fueling occurs inside the garage and used oil is transferred to the storage tank via underground piping from the garage. The only activity occurring outdoors is filling and unloading the underground storage tanks. The tank vents and fill ports are located in a paved area. Storm water runoff from this area is sheet flow south to the asphalt in Basin 1, or north into grassed areas in Basin 2.

Inventory of Exposed Materials/Risk Identification

- The underground tank loading/unloading area is exposed to precipitation.

- The servicing of the fuel and used oil tanks has the potential for small spills of petroleum products onto the pavement.

- The potential exists for contaminants to be carried off the pavement at the tank area and onto the adjacent grassy area.

- Potential Pollutant Parameters: TSS, TDS, Diesel-Range Organics (DRO), and TOG.

3.3.3 Refuse and Recycling Containers

Description

The main refuse storage area is located in the western portion of Area 1. Smaller recycling containers are located outside the main garage doors in Area 1. The refuse/recycling area contains an assortment of metal and plastic containers and drums, and recycling bins for plastics, metals, and other recyclable materials. Only part of this area is paved. Storm water runoff from these areas is sheet flow on the asphalt to the nearby

catchbasin, to the west into the grassed area where the storm water infiltrates, or into Second Street along the southern property boundary.

Inventory of Exposed Materials/Risk Identification

- The refuse and recycling containers are not under roof and are exposed to precipitation.

- Potential Pollutant Parameters: TSS, TDS, pH, and TOG.

3.4 SIGNIFICANT MATERIALS INVENTORY

Significant materials that are managed at this facility are itemized in Table 3 in accordance with the requirements for contents of a Stormwater Pollution Prevention Plan given in NR 216.27. These materials are identified by the material description, use, location, approximate quantity of material used, containment methods, and likelihood of exposure to storm water.

3.5 HISTORICAL LEAKS AND SPILLS

Based on information provided by the City of Appleton, no reportable leaks or spills have occurred at the facility within the last 3 years. From inspection during the site visit, no evidence was found of any leaks or spills discharging off-site.

4.0 NON-STORM WATER DISCHARGES

This facility is serviced by a municipal sewer system. Evaluation for the presence of non-storm water discharges was initially conducted by Loren Trick, of Earth Tech, through on-site observations and discussion with site personnel on September 29, 2003. No non-storm water discharges were identified during the site reconnaissance. In the future, each outfall location will be examined for indications of non-storm water discharge, and the results of the inspection recorded. Records will include the methodology and criteria used, the dates of the inspection and the drainage points observed during the test or evaluation.

SWPPP requirements include a certification, signed by an authorized individual, that the provisions of the SWPPP will be adhered to. This includes an understanding that storm water discharges from the site have been evaluated for the presence of non-storm water discharges. Valley Transit will use visual observation during dry weather to check for non-storm water discharges.

5.0 BEST MANAGEMENT PRACTICES

5.1 OBJECTIVE

This section describes best management practices for general facility operations and for each of the potential areas of stormwater contamination. The primary objective of BMPs is to prevent storm water from coming into contact with source materials. Wherever possible, sources will be removed or covered to eliminate storm water contamination. If source controls are inadequate, treatment practices may be recommended.

This section includes measures and controls taken to promote good housekeeping, run-on/runoff management and preventive maintenance. Spill prevention techniques, inspections, employee training, and recordkeeping are addressed in separate sections of this SWPPP.

5.2 MEASURES AND CONTROLS

Activities and materials present at the Valley Transit Facility that may cause potential impacts to storm water discharges are listed in Section 3.3 and summarized on Table 3:

The City of Appleton understands that source control is the most effective way to reduce pollutants in storm water. Measures such as removing wastes, storing materials inside, and establishing a waste removal schedule that minimizes on-site storage have been implemented wherever possible. A summary of existing and proposed control measures follows.

5.2.1 Existing Management Practices

Existing storm water management practices, that will be continued, include:

- Several areas of the property are maintained as grassed areas. These areas serve as a filtering media for storm water runoff.
- The amount of grass chemically treated for weeds is kept to a minimum.
- Valley Transit vehicles are properly cleaned and maintained so that they do not have contaminants exposed to rainfall.
- All vehicle maintenance and washing occurs inside the Valley Transit Facility.
- The dumpsters and recycling bins have covers. They are located near the building where they can be frequently inspected for leaks or spills.
- Standard procedures for loading and unloading fuel and oil include constant attendance and immediate cleanup of any spills.
- The site is neatly maintained and good housekeeping standards are followed.

