ATTACHMENT A

CONTINGENCY PLAN

CONTINGENCY PLAN

BADGER DISPOSAL OF WI., INC.
MILWAUKEE, WISCONSIN

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Section 1
INTRODUCTION

1.1 Background

The purpose of the existing facility is to conduct exempt recycling of hazardous waste materials, including combustible waste, waste oil, paint waste, solvent waste, and other organic and inorganic materials. The activities conducted at this facility are based on a very simple concept--the re-direction of materials from the waste stream for the purpose of beneficial reuse whenever possible. The materials received at this facility are primarily generated by commercial, institutional and industrial companies that do not generate bulk quantities. Therefore, the function performed by this facility is primarily the bulking and transfer of hazardous and non hazardous wastes in order to gain access to secondary markets. Some of the organic materials are recycled by Badger Disposal for re-refining or energy recovery as a fuel for industrial furnaces, or some are recycled by a separate off-site licensed facility. Both liquid and solid materials are processed at this location. The facility also accepts labpacks for repackaging to allow for the cost effective re-direction of these materials for the purpose of beneficial use.

1.2 Purpose and Scope

The information contained herein is submitted for the Badger Disposal of WI., Inc. (Badger Disposal) in accordance with the requirements for a contingency plan, as contained in Chapter 630.22(1) and (2), Wisconsin Administrative Code. The purpose of this contingency plan is to prevent or minimize hazards to human health or the environment from fires, explosions, or unplanned releases of hazardous waste or hazardous waste constituents to air, land, or water. The provisions of this plan will be carried out immediately in the event of a fire, explosion, or release of hazardous waste or waste constituents which could threaten human health or the environment.

This contingency plan will also be implemented whenever hazardous conditions exist. Hazardous conditions, other than an actual incident, refer to any situation involving the imminent, or probable spillage, leakage, or release of a hazardous substance onto land, water, or the atmosphere that could create an immediate or potential danger to the public health or safety because of its quantity, strength, and toxicity; its mobility in the environment; and its persistence. Routine cleanup operations will be performed by operating personnel without implementing this contingency plan.

Section 2

IMPLEMENTATION CRITERIA

The decision to implement the contingency plan depends upon whether an imminent or actual incident could threaten human health or the environment. The purpose of this section is to guide the emergency coordinators, through decision-making criteria, in making this decision. Emergencies may occur at any time as a result of natural forces, trespassing, accidents, hazardous substance spills, or other situations that disrupt essential operations. Table 1 summarizes the type and nature of emergency situations that would require implementation of the contingency plan. If any of the criteria listed in Table 1 occur, then the contingency plan will be implemented. If a site emergency is initiated, the emergency coordinator will follow the procedures contained herein.

TABLE 1

CONTINGENCY PLAN IMPLEMENTATION CRITERIA

Emergency Type	Emergency Nature
Fire and/or Explosion	* A fire causes the release of toxic fumes, particulates, or smoke. * The fire is sufficiently large or uncontrolled to warrant outside assistance. * The fire could possible spread to off-site areas. * Use of water or water and chemical fire suppressant could result in contaminated runoff reaching groundwater or the properties of others. * Imminent danger exists of an explosion that could cause a safety hazard because of flying fragments or shock waves. * An imminent danger of explosion exists. * An explosion has occurred.
Spills or Material Release	* The spill could release flammable liquids or vapors in sufficient quantities to cause a fire or gas explosion hazard. * The spill could release toxic particulates, liquids, or fumes in sufficient quantities or in a manner that is hazardous to human health. * The spill increases the potential for groundwater contamination. * The spill cannot be contained on-site and therefore results in off-site soil contamination and/or ground or surface water pollution.
Natural Disaster	* A tornado affecting the facility has occurred. * An earthquake affecting the facility has occurred. * Severe thunderstorms have occurred and caused release of hazardous wastes.

Section 3

COORDINATION OF EMERGENCY SERVICES

3.1 Emergency Coordinator

A list of Emergency Coordinators is provided in Table 2. In the event of an emergency, the Emergency Coordinator has the authority to commit resources to an emergency. In accordance with s. NR 630.22(1)(d), Wisconsin Administrative Code, at least one person with the responsibility of coordinating all emergency response measures will be present when the facility is in operation. When the facility is not in operation, a facility emergency coordinator will be present or on call and available to respond to an emergency by reaching the facility in a short period of time. The Emergency Coordinator (or designee) will perform the following tasks:

- Assess extent of emergency.
- Contact appropriate emergency support agencies if needed.
- Designate someone in charge at incident area to temporarily supervise immediate control action, radio report to coordinator for an update on conditions, and notify all personnel.
- Take precautions to prevent spreading of fire or other emergency conditions to other hazardous waste or waste disposal areas.
- Evacuate non-Badger Disposal personnel and non-essential Badger Disposal personnel from incident area particularly during operating hours.
- Assemble all personnel at a designated area for instructions and roll call. Direct company personnel in responding to fire or explosion, if appropriate, and wait for outside emergency personnel and assist in their efforts.
- If appropriate, prepare self-contained breathing apparatus, and distribute.
- Prevent additional traffic from entering incident area.
- Clear road(s) for emergency vehicles and equipment.
- Contact Chemical Coordinator, or check waste inventory log located in the laboratory for information to identify the nature of wastes in the incident area, and to determine potential hazards, such as toxic, irritating, or asphyxiating gases generated as a result of fire or explosion.
- Determine the need to evacuate the site based on evaluation of the following:

- The areal extent of the incident
- The nature of wastes involved, especially including the potential for generation of hazardous gases
- An estimate of the time required and equipment needed to bring the incident under control.
- Any other special conditions or factors that may have a bearing on the severity of the incident.
- In the event of fire, consider smoke visibility or toxic fume hazard in off-site areas, and notify Milwaukee County Fire Department personnel for action, if necessary.
- For occurrences requiring local traffic control, contact the Milwaukee County Sheriff's Department to coordinate evacuation activities, if necessary.
- If the emergency involves a spill or release, contact the State of Wisconsin Division of Emergency Government Spill Hotline (800-943-0003), the National Response Center (800-424-8802), the Wisconsin DNR-Southeast District Office – Spill Coordinator (414-263-8685), Milwaukee Metropolitan Sewerage District (414-282-7200) Milwaukee County Division of Emergency Management (414-278-4709) and report the following:
- Name and telephone number of the reporter
- Name and address of Badger Disposal
- Date, time and type of incident
- Name and quantity of material involved, to the extent known
- Estimate of total quantity discharged, source of discharge description of all affected material (Air, Water, Soil etc.)
- Cause of discharge
- The extent of injuries, if any – evacuation required?
-
- Possible hazards to human health, or the environment, <u>outside the facility</u>
- Immediately after the incident, make an assessment to determine the need for recycling, recovery, and/or disposal of recovered waste, contaminated soil or surface waters, or any other material that results from a release, fire, or explosion at the facility (assume materials are hazardous). Obtain a sample of wastes involved in the incident for possible chemical analysis so that the cause of the incident can be definitely determined.
- The emergency coordinator will evaluate the nature of materials (such as fire suppressants, neutralizing agents, waste residuals) in the affected area of the facility to determine if special cleanup efforts must be initiated before operation is resumed. The evaluation will include a determination as to whether the released materials would be incompatible with incoming wastes. If special fire suppressants have been used, the emergency coordinator (or site chemist) will consult with the manufacturer or check the product label (if adequately detailed) to determine any potential incompatibility.

TABLE 2

LISTING OF EMERGENCY COORDINATORS

Priority of Notification	Title	Employee Name	Business Phone Number	Mobile Number	Home Phone Number
1	Primary Emergency Coordinator	Ron Mitchell	414-760-9175	414-236-1080	non-responsive [redacted]
2	Alternate Emergency Coordinators	Henry J. Krier	414-760-9175	414-236-1082	
		Martin Schmit	414-760-9175	414-236-1081	
3	24 Hour Emergency Line	Ron Mitchell	414-760-9175	414-236-1080	
4	24 Hour Emergency Pager	N/A	N/A	414-584-4746	N/A

NOTE:

One emergency coordinator will always be available, either on-site or on call 24 hours a day. In the event that more than one emergency coordinator is on-site at the time of an emergency, the chain of command will follow the priority of notification.

- The Emergency Coordinator will ensure that all emergency equipment listed in the contingency plan is cleaned and fit for its intended use before operations are resumed.
- Badger Disposal will notify the appropriate state and local authorities, that the facility is in compliance with this Section before operations are resumed in the affected area(s) of the facility.
- Badger Disposal will note in the operating record the time, date, and details of any incident that requires implementing the Contingency Plan. Within 15 days after the incident, a written report will be submitted on the incident to the Wisconsin Department of Natural Resources Director. The report will include the following:
- Name, address, and telephone number of Badger Disposal.
- Date, time, and type of incident (e.g., fire, explosion).
- Name and quantity of material(s) involved.
- The extent of injuries, if any.
- An assessment of actual or potential hazards to human health or the environment, where this is applicable.
- Estimated quantity and disposition of recovered material that resulted from the incident.
- A narrative describing the known or suspected causes of the incident and a statement describing the measures taken to investigate the cause. The narrative will also describe any necessary measures which have been or will be taken to prevent incidents in the future.
- Any amendments to the contingency plan.

3.2 Emergency Response Team

The Emergency Response Team is established at the facility to provide incident control and remediation during emergency situations. The team listed in Table 3 consists of an Emergency Coordinator plus plant personnel who are trained for fire, chemical, first-aid, and maintenance assistance. Table 3 identifies Emergency Response Team personnel.

TABLE 3

EMERGENCY RESPONSE TEAM

Team Members	Name	Title
Emergency Response Team Chief	Ron Mitchell	General Manager
Emergency Response Team Members	Henry J. Krier Martin W. Schmit Dave Conley Scott Zeinert Leo Ford	President Plant Manager Lab Manager Facility Chemist Warehouse Technician

3.3 Fire Brigade

The facility has a fire brigade who acts as a first line of defense against fire and explosion. The Fire Brigade, listed in Table 4, is organized and trained to respond to incipient fires (those in the early stages of development that can be successfully fought using hand extinguishers or hose lines) and more serious fires. Fires that present life-threatening situations will be fought with the help of outside fire companies.

3.4 Coordination Agreements with Local Authorities

The facility maintains close ties with local police and fire departments and health care facilities. Refer to Table 5 for a list of local emergency contacts. Numerous contacts have been made and are maintained throughout the year by Badger Disposal, such as emergency planning, fire prevention, and security personnel with various outside agencies. Copies of the Contingency Plan have been supplied to the appropriate local authorities to familiarize them with operations and emergency procedures (Appendix C). Any amendments to the Contingency Plan will also be supplied to the appropriate local authorities to familiarize them with any additional operations and emergency procedures.

Fire Department

The City of Milwaukee Fire Department personnel are offered annual inspection and familiarization tours of the Badger Disposal facility, and will work closely with Badger Disposal Fire Brigade personnel in establishing and maintaining effective prevention and protection programs. The interaction will include identification of the properties of hazardous waste handled at the facility, the associated hazards, and the fire control techniques, as well as a review of the contingency plan.

Police Department

The Badger Disposal Emergency Coordinator will interact with the City of Milwaukee Police Department and the Milwaukee County Sheriff to establish effective working relationships in dealing with potential emergency situations.

Medical Services

The Badger Disposal Emergency Staff will maintain close contact with ambulance squads and emergency medical personnel to ensure a thorough understanding of site hazards, building layouts, and emergency medical procedures. Diagnosis and treatment procedures for chemicals (including hazardous wastes) at Badger Disposal will be maintained at the site.

TABLE 4

FIRE BRIGADE PERSONNEL

Fire Brigade	Name	Title
Fire Brigade Chief	Ron Mitchell	General Manager
Fire Brigade Members	Henry J. Krier	President
	Martin W. Schmit Leo Ford Dave Conley	Plant Manager Warehouse Technician Lab Manager

TABLE 5 EMERGENCY RESPONSE CONTACTS AND TELEPHONE NUMBERS	
Local Emergency Response Contacts	
City of Milwaukee Police Department	911
City of Milwaukee Fire Department	911
Milwaukee County Sheriff	911
State of Wisconsin Division of Emergency Government	800-943-0003
State Patrol	414-227-4691
EMS	911
Local Hospital Emergency Numbers	
St. Joseph's Hospital	414-447-2000

Section 4

EMERGENCY RESPONSE PROCEDURES

4.1 Notification

Should an emergency situation arise, the Emergency Coordinator, or the designee, will be notified immediately. The Emergency Coordinator will then contact the Safety Officer and the Fire Brigade Chief as required. If any employee in the active hazardous waste disposal area or waste reception area encounters an emergency situation that they believe is a threat to the health or safety of themselves or others, the individual employee is authorized to alert others to the problem by radio or voice communication and to evacuate the area immediately.

4.2 General Emergency Action Procedure

During an emergency, the Emergency Coordinator will take all reasonable measures necessary to ensure that fires, explosions, and releases do not occur, recur, or spread to other hazardous wastes at the facility. These measures include, where applicable, stopping facility operations, collecting and containing released waste, and removing or isolating containers. If the facility stops operations in response to an emergency, the Emergency Coordinator or designee will then monitor for leaks, pressure buildup, gas generation, or ruptures in valves, pipes, or other equipment, as appropriate. The specific emergency action procedures followed are to control potential releases to air, soil, and water.

4.3 Fire/Explosion Action Procedure

Upon discovery of a fire or explosion at or outside of the Badger Disposal facility, the Emergency Coordinator will contact the necessary personnel to fight the fire. This may include the use of the Fire Brigade, who are trained in the proper method of fire fighting, and other Emergency Response Team personnel, who are trained in the proper methods of fire fighting. All untrained personnel will be required to leave the area. In addition, the Emergency Coordinator will direct all cleanup operations, determine the level of personnel protective equipment needed, and decide on the appropriate cleanup materials.

Regardless of the location of the fire/explosion, the Emergency Coordinator is responsible for the following:

- Determining a life-threatening potential
- Determining a property-threatening potential
- Determining an environmental impact potential

Depending on the availability of data, these assessments are accomplished through careful review of waste shipping manifests, detailed chemical analysis data, or "fingerprint" chemical analysis data.

On-site firefighting equipment that will be used to control fires/explosions at the Badger Disposal facility will include the following:

- Fire blankets
- Hand-held fire extinguishers located throughout the facility
- Portable fire extinguishers
- Automatic Aqueous Film Forming Foam (AFFF) fire suppression system

Upon discovery of a fire/explosion, individuals will initiate the fire/explosion action procedure as described below.

FIRE/EXPLOSION ACTION PROCEDURE

1. Notify Emergency Coordinator or designee.

   Emergency Coordinator: Ron Mitchell
   Business Telephone - (414) 236-1080
   Home Telephone - non-responsive

   The Emergency Coordinator has the authority and responsibility to take all reasonable measures to ensure that fires, explosions and releases with the potential to cause a fire or explosion do not occur, recur, or spread to other wastes at the facility. Upon discovery of any fire or explosion at or outside the facility, the Emergency Coordinator will immediately, via telephone, contact the City of Milwaukee Fire Department, by dialing 911. He will inform the Fire Department of the current situation, including the

need for ambulances or other emergency equipment, should any injuries have occurred as a result of the fire or explosion. The Emergency Coordinator will designate a person to wait at the street entrance to the facility to direct emergency personnel to area of the incident when they arrive.

The Emergency Coordinator or designee then subsequently notifies the Badger Disposal Fire Brigade and Emergency Response Team.

2. Control access to area. Clear all nonessential personnel from area.

3. Extinguish fire with hand-held fire extinguishers, if possible, or take other immediate action to mitigate the emergency until the local Fire Department arrives.

4. Take all reasonable measures necessary to ensure that subsequent fires, explosions, or releases do not occur or spread to other areas. These measures may include, but are not limited to, the possible removal of unaffected drums of waste from the area and dowsing adjacent areas with water.

5. In response to a fire or explosion that may release hazardous materials, the Emergency Coordinator will direct activities to monitor for leaks, pressure build-up, gas generation, or for ruptured pipes or valves or other equipment, as appropriate.

6. If a fire or explosion causes the release of hazardous materials, the appropriate action procedure for spilled or released material will be followed, as described in Subsection 4.5.

7. The Emergency Coordinator will deploy additional personnel and equipment as required.

8. The Emergency Coordinator will document the event.

4.4 Fire/Explosion Residual Cleanup Procedure

Cleanup of fire residuals involving hazardous wastes is aimed at collecting as much of the hazardous waste as possible for recycling, recovery, and/or disposal as quickly as possible. Several techniques are available for on-site cleanup, and their use will be determined at the time of the incident, taking into account the extent of the cleanup. Procedures may require the use of sorbents, portable pumps, etc. Similarly, the type of personal protective equipment depends upon the type of material(s) involved.

All waste generated from post-fire cleanups involving hazardous waste will be placed in containers, sampled, and disposed accordingly. Any equipment used in cleaning fire residuals involving hazardous waste will be decontaminated prior to use elsewhere. Any collectable liquid generated from decontamination procedures will be tested and drummed for proper disposal.

Any residual liquid remaining from a fire at the facility will be cleaned up as described in the spill or material release section.

4.5 Spill or Material Release Action Procedure

In the event of an emergency involving a hazardous waste spill, the following general procedure will be used for a rapid and safe response and to maintain control of the situation.

- If an employee discovers a hazardous waste spill or a vapor release, the employee will immediately notify the area supervisor.
- The area supervisor will notify the Emergency Coordinator or designee.

When a spill or release occurs at the Badger Disposal facility, the Emergency Coordinator will contact the necessary personnel to contain and clean up the spill or release. Team members will be responsible for controlling the cause of the incident and for neutralizing or otherwise rendering the waste or waste constituents harmless so that others may enter the area to make repairs. Team members will also be well trained in spill control methods and equipment. This may include the use of the Fire Brigade and the Emergency Response Team who are properly trained in spill cleanup procedures. Maintenance personnel and other specialized employees not on the Emergency Response Team may assist in the cleanup after the emergency situation has subsided. In addition, the Emergency Coordinator will direct all cleanup operations, determine the level of personal protective equipment needed, and decide on the appropriate cleanup materials and procedures.

Regardless of the incident location on the property, the Emergency Coordinator will be responsible for the following:

- Identifying the spilled material
- Estimating the quantity of material spilled
- Determining the life-threatening potential
- Determining the property-threatening potential
- Determining the environmental impact potential

Depending on the availability of data, these assessments will be accomplished through careful review of waste shipping manifests, detailed chemical analysis data, or "fingerprint" chemical analysis data. If appropriate, chemical analysis will be performed on the spilled/ released material.

Upon discovery of a spill/release, individuals will initiate the action procedure as described below.

SPILL/RELEASE ACTION PROCEDURE

1. Report the incident to the Emergency Coordinator or designee.

   Emergency Coordinator: Ron Mitchell
   Business Telephone - (414) 236-1080
   Home Telephone - non-responsive

   The Emergency Coordinator or designee will subsequently notify the Emergency Response Team.

2. Protect personnel.

   Keep non-essential personnel away from area of spill; evacuate if necessary. Remove unaffected items from area only if ignition does not present a fire hazard.

3. Confine danger.

   Stop spill at source or contain, if possible. Shut off or cap valves to contain as much run-off and spill as possible. If a truck is affected, every effort will be made to prevent the material from entering sewers. This will be accomplished by damming, diking, or channeling with sand, dirt, or spill pillows. If a leak is uncontrollable in a tanker, the remaining contents of the tanker will be transferred to appropriate storage tanks or drums.

4. Eliminate ignition sources.

   Eliminate all sources of heat, open flame, sparks, and friction. Use non-sparking tools for spill cleanup. Refer to the appropriate action procedure if a significant fire or explosion risk exists.

5. Spill Response.

   The Emergency Response Team will report to the scene and address the spill. Appropriate protective equipment and respiratory protection will be donned, and contaminant levels and spill neutralization needs will be assessed.

6. Handle wastes.

   Properly package and label spilled materials absorbed by sorbents. Remove spilled materials and rinse water accumulated in containment areas via a portable vacuum unit. The contents will be discharged to the appropriate storage tank or drums. Absorb residual materials in the containment area with the appropriate sorbent; properly package and label materials.

7. Verify cleanup.

   At the completion of the cleanup effort, the Emergency Coordinator will verify complete spill collection and neutralization as well as the absence of hazardous airborne contaminants.

8. Decontaminate equipment.

   Decontaminate spill response materials, and return them to their proper locations. Adjust the inventory of the spilled materials to account for materials expended in the spill cleanup.

9. Report spill.

   In the event of a release to the environment (i.e. soil, groundwater, sewer system air) or a spill that leaves the property, the following government agencies will be contacted immediately:

   1) National Response Center
      Phone: 800-424-8802

   2) Wisconsin Emergency Government (24 Hours)
      2400 Wright Street
      Madison, WI 53704
      Phone: 800-943-0003

   3) Wisconsin DNR – Southeast District Office – Spill Coordinator
      Phone: 414-263-8685

   4) Milwaukee Metropolitan Sewerage District
      Phone: 414-282-7200

   5) Milwaukee County Division of Emergency Management
      Phone: 414-278-4709

4.6 Spill or Material Release Cleanup Procedure

On-site spill cleanup is aimed at recovering as much of the spilled material as possible for recovery, recycling, and/or disposal as quickly as possible. Several techniques are available for on-site cleanup. Choice of a cleanup method will be determined at the time of the incident, taking into account the extent of the spill. Some cleanup alternatives include the following:

- Using sorbents, which are spill scavengers and cleanup agents, to absorb the spilled product is the most common method for handling spills or residual product left from a major spill. Application of the sorbents can be in the form of direct application where the sorbent is placed directly on the product, or it can be in pillows, large bats, or booms which can absorb a large amount of liquid and make recovery, recycling, and/or disposal easier. Three classes of sorbents are natural products (straw, sawdust, clays, and vermiculite), modified natural products (expanded perlite, cloth rags, charcoal, silicone-coated sawdust, surfactant-treated asbestos), and synthetic products (imbiber beads, imbiber bead blankets, and foam products). When using sorbents, it is necessary to recycle and/or dispose of spent products properly, unless recoverable sorbents are used.

- When selecting a sorbent material, important considerations are its capability to absorb all spilled product, its availability in sufficient quantities; and whether or not it is chemically inert and will not react with the spilled product to form toxic or otherwise hazardous substances. For corrosive materials, lime or other neutralizers are practicable.

- Direct suction pumping into drums using pumps which are driven by explosion proof motors or pneumatic operation. Consider applying a blanket of firefighting foam (AFFF) to control vapors.

4.7 Civil Unrest Action Procedure

This procedure will be followed should the Badger Disposal facility be subject to civil disturbance. The Emergency Coordinator will initiate the following actions:

- Call security to notify them of possible disturbances. If necessary, notify the facility General Manager who may call an immediate conference to determine an appropriate plan of action.

- If necessary, issue instructions to secure all entrances with security officers or managers to control access or egress from the buildings by either demonstrators or Badger Disposal employees.

- If necessary, the Security Coordinator will notify local law enforcement agencies, but they should be summoned to take action only as a last resort. An agreement has been made as to the conditions under which outside authorities are summoned, and Badger Disposal management is aware of the planned police action.

- If necessary, make every reasonable attempt to have the demonstrators approached by a Badger Disposal manager (with due regard for the manager's safety) and inform them that Badger Disposal does not permit such activity on its premises, and in a restrained and courteous manner, request that they leave.
- If necessary, prepare a restraining order as soon as possible.

4.8 Natural Disaster Action Procedure

This procedure will be followed in the event of an emergency caused by severe weather, such as tornadoes and high-intensity thunderstorms, earthquakes, or flooding.

The Emergency Coordinator will direct and control the following remedial actions if they can be accomplished without unduly endangering the lives of Badger Disposal personnel:

- Visually inspect area to ascertain structural integrity.
- Close windows and doors.
- Instruct employees to proceed to designated safety areas.

Even in the event of just a tornado warning, this portion of the plan will be implemented.

4.9 Storage and Treatment of Recovered Materials

Immediately after an emergency, the Emergency Coordinator will arrange for the analysis and characterization of representative samples of all recovered wastes, contaminated soils, and waters. Arrangements for any necessary recycling, treatment, or disposal will be completed within 90 days of the conclusion of the emergency. Accumulated materials will be containerized to the extent practicable for transportation. If large quantities of a hazardous waste are generated during the emergency cleanup operations, bulk trucks will be used to transport this waste as it is pumped, or made ready for storage, recycling, treatment, or disposal.

4.10 Incompatible Wastes

The Emergency Coordinator will ensure that wastes that may be incompatible with released materials are isolated from the spill area. Isolation will be accomplished by moving the waste to other accumulation areas, or by constructing dikes, berms, or ditches as appropriate. Wastes that are

potentially incompatible with the released material will not be treated, stored, or accumulated in the affected area until cleanup procedures are complete. Concurrently, the Emergency Coordinator will ensure that released materials are not placed in containers or tanks that previously held materials that may be incompatible with the released material unless adequate decontamination has occurred.

Section 5

EMERGENCY EQUIPMENT

All emergency equipment is kept at the facility in an easily accessible location. Table 6 provides a list of emergency and decontamination equipment along with a list of places where it can be found at the facility. A Current Operations Emergency Equipment Layout drawing #05490-EE1 is located in Section 7, Attachment B, this drawing shows the location of safety and emergency equipment in a layout of the facility. Table 7 outlines personal protective equipment which is used by facility personnel.

After an emergency event, or as needed during the emergency event, all emergency equipment and supplies listed in Tables 6 and 7 will be decontaminated or replaced. All safety equipment will be inspected and evaluated for readiness before operations are resumed in the affected areas.

Emergency spill control equipment is located in an easily accessible area within the building. This equipment includes the following:

1. Bags of clay and vermiculite ("Speedi-Dry")
2. Sand bags
3. Spill pillows
4. Shovels
5. Push brooms
6. Long-handled squeegees
7. Fire extinguishers
8. Pipe balloon
9. Portable liquid vacuum units
10. Empty, 55-gallon drums
11. Sets of non-sparking tools
12. Sorbent boom
13. Personal protective equipment (clothing, boots, gloves)

TABLE 6 EMERGENCY AND DECONTAMINATION EQUIPMENT		
Type of Equipment	Location	Use
Hand-held fire extinguishers	Warehouse entrances and exists.	To put out a larger than 3-foot-diameter fire and easily moved
Eye wash	Entrance to the warehouse Restrooms.	To flush splashed materials from eyes or face
Safety showers	Entrance to the warehouse Restrooms.	To wash off material that may be splashed on an employee
Hand-held air horn	All processing stations throughout the warehouse.	To sound alarm for emergencies
First aid stations	Laboratory and warehouse.	To handle non-serious injuries
Alarm actuators	All entrances and exits throughout the warehouse.	For security and for emergencies
Internal telephone communications	Warehouse building walls	To notify and instruct in the event of an emergency
Two-way radios	All areas of the warehouse and Facility grounds.	To notify and instruct in the case of an emergency
Zorbal, sand, and/or other absorbent materials	Throughout the warehouse.	To contain and cleanup spilled materials
Fire blankets	Throughout the warehouse.	To control and/or extinguish fires or put out flames on personnel
Emergency stretchers	In the warehouse.	To remove injured personnel

TABLE 7 PERSONAL PROTECTIVE EQUIPMENT		
Type of Equipment	Location	Use
Five-Minute emergency air packs	Throughout the warehouse. Midway along each wall.	To supply 5 minutes of air for emergency escapes
Self contained breathing apparatus (air pack)	On supply shelves outside of the office.	For emergencies or for confined-space work. Will supply 30 minutes of air
Organic vapor air filter respirators	On supply shelves outside of the office.	To minimize employee exposure
Safety glasses	Office.	To protect the eyes
Safety goggles	Office.	To protect the eyes
Safety boots	Throughout the warehouse.	To protect the feet
Safety gloves	Supply shelves outside of the office.	To protect the hands
Tyvek® coveralls	Supply shelves outside of the office.	To protect the body
Uniforms	Office.	To protect the body

Section 6

BUILDING EVACUATION PLAN AND EVACUATION DRILL PROGRAM

6.1 Evacuation Plan

In the event of a facility emergency, all Badger Disposal personnel (with the exception of the Fire Brigade or Emergency Response crew members as required) will evacuate the site. A general site evacuation will be announced by activating the alarm system (i.e., air horn). Further instruction will be provided at the time of evacuation by the appropriate supervisory staff.

The evacuation routes for the existing Badger Disposal facility are posted throughout the facility and illustrated on Figure 1. The drawing shows the primary and alternate routes by which to leave the site. Personnel at the site who are to be evacuated will leave by the primary route unless the emergency situation is along that route.

6.2 Evacuation Drill Program

Evacuation drills will be conducted annually and will be coordinated by the Emergency Coordinator in conjunction with facility managers. A critique team will observe each drill; summary reports will be given to the General Manager for analysis and corrective actions.

The drills provide valuable information about the site's evacuation capability and give managers a chance to test evacuation procedures under controlled conditions. Based on the outcome of the drills, managers will adjust and improve department emergency procedures as needed.

Department managers will carry out the following during the planning and action stages of an evacuation drill, and during actual evacuations in emergency situations:

1. Planning Stage.

    - Ensure that all employees fully understand all aspects of the department evacuation plan.
    - Establish primary (closest exit) and alternate evacuation routes and assembly points; include same in the department emergency plan folder.

- Appoint a department evacuation leader and alternate.
- Assign employees to assist the handicapped, if applicable.
- Compile shutdown procedures, if applicable.
- Advise employees to take with them their personal belongings, such as purses, briefcases, outerwear, and car keys, during the drill.

2. Action Stage.

- Assume responsibility for all personnel (including guests, visitors, contractors, etc.) in the work area, and advise them during an evacuation that they must accompany other department employees to the assembly area.
- Ensure that the evacuation leader or alternate checks restrooms, locker rooms, break rooms, conference rooms, etc., in proximity to the department.
- Ensure that all personnel in or near the department area evacuate by the primary or alternate exit route. Contractors will also participate in the drills.

6.3 Shutdown Procedures

Managers will assign employees in advance to be responsible for shutdown procedures, where necessary. To safely shut down a department area, designated employee(s) will do the following:

- Switch off all operating electrical equipment, unless shutting it off damages the equipment and leaving it running will not worsen the emergency situation.
- Return chemicals in use to original containers, if applicable, and close or cover open containers.
- Shut down supplied gases and chemicals, if practical, by turning off at the last rigid pipe connection in the department.

When equipment shutdown might cause serious production problems or damage equipment, managers are allowed to assign certain employees to remain in the building and not participate in the drills. Such drill exemptions will be established in advance with that employee before the drill takes place, but those employees will fully understand the evacuation procedures and be ready to evacuate under actual emergency situations. Drill exemptions will be kept to an absolute minimum.

Section 7

REQUIRED REPORTS

Badger Disposal will note in the operating record the time, date, and details of any incident that requires implementing the contingency plan. Within 15 days, Badger Disposal will submit a written report to the permitting authorities. The report will include the following:

- Name, address, and telephone number of the owner or operator.
- Name, address, and telephone number of the facility.
- Date, time, and type of incident.
- Name and quantity of material(s) involved.
- The extent of injuries, if any.
- An assessment of actual or potential hazards to human health or the environment, where applicable.
- An estimate of the quantity and disposition of recovered material that resulted from the incident.
- A narrative describing the known or suspected causes of the incident and a statement describing the measures taken to investigate the cause. The narrative will also describe any necessary measures which have been, or will be, taken to prevent incidents in the future.
- Any amendments to the contingency plan.

Section 8

CONTINGENCY PLAN AMENDMENTS

This contingency plan will be amended whenever the following occur:

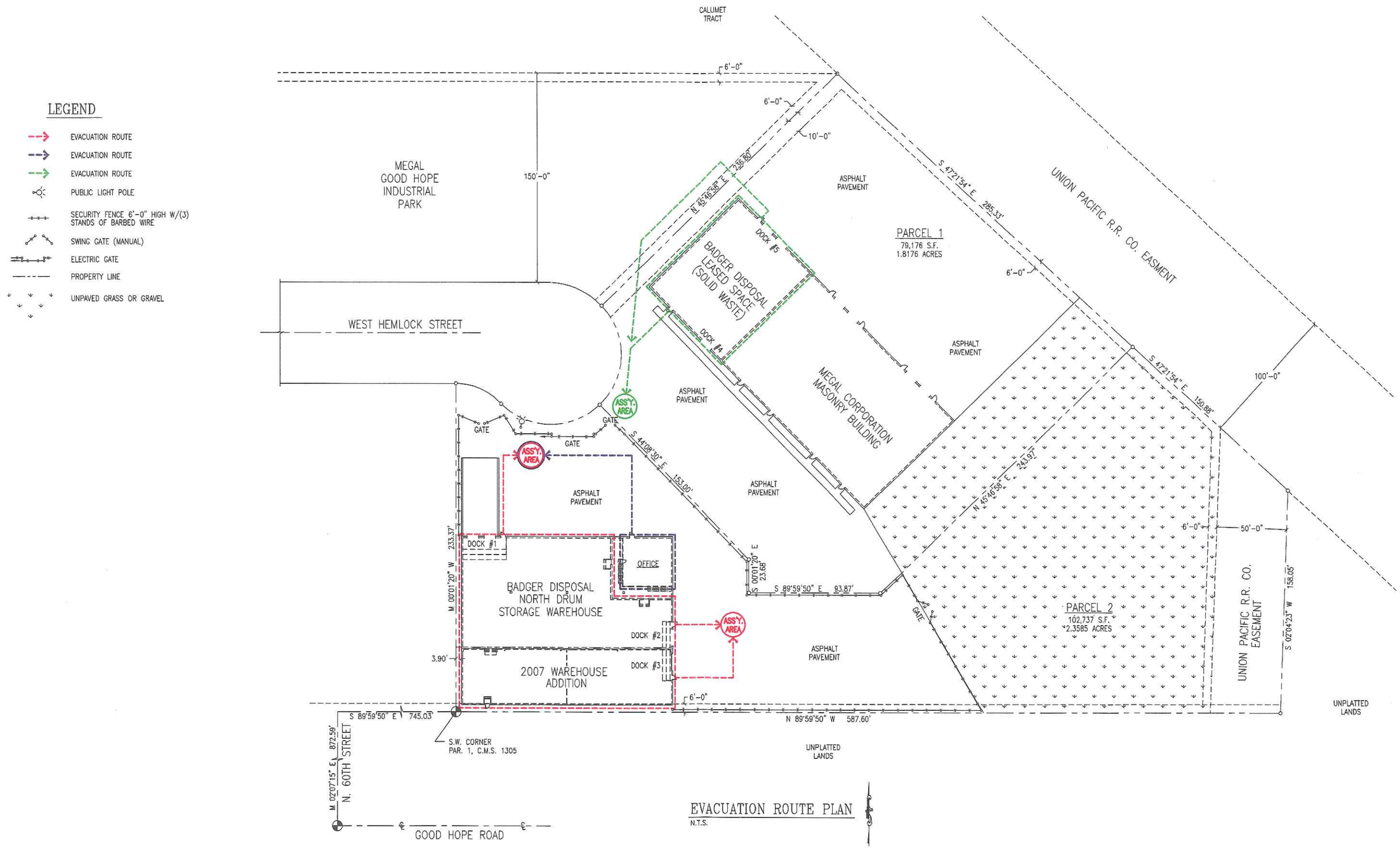
- The facility permit is revised.
- Experience with a real emergency dictates a change in the plan if needed.
- The facility changes its design, construction, operation, maintenance, or other circumstances in a way that significantly changes the potential for fires, explosions, or releases of wastes or waste constituents, or changes the response necessary in an emergency.
- The list of emergency equipment changes significantly.
- Personnel changes are made to the roles of Emergency Coordinator, Emergency response Team Chief, and Fire Brigade Chief. In addition, Badger Disposal will conduct quarterly reviews of the lists of members for the Emergency Response Team and Fire Brigade, and will revise as necessary.

FIGURE 1

FACILITY EVACUATION PLAN

FIGURE 1

FACILITY EVACUATION PLAN



EVACUATION ROUTE PLAN
N.T.S.

FIGURE 1

SPECTRUM ENGINEERING INCORPORATED
262-783-7725
FAX 262-783-7726
19395 West Capitol Drive,
Brookfield, Wisconsin 53045

THIS DRAWING, AS AN INSTRUMENT OF PROFESSIONAL SERVICE, REMAINS THE PROPERTY OF SPECTRUM ENGINEERING INCORPORATED. ANY CHANGES, REPRODUCTION, OR UNAUTHORIZED USE, IN WHOLE OR IN PART, FOR OTHER PROJECTS IS PROHIBITED UNLESS EXPRESSLY APPROVED BY SPECTRUM ENGINEERING INCORPORATED.

VERIFY SCALES
BAR IS ONE INCH ON ORIGINAL DRAWING.
0 1"
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY.

NO.	DATE	BY	REVISION
1	10/11/07	J.M.N.	FROM PREVIOUS SEI PROJ. NO. 05490. ADDED 2007 WAREHOUSE ADDITION.

DRAWN BY: S.A.M.	CHECKED BY: BADGER
DESIGNED BY: J.M. NOLL, P.E.	
PROJECT MANAGER: R.B. SMITS, P.E.	

BADGER DISPOSAL

Badger Disposal of WI, Inc.
5611 West Hemlock Street
Milwaukee, WI 53223

BADGER DISPOSAL - MILWAUKEE FPOR
CURRENT OPERATIONS
EVACUATION PLAN

DRAWING NUMBER:	05490-EV1
DATE:	10/11/07
PROJECT NUMBER:	07649
SHEET NUMBER:	

ATTACHMENT B

CURRENT FACILITY OPERATION DRAWINGS

Revised November 12, 2007

Current Operations Drawing #5490-OV1

Current Operations Drawing #5490-D1

Current Operations Traffic Pattern Plan Drawing #05490-T1

Current Operations Security Plan Drawing #05490-SY1

Current Operations Emergency Equipment Layout Drawing #05490-EE1

A-0.1 Title Sheet

MLW-130 Survey

A-1.0 Site Plan

A-1.1 Site Grading Plan/Erosion Control Plan

S-1.0 Foundation Plan

S-1.1 Foundation Details

S-1.2 Foundation Details

S-1.3 Foundation Details

S-2.0 Roof Framing Plan

S-2.1 Roof Framing Details

S-2.2 Door Opening Details

A-3.0 Floor Plan

A-4.0 Elevations

FP-1 Fire Sprinkler Plan

H-1 HVAC Plan

Appendix A

INCIDENT REPORT

BADGER DISPOSAL OF WI. INC. INCIDENT REPORT

Incident Log No.

1. Site/location of incident _____

2. Date _____ Time _____ Duration _____

3. Description of incident _____

4. Amount & type of hazardous chemical substance(s) released:

   BADGER Waste Approval No. (if applicable): _____

5. Equipment involved: Drum ____ Small Container _____
   Tanker ____ Truck ____ Pump ____ _____
   Sump ____ Hose _____
   Other _____

6. Cause of incident:
   Mechanical/electrical failure _____
   Operator error _____
   Procedural failure _____
   Contractor-caused incident _____
   Incident beyond BADGER control _____
   Act of God _____
   Instrumentation _____
   Other _____

7. Hazardous chemical substance(s) released to: Air _____
   Water _____ Land _____ Groundwater _____
   Bldg Floor _____ Secondary containment _____
   Other _____
   Air/stack identification _____
   Water/describe receptor (e.g., outfall, sewer, stream) _____
   Soil/depth to groundwater _____

8 Estimate area (e.g., sq. ft., acres) affected: _____

9. Hazardous chemical substances released beyond BADGER property boundary, if any: _____

10. Agencies notified (contact, time, date, by whom):
    Wisconsin Division of Emergency Government _____
    WDNR _____
    Milwaukee Police Department _____
    Milwaukee Fire Department _____

BADGER DISPOSAL OF WI., INC. INCIDENT REPORT

11. Agencies' responses/inspections (name, time, date, comments): _____

12. List the materials released in quantities that exceed the reportable quantities of 40 CFR Part 302 (CERCLA hazardous substances) or 40 CFR Part 100 (oil): _____

13. List the materials released in quantities that exceed state reportable quantity levels:

14. Immediate corrective action taken: _____

    a) Contractor: _____
    b) Amount of waste collected for disposal: _____
    c) Method/vendor/location for waste disposal: _____

15. Incident damage (describe):

    a) Personal injuries: _____
    b) Environmental damage/permit excursion(s): _____
    c) Property damage: _____

16. Preventive measures: _____

17. Reported to State of Wisconsin by:

    Name/Title: _____
    Dept.: _____ Phone number: _____
    Time: _____ Time of State of Wisconsin response _____
    State of Wisconsin spill notification line - (800)943-0003

18. Additional Comments: _____

Appendix B

LOCAL AUTHORITY SUBMITTALS

BADGER DISPOSAL

Badger Disposal of WI, Inc.

March 29, 2006

Ms. Nannette Hegerty
Chief of Police
Police Administration Building
749 West State Street
P.O. Box 531
Milwaukee, WI 53233

Dear Ms. Hegerty,

Enclosed please find an updated copy of our facility Contingency Plan. Please note the facility name has changed from EOG Disposal Inc. to Badger Disposal of WI., Inc. There have also been personnel and telephone number changes.

If you have any questions regarding our Contingency Plan please be certain to contact me.

Sincerely,
Badger Disposal of WI., Inc.

Kandylee Schmit
Compliance Officer

5611 W. Hemlock St. Milwaukee, WI 53223
866-271-0961 • 414-760-9175 • Fax: 414-760-9189 • www.badgerdisposal.com

SENDER: COMPLETE THIS SECTION

- Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.
- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:
Ms. Nannette Hegerty
Chief of Police
Police Administration Bldg.
749 W. State Street
Milwaukee, WI 53233

COMPLETE THIS SECTION ON DELIVERY

A. Signature
X
☐ Agent
☐ Addressee

B. Received by (Printed Name)

C. Date of Delivery

D. Is delivery address different from item 1? ☐ Yes
If YES, enter delivery address below: ☐ No

3. Service Type
☒ Certified Mail ☐ Express Mail
☐ Registered ☐ Return Receipt for Merchandise
☐ Insured Mail ☐ C.O.D.

4. Restricted Delivery? (Extra Fee) ☐ Yes

2. Article Number
(Transfer from service label) 7004 2510 0000 4621 5636

PS Form 3811, August 2001 Domestic Return Receipt 102595-02-M-1035

7004 2510 0000 4621 5636

PLACE STICKER AT TOP OF ENVELOPE TO THE RIGHT OF THE RETURN ADDRESS, FOLD AT DOTTED LINE

CERTIFIED MAIL™

7004 2510 0000 4621 5636

7004 2510 0000 4621 5636

U.S. Postal Service™
CERTIFIED MAIL™ RECEIPT
(Domestic Mail Only; No Insurance Coverage Provided)

For delivery information visit our website at www.usps.com®

OFFICIAL USE

Postage	$
Certified Fee	
Return Receipt Fee (Endorsement Required)	
Restricted Delivery Fee (Endorsement Required)	
Total Postage & Fees	$

Postmark Here

Sent To Ms. Nannette Hegerty
CHIEF OF POLICE, Police Admin Bldg
Street, Apt. No.; or PO Box No. 749 W. State Street
City, State, ZIP+4 Milwaukee, WI 53233

PS Form 3800, June 2002 See Reverse for Instructions

BADGER DISPOSAL

Badger Disposal of WI, Inc.

March 29, 2006

Company Officer
Milwaukee Fire Department
Engine #9
4141 West Mill Road
Milwaukee, WI 53223

Dear Company Officer,

Enclosed please find an updated copy of our facility Contingency Plan. Please note the facility name has changed from EOG Disposal Inc. to Badger Disposal of WI., Inc. There have also been personnel and telephone number changes.

If you have any questions regarding our Contingency Plan please be certain to contact me.

Sincerely,
Badger Disposal of WI., Inc.

Kandylee Schmit
Compliance Officer

5611 W. Hemlock St. Milwaukee, WI 53223
866-271-0961 • 414-760-9175 • Fax: 414-760-9189 • www.badgerdisposal.com

SENDER: COMPLETE THIS SECTION

- Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.
- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:
Company Officer
Milwaukee Fire Dept.
Engine #9
4141 West Mill Road
Milwaukee, WI 53223

COMPLETE THIS SECTION ON DELIVERY

A. Signature
X
☐ Agent
☐ Addressee

B. Received by (Printed Name)

C. Date of Delivery

D. Is delivery address different from item 1? ☐ Yes
If YES, enter delivery address below: ☐ No

3. Service Type
☒ Certified Mail ☐ Express Mail
☐ Registered ☐ Return Receipt for Merchandise
☐ Insured Mail ☐ C.O.D.

4. Restricted Delivery? (Extra Fee) ☐ Yes

2. Article Number (Transfer from service label) 7004 2510 0000 4621 5803

PS Form 3811, February 2004 Domestic Return Receipt 102595-02-M-1540

PLACE STICKER AT TOP OF ENVELOPE TO THE RIGHT OF THE RETURN ADDRESS, FOLD AT DOTTED LINE
CERTIFIED MAIL™

7004 2510 0000 4621 5803

U.S. Postal Service™
CERTIFIED MAIL™ RECEIPT
(Domestic Mail Only; No Insurance Coverage Provided)

For delivery information visit our website at www.usps.com®

OFFICIAL USE

Postage	$
Certified Fee	
Return Receipt Fee (Endorsement Required)	
Restricted Delivery Fee (Endorsement Required)	
Total Postage & Fees	$

Postmark Here

Sent To: Company Officer - Milw. Fire Dept. Engine #9
Street, Apt. No.; or PO Box No.: 4141 West Mill Road
City, State, ZIP+4: Milwaukee WI 53223

PS Form 3800, June 2002 See Reverse for Instructions

ATTACHMENT B

CURRENT FACILITY OPERATION DRAWINGS

Current Operations Drawing #05490-OV1

Current Operations Drum Storage Plan Drawing #05490-D1

Current Operations Traffic Pattern Plan Drawing #05490-T1

Current Operations Security Plan Drawing #05490-SY1

Current Operations Emergency Equipment Layout Drawing #05490-EE1

ATTACHMENT C

AERIAL PHOTOGRAPHS

Send To Printer Back To TerraServer Change to 11x17 Print Size Show Grid Lines Change to Landscape

USGS **Brown Deer, Wisconsin, United States** 31 Mar 2000

0 .5Km 0 .25Mi

Image courtesy of the U.S. Geological Survey

© 2004 Microsoft Corporation. **Terms of Use** **Privacy Statement**

Send To Printer Back To TerraServer Change to 11x17 Print Size Show Grid Lines Change to Landscape

USGS **Brown Deer, Wisconsin, United States** 31 Mar 2000

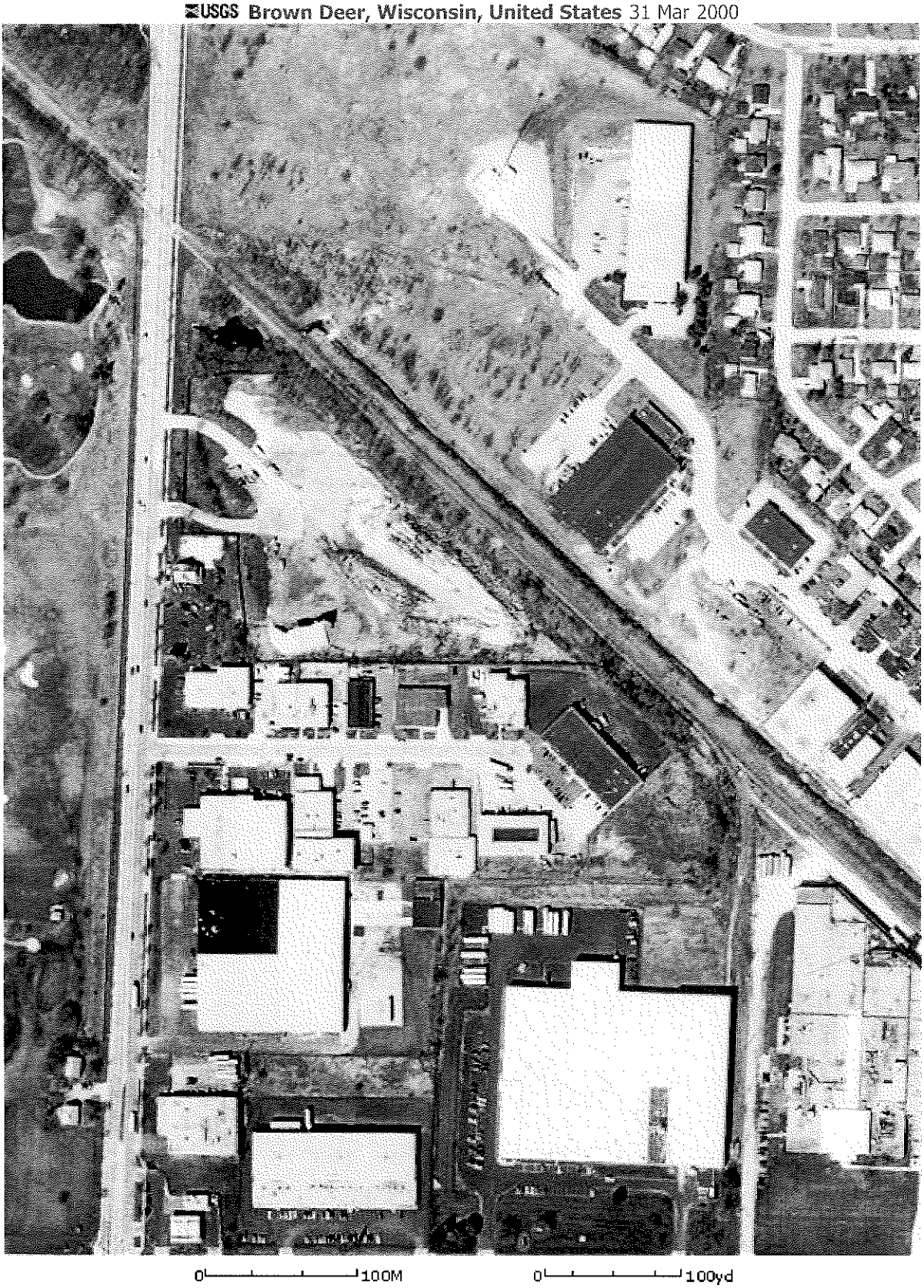


Image courtesy of the U.S. Geological Survey

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ATTACHMENT D

CLOSURE COST ESTIMATE – CURRENT OPERATIONS

TABLE 1

CLOSURE COST ESTIMATE – CURRENT OPERATIONS

Closure Activities	Unit Cost	Quantity	Total ($)
Recycling/Disposal of Hazardous Waste Drum Inventory	non-responsive [redacted]	1,212	$121,200.00
Transportation Costs	[redacted]	15	$13,155.00
Storage Area - decontaminate floor surface - rinsate analyses	[redacted]	1 10	$10,500.00 $3,330.00
Closure-Derived Waste Management - liquid residues	[redacted]	10,000	$5,000.00
Engineering - closure observation - documentation report	[redacted]	4 1	$ 4,800.00 $ 8,000.00
Sub Total	[redacted]		$165,985.00
10% Contingency	[redacted]	1	$16,598.50
TOTAL	[redacted]		**$182,583.50**

N:\USER\KANDY\CLOSURE.TBL

Veolia ES Industrial Services, Inc.
N104 W13275 Donges Bay Road
Germantown, WI 53022
(262) 512-8049 Fax (262) 236-8140

Proposal # 1002
Proposal Date: 10/1/2007

PROPOSAL

Customer
Name: HENRY KRIER
Company: BADGER DISPOSAL OF WI.
Address: 5611 WEST HEMLOCK STREET
City MILWAUKEE State WI ZIP 53223
Phone: 414-760-9175
Fax: 414-760-9189
Email: henry@badgerdisposal.com

Job Site: SAME
Address:
Address:
City:
State ZIP 88888

	Description of Work	Amount	TOTAL
1.00	TRANSPORTATION FROM MILWAUKEE,WI TO DETROIT,MI	$815.00	$815.00
	DEMURRAGE:1ST TWO HOURS LOADING & UNLOADING FREE: non- / HOUR THEREAFTER		
	FUEL SURCHARGE UPDATED WEEKLY FROM THE D.O.E.	20%	
		SubTotal	$815.00
		TOTAL	$815.00

ACCEPTANCE OF PROPOSAL
Title:
Signature:
Title:
Signature:
Date:
PO #

TERMS: NET 30
FINANCE CHARGES: 1 1/2%
AFTER 30 DAYS.

Questions concerning this proposal?
Call: (920) 605-6128
Allan Luttinen

Signature:

THIS IS ONLY AN ESTIMATE.
If scope of work changes a change order will be issued. The customer will remain liable for all actual charges incured.

Thank you for your business! Please call on us again.

A MDWTP, Inc. & Wayne Disposal, Inc.

Discounted Pricing Schedule For:

Badger Disposal

Updated 6/28/2006
Current as of 12/11/2007

Non-Hazardous Wastes (029L,Slud,Non,ect.)

1) Non-Hazardous Solids

2) Non-Haz Liquids and Sludges

non-responsive [redacted]

Characteristic Hazardous Wastes (D001,2,4-11,12-43) Treat to non-haz.

1) D001, D002, D004-11

2) D012-D043 (D-Metals w/ UHC

3) Characteristic Subpart CC

non-responsive [redacted]

Listed Hazardous Wastes (F,K,P,U Coded and MI Listed)Treat to haz.

1) Listed Metals for Stabilization

2) Listed Organic for ChemOx

3) Listed Subpart CC

4) Micro-encapsulation of Debris

Direct Subtitle C or TSCA Landfill

1) Listed Waste Meeting All LDR

2) TSCA Solids for Landfill

non-responsive [redacted]

Notes:

1) Bulk pricing (per ton) will be charged on a yard basis for bulk density < 2000 lbs/yard.
2) State surcharges are non-responsive [redacted] box or ton for hazardous wastes.
3) State surcharges are non-responsive [redacted] box or ton for non-hazardous wastes.
4) Please call for pricing for all event work.
5) Rates do not include special burial charges, dig-outs, wash-outs, etc.
6) An insurance surcharge of 1.5% will apply to all invoiced totals starting 03/01/03.

WASTE ANALYSIS PLAN

BADGER DISPOSAL OF WI., Inc.
MILWAUKEE, WISCONSIN

Revised November 12, 2007

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Appendix C Material Flow Diagram
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Appendix E Compatibility Testing Procedures

match the Waste Profile sheet provided by the generator, the load shall be accepted and the material shall be segregated according to the ultimate method of processing.

If, after analysis, results are not representative of the manifest description, the General Manager is informed and the proper steps are taken to rectify the discrepancy. If the generator has an existing profile that matches the results, the material is received under the alternate profile. The generator is notified, a discrepancy is indicated on the manifest, a new drum label is placed on the drum/s and the drum/s are received under the alternate profile. If a profile that matches the analytical results does not exist, the generator is contacted to complete a new profile and the same discrepancy procedure is followed.

5.2 Bulk Liquid Loads

This process is similar to that of the containerized loads. A copy of the manifest and the driver log-in are brought to the plant office. A sample of the fuel blendable material is analyzed for BTU content, chloride, water, specific gravity, pH and any other analysis as deemed necessary by management. A comparison is made between the waste description on the manifest and the analytical results obtained to ensure that they are representative. In addition, a comparison may be made against the prequalification and/or historical receipts of the material to assure that there are no significant discrepancies between the load and what is expected. If acceptable, the material is assigned a spot to be off-loaded into a tank. When the material has been successfully off-loaded, the driver returns to the laboratory to pick up his log-in sheet, and takes it back to the plant office to receive his signed copy of the manifest. A copy of the manifest is also sent to the generator as required.

If, after analysis, results are not representative of the manifest description, the General Manager is informed and the proper steps are taken to rectify the discrepancy. If the generator has an existing profile that matches the results, the material is received under the alternate profile. The generator is notified, a discrepancy is indicated on the manifest and the load is received under the alternate profile. If a profile that matches the analytical results does not exist, the generator is contacted to complete a new profile and the same discrepancy procedure is followed.

5.3 Bulk Solid Loads

A copy of the manifest and driver log-in are brought to the plant office. A composite sample of the fuel blendable material is analyzed for BTU content, chloride, water, specific gravity, pH and any other analysis as deemed necessary by management. A comparison is made between the waste description on the manifest and the analytical results obtained to ensure that they are representative. In addition, a comparison may be made against the prequalification and/or historical receipts of the material to assure that there are no significant discrepancies between the load and what is expected. If acceptable, the material will be staged or off-loaded. When the material has been accepted or off-loaded, the driver returns to the office to pick up his log-in sheet, and takes it back to the plant office to receive his signed copy of the manifest. A copy of the manifest is also sent to the generator as required.

If, after analysis, results are not representative of the manifest description, the General Manager is informed and the proper steps are taken to rectify the discrepancy. If the generator has an existing profile that matches the results, the material is received under the alternate profile. The generator is notified, a discrepancy is indicated on the manifest and the load is are received under the alternate profile. If a profile that matches the analytical results does not exist, the generator is contacted to complete a new profile and the same discrepancy procedure is followed.

5.4 Labpack Loads

After the manifest(s) has been validated and a tracking number assigned, the driver shall receive two copies of the manifest to take to the acting area Supervisor. After receipt of the manifest(s), the Supervisor shall instruct the driver where to position his box van or truck. Once positioned, the Supervisor and/or one of the crew shall off-load the containers, check to ensure that all labels are consistent with the manifest(s) and verify the number of containers. If the containers are accepted through this initial qualification step, they shall then be moved to the container storage area and shall be staged in the proper containment areas. Once the containers are off-loaded from the box van or truck, the driver shall return to the plant office to receive a signed copy of the manifest. A copy of the manifest shall also be sent to the generator, as required.

5.5 Polychlorinated Biphenyl Loads

After the manifest(s) has been validated and a tracking number assigned, the driver shall receive two copies of the manifest to take to the acting area Supervisor. After receipt of the manifest(s), the Supervisor shall instruct the driver where to position his box van or truck. Once positioned, the Supervisor and/or one of the crew shall off-load the containers, check to ensure that all labels are consistent with the manifest(s) and verify the number of containers. If the containers are accepted through this initial qualification step, they shall then be moved to the container storage area and shall be staged in the containment area designated for PCB storage. Once the containers are off-loaded from the box van or truck, the driver shall return to the plant office to receive a signed copy of the manifest. A copy of the manifest shall also be sent to the generator, as required.

Section 6
REJECTION PROCEDURE

6.1 Containerized Loads

If a load of containers is unacceptable by physical assay, the containers are reloaded onto box van or truck and the transporter is instructed to return to the plant office as above. If only a portion of the containers is unacceptable, the appropriate notation is made on the manifest as above.

If, after analysis or inspection, it is determined that a load or portion of a load of containers is unacceptable, the generator and/or transporter are informed and the unacceptable containers are returned to the generator with the rejected containers indicated in Section 19 of the manifest. A copy of the manifest is also sent to the generator as required.

6.2 Bulk Liquid and Bulk Solid Loads

If, after inspection and/or analysis, it is determined that a load or a portion of a load (i.e., compartmentalized trailers) is incompatible or otherwise unacceptable for processing, the laboratory informs the operations manager who takes the necessary steps to ensure that the generator is informed of the reason(s) for the rejection. The transporter is instructed to return to the plant office to pick up the manifest with the notation(s) of rejection returned to the generator.

If only part of a load is rejected, the appropriate notation is made on the manifest (section 19 of the manifest) when the transporter picks up the copy after off-loading, or when the driver returns to pick up the transport vehicle. A copy of the manifest will also be sent to the generator as required.

6.3 Labpack Loads

If a load of labpack containers is unacceptable by inspection, the containers are reloaded onto the box van or truck and the transporter is instructed to return to the plant office as above. If only a portion of the containers is unacceptable, the appropriate notation is made on the manifest as above.

If, after inspection, it is determined that a load or portion of a load of containers is unacceptable, the generator and/or transporter are informed and the unacceptable containers are returned to the generator with the rejected containers indicated in Section 19 of the manifest. A copy of the manifest is also sent to the generator as required.

6.4 Polychlorinated Biphenyl Loads

If a load of containers is unacceptable by inspection, the containers are reloaded onto the box van or truck and the transporter is instructed to return to the plant office as above. If only a portion of the containers is unacceptable, the appropriate notation is made on the manifest as above.

If, after inspection, it is determined that a load or portion of a load of containers is unacceptable, the generator and/or transporter are informed and the unacceptable containers are returned to the generator with the rejected containers indicated in Section 19 of the manifest. A copy of the manifest is also sent to the generator as required.

Section 7
SAMPLING PROCEDURES

7.1 Containerized Loads

Containers shall be sampled once they have been moved to the appropriate staging area in the process/storage building. A minimum 10 percent composite of each generator's waste stream(s) shall be sampled with a coliwasa or equivalent SW-846 method. Once samples are collected and labeled, they shall be analyzed by a laboratory which is certified or registered under ch. NR149, Wisconsin Administrative Code.

7.2 Bulk Liquid Loads

Sampling bulk loads is done using a coliwasa or equivalent SW-846 method. Samples are taken by one of the tank farm operators. Once taken, the sample is labeled immediately with the generator and/or transporter name and is taken to the laboratory. The laboratory personnel additionally label the sample with the unique tracking number associated with the manifest for the load.

7.3 Bulk Solid Loads

Sampling bulk solid loads will be done by taking random samples throughout the load to make a representative composite sample. Samples are obtained by one of the tank farm, drum line, or labpack operators. Where appropriate, sampling procedures will follow guidelines established in SW-846. Once obtained, the sample is labeled immediately with the generator and/or transporter name and is taken to the laboratory. The laboratory personnel additionally label the sample with the unique tracking number associated with the manifest for the load.

Section 8
ANALYSIS PLAN

Badger Disposal shall routinely conduct analysis of six indicator parameters to determine the acceptability of waste materials. Other analyses may be performed based on past experience with a generator, suspect wastestreams, to meet outbound specifications for products, and/or for any other reason management deems appropriate in its discretion. Table 2 lists those analyses that may be routinely performed based on the primary waste code of the waste stream. Rationales for each waste code are included in Table 2 and defined on page 67. Appendix C contains a material flow diagram and indicates the types of analysis performed for wastes received at Badger Disposal.

TABLE 2 SUMMARY OF ANALYSES PERFORMED								
Primary Waste Type	SAMPLE PARAMETERS CONDUCTED							Rationale
	BTU's/lb.	%Cl	%H_2O	pH	Spec. Grav.	Compatability	Other	
D001	X	X	X	X	X	X	X	1
D002	X	X	X	X	X	X	X	2
D003	X	X	X	X	X	X	X	1
D004	X	X	X	X	X	X	Arsenic	3
D005	X	X	X	X	X	X	Barium	4
D006	X	X	X	X	X	X	Cadmium	5
D007	X	X	X	X	X	X	Chromium	6
D008	X	X	X	X	X	X	Lead	7
D009	X	X	X	X	X	X	Mercury	8
D010	X	X	X	X	X	X	Selenium	9
D011	X	X	X	X	X	X	Silver	10
D012	X	X	X	X	X	X	X	1
D013	X	X	X	X	X	X	X	1
D014	X	X	X	X	X	X	X	1
D015	X	X	X	X	X	X	X	1
D016	X	X	X	X	X	X	X	1
D017						X	X	11
D018	X	X	X	X	X	X	X	1
D019	X	X	X	X	X	X	X	1
D020	X	X	X	X	X	X	X	1
D021	X	X	X	X	X	X	X	1
D022	X	X	X	X	X	X	X	1
D023	X	X	X	X	X	X	X	1
D024	X	X	X	X	X	X	X	1
D025	X	X	X	X	X	X	X	1
D026	X	X	X	X	X	X	X	1

TABLE 2
SUMMARY OF ANALYSES PERFORMED

Primary Waste Type	SAMPLE PARAMETERS CONDUCTED							Rationale
	BTU's/lb.	%Cl	%H_2O	pH	Spec. Grav.	Compatability	Other	
D027	X	X	X	X	X	X	X	1
D028	X	X	X	X	X	X	X	1
D029	X	X	X	X	X	X	X	1
D030	X	X	X	X	X	X	X	1
D031	X	X	X	X	X	X	X	1
D032	X	X	X	X	X	X	X	1
D033	X	X	X	X	X	X	X	1
D034	X	X	X	X	X	X	X	1
D035	X	X	X	X	X	X	X	1
D036	X	X	X	X	X	X	X	1
D037						X	X	11
D038	X	X	X	X	X	X	X	1
D039	X	X	X	X	X	X	X	1
D040	X	X	X	X	X	X	X	1
D041						X	X	11
D042						X	X	11
D043	X	X	X	X	X	X	X	1
F001	X	X	X	X	X	X	X	1
F002	X	X	X	X	X	X	X	1
F003	X	X	X	X	X	X	X	1
F004	X	X	X	X	X	X	X	1
F005	X	X	X	X	X	X	X	1
F006	X	X	X	X	X	X	X	1
F007	X	X	X	X	X	X	X	1
F008	X	X	X	X	X	X	X	1
F009	X	X	X	X	X	X	X	1

TABLE 2
SUMMARY OF ANALYSES PERFORMED

Primary Waste Type	SAMPLE PARAMETERS CONDUCTED							Rationale
	BTU's/lb.	%Cl	%H_2O	pH	Spec. Grav.	Compatability	Other	
F010	X	X	X	X	X	X	X	1
F011	X	X	X	X	X	X	X	1
F012	X	X	X	X	X	X	X	1
F019	X	X	X	X	X	X	X	1
F020						X	X	11
F021						X	X	11
F022						X	X	11
F023						X	X	11
F024	X	X	X	X	X	X	X	1
F025	X	X	X	X	X	X	X	1
F026						X	X	11
F027						X	X	11
F028						X	X	11
F032	X	X	X	X	X	X	X	1
F034	X	X	X	X	X	X	X	1
F035	X	X	X	X	X	X	X	1
F037	X	X	X	X	X	X	X	1
F038	X	X	X	X	X	X	X	1
F039	X	X	X	X	X	X	X	1
K001	X	X	X	X	X	X	X	1
K002	X	X	X	X	X	X	X	1
K003	X	X	X	X	X	X	X	1
K004	X	X	X	X	X	X	X	1
K005	X	X	X	X	X	X	X	1
K006	X	X	X	X	X	X	X	1
K007	X	X	X	X	X	X	X	1

TABLE 2 SUMMARY OF ANALYSES PERFORMED								
Primary Waste Type	SAMPLE PARAMETERS CONDUCTED							Rationale
	BTU's/lb.	%Cl	%H_2O	pH	Spec. Grav.	Compatability	Other	
K008	X	X	X	X	X	X	X	1
K009	X	X	X	X	X	X	X	1
K010	X	X	X	X	X	X	X	1
K011	X	X	X	X	X	X	X	1
K013	X	X	X	X	X	X	X	1
K014	X	X	X	X	X	X	X	1
K015	X	X	X	X	X	X	X	1
K016	X	X	X	X	X	X	X	1
K017	X	X	X	X	X	X	X	1
K018	X	X	X	X	X	X	X	1
K019	X	X	X	X	X	X	X	1
K020	X	X	X	X	X	X	X	1
K021	X	X	X	X	X	X	X	1
K022	X	X	X	X	X	X	X	1
K023	X	X	X	X	X	X	X	1
K024	X	X	X	X	X	X	X	1
K025	X	X	X	X	X	X	X	1
K026	X	X	X	X	X	X	X	1
K027	X	X	X	X	X	X	X	1
K028	X	X	X	X	X	X	X	1
K029	X	X	X	X	X	X	X	1
K030	X	X	X	X	X	X	X	1
K031	X	X	X	X	X	X	X	1
K032	X	X	X	X	X	X	X	1
K033	X	X	X	X	X	X	X	1
K034	X	X	X	X	X	X	X	1

TABLE 2 SUMMARY OF ANALYSES PERFORMED								
Primary Waste Type	SAMPLE PARAMETERS CONDUCTED							Rationale
	BTU's/lb.	%Cl	%H_2O	pH	Spec. Grav.	Compatability	Other	
K035	X	X	X	X	X	X	X	1
K036	X	X	X	X	X	X	X	1
K037	X	X	X	X	X	X	X	1
K038	X	X	X	X	X	X	X	1
K039	X	X	X	X	X	X	X	1
K040	X	X	X	X	X	X	X	1
K041	X	X	X	X	X	X	X	1
K042	X	X	X	X	X	X	X	1
K043	X	X	X	X	X	X	X	1, 11
K044	X	X	X	X	X	X	X	1
K045	X	X	X	X	X	X	X	1
K046	X	X	X	X	X	X	X	1
K047	X	X	X	X	X	X	X	1
K048	X	X	X	X	X	X	X	1
K049	X	X	X	X	X	X	X	1
K050	X	X	X	X	X	X	X	1
K051	X	X	X	X	X	X	Chromium	6
K052	X	X	X	X	X	X	Lead	7
K060	X	X	X	X	X	X	X	1
K061	X	X	X	X	X	X	X	1
K062	X	X	X	X	X	X	X	1
K064	X	X	X	X	X	X	X	1
K065	X	X	X	X	X	X	X	1
K066	X	X	X	X	X	X	X	1
K069	X	X	X	X	X	X	X	1
K071	X	X	X	X	X	X	X	1

TABLE 2 SUMMARY OF ANALYSES PERFORMED								
Primary Waste Type	SAMPLE PARAMETERS CONDUCTED							Rationale
	BTU's/lb.	%Cl	%H_2O	pH	Spec. Grav.	Compatability	Other	
K073	X	X	X	X	X	X	X	1
K083	X	X	X	X	X	X	X	1
K084	X	X	X	X	X	X	X	1
K085	X	X	X	X	X	X	X	1
K086	X	X	X	X	X	X	X	2
K087	X	X	X	X	X	X	X	1
K088	X	X	X	X	X	X	X	1
K090	X	X	X	X	X	X	X	1
K091	X	X	X	X	X	X	X	1
K093	X	X	X	X	X	X	X	1
K094	X	X	X	X	X	X	X	1
K095	X	X	X	X	X	X	X	1
K096	X	X	X	X	X	X	X	1
K097	X	X	X	X	X	X	X	1
K098	X	X	X	X	X	X	X	1
K099	X	X	X	X	X	X	X	1
K100	X	X	X	X	X	X	X	1
K101	X	X	X	X	X	X	X	1
K102	X	X	X	X	X	X	X	1
K103	X	X	X	X	X	X	X	1
K104	X	X	X	X	X	X	X	1
K105	X	X	X	X	X	X	X	1
K106	X	X	X	X	X	X	X	1
K107	X	X	X	X	X	X	X	1
K108	X	X	X	X	X	X	X	1
K109	X	X	X	X	X	X	X	1

TABLE 2 SUMMARY OF ANALYSES PERFORMED								
Primary Waste Type	SAMPLE PARAMETERS CONDUCTED							Rationale
	BTU's/lb.	%Cl	%H_2O	pH	Spec. Grav.	Compatability	Other	
K110	X	X	X	X	X	X	X	1
K111	X	X	X	X	X	X	X	1
K112	X	X	X	X	X	X	X	1
K113	X	X	X	X	X	X	X	1
K114	X	X	X	X	X	X	X	1
K115	X	X	X	X	X	X	X	1
K116	X	X	X	X	X	X	X	1
K117	X	X	X	X	X	X	X	1
K118	X	X	X	X	X	X	X	1
K123	X	X	X	X	X	X	X	1
K124	X	X	X	X	X	X	X	1
K125	X	X	X	X	X	X	X	1
K126	X	X	X	X	X	X	X	1
K131	X	X	x	X	X	X	X	1
K132	X	X	X	X	X	X	X	1
K136	X	X	X	X	X	X	X	1
K141	X	X	X	X	X	X	X	1
K142	X	X	X	X	X	X	X	1
K143	X	X	X	X	X	X	X	1
K144	X	X	X	X	X	X	X	1
K145	X	X	X	X	X	X	X	1
K147	X	X	X	X	X	X	X	1
K148	X	X	X	X	X	X	X	1
K149						X	X	11
K150	X	X	X	X	X	X	X	1
K151	X	X	X	X	X	X	X	1

TABLE 2 SUMMARY OF ANALYSES PERFORMED								
Primary Waste Type	SAMPLE PARAMETERS CONDUCTED							Rationale
	BTU's/lb.	%Cl	%H_2O	pH	Spec. Grav.	Compatability	Other	
K156	X	X	X	X	X	X	X	1
K157	X	X	X	X	X	X	X	1
K158	X	X	X	X	X	X	X	1
K159	X	X	X	X	X	X	X	1
K161	X	X	X	X	X	X	X	1
K174	X	X	X	X	X	X	X	1
K175	X	X	X	X	X	X	X	1
K169	X	X	X	X	X	X	X	1
K170	X	X	X	X	X	X	X	1
K171	X	X	X	X	X	X	X	1
K172	X	X	X	X	X	X	X	1
P001	X	X	X	X	X	X	X	1
P002	X	X	X	X	X	X	X	1
P003	X	X	X	X	X	X	X	1
P004	X	X	X	X	X	X	X	1
P005	X	X	X	X	X	X	X	1
P006	X	X	X	X	X	X	X	1
P007	X	X	X	X	X	X	X	1
P008	X	X	X	X	X	X	X	1
P009	X	X	X	X	X	X	X	1
P010	X	X	X	X	X	X	X	1
P011	X	X	X	X	X	X	X	1
P012	X	X	X	X	X	X	X	1
P013	X	X	X	X	X	X	X	1
P014	X	X	X	X	X	X	X	1
P015	X	X	X	X	X	X	X	1

TABLE 2 SUMMARY OF ANALYSES PERFORMED								
Primary Waste Type	SAMPLE PARAMETERS CONDUCTED							Rationale
	BTU's/lb.	%Cl	%H_2O	pH	Spec. Grav.	Compatability	Other	
P016	X	X	X	X	X	X	X	1
P017	X	X	X	X	X	X	X	1
P018	X	X	X	X	X	X	X	1
P020	X	X	X	X	X	X	X	1
P021	X	X	X	X	X	X	X	1
P022	X	X	X	X	X	X	X	1
P023	X	X	X	X	X	X	X	1
P024	X	X	X	X	X	X	X	1
P026	X	X	X	X	X	X	X	1
P027	X	X	X	X	X	X	X	1
P028	X	X	X	X	X	X	X	1
P029	X	X	X	X	X	X	X	1
P030	X	X	X	X	X	X	X	1
P031	X	X	X	X	X	X	X	1
P033	X	X	X	X	X	X	X	1
P034	X	X	X	X	X	X	X	1
P036	X	X	X	X	X	X	X	1
P037	X	X	X	X	X	X	X	1
P038	X	X	X	X	X	X	X	1
P039	X	X	X	X	X	X	X	1
P040	X	X	X	X	X	X	X	1
P041	X	X	X	X	X	X	X	1
P042	X	X	X	X	X	X	X	1
P043	X	X	X	X	X	X	X	1
P044	X	X	X	X	X	X	X	1
P045	X	X	X	X	X	X	X	1

TABLE 2 SUMMARY OF ANALYSES PERFORMED								
Primary Waste Type	SAMPLE PARAMETERS CONDUCTED							Rationale
	BTU's/lb.	%Cl	%H_2O	pH	Spec. Grav.	Compatability	Other	
P046	X	X	X	X	X	X	X	1
P047	X	X	X	X	X	X	X	1
P048	X	X	X	X	X	X	X	1
P049	X	X	X	X	X	X	X	1
P050	X	X	X	X	X	X	X	1
P051	X	X	X	X	X	X	X	1
P054	X	X	X	X	X	X	X	1
P056	X	X	X	X	X	X	X	1
P057	X	X	X	X	X	X	X	1
P058	X	X	X	X	X	X	X	1
P059	X	X	X	X	X	X	X	1
P060	X	X	X	X	X	X	X	1
P062	X	X	X	X	X	X	X	1
P063	X	X	X	X		X	X	1
P064	X	X	X	X		X	X	1
P065	X	X	X	X		X	X	1
P066	X	X	X	X	X	X	X	1
P067	X	X	X	X	X	X	X	1
P068	X	X	X	X	X	X	X	1
P069	X	X	X	X	X	X	X	1
P070	X	X	X	X	X	X	X	1
P071	X	X	X	X	X	X	X	1
P072	X	X	X	X	X	X	X	1
P073	X	X	X	X	X	X	X	1
P074	X	X	X	X	X	X	X	1
P075	X	X	X	X	X	X	X	1

TABLE 2 SUMMARY OF ANALYSES PERFORMED								
Primary Waste Type	SAMPLE PARAMETERS CONDUCTED							Rationale
	BTU's/lb.	%Cl	%H_2O	pH	Spec. Grav.	Compatability	Other	
P076	X	X	X	X	X	X	X	1
P077	X	X	X	X	X	X	X	1
P078	X	X	X	X	X	X	X	1
P081	X	X	X	X	X	X	X	1
P082	X	X	X	X	X	X	X	1
P084	X	X	X	X	X	X	X	1
P085	X	X	X	X	X	X	X	1
P087	X	X	X	X	X	X	X	1
P088	X	X	X	X	X	X	X	1
P089	X	X	X	X	X	X	X	1
P092	X	X	X	X	X	X	X	1
P093	X	X	X	X	X	X	X	1
P094	X	X	X	X	X	X	X	1
P095	X	X	X	X	X	X	X	1
P096	X	X	X	X	X	X	X	1
P097	X	X	X	X	X	X	X	1
P098	X	X	X	X	X	X	X	1
P099	X	X	X	X	X	X	X	1
P101	X	X	X	X	X	X	X	1
P102	X	X	X	X	X	X	X	1
P103	X	X	X	X	X	X	X	1
P104	X	X	X	X	X	X	X	1
P105	X	X	X	X	X	X	X	1
P106	X	X	X	X	X	X	X	1
P107	X	X	X	X	X	X	X	1
P108	X	X	X	X	X	X	X	1

TABLE 2 SUMMARY OF ANALYSES PERFORMED								
Primary Waste Type	SAMPLE PARAMETERS CONDUCTED							Rationale
	BTU's/lb.	%Cl	%H_2O	pH	Spec. Grav.	Compatability	Other	
P109	X	X	X	X	X	X	X	1
P110	X	X	X	X	X	X	X	1
P111	X	X	X	X	X	X	X	1
P112	X	X	X	X	X	X	X	1
P113	X	X	X	X	X	X	X	1
P114	X	X	X	X	X	X	X	1
P115	X	X	X	X	X	X	X	1
P116	X	X	X	X	X	X	X	1
P118	X	X	X	X	X	X	X	1
P119	X	X	X	X	X	X	X	1
P120	X	X	X	X	X	X	X	1
P121	X	X	X	X	X	X	X	1
P122	X	X	X	X	X	X	X	1
P123	X	X	X	X	X	X	X	1
P127	X	X	X	X	X	X	X	1
P128	X	X	X	X	X	X	X	1
P185	X	X	X	X	X	X	X	1
P188	X	X	X	X	X	X	X	1
P189	X	X	X	X	X	X	X	1
P190	X	X	X	X	X	X	X	1
P191	X	X	X	X	X	X	X	1
P192	X	X	X	X	X	X	X	1
P194	X	X	X	X	X	X	X	1
P196	X	X	X	X	X	X	X	1
P197	X	X	X	X	X	X	X	1
P198	X	X	X	X	X	X	X	1

TABLE 2 SUMMARY OF ANALYSES PERFORMED								
Primary Waste Type	SAMPLE PARAMETERS CONDUCTED							Rationale
	BTU's/lb.	%Cl	%H_2O	pH	Spec. Grav.	Compatability	Other	
P199	X	X	X	X	X	X	X	1
P201	X	X	X	X	X	X	X	1
P202	X	X	X	X	X	X	X	1
P203	X	X	X	X	X	X	X	1
P204	X	X	X	X	X	X	X	1
P205	X	X	X	X	X	X	X	1
U001	X	X	X	X	X	X	X	1
U002	X	X	X	X	X	X	X	1
U003	X	X	X	X	X	X	X	1
U004	X	X	X	X	X	X	X	1
U005	X	X	X	X	X	X	X	1
U006	X	X	X	X	X	X	X	1
U007	X	X	X	X	X	X	X	1
U008	X	X	X	X	X	X	X	1
U009	X	X	X	X	X	X	X	1
U010	X	X	X	X	X	X	X	1
U011	X	X	X	X	X	X	X	1
U012	X	X	X	X	X	X	X	1
U014	X	X	X	X	X	X	X	1
U015	X	X	X	X	X	X	X	1
U016	X	X	X	X	X	X	X	1
U017	X	X	X	X	X	X	X	1
U018	X	X	X	X	X	X	X	1
U019	X	X	X	X	X	X	X	1
U020	X	X	X	X	X	X	X	1
U021	X	X	X	X	X	X	X	1

TABLE 2 SUMMARY OF ANALYSES PERFORMED								
Primary Waste Type	SAMPLE PARAMETERS CONDUCTED							Rationale
	BTU's/lb.	%Cl	%H_2O	pH	Spec. Grav.	Compatability	Other	
U022	X	X	X	X	X	X	X	1
U023	X	X	X	X	X	X	X	1
U024	X	X	X	X	X	X	X	1
U025	X	X	X	X	X	X	X	1
U026	X	X	X	X	X	X	X	1
U027	X	X	X	X	X	X	X	1
U028	X	X	X	X	X	X	X	1
U029	X	X	X	X	X	X	X	1
U030						X	X	11
U031	X	X	X	X	X	X	X	1
U032	X	X	X	X	X	X	X	1
U033	X	X	X	X	X	X	X	1
U034	X	X	X	X	X	X	X	1
U035	X	X	X	X	X	X	X	1
U036	X	X	X	X	X	X	X	1
U037	X	X	X	X	X	X	X	1
U038	X	X	X	X	X	X	X	1
U039	X	X	X	X	X	X	X	1
U041	X	X	X	X	X	X	X	1
U042	X	X	X	X	X	X	X	1
U043	X	X	X	X	X	X	X	1
U044	X	X	X	X	X	X	X	1
U045	X	X	X	X	X	X	X	1
U046	X	X	X	X	X	X	X	1
U047	X	X	X	X	X	X	X	1
U048	X	X	X	X	X	X	X	1

TABLE 2 SUMMARY OF ANALYSES PERFORMED								
Primary Waste Type	SAMPLE PARAMETERS CONDUCTED							Rationale
	BTU's/lb.	%Cl	%H_2O	pH	Spec. Grav.	Compatability	Other	
U049	X	X	X	X	X	X	X	1
U050	X	X	X	X	X	X	X	1
U051	X	X	X	X	X	X	X	1
U052	X	X	X	X	X	X	X	1
U053	X	X	X	X	X	X	X	1
U055	X	X	X	X	X	X	X	1
U056	X	X	X	X	X	X	X	1
U057	X	X	X	X	X	X	X	1
U058	X	X	X	X	X	X	X	1
U059	X	X	X	X	X	X	X	1
U060	X	X	X	X	X	X	X	1
U061	X	X	X	X	X	X	X	1
U062	X	X	X	X	X	X	X	1
U063	X	X	X	X	X	X	X	1
U064	X	X	X	X	X	X	X	1
U066	X	X	X	X	X	X	X	1
U067	X	X	X	X	X	X	X	1
U068	X	X	X	X	X	X	X	1
U069	X	X	X	X	X	X	X	1
U070	X	X	X	X	X	X	X	1
U071	X	X	X	X	X	X	X	1
U072	X	X	X	X	X	X	X	1
U073	X	X	X	X	X	X	X	1
U074	X	X	X	X	X	X	X	1
U075	X	X	X	X	X	X	X	1
U076	X	X	X	X	X	X	X	1

TABLE 2 SUMMARY OF ANALYSES PERFORMED								
Primary Waste Type	SAMPLE PARAMETERS CONDUCTED							Rationale
	BTU's/lb.	%Cl	%H_2O	pH	Spec. Grav.	Compatability	Other	
U077	X	X	X	X	X	X	X	1
U078	X	X	X	X	X	X	X	1
U079	X	X	X	X	X	X	X	1
U080	X	X	X	X	X	X	X	1
U081	X	X	X	X	X	X	X	1
U082	X	X	X	X	X	X	X	1
U083	X	X	X	X	X	X	X	1
U084	X	X	X	X	X	X	X	1
U085	X	X	X	X	X	X	X	1
U086	X	X	X	X	X	X	X	1
U087	X	X	X	X	X	X	X	1
U088	X	X	X	X	X	X	X	1
U089	X	X	X	X	X	X	X	1
U090	X	X	X	X	X	X	X	1
U091	X	X	X	X	X	X	X	1
U092	X	X	X	X	X	X	X	1
U093	X	X	X	X	X	X	X	1
U094	X	X	X	X	X	X	X	1
U095	X	X	X	X	X	X	X	1
U096	X	X	X	X	X	X	X	1
U097	X	X	X	X	X	X	X	1
U098	X	X	X	X	X	X	X	1
U099	X	X	X	X	X	X	X	1
U101	X	X	X	X	X	X	X	1
U102	X	X	X	X	X	X	X	1
U103	X	X	X	X	X	X	X	1

TABLE 2 SUMMARY OF ANALYSES PERFORMED								
Primary Waste Type	SAMPLE PARAMETERS CONDUCTED							Rationale
	BTU's/lb.	%Cl	%H_2O	pH	Spec. Grav.	Compatability	Other	
U105	X	X	X	X	X	X	X	1
U106	X	X	X	X	X	X	X	1
U107	X	X	X	X	X	X	X	1
U108	X	X	X	X	X	X	X	1
U109	X	X	X	X	X	X	X	1
U110	X	X	X	X	X	X	X	1
U111	X	X	X	X	X	X	X	1
U112	X	X	X	X	X	X	X	1
U113	X	X	X	X	X	X	X	2
U114	X	X	X	X	X	X	X	1
U115	X	X	X	X	X	X	X	1
U116	X	X	X	X	X	X	X	1
U117	X	X	X	X	X	X	X	1
U118	X	X	X	X	X	X	X	2
U119	X	X	X	X	X	X	X	1
U120	X	X	X	X	X	X	X	1
U121	X	X	X	X	X	X	X	1
U122	X	X	X	X	X	X	X	1
U123	X	X	X	X	X	X	X	1
U124	X	X	X	X	X	X	X	1
U125	X	X	X	X	X	X	X	1
U126	X	X	X	X	X	X	X	1
U127	X	X	X	X	X	X	X	1
U128	X	X	X	X	X	X	X	1
U129	X	X	X	X	X	X	X	1
U130	X	X	X	X	X	X	X	1

TABLE 2 SUMMARY OF ANALYSES PERFORMED								
Primary Waste Type	SAMPLE PARAMETERS CONDUCTED							Rationale
	BTU's/lb.	%Cl	%H_2O	pH	Spec. Grav.	Compatability	Other	
U131	X	X	X	X	X	X	X	1
U132	X	X	X	X	X	X	X	1
U133	X	X	X	X	X	X	X	1
U134	X	X	X	X	X	X	X	1
U135	X	X	X	X	X	X	X	1
U136	X	X	X	X	X	X	X	1
U137	X	X	X	X	X	X	X	1
U138	X	X	X	X	X	X	X	1
U139	X	X	X	X	X	X	X	1
U140	X	X	X	X	X	X	X	1
U141	X	X	X	X	X	X	X	1
U142	X	X	X	X	X	X	X	1
U143	X	X	X	X	X	X	X	1
U144	X	X	X	X	X	X	X	1
U145	X	X	X	X	X	X	X	1
U146	X	X	X	X	X	X	X	1
U147	X	X	X	X	X	X	X	1
U148	X	X	X	X	X	X	X	1
U149	X	X	X	X	X	X	X	1
U150	X	X	X	X	X	X	X	1
U151	X	X	X	X	X	X	X	1
U152	X	X	X	X	X	X	X	2
U153	X	X	X	X	X	X	X	1
U154	X	X	X	X	X	X	X	1
U155	X	X	X	X	X	X	X	1
U156	X	X	X	X	X	X	X	1

TABLE 2 SUMMARY OF ANALYSES PERFORMED								
Primary Waste Type	SAMPLE PARAMETERS CONDUCTED							Rationale
	BTU's/lb.	%Cl	%H_2O	pH	Spec. Grav.	Compatability	Other	
U157	X	X	X	X	X	X	X	1
U158	X	X	X	X	X	X	X	1
U159	X	X	X	X	X	X	X	1
U160	X	X	X	X	X	X	X	1
U161	X	X	X	X	X	X	X	1
U162	X	X	X	X	X	X	X	2
U163	X	X	X	X	X	X	X	1
U164	X	X	X	X	X	X	X	1
U165	X	X	X	X	X	X	X	1
U166	X	X	X	X	X	X	X	1
U167	X	X	X	X	X	X	X	1
U168	X	X	X	X	X	X	X	1
U169	X	X	X	X	X	X	X	1
U170	X	X	X	X	X	X	X	1
U171	X	X	X	X	X	X	X	1
U172	X	X	X	X	X	X	X	1
U173	X	X	X	X	X	X	X	1
U174	X	X	X	X	X	X	X	1
U176	X	X	X	X	X	X	X	1
U177	X	X	X	X	X	X	X	1
U178	X	X	X	X	X	X	X	1
U179	X	X	X	X	X	X	X	1
U180	X	X	X	X	X	X	X	1
U181	X	X	X	X	X	X	X	1
U182	X	X	X	X	X	X	X	1
U183	X	X	X	X	X	X	X	1

TABLE 2 SUMMARY OF ANALYSES PERFORMED								
Primary Waste Type	SAMPLE PARAMETERS CONDUCTED							Rationale
	BTU's/lb.	%Cl	%H_2O	pH	Spec. Grav.	Compatability	Other	
U184	X	X	X	X	X	X	X	1
U185	X	X	X	X	X	X	X	1
U186	X	X	X	X	X	X	X	1
U187	X	X	X	X	X	X	X	1
U188	X	X	X	X	X	X	X	1
U189	X	X	X	X	X	X	X	1
U190	X	X	X	X	X	X	X	1
U191	X	X	X	X	X	X	X	1
U192	X	X	X	X	X	X	X	1
U193	X	X	X	X	X	X	X	1
U194	X	X	X	X	X	X	X	1
U196	X	X	X	X	X	X	X	1
U197	X	X	X	X	X	X	X	1
U200	X	X	X	X	X	X	X	1
U201	X	X	X	X	X	X	X	1
U202	X	X	X	X	X	X	X	1
U203	X	X	X	X	X	X	X	1
U204	X	X	X	X	X	X	X	1
U205	X	X	X	X	X	X	X	1
U206	X	X	X	X	X	X	X	1
U207	X	X	X	X	X	X	X	1
U208	X	X	X	X	X	X	X	1
U209	X	X	X	X	X	X	X	1
U210	X	X	X	X	X	X	X	1
U211	X	X	X	X	X	X	X	1
U212						X	X	11

TABLE 2 SUMMARY OF ANALYSES PERFORMED								
Primary Waste Type	SAMPLE PARAMETERS CONDUCTED							Rationale
	BTU's/lb.	%Cl	%H_2O	pH	Spec. Grav.	Compatability	Other	
U213	X	X	X	X	X	X	X	1
U214	X	X	X	X	X	X	X	1
U215	X	X	X	X	X	X	X	1
U216	X	X	X	X	X	X	X	1
U217	X	X	X	X	X	X	X	1
U218	X	X	X	X	X	X	X	1
U219	X	X	X	X	X	X	X	1
U220	X	X	X	X	X	X	X	1
U221	X	X	X	X	X	X	X	1
U222	X	X	X	X	X	X	X	1
U223	X	X	X	X	X	X	X	2
U225	X	X	X	X	X	X	X	1
U226	X	X	X	X	X	X	X	1
U227	X	X	X	X	X	X	X	1
U228	X	X	X	X	X	X	X	1
U230						X	X	11
U231						X	X	11
U232						X	X	11
U233						X	X	11
U234	X	X	X	X	X	X	X	1
U235	X	X	X	X	X	X	X	1
U236	X	X	X	X	X	X	X	1
U237	X	X	X	X	X	X	X	1
U238	X	X	X	X	X	X	X	1
U239	X	X	X	X	X	X	X	1
U240	X	X	X	X	X	X	X	1

TABLE 2 SUMMARY OF ANALYSES PERFORMED								
Primary Waste Type	SAMPLE PARAMETERS CONDUCTED							Rationale
	BTU's/lb.	%Cl	%H_2O	pH	Spec. Grav.	Compatability	Other	
U242						X	X	11
U243	X	X	X	X	X	X	X	1
U244	X	X	X	X	X	X	X	1
U246	X	X	X	X	X	X	X	1
U247	X	X	X	X	X	X	X	1
U248	X	X	X	X	X	X	X	1
U249	X	X	X	X	X	X	X	1
U271	X	X	X	X	X	X	X	1
U278	X	X	X	X	X	X	X	1
U279	X	X	X	X	X	X	X	1
U280	X	X	X	X	X	X	X	1
U328	X	X	X	X	X	X	X	1
U353	X	X	X	X	X	X	X	1
U359	X	X	X	X	X	X	X	1
U364	X	X	X	X	X	X	X	1
U367	X	X	X	X	X	X	X	1
U372	X	X	X	X	X	X	X	1
U373	X	X	X	X	X	X	X	1
U387	X	X	X	X	X	X	X	1
U389	X	X	X	X	X	X	X	1
U394	X	X	X	X	X	X	X	1
U395	X	X	X	X	X	X	X	1
U404	X	X	X	X	X	X	X	1
U409	X	X	X	X	X	X	X	1
U411	X	X	X	X	X	X	X	1

(1) This waste has both heat content and material value. Test parameters are necessary to ensure proper blending to meet outgoing product specifications and for employee & environmental safety.

(2) Same as (1), compatability is performed to assure processability.

(3) Same as (1), Arsenic is tested for blending needs and for employee & environmental safety.

(4) Same as (1), Barium is tested for blending needs and for employee & environmental safety.

(5) Same as (1), Cadmium is tested for blending needs and for employee & environmental safety.

(6) Same as (1), Chromium is tested for blending needs and for employee & environmental safety.

(7) Same as (1), Lead is tested for blending needs and for employee & environmental safety.

(8) Same as (1), Mercury is tested for blending needs and for employee & environmental safety.

(9) Same as (1), Selenium is tested for blending needs and for employee & environmental safety.

(10) Same as (1), Silver is tested for blending needs and for employee & environmental safety.

(11) These wastes will not be sampled because they may contain dioxins and/or dioxin precursors.

NOTE: Other analysis may include additional fingerprint analysis such as reactivity, organic solvent identification, viscosity, acid reactivity, oxidizer and percent ash.

PREPAREDNESS AND PREVENTION PLAN

BADGER DISPOSAL OF WI., INC.
MILWAUKEE, WISCONSIN

MARCH 2006

Revised November 12, 2007

- Daily visual inspections and routine preventative maintenance of all equipment aid in the prevention of potential runoff problems.
- Loading and unloading areas are paved and diked in a manner to preclude runoff from entering surface waters and groundwater.

Should a spill result in a short-term release that was outside of a contained area or paved area, immediate actions would be taken to stop the release. Any ponding material would be absorbed using on-site absorbent materials. The area of the spill would then be analyzed to determine the extent of contamination. Proper reporting would also be made to all appropriate agencies and the contaminated soil removed. All contaminated material would then be handled in accordance with all local, state and federal regulations. Further information on spill handling is contained in the SPCC Plan, as contained in Appendix C.

9.2 Containment Structures

The storage/process building and lab pack building are designed with 6-inch concrete curbing at entrances to the buildings to minimize the risk of any accidental spillage leaving the confines of the buildings. The curbing, walls and floors of the buildings are designed to meet the requirements of WAC NR 640.13(1) and 40 CFR 264.175(b)(3), and are sufficiently level to ensure the integrity of the containment. There are no sewer discharges located in any operational or storage area of the storage/process or lab pack buildings.

The storage/process building provides containment capacity of 11,379 gallons of liquid materials in accordance with WAC NR 640.13(1). An additional 6,737 gallons of containment capacity is available th warehouse addition. Appendix A contains calculations on the containment capacity.

The lab pack building contains five separate containment areas for drum storage. Each of the five containment areas will be constructed of 6-inch wide and 6-inch high walls and will provide containment capacity of over 630-gallons of liquid materials in accordance with WAC NR 640.13(1). Because the intended use of these containment areas is to segregate incompatible wastes, adjoining containment areas will be separated by 12-inch wide and 6-inch high walls in accordance with WAC NR 640.15.

Appendix A

CONTAINMENT AREA CALCULATIONS

CONTAINMENT SUMMARY
FOR
BADGER DISPOSAL FACILITY

PAGE	CONTAINMENT AREA	SHEET NUMBER	MAXIMUM VOL. STORED (GAL.)	MIN. CONTAINMENT REQ'D. BY RULE (GAL.)	CONTAINMENT CAPACITY (GAL.)
2	LAB-PACK BUILDING DRUM STORAGE CONTAINMENT AREA CALCULATIONS (TYP. 5) (3)	11 of 18	1,595	160	632
3	LAB-PACK BUILDING TYPICAL DEPACK ROOM CONTAINMENT AREA CALCULATIONS (3)	11 of 18	220	55	177
5	LAB-PACK BUILDING BULK STORAGE CONTAINMENT AREA CALCULATIONS (TYP. 2) (3)	11 of 18	5,500	5,500	5,648
6 a,b,c	EXISTING NORTH DRUM STORAGE WAREHOUSE CONTAINMENT AREA CALCULATIONS	(1) (1)	6,000 39,600	6,000 (Tanker) 3,960 (Drums)	11,379 (4) 11,379 (4)
7 a,b	2007 WAREHOUSE ADDITION DRUM STORAGE CONTAINMENT AREA CALCULATIONS	(1) (1) (1)	27,060 (Sect. A) 27,060 (Sect. B) 6,000 (Sect. B)	2,706 (Drums) 2,706 (Drums) 6,000 (Tanker)	3,361 (4) 3,376 (4) 6,000 (w/o pallets)(4)
8	TANK FARM BULK STORAGE CONTAINMENT AREA CALCULATIONS (3)	12 of 18	12,000	12,000 + 25-year, 24-hour storm	20,765
11	TANK FARM LOADING/UNLOADING PAD CONTAINMENT AREA CALCULATIONS (3)	12 of 18	(2)	(2)	1,591
N/A	ROLL-OFF STORAGE	N/A	6-20 CY ROLL-OFFS	N/A	N/A

Notes:
(1) See Spectrum Engineering Drawing No. 05490-D1, 10/11/07, and attached Building Containment Calculations, 10/11/07.
(2) Existing Loading/Unloading Pad Containment is not adequate for largest compartment of tanker (6,000 gallons), without utilizing Bulk Storage Containment. Design of Loading/Unloading Pad Containment will need to be reviewed when bulk tank farm is installed.
(3) Volume stored and containment capacity are based on calculations, dated February 24, 1995, prepared by others.
(4) Badger Disposal uses containment pallets for all hazardous liquids, which provide adequate secondary containment capacity for the containers stored on pallets. Furthermore, the building also provides containment for both hazardous and non-hazardous liquid waste and for tanker unloading.

BADGER DISPOSAL OF WI, INC.
BUILDING CONTAINMENT CALCULATIONS
CURRENT OPERATIONS – NORTH DRUM STORAGE WAREHOUSE

CALCULATE BUILDING AREA

AREA A = 63'-11" x 31'-0"
A = 1,981.4 s.f.

AREA B = (77'-8" X 73'-10") - E
B = 5,734.4 s.f. - 31.3 s.f.
B = 5,703.1 s.f.

AREA C = (34'-0" x 38'-4 ½") - E
C = 1,304.8 s.f - 31.3 s.f
C = 1,273.5 s.f.

AREA D = 15'-6" x 5'-1 ½"
D = 79.4 s.f.

AREA E = 7'-1" x 4'-5"
E = 31.3 s.f.

Total Combined Area = A_{TOT} = A + B + C + D = 1,981.4 + 5,703.1 + 1,273.5 + 79.4
A_{TOT} = 9,037.4 s.f.

CALCULATE GROSS VOLUME OF BUILDING CONTAINMENT (EMPTY):

Containment curb and ramp heights vary. Per photos and site visit, lowest containment curbing is 3 ½" (worst case).
Volume of empty containment = V_E = A_{TOT} x (3.5"/12")
V_E = 9,037.4 s.f. x 0.292 ft = 2,636 c.f.
V_E = 2,636 c.f. x 7.481 gal/c.f.
V_E = 19,719 gal.

DETERMINE DRUM CAPACITY:

Badger's hazardous waste license allows 720 drums of hazardous waste to be stored on containment pallets on the floor. In accordance with drawing 05490-D1, the capacity of the building is 860 drums on the floor and 1,720 drums double-stacked. The volume of the building containment (V_E), minus the drum volume on the floor (V_D), minus the volume of the containment pallets (V_C), must be greater than 10% of the hazardous waste drum capacity (720) or the largest container.
720 drums x 55 gal. = 39,600 gal.

CALCULATE VOLUME REQUIRED:

In accordance with NR 664.0175 of *Subchapter I - Containers*, the containment shall have sufficient capacity to contain 10% of the volume of containers. Containers that do not contain hazardous waste with free liquids, or hazardous waste, do not need to be considered.

Volume Required = V_R = 720 x 55 gal. x 0.10
V_R = 3,960 gal.

BADGER DISPOSAL OF WI, INC.
BUILDING CONTAINMENT CALCULATIONS
CURRENT OPERATIONS – NORTH DRUM STORAGE WAREHOUSE

CALCULATE VOLUME OF CONTAINMENT PALLETS:

Volume of 6 Drum Containment Pallet = 61 gal.
Volume of 8 Drum Containment Pallet = 82 gal.
Assume all pallets are 8 drum containment pallets.
V_P = 82 gal. x qty. of pallets
720 Hazardous waste drums ÷ 8 drums/pallet = 90 pallets
V_P = 82 gal. x 90
V_P = 7,380 gal.

CALCULATE VOLUME OF DRUMS ON THE FLOOR:

Volume of Drums on floor (worst case) = $V_D = \pi r^2 h$
$V_D = \pi(1)^2$ 3.5"/12 x qty. drums = 0.9163 c.f x 7.481 gal./c.f. x qty. drums
V_D = 6.85 gal. x qty. drums
860 drum capacity - 720 hazardous waste drums on pallets = 140 Non-hazardous waste drums on the floor
V_D = 6.85 gal./drum x 140 drums
V_D = 959.7 gal.

CALCULATE NET VOLUME OF BUILDING CONTAINMENT (AT STORAGE CAPACITY):

Volume of Containment = $V_C = V_E - V_P - V_D$
V_C = 19,719 gal. - 7,380 gal. - 960 gal.
V_C = 11,379 gal.

COMPARE CONTAINMENT VOLUME (AT STORAGE CAPACITY) TO CONTAINMENT VOLUME REQUIRED:

1. Volume Required V_R = 3,960 gal. < V_C = 11,379 gal., therefore, there is adequate containment capacity for hazardous waste drums.

2. Volume of containment pallets = 82 gal. for 8 drum capacity and 61 gal. for 6 drum capacity. In both cases, the containment pallet capacity exceeds 10% of the volume that can be stored on pallets. Therefore, there is adequate containment capacity for hazardous waste drums.
   6 drums x 55-gal./drum = 330 gal.
   61 gal. of containment = 61/330 x 100 = 18.5%

   8 drums x 55-gal./drum = 440 gal.
   82 gal. of containment = 82/440 x 100 = 18.6%

3. Volume of Tanker (V_T) is 6,000 gal. Volume of Containment (V_C) must be adequate for a full tanker inside the building. V_T = 6,000 gal. < V_C = 11,379 gal., therefore, there is adequate containment capacity for a tanker loading inside the building.

CONCLUSION:

Badger uses containment pallets for all hazardous liquids, which provide adequate secondary containment capacity for the containers stored on the pallets. Furthermore, the building also provides additional containment for both hazardous and non-hazardous liquid waste and for tanker unloading.

BADGER DISPOSAL OF WI, INC.
BUILDING CONTAINMENT CALCULATIONS
CURRENT OPERATIONS – 2007 WAREHOUSE ADDITION

CALCULATE BUILDING AREA

(Section A)

AREA F = (38'-8"x74'-1 ½ ")-(8'-0"x2'-4 ½ ")-(5'-0"x4'-8")-(6'-0"x1'-4 ¾ ")
F = 2,866 s.f. – 19 s.f. – 23.3 s.f. – 8.4 s.f.
F = 2,815 s.f.

(Section B)

AREA G = (38'-8"x74'- 2 ½ ")-(22'-0"x5'-2")-(6'-0"x1'-4 ¾ ")
G = 2,869 s.f. – 113.7 s.f. – 8.4 s.f.
G = 2,747 s.f.

CALCULATE GROSS VOLUME OF BUILDING CONTAINMENT (EMPTY):

Containment curb and ramp heights vary slightly. Per a site visit, the lowest containment curbing appears to be 3 ½" (worst case). (This was not verified with a transit).
Volume of empty containment = $V_E = A_{TOT}$ x (3.5"/12")

V_E (F) = 2,815 s.f. x 0.292 ft = 822 c.f.
V_E (F) = 822 c.f. x 7.481 gal/c.f.
V_E (F) = 6,149 gal.

V_E (G) = 2,747 s.f. x 0.292 ft = 802 c.f.
V_E (G) = 802 c.f. x 7.481 gal/c.f.
V_E (G) = 6,000 gal.

DETERMINE DRUM CAPACITY:

Badger is allowed to store 492 drums of non-ignitable hazardous waste in the 2007 Warehouse Addition Section A (Calculation V_E (F) above), or, 492 drums of non-ignitable hazardous waste in Section B (Calculation V_E (G) above). Drums will be stored on containment pallets so that any leaks can be detected. The volume of the building containment (V_E), minus the containment pallets (V_P), must be greater than 10% of the drum capacities (492 and 492) or the largest container.
Section A (Calc F) - 492 drums x 55 gal. = 27,060 gal.
Section B (Calc G) - 492 drums x 55 gal. = 27,060 gal.

CALCULATE VOLUME REQUIRED:

In accordance with NR 664.0175 of *Subchapter I - Containers*, the containment shall have sufficient capacity to contain 10% of the volume of containers. Containers that do not contain hazardous waste with free liquids, or hazardous waste, do not need to be considered.

Volume Required = V_R (F) = 492 x 55 gal. x 0.10
V_R (F) = 2,706 gal.

V_R (G) = 492 x 55 gal. x 0.10
V_R (G) = 2,706 gal.

CALCULATE VOLUME OF PALLETS:

Volume of 8 Drum Containment Pallet = 82 gal.
Assume all pallets are 8 drum containment pallets per Badger Disposal 10/10/07.

V_P (F) = 82 gal. x qty. of pallets
V_P (F) = 82 gal. x 34
V_P (F) = 2,788 gal.

V_P (G) = 82 gal. x qty. of pallets
V_P (G) = 82 gal. x 32
V_P (G) = 2,624 gal.

CALCULATE NET VOLUME OF BUILDING CONTAINMENT (AT STORAGE CAPACITY):

Volume of Containment = $V_C = V_E - V_P$

V_C (F) = 6,149 – 2,788 gal.
V_C (F) = 3,361 gal.

V_C (G) = 6,000 – 2,624 gal.
V_C (G) = 3,376 gal.

COMPARE CONTAINMENT VOLUME (AT STORAGE CAPACITY) TO CONTAINMENT VOLUME REQUIRED:

1. Volume Required V_R (F) = 2,706 gal. < V_C (F) = 3,361 gal., therefore, there is adequate containment capacity in Warehouse Addition Section A.

2. Volume Required V_R (G) = 2,706 gal. < V_C (G) = 3,376 gal., therefore, there is adequate containment capacity in Warehouse Addition Section B.

3. The Volume of Containment V_C was calculated assuming a spill would occur outside the containment pallets. Badger Disposal utilizes containment pallets for drum storage. These pallets are designed to provide a minimum of 10% of the total volume stored, without considering the additional containment capacity provided by the room.

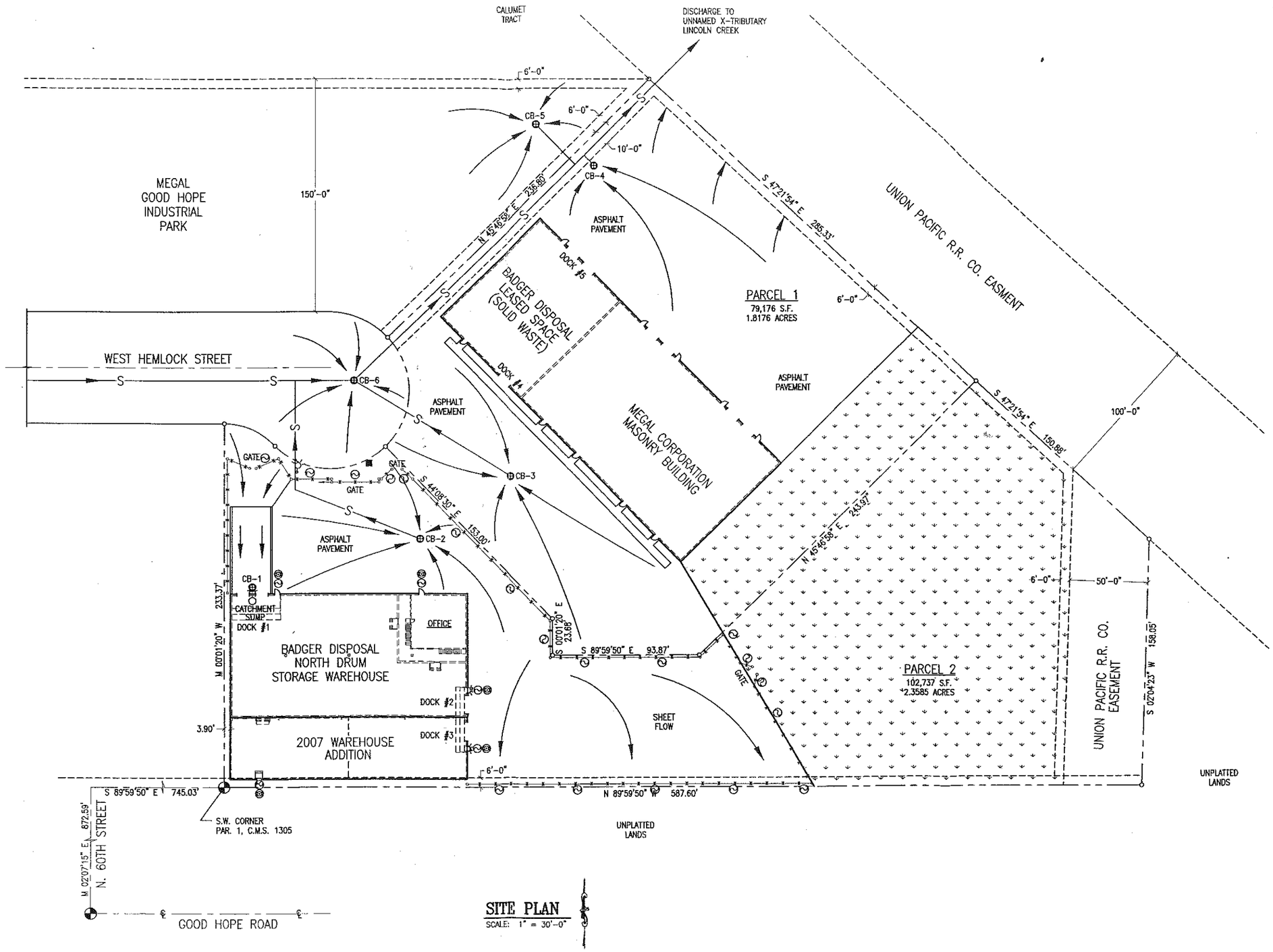
4. Volume of Tanker (V_T) is 6,000 gal. Volume of Empty Containment in Warehouse Addition Section B (Calc. V_e (G)) must be adequate for a full tanker inside the building. V_T = 6,000 gal. = V_e (G) = 6,000 gal., therefore, there is adequate containment capacity for a full tanker inside the building, as long as all pallets and drums within Warehouse Addition Section B are removed during tanker loading. If drums are left in place on pallets along the south side of Section B (9 of 16 pallets), the containment capacity would be reduced to 4,524 gal. (6,000 x 2,624 x 9/16). This would be adequate containment capacity for smaller tank trucks with 3,000 gal. compartments.

Appendix C

SPILL PREVENTION CONTROL AND COUNTERMEASURE PLAN (SPCC PLAN)

LEGEND

- WARNING SIGN READS: DANGER UNAUTHORIZED PERSONNEL KEEP OUT
- WARNING SIGN READS: EYE PROTECTION REQUIRED
- CATCH BASIN
- PUBLIC LIGHT POLE
- SECURITY LIGHTING
- INTERCOM/KEY PAD OPERATOR
- SECURITY FENCE 6'-0" HIGH W/(3) STANDS OF BARBED WIRE
- SWING GATE (MANUAL)
- ELECTRIC GATE
- STORM SEWER
- FLOW PATTERNS
- PROPERTY LINE
- UNPAVED GRASS OR GRAVEL



SITE PLAN

SCALE: 1" = 30'-0"

SPECTRUM ENGINEERING INCORPORATED

262-783-7725
FAX 262-783-7726
19395 West Capital Drive,
Brookfield, Wisconsin 53045

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VERIFY SCALES
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0 1"
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY.

NO.	DATE	BY	REVISION
1	10/11/07	J.M.N.	FROM PREVIOUS SEI PROJ. NO. 05490. ADDED 2007 WAREHOUSE ADDITION.

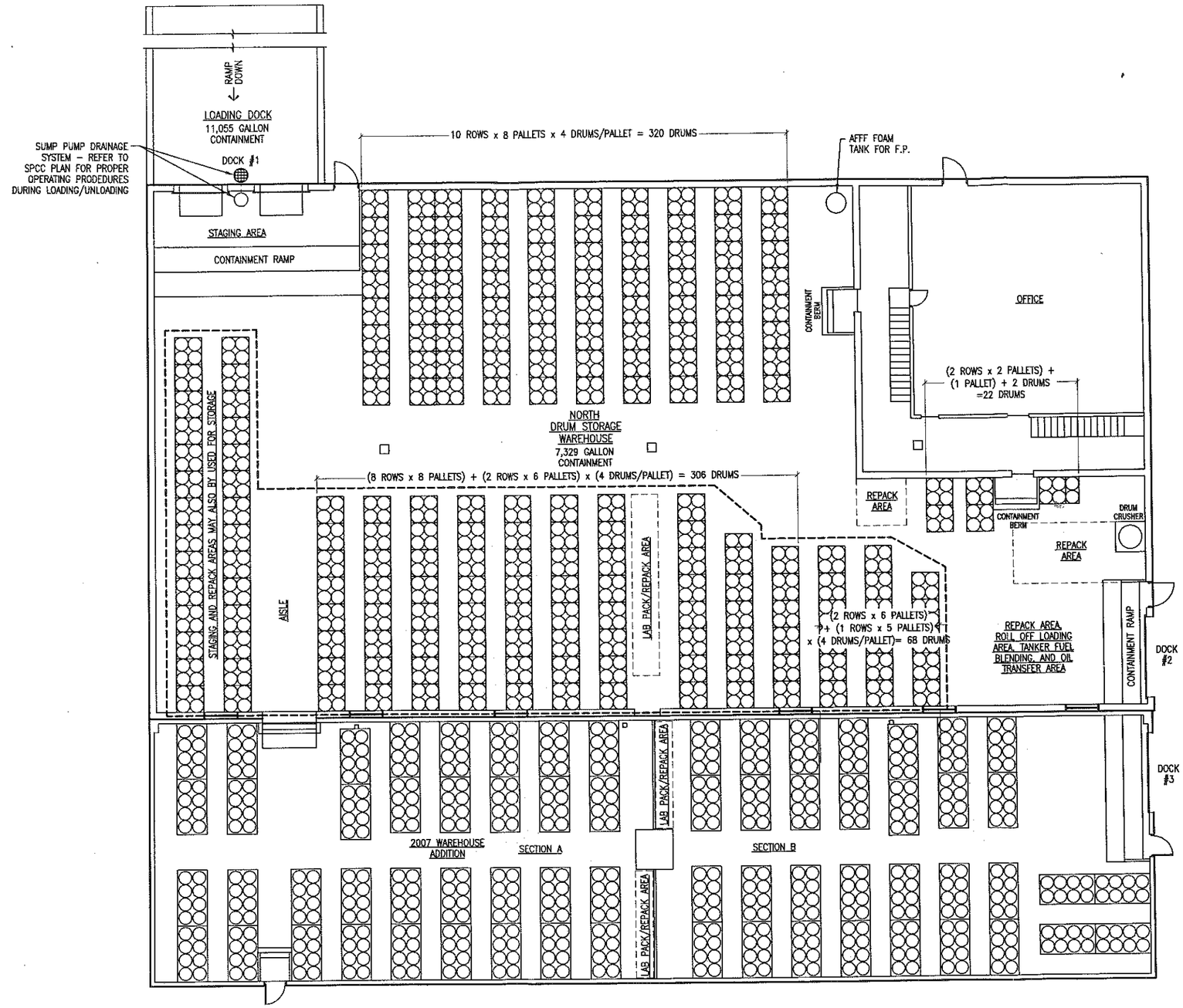
DRAWN BY: S.A.M.	CHECKED BY: BADGER
DESIGNED BY: J.M. NOLL, P.E.	
PROJECT MANAGER: R.B. SMITS, P.E.	

BADGER DISPOSAL

Badger Disposal of WI, Inc.
5611 West Hemlock Street
Milwaukee, WI 53223

BADGER DISPOSAL – MILWAUKEE FACILITY
SPCC PLAN
SITE PLAN

DRAWING NUMBER:	05490-SITE
DATE:	10/11/07
PROJECT NUMBER:	07649
SHEET NUMBER:	



LEGEND

EXTENT OF AREA WHERE 55 GALLON DRUMS CONTAINING OIL COULD BE STORED

4'x4' PALLET WITH 4 DRUMS (HAZARDOUS WASTE); 4'x4' PALLET WITH 8 DRUMS WHEN DOUBLE STACKED (NON HAZARDOUS WASTE)

NOTES:

1. IN THEORY, THE ENTIRE AREA DESIGNATED FOR OIL STORAGE COULD BE DRUMS OF OIL. IN REALITY, THERE ARE TYPICALLY ONLY 20 DRUMS OF OIL ON-SITE AT ANY ONE TIME.
2. OILS INCLUDE USED CRANK CASE OIL, USED MOTOR OIL & OILY WATER MIXTURES.
3. OIL DRUMS ARE NOT STORED IN WAREHOUSE ADDITION SECTIONS A & B.

FACILITY DIAGRAM

SCALE: 1/8" = 1'-0"

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NO.	DATE	BY	REVISION
2	11/7/07	J.M.N.	ADDED LAB PACK/REPACK AREA IN 2007 WAREHOUSE ADDITION.
1	10/11/07	J.M.N.	FROM PREVIOUS SEI PROJ. NO. 05490. ADDED 2007 WAREHOUSE ADDITION.

DRAWN BY: S.A.M.
CHECKED BY: BADGER
DESIGNED BY: J.M. NOLL, P.E.
PROJECT MANAGER: R.B. SMITS, P.E.

BADGER DISPOSAL
Badger Disposal of WI, Inc.
5611 West Hemlock Street
Milwaukee, WI 53223

BADGER DISPOSAL – MILWAUKEE FACILITY
SPCC PLAN
FACILITY DIAGRAM

DRAWING NUMBER: 05490-G1
DATE: 10/11/07
PROJECT NUMBER: 07649
SHEET NUMBER:

SPECTRUM ENGINEERING INCORPORATED

262-783-7725
FAX 262-783-7726

November 7, 2007

COPY

Ms. Sandra J. Miller
Waste Management Specialist
Wisconsin Department of Natural Resources
110 S. Neenah Avenue
Sturgeon Bay, WI 54235

Subject: **Review and Certification of Design Drawings & Specifications**
Badger Disposal Building Addition (EPA ID No. WID988580056)
Spectrum Engineering Project No. 07649

Dear Ms. Miller:

I have reviewed the as-built design drawings and specifications for Badger Disposal's Proposed Building Addition, which were prepared by Brian Cooley & Associates, LLC (dated October 8, 2007), and I have inspected the facility and have determined that it is acceptable for storing hazardous waste in containers ranging in size from 5 gallons to 275 gallons. A copy of the architects drawings, as well as the HVAC Plan (prepared by Bredan Mechanical Systems), and the Fire Sprinkler Plan (prepared by Quality Fire Protection, Inc.) for the 2007 Building Addition, are included as attachments to this letter. The specific regulatory requirements addressed in my review and the conditions of my certification are presented below.

NR 664.0175 – Containment

In accordance with NR 664.0175(a), the floor joints were caulked and a coating was applied to the floor to provide a base that is free of cracks and gaps and is sufficiently impervious to contain leaks or spills until they are detected and removed. A copy of the specifications for the floor caulking and coating material is included as an attachment to this letter. Badger Disposal will be responsible for maintaining the integrity of the floor caulking and coating.

The floor does not slope to a collection sump. Therefore, in accordance with NR 664.0175(b), the containers must be elevated above the floor on pallets or racks to prevent contact with potential spills.

The building is designed to store 54,120 gallons of waste material (hazardous and nonhazardous). The building has adequate secondary containment capacity to contain 10% of this volume. Containment calculations for the building addition are provided as an attachment to this letter.

NR 664.0176 – Special Requirements for Ignitable or Reactive Waste

NR 664.0176 requires that containers holding ignitable or reactive waste be located at least 50 feet from the facility's property line. Due to the close proximity of the building addition to the property line, no ignitable or reactive wastes can be stored in the addition.

NR 664.0177 – Special Requirements for Incompatible Wastes

The building addition was designed to store both acid and caustic wastes. The building has a concrete berm to separate the storage areas for acid and caustic wastes. Liquid wastes will also be stored on containment pallets to further segregate incompatible wastes.

It is my understanding that the Building Addition was designed under the direction of Mr. Brian Cooley, AIA, in accordance with the requirements of current Wisconsin Building Codes as approved by the City of Milwaukee. H4 occupancy has been identified for the building addition, which is consistent with the current building use and intended operations. The HVAC and the fire protection systems have been prepared accordingly.

I, Farhad Mohsenian, hereby certify that I am a registered professional engineer in the State of Wisconsin in accordance with Ch. A-E 4, Wisconsin Administrative Code and that this document has been prepared in accordance with the Rules of Professional Conduct in Ch. A-E 8, Wisconsin Administrative Code.

WISCONSIN
FARHAD
MOHSENIAN
E-26234
MEQUON
WI
PROFESSIONAL ENGINEER

F. Mohsenian

Farhad Mohsenian, P.E.
President
Spectrum Engineering Incorporated
P.E. Certificate Number E-26234

11-7-07

Date

Attachments: No. 1 – Architectural Drawings
No. 2 – HVAC Plan
No. 3 – Fire Sprinkler Plan 2007 Add.
No. 4 – Building Containment Calculations
No. 5 – Floor Caulking and Coating Specifications

Appendix E

COMPATIBILITY TESTING PROCEDURES

COMPATIBILITY, PARTICLE SUSPENSION, THERMAL STABILITY TEST

*ASTM-D-5058

1. In a fume hood, put 40 ml of liquid Chemfuel or CPS solvent into a 100 ml disposable beaker. Do the same with Methanol and water, individually.

2. Add approximately 40 ml of liquid material or a small sample of solid material to the beaker, and stir.

3. Observe the mixtures for the following:

   A. Exothermic reactions
   B. General reactivity
   C. Polymerization
   D. Settling or suspension of solids
   E. Breakdown of hard solids
   F. Thinning of grease or resins
   G. Vapor release

4. If no reaction, polymerization, settling, vapor release, if grease or resin thins, or if solids are broken down, sample is compatible or compatible with agitation.

BADGER DISPOSAL OF WI, INC.
BUILDING CONTAINMENT CALCULATIONS
CURRENT OPERATIONS – 2009 LAB PACK BLDG.

CALCULATE BUILDING AREA

(Section A) (Calculate total area from outer walls (west, north and east) to the separation curb on the south and subtract all ramps, curbs and steps from this area.)

AREA H = (36'-11½" x92'-0 ")-(11'-2"x22'-9")-(10'-0"x5'-0")-(9'-0"x7'-0") -(11'-0"x3'-10")-(9'-0"x5'-6")-(6'-0"x2'-4")-(6'-0"x2'-5")- (½x4'-0"x6'-3")-(½x2'-6"x9'-0")-(½x2'-6"x11'-0")- (½x6'-0"x4'-0")-(½x6'-0"x3'-10")

H = 3,400.2 s.f. – 254 s.f. – 50 s.f. – 63 s.f. – 42.2 s.f. – 49.5 s.f - 14 s.f. – 14.5 s.f. – 12.5 s.f. – 11.3 s.f. – 13.8 s.f. -12 s.f. – 11.5 s.f.

H = 2,851.9 s.f.

CALCULATE GROSS VOLUME OF BUILDING CONTAINMENT (EMPTY):

Containment curb and ramp heights vary slightly. Per a site visit, the lowest containment curbing appears to be 4" (worst case). (This was not verified with a transit).
Volume of empty containment = $V_E = A_{TOT} \times (4"/12")$

V_E (H) = 2,851.9 s.f. x 0.333 ft = 950.6 c.f.
V_E (H) = 950.6 c.f. x 7.481 gal/c.f.
V_E (H) = 7,112 gal.

DETERMINE DRUM CAPACITY:

Badger is allowed to store 384 drums of non-ignitable hazardous waste in the 2009 Lab Pack Building Section A (Calculation V_E (H) above. Drums will be stored on standard wood pallets. The volume of the building containment (V_E), minus the wood pallets (V_P), must be greater than 10% of the drum capacities (384) or the largest container.
Section A (Calc H) – (345 drums x 55 gal.) = 18,975 gal.

CALCULATE VOLUME REQUIRED:

In accordance with NR 664.0175 of *Subchapter I - Containers*, the containment shall have sufficient capacity to contain 10% of the volume of containers. Containers that do not contain hazardous waste with free liquids, or hazardous waste, do not need to be considered.

Volume Required = V_R (H) = 384 x 55 gal. x 0.10
V_R (H) = 1,898 gal.

CALCULATE VOLUME OF PALLETS:

Volume of Standard Wood Pallet = 1.5 c.f. = 11.2 gal.

V_P (H) = 11.2 gal. x qty. of pallets
V_P (H) = 11.2 gal. x 48
V_P (H) = 539 gal.