

**BEFORE THE STATE OF WISCONSIN  
DEPARTMENT OF NATURAL RESOURCES**

**FINAL DETERMINATION  
FEASIBILITY AND PLAN OF OPERATION REPORT**

**BADGER DISPOSAL OF WISCONSIN, INC.  
EPA ID# WID988580056  
FID# 241384000**

**GENERAL FACILITY INFORMATION**

Facility Name, Site Operator, and Address

Badger Disposal of Wisconsin, Inc.  
Henry J. Krier, President  
5611 West Hemlock Street  
Milwaukee, WI 53223

Facility and Property Owner

Badger Investment Realty, LLC  
5611 West Hemlock Street  
Milwaukee, WI 53223

Facility Location

The Southwest 1/4 of Section 14, Township 8 North, Range 21 East  
City of Milwaukee, Milwaukee County, Wisconsin

Facility Contacts

Henry Krier, President  
Kandylee Schmit, Compliance Officer  
414-760-9175

Consultant

Renee Smits, P.E.  
Spectrum Engineering, Inc.  
19395 West Capitol Drive  
Brookfield, WI 53045  
262-783-7725

### Facility Description – Current Facility Operations

The facility at 5611 West Hemlock Street in Milwaukee began operations as EOG Disposal on September 1, 1990. A hazardous waste facility interim license was issued to EOG Disposal on March 15, 1994. The initial hazardous waste facility operating license was issued to EOG Disposal on December 16, 1996. In early 2003, the name of the facility changed from EOG Disposal to Badger Disposal of Wisconsin, Inc., as a result of an ownership change. On May 6, 2003, the Department approved a Class 1 license modification recognizing the ownership and name change.

Badger Disposal is located on approximately 3 acres of land. Badger Disposal is immediately surrounded by manufacturing, warehousing and other commercial activities. Badger Disposal serves over 900 clients of commercial, institutional, governmental and industrial companies nationwide.

Badger Disposal currently operates a licensed hazardous waste and nonhazardous waste storage facility within an existing building which consists of an 11,000 square foot licensed storage area and other non-regulated areas, such as a laboratory, reception area and administrative offices. The building is constructed of 12-inch thick outside walls and reinforced concrete floors. Six-inch high, ten-inch thick concrete berms are constructed where exits from the regulated storage area to non-containment areas exist. A 4-hour rated fire wall has been constructed with automatic fire doors which will close if excessive heat is detected, isolating the hazardous waste processing and storage area from the laboratory and office area.

The storage area in the existing warehouse building has the capacity to store up to 1,720 55-gallon containers (94,600 gallons) of hazardous and nonhazardous waste. The total capacity consists of a combination of hazardous waste and nonhazardous waste containers which are not to exceed a maximum of 720 55-gallon hazardous waste containers (39,600 gallons) and 1,500 55-gallon nonhazardous waste containers (82,500 gallons). Containers of nonhazardous waste and containers of hazardous waste solids and lab packs are stored two high. Containers of hazardous waste liquids are not stacked. Containers of hazardous waste liquids and lab packs are stored on 6 or 8 drum spill containment pallets which have capacity to contain at least 10% of the container volume.

The primary function of Badger Disposal is the bulking and transfer of hazardous and nonhazardous waste for recycling, fuel blending and other waste management methods. The majority of the wastes received at Badger Disposal are organic hazardous wastes (F001, F002, F003, F005 and D001 hazardous wastes) and nonhazardous wastes that are shipped off-site to be recycled or burned as a fuel in industrial furnaces. Badger Disposal is also approved to store corrosive, reactive and toxic characteristic hazardous wastes (D002-D043 hazardous wastes), listed hazardous wastes from non-specific sources (F-listed hazardous wastes), listed hazardous wastes from specific sources (K-listed wastes) and toxic and acute commercial chemical products and manufacturing chemical intermediates (U- and P- listed hazardous wastes). Wastes that are not burned as fuel are bulked for off-site metal recovery, neutralization and other waste management methods. Containers of waste that are not bulked are stored on-site until enough accumulate for an economical shipment off-site.