5.2.2 Proposed Best Management and Stormwater Treatment Practices

Implementation of the following BMPs is recommended to prevent storm water contamination:

- Continue to maintain the existing management practices.
- Any drain holes at the bottom of the dumpsters will be plugged.

- Conduct quarterly visual storm water inspections and annual facility site inspections. The quarterly visual inspection will consist of observing storm water runoff from each of the outfalls identified in this SWPPP and from each area where activities have the potential to impact storm water.
- Implement an employee training program (Refer to Section 6.6).
- Any equipment or other items that are temporarily stored outdoors, should be evaluated for potential contaminants. If it is determined that the items include potential contaminants (e.g., oil, grease, particulates) that would be exposed to rainfall and could enter the storm water runoff, consideration should be given to properly protecting the item, removing the potential contaminants, or storing the item indoors until the item can be stored or disposed properly.
- Conduct routine inspections of the fuel and used oil storage area, the drives and parking areas. All spills shall be promptly cleaned up. Cleanup may involve shoveling or sweeping the solids, or using commercial sorbent material to absorb oil and grease spills. Any reportable spill must be reported to the WDNR, the Appleton Fire Department and Valley Transit's General Manager. A summary of Wisconsin Spill Reporting Requirements is included in Appendix D.
- Construct "Biofilters" in conjunction with the proposed parking lot improvements to reduce the amount of sediment entering the storm sewer in runoff from the parking lot and drives. A Storm Water Management Plan, which describes the construction and function of the biofilters, is included in Appendix E.

The existing and proposed BMPs are outlined in Table 4.

5.3 BEST MANAGEMENT PRACTICES IMPLEMENTATION

The existing BMPs will continue to be followed and maintained. Proposed BMPs will be implemented within 24 months of the effective date of coverage under the permit, in accordance with NR 216.29(5). If future changes in operational activities at the Site require the implementation of additional BMPs, this plan will be modified accordingly.

5.4 PROHIBITED ACTIVITIES

- No liquids are to be sprayed or applied onto pavements or gravel areas of the facility where they would discharge along with storm water.

- No vehicles are to be washed or steam cleaned outside of the building.

5.5 RESIDUAL POLLUTANTS EXPECTED TO REMAIN IN STORM WATER

Based on current operations at the subject site and the anticipated implementation of the BMPs, residual pollutants expected to impact storm water will be minimal, and include grease from employee and visitor parking areas, and calcium chloride for snow and ice control. Implementation of this SWPPP and the BMPs are believed to be adequate to minimize pollutants in the facility's storm water runoff.

The facility may qualify for a NR 216.21(3) "Conditional No Exposure Exclusion" based on having no potential areas of contamination as listed in NR 216.27(3)e. WDNR would need to determine if the underground storage tank loading and unloading area constitutes a "material handling site". If the site qualifies for the conditional exclusion, a signed certification must be submitted to WDNR by February 1, 2005 on USEPA form 3510-11. A signed certification must be resubmitted to WDNR every five years.

6.0 INSPECTIONS, RECORDKEEPING AND TRAINING REQUIREMENTS

Quarterly inspections should be conducted to document that the provisions of this SWPPP are being followed and to identify areas, if any, needing improvement. Deficiencies revealed during inspection procedures that require further action, such as purchasing or replacing equipment, should be communicated to the SWPPP team coordinator. Blank forms are located in Appendix B and completed forms are placed in Appendix C. Inspection records must be retained for a period of at least 5 years.

6.1 QUARTERLY VISUAL STORM WATER INSPECTIONS

Under NR216 SWPPP requirements, each outfall must be inspected at least once every three months during a rainfall event. Each inspection must be conducted within the first 30 minutes or as soon thereafter as practical, but not to exceed 60 minutes, after runoff begins discharging to an outfall or leaving the property. The inspections should be documented, and include observations of color, odor, clarity, floating solids, foam, oil sheen, or other obvious indicators of storm water pollution.

6.2 ANNUAL SITE INSPECTION

A comprehensive annual facility site compliance inspection (AFSCI) of the facility and property must be performed. These inspections will be used to verify that the site drainage conditions and potential pollutant sources identified in the SWPPP remain accurate, and that the BMPs prescribed in the SWPPP are being implemented. The findings from the annual inspection must be documented. Based on the findings from these inspections, the facility's SWPPP may need to be revised. A blank WDNR AFSCI Form No. 3400-176 is enclosed in Appendix B. A thorough inspection, together with information from the quarterly and semi-annual dry weather inspection checklists, should be used to complete this form. The WDNR AFSCI form must be completed and retained by the facility. The completed forms do not need to be mailed to the WDNR.

A site-specific annual inspection checklist is included in Appendix B. This checklist can be completed as an attachment to the WDNR AFSCI Form 3400-176A, if desired.

6.3 SEMI-ANNUAL DRY WEATHER INSPECTION

Semi-annual visual observations, during dry weather, must be completed at each outfall of the storm sewer collection system. Observations shall be made at times when non-storm water discharges from the facility are considered most likely to occur (i.e., periods of dry weather during normal working hours). Indications of stains, sludges, color, odor, or other indications of a non-storm water discharge shall be recorded on the Non-Storm Water Discharge Assessment and Certification form enclosed. In addition, a certification statement on each inspection form must be signed by a representative of the facility indicating that the information on the form is accurate and complete. A copy of these completed forms must be retained by the facility.

6.4 SPILL MANAGEMENT AND DOCUMENTATION

Should a spill occur in an area on the property that could be exposed to storm water, the spill must be cleaned up immediately. If the spill is reportable, it must be reported to the WDNR and Appleton Fire Department. A record must be kept of all spills, and should include the following:

- Date and time of the incident.
- Substance spilled.
- Volume spilled.

- Weather conditions.
- Duration of the incident.
- Cause of the incident.
- Response procedures.
- Parties notified.
- Amount of spilled material recovered and recovery method.

A spill documentation form is enclosed and can be used to record the pertinent data that must be documented whenever a spill occurs. A brief WDNR fact sheet providing definition for what is a reportable spill is included in Appendix D.

6.5 ANNUAL STORM WATER SAMPLING AND TESTING

Valley Transit is not required to collect a storm water sample for analytic testing because it is not a Tier 1 facility per NR 216.21(2)a.

6.6 SWPPP UPDATES OR REVISIONS

The SWPPP should be amended whenever there is a change in pollution prevention team personnel or facility design, construction, or operation that changes the potential for pollutants to come into contact with storm water, or if the SWPPP proves to be ineffective in controlling the discharge of pollutants.

6.7 EMPLOYEE TRAINING REQUIREMENTS

To effectively implement the SWPPP, employees must be adequately trained. The goal of the training program is to teach personnel the components and goals of the pollution prevention plan. Properly trained personnel can recognize situations that have the potential to impact storm water and can respond safely and effectively to an accident. The employee training program should cover topics such as:

- Spill prevention and response.
- Good housekeeping.
- Material management practices.

All employees should be trained at least annually. Training frequency should be determined based upon the complexity of stored materials, storm water management practices, staff turnover, and changes in job assignments at the facility. An employee training record is included in Appendix B.

6.8 PREVENTIVE MAINTENANCE

During the quarterly visual storm water inspections, all storm water management devices (e.g., catch basins, or other structural or treatment management practices) should be examined and preventive maintenance performed if needed.

6.9 IMPLEMENTATION SCHEDULE

The facility must complete a SWPPP within 12 months after the issue date of their storm water permit. The SWPPP implementation schedule is shown in Table 5.

7.0 REFERENCES

United States Environmental Protection Agency, *Storm Water Management for Industrial Activities - Developing Pollution Prevention Plans and Best Management Practices*, September 1992. EPA 832-R-92-006.

Wisconsin Department of Natural Resources, *The Wisconsin Storm Water Manual*, Bureau of Water Resource Management, Non-point Source and Land Management Section, Publication Number: WR-349-94.

United States Environmental Protection Agency, "Guidance Manual for Conditional Exclusion from Storm Water Permitting Based on "No Exposure" of Industrial Activities to Storm Water", June 2000. EPA 833-B-00-001.

APPENDIX A

NO EXPOSURE CERTIFICATION FORM

(Will Be Inserted Upon Completion of Forms)

APPENDIX B

BLANK CHECKLISTS AND FORMS

APPENDIX C

COMPLETED CHECKLISTS AND FORMS

APPENDIX D

WDNR FACT SHEET DEFINING REPORTABLE SPILLS

APPENDIX E

STORM WATER MANAGEMENT PLAN
FOR PARKING LOT AND DRIVEWAY RECONSTRUCTION