Badger Disposal accepts containers of lab-packed waste into its storage facility. The small containers in the lab-packs are not emptied, but are re-packed into larger lab-pack containers before they are shipped to off-site treatment, storage or disposal facilities. The lab pack container is re-packed while it is located on a spill containment pallet to minimize potential spills. The lab pack operations are performed in designated areas that are placarded and delineated by markings on the floor. Badger Disposal stores gas cylinders in its storage facility until enough have been accumulated for economical shipment to a permitted treatment or disposal facility. Badger Disposal was issued a conditional exemption for the storage and transfer of polychlorinated biphenyls (PCBs) on February 9, 2006. The conditional exemption allows Badger Disposal to store and bulk PCB wastes, such as ballasts, transformers and other PCB containing materials in the hazardous waste storage facility. Badger Disposal punctures aerosol cans using a puncturing device which de-pressurizes the cans and allows them to drain. The liquid contents of the aerosol cans are drained into a 55 gallon container and may be fuel blended. The drained aerosol cans are sent off-site for metal recycling.

Before containers of hazardous waste are shipped to Badger Disposal, a waste profile form is completed by the generator. The waste profile includes generator information, a waste description, general characteristics and composition such as viscosity, % water, total suspended solids, pH, BTU's, flash point, halogens, and metals content. Generators are required to re-submit waste identification forms annually. Profiles for containers of lab packed waste include an inventory list of laboratory chemicals packed in each drum. After the waste is received by Badger Disposal, the waste is sampled and analyzed to verify the properties of the waste stated on the waste profile form.

Badger Disposal also blends hazardous wastes so they can be burned as a fuel in off-site boilers and industrial furnaces, such as cement kilns. Containers of hazardous waste that are selected for fuel blending are staged inside the bermed warehouse area near Dock 2 located on the east side of the existing warehouse building. A 6,000 gallon vacuum truck trailer is backed over the berm and the contents of the selected drums are pumped into the trailer while it is parked within the containment area of the warehouse building. A liquid level control on the tanker indicates when the tanker is full. Before transport, a sample of the material in the tanker is obtained and analyzed to determine if the mixture meets fuel blending specifications. The valves are closed and capped and the trailer is inspected to make sure it is not leaking. A new manifest accompanies the outbound shipment which is transported to an approved cement kiln for use as a secondary fuel. Empty containers generated by pumping the waste into the vacuum truck are either crushed or stored at Badger Disposal until they shipped to a drum recycler.

#### Total Treatment Capacity

Badger Disposal treats hazardous wastes to meet fuel blending specifications. Fuel blending is currently performed in a 6,000 gallon vacuum truck parked within the spill containment area of the existing warehouse building. Badger Disposal is proposing to construct a blending area on the east side of the existing warehouse building where a 2,000 gallon blending tank will be located. Waste will be pumped from the blending tank to four 12,000 gallon storage tanks in the

proposed tank farm. See sheet 2 of 18 (July 1994) for the tank configuration. The blending tank and tank farm will replace the current fuel blending operations in the vacuum truck.

#### Total Hazardous Waste Container Storage Capacity

The maximum storage capacity in the existing warehouse building is 720 fifty-five gallon containers or 39,600 gallons of hazardous waste. The 39,600 gallon maximum capacity in the existing warehouse includes the 6,000 gallon vacuum truck into which the wastes are fuel blended. See drawing number 05490-D1 (08/25/06) for the layout of containers.

The maximum storage capacity in the proposed addition to the existing warehouse building is 492 fifty-five gallon containers or 27,060 gallons of non-ignitable hazardous waste. See Sheet 10 of 18 in Appendix P (June 1994) for the container layout in the proposed addition.

The maximum storage capacity in the proposed lab pack building is 145 fifty-five gallon containers or 7,975 gallons. See Sheet 11 of 18 in Appendix P (July 1994) for the container layout in the proposed lab pack building.

The maximum storage capacity in the proposed bulk solids area is six 20 cubic yard roll off boxes. See Sheet 3 of 3 in Appendix P (10/30/95) for the layout of the roll off box storage area. The maximum storage capacity of bulk solids storage in the existing warehouse building in the repack area and roll off loading area is one 20 cubic yard roll off box. See Drawing #05490-D1 (08/25/06).

Badger Disposal will use 5, 10, 14, 20, 30, 55, 85 gallon drums, 275 gallon totes and cubic yard bags and boxes to store hazardous waste in the existing warehouse building, the proposed addition to the warehouse building and the proposed lab pack building. After construction is completed, the maximum storage capacity for containers, other than roll off boxes, will be the equivalent of 1,357 fifty-five gallon containers, or 74,635 gallons.

#### Total Hazardous Waste Tank Storage Capacity

The maximum storage capacity in the proposed lab pack building will be two 5,500 gallon above ground tanks for a total of 11,000 gallons. See sheet 11 of 18 in Appendix P (July 1994). One tank will be used to store acid waste and one tank will be used to store basic waste.

The maximum storage capacity in the proposed tank farm will be four 12,000 gallon tanks for a total of 48,000 gallons. See sheet 12 of 18 in Appendix P (August 1994).

After construction is completed, the total quantity of hazardous waste stored in tanks will be 61,000 gallons which includes the 2,000 gallon fuel blending tank in the existing warehouse building.

### Facility Operation - Proposed Construction

Badger Disposal proposes to construct the following units:

1. A new tank farm;
2. A new lab pack building;
3. Roll off/lugger box storage area; and,
4. An addition to the existing warehouse building.

1. The proposed tank farm: A 2,000 gallon fuel blending tank will be located in the repack area on the east end of the existing warehouse building. Solids which are suitable for fuel blending will be augered from drums and directed to the fuel blend tank. Liquids suitable for fuel blending will also be pumped into the 2,000 gallon fuel blending tank. A minimum liquid level will be maintained in the blending tank at all times to allow solids from the drum auger to be blended. The contents of the blending tank will be continuously mixed to achieve a homogeneous blend which will be pumped to the bulk storage tank system consisting of four 12,000 gallon carbon steel above ground storage tanks. The bulk storage tank system will be located in a 40 feet by 40 feet lined and coated concrete containment area provided with a canopy.

2. The proposed lab pack building: The totally enclosed lab pack building will be 104 feet by 60 feet and constructed to provide for the maximum storage of 145 55-gallon drums in 5 distinct containment areas. Each containment area will be 20 feet by 13 feet and designed to store up to 29 drums each of acidic, basic, ignitable, reactive waste or oxidizers. A containment area for drums of basic waste will be next to a 5,500 gallon above ground storage tank for basic waste. A containment area for drums of acidic waste will be next to a 5,500 gallon above ground storage tank for acid waste. Each of the tanks will be constructed of lined carbon steel, equipped with continuous readout non-contact ultrasonic level controls and located in a 15 feet by 15.5 feet room. The lab pack building will also have 5 lab-pack bays, which will be used to repack acidic, basic, ignitable, reactive wastes or oxidizers. Once the waste is repacked into 55 gallon drums, the waste will either be bulked into the acid or caustic storage tank in the lab pack building or transferred to the warehouse building where it will be processed into fuels or stored until it is shipped off-site for disposal or recycling. The lab pack building will also house a scrubber system, consisting of ventilation equipment, a carbon adsorber and an alkaline oxidation scrubber.

3. The proposed roll off/lugger box storage area: A maximum of 6 20-cubic yard roll off/lugger boxes will be stored on a 60 feet by 22 feet concrete slab enclosed with a canopy. The floor slab will be constructed of 8 inch thick reinforced concrete. Concrete curbing monolithically joined to the concrete floor slab will provide adequate secondary containment for the volume of one 20 cubic yard roll-off box. The roll off/lugger boxes will be used to store solid hazardous and nonhazardous waste of like chemical compatibility. Roll off/lugger boxes will be accepted from generators and shipped off-site under generic outgoing approvals. One roll off/lugger box stored inside the existing warehouse will be used to bulk waste. Fifty-five gallon containers of solids will be emptied into the roll-off box using the same variable speed hydraulically driven auger used to empty containers of hazardous waste destined for fuel blending.

4. The proposed addition to the existing warehouse building: The addition will be constructed to the south of the existing building and will add 40 feet by 150 feet of additional space for container storage. The addition will provide for the storage of a combination of up to 492 containers of non-ignitable hazardous waste and up to 984 containers of non-ignitable nonhazardous waste, not to exceed a maximum capacity of an equivalent of 984 55-gallon containers (53,900 gallons).

#### Re-licensing Procedures

The initial hazardous waste operating license for storing hazardous waste in containers and tanks was issued on December 16, 1996. The initial operating license is effective for 10 years from the date of issuance. On June 17, 2005, the Department issued a call-in letter to Badger Disposal requiring them to either pursue relicensing by submitting a Feasibility and Plan of Operation Report (FPOR) or notify the Department of its intent to close the facility. Badger Disposal has chosen to continue to operate its licensed hazardous waste storage facility. Badger Disposal submitted an FPOR, as required by s. NR 670.010(8), Wis. Adm. Code, on March 17, 2006. The FPOR submitted by Badger Disposal describes how the facility will conduct its operations in compliance with the applicable requirements of the Department's hazardous waste management rules, chs. NR 660 to 679, Wis. Adm. Code.

#### Determination of Need

The Department believes there is a need for the Badger Disposal facility to store and treat hazardous waste. The purpose of Badger Disposal's bulking and fuel blending facility is to collect and direct waste streams to reclamation and beneficial re-use operations wherever possible. The recycling of materials handled at Badger Disposal is most cost effective when managed in bulk quantities. Generators sending waste to Badger Disposal generate small quantities of waste which would otherwise be solidified and disposed in landfills or incinerated. The bulking operations at Badger Disposal allow these wastes to be directed to recycling or beneficial re-use programs rather than landfilling. Examples of these recycling and beneficial re-use programs include the blending of wastes for use as fuels at cement kilns and the use of wastewater for cooling and make-up water in the cement-making process.

Many of the companies sending waste to Badger Disposal generate waste in small quantities. The disposal of small quantities of waste by the generator can be difficult and expensive. Badger Disposal stores and bulks these smaller quantities of wastes into larger containers for eventual shipment off-site, which can decrease the treatment or disposal costs for the generator.

#### Licensing History (Approvals/Determinations)

On March 8, 1993, EOG Disposal submitted an application for an interim license to store hazardous waste. On March 15, 1994, the Department issued an interim license application determination which conditionally approved the interim license application. The interim license allowed EOG Disposal to store in containers the additional twenty-five hazardous waste codes resulting from the promulgation of the toxicity characteristic (TC) rule. A condition of the interim license required EOG Disposal to submit a FPOR within 180 days of the approval.

The FPOR was submitted in September 1994. The initial FPOR approval for hazardous waste storage was issued to EOG Disposal on April 19, 1996. The hazardous waste storage facility operating license was issued on December 16, 1996. In addition, the Department issued the following approvals for the facility:

- August 23, 1996 Conditional Approval for Legitimate Recycling Exemption – Hazardous Waste Burned for Energy Recovery/Fuel Blending and Marketing Activities.
- May 14, 1997 Construction Determination and License Modification Determination Second Phase of the Hazardous Waste Management Storage Facility to allow the storage of ignitable waste in the existing warehouse building.
- June 17, 2003 Conditional Class 1 Plan Modification Final Determination for Name and Ownership Change to Badger Disposal of Wisconsin, Inc.
- January 7, 2004 Class 2 Plan Modification Request to store hazardous waste containers two high without increasing the storage capacity.
- January 29, 2004 Conditional Class 1 Modification Determination – Revised Container Storage Layout
- April 6, 2004 Conditional Class 1 Modification Determination – Revised Container Storage Layout
- August 15, 2006 Temporary Authorization Request granting conditional approval to continue fuel blending operations since the May 14, 1997 conditional approval for the legitimate recycling exemption is no longer effective due to the adoption of the new Wisconsin hazardous waste administrative code.
- February 13, 2007 Re-issuance of the Temporary Authorization Determination for fuel blending operations

#### Regulatory Status of Fuel Blending

On August 1, 2006, the State of Wisconsin repealed and re-created the hazardous waste administrative code, chs. NR 600 to 690. The hazardous waste administrative code in effect at the time the initial license was issued to EOG Disposal allowed the Department to grant a recycling exemption under ch. NR 625 for fuel blending activities. A recycling exemption approval was issued to EOG Disposal on August 23, 1996. On August 1, 2006, ch. NR 625 was repealed. Fuel blending activities are now subject to full hazardous waste treatment facility requirements, including licensing. The Department issued a notice of the change in regulatory status to Badger Disposal on June 14, 2006 and requested Badger Disposal to submit a temporary authorization request to allow Badger Disposal to continue fuel blending activities, pending licensing. Badger Disposal submitted the temporary authorization request on July 10, 2006. The temporary authorization conditional approval issued by the Department on August 15, 2006 required Badger Disposal to include information regarding the fuel blending activities in the FPOR. The temporary authorization conditional approval was re-issued on February 13, 2007 and expires within 180 days or until a treatment license is issued by the Department, whichever occurs first.

If the Department's final decision is to approve the FPOR, a hazardous waste treatment facility operating license will be issued to Badger Disposal for the fuel blending activities. The Department does not consider the issuance of a treatment license to be either a new facility or an

expansion of the existing Badger Disposal facility, since the fuel blending activities have occurred at Badger Disposal since the ch. NR 625 exemption approval was issued on August 23, 1996. Badger Disposal is not changing their waste management activities; rather, the Department is changing administrative authority to regulate the fuel blending activity.

### Closure

Badger Disposal expects to operate for the next 50 years with no partial closure of the facility anticipated. The FPOR includes a detailed closure plan and cost estimates for completing closure. The closure plan includes the removal of the maximum allowable quantity of hazardous waste stored and treated at the facility and decontamination procedures for all of the surfaces and equipment in the tank and container storage and treatment areas.

### Financial Responsibility

The cost for final closure of the Badger Disposal facility is estimated to be \$181,495.00. The closure cost estimate is adjusted annually for inflation. Badger Disposal is required to maintain on file with the Department adequate proof of financial responsibility to cover the cost of closure. Currently Badger Disposal has on file an irrevocable letter of credit for closure.

The facility also maintains a pollution liability insurance policy for sudden environmental releases of \$1,000,000 per occurrence and \$2,000,000 annual aggregate.

## **FINDINGS OF FACT**

The Department finds that:

1. Badger Disposal of Wisconsin, Incorporated (Badger Disposal) currently operates a hazardous waste container storage unit and treatment unit in an existing warehouse building, according to the facility standards stated in chs. NR 660 to 679, Wis. Adm. Code. A maximum capacity of 720 55-gallon containers of hazardous waste is stored in the existing warehouse building. A 6,000 gallon vacuum truck is used for fuel blending operations. The trailer of the vacuum truck is parked in the existing warehouse building while wastes selected for fuel blending are pumped from the containers into the trailer. Selective fuel blending is hazardous waste treatment subject to hazardous waste licensing requirements.
2. On March 15, 1994, the Department issued an interim hazardous waste storage license to EOG Disposal, Incorporated. The interim license allowed EOG Disposal, Inc., to store in containers the additional twenty-five hazardous waste codes resulting from the promulgation of the toxicity characteristic (TC) rule.
3. On April 19, 1996, the Department conditionally approved a FPOR submitted by EOG Disposal, Inc.
4. On August 23, 1996 the Department issued a recycling exemption conditional approval to EOG Disposal, Inc. under the authority of s. NR 625.07, Wis. Adm. Code, for the fuel blending of hazardous waste.

5. On December 16, 1996, the Department issued the initial hazardous waste storage facility operating license to EOG Disposal, Inc. The license is effective for 10 years.
6. On May 14, 1997 the Department issued a construction determination and license modification determination for the second phase of the hazardous waste storage facility allowing EOG Disposal to store ignitable hazardous waste in the existing warehouse building.
7. On June 17, 2003 the Department issued a conditional class 1 plan modification final determination to change the ownership of the facility to Badger Investment Realty, LLC. The name of the facility changed from EOG Disposal, Inc. to Badger Disposal of Wisconsin, Inc.
8. On June 17, 2005, the Department issued a call-in letter requesting Badger Disposal to either initiate closure or seek re-licensing of the facility by submitting a FPOR.
9. On August 24, 2005, Badger Disposal submitted an Incident Report for a fire that occurred on the property. The report indicated that samples of the debris, asphalt and soils in the affected area were collected and submitted for analysis.
10. On March 17, 2006, Badger Disposal submitted the FPOR and requested the Department to re-issue a 10 year operating license. A check in the amount of \$7,800 was included for the review fee.
11. On May 16, 2006, the Department issued a Notice of Incompleteness for the FPOR and requested a response by July 16, 2006.
12. On June 14, 2006, the Department sent a letter to Mr. Henry Krier, President of Badger Disposal, stating that new hazardous waste rules would be in effect sometime in August 2006. Mr. Krier was notified that the recycling exemption conditional approval issued under ch. NR. 625, Wis. Adm. Code, for the fuel blending activity at Badger Disposal would no longer exist after the new rules took effect. The Department acknowledged that affected facilities are not changing their waste management activities. Rather the Department is changing the administrative authority to regulate the activity from a recycling exemption approval to a licensed treatment activity. The Department requested Badger Disposal to submit a temporary authorization request by July 10, 2006 if it intended to continue fuel blending activities.
13. On July 6, 2006, Badger Disposal requested that the submittal date for its response to the FPOR notice of incompleteness be extended to September 16, 2006.
14. On July 10, 2006, Badger Disposal submitted a temporary authorization request to continue fuel blending activities.
15. On July 11, 2006, the Department granted an extension allowing Badger Disposal to submit its response to the May 16, 2006 FPOR notice of incompleteness by September 16, 2006.
16. On August 1, 2006, the revised State of Wisconsin hazardous waste administrative code was adopted.
17. On August 3, 2006, the Department received a complaint alleging that containers of hazardous waste and flammable materials were being stored outside on the east side of the Badger Disposal storage building. On August 3, the Department investigated the complaint allegations and found that the drums stored outside were empty.
18. On August 15, 2006, the Department issued Badger Disposal a temporary authorization conditional approval for fuel blending activities.
19. On September 15, 2006, the Department received Badger Disposal's response to the May 16, 2006 FPOR notice of incompleteness.

20. On October 4, 2006, the Department received information that soils had been excavated on the east side of the storage building. Badger Disposal informed the Department on October 4, 2006 that soils had been excavated to create a turn-out for the vacuum truck backing into the east loading dock for fuel blending operations. Badger Disposal informed the Department that crushed stone would likely be used for the turn-out.
21. On October 10, 2006, the Department collected samples from a pile of soil that was excavated on the east side of the storage building. The samples were submitted for VOC and PAH analysis.
22. On November 15, 2006, the Department met with Badger Disposal and its consultant to discuss air emission requirements and ch. NR 664 subch. CC, Wis. Adm. Code, requirements that apply to the fuel blending operations. EPA permitting staff and DNR air compliance staff participated in the meeting. After the meeting, the Department sent an e-mail requesting Badger Disposal to submit specific information regarding the fuel blending operation to the Department by December 30, 2006.
23. On December 14, 2006, the Department prepared a correspondence memorandum regarding the need for corrective action at Badger Disposal. The correspondence memorandum documents the Department's decision that corrective action at Badger Disposal is not necessary at this time.
24. On December 26, 2006, Badger Disposal submitted replacement pages to Section 7 of the FPOR which included revised rejection procedures for incoming shipments of hazardous waste.
25. On January 3, 2007, the Department received Badger Disposal's December 26, 2006 response to the Department's November 15, 2006 e-mail regarding air emission requirements.
26. On February 6, 2007, the Department requested additional information regarding a fire resulting from the bulking of metal bearing wastes on August 17, 2005.
27. On February 6, 2007, Badger Disposal requested the Department to re-issue the temporary authorization for the fuel blending operation.
28. On February 7, 2007, Badger Disposal supplied the additional information regarding the fire on August 17, 2005.
29. On February 13, 2007, the Department re-issued a 6-month temporary authorization approval for the fuel blending operation.
30. On February 28, 2007, the Department issued a preliminary determination to conditionally approve the FPOR.
31. On March 1, 2007, the Department requested additional information regarding the August 17, 2005 fire.
32. On March 12, 2007, Badger Disposal notified the Department that a copy of the updated FPOR was sent to the Milwaukee Public Library and affected local municipalities.
33. On March 15, 2007, the preliminary determination was public noticed in the Milwaukee Journal Sentinel and State Journal and broadcasted on radio station WFMR.
34. On March 22, 2007, the Department issued a news release stating the preliminary determination reaffirmed that approving the license would not significantly affect the quality of human health or the environment.
35. On March 27, 2007, Badger Disposal submitted the additional information to the Department regarding the August 17, 2005 fire.

36. On April 11, 2007, the Department received comments regarding the preliminary determination issued by the Department.
37. On April 24, 2007, the Department updated the decision regarding the need for corrective action made on December 14, 2006. Based on additional information supplied on March 27, 2007, corrective action is necessary in the area of the August 17, 2005 fire.
38. On May 16, 2007, additional comments were received on the preliminary determination issued by the Department. The late comments were accepted due to delays in providing the public files.
39. On May 25, 2007, Badger submitted updated pages to the contingency plan and revised compatibility procedures.
40. On June 29, 2007, the Department responded to the comments received on April 10, 2007 and May 16, 2007.

### **CONCLUSIONS OF LAW**

The Department concludes that:

1. The Department promulgated chs. NR 660 through 679, Wis. Adm. Code, establishing minimum requirements for hazardous waste management under the authority of chs. 289 and 291, Wis. Stats.
2. The Department has the authority to conditionally approve a FPOR if the conditions are necessary to ensure compliance with chs. NR 660 through 679, Wis. Adm. Code, pursuant to s. 289.30(6), Wis. Stats.
3. Pursuant to s. 289.31, Wis. Stats., and s. NR 670.050, Wis. Adm. Code, the Department may issue annual renewals of hazardous waste operating licenses for an effective period of up to 10 years. If the licensee chooses to operate or maintain a hazardous waste facility after the 10-year effective period ends, the licensee must submit, at least 180 days before the end of the effective period, a new operating license application consisting of a part A application form, the feasibility and plan of operation report and any supplemental information, as specified in s. NR 670.010(1), (3) and (8), Wis. Adm. Code, and the applicable sections of chs. NR 660 to 679, Wis. Adm. Code.
4. The Department promulgated ch. NR 103, Wis. Adm. Code, to preserve and protect the water quality of wetlands.
5. Pursuant to s. 289.30(6), Wis. Stats., and ch. NR 670, Wis. Adm. Code, the Department has the authority to issue hazardous waste facility plan approvals.
6. The conditions of approval set forth below are necessary to ensure compliance with chs. NR 660 through 679, Wis. Adm. Code.

## **DETERMINATION**

In accordance with s. 289.28(3), Wis. Stats., the Department has determined that there is a need for the facility to store and treat hazardous waste as approved. The Department has further determined that there is no need for an environmental impact report or environmental impact statement for this facility at this time, pursuant to s. 1.11, Wis. Stats., and ch. NR 150, Wis. Adm. Code, and that the existing facility conforms to wetlands water quality standards pursuant to ch. NR 103, Wis. Adm. Code.

Based on the above Findings of Fact and Conclusions of Law, the Department hereby approves the hazardous waste feasibility and plan of operation report for Badger Disposal of Wisconsin, Inc., submitted on March 17, 2006 and amended on September 15, 2006, December 26, 2006 and May 25, 2007, subject to compliance with ch. 291, Stats., chs. NR 660 through NR 679, Wis. Adm. Code, and the following conditions.

## **CONDITIONS OF APPROVAL**

Badger Disposal of Wisconsin, Inc. is subject to the following conditions:

### **General Conditions**

1. The storage and treatment facility shall be operated in accordance with the approved Feasibility and Plan of Operation Report (FPOR), the requirements of ch. 291, Wis. Stats., chs. NR 660 to 679, Wis. Adm. Code, and the conditions of this approval.
2. The Department retains the right to modify this approval and to require the submittal of additional information. Nothing in this conditional approval shall relieve Badger Disposal of the legal obligation to comply with applicable federal, state and local approvals.
3. The conditions set out in s. NR 670.030, Wis. Adm. Code, apply to this facility and are hereby incorporated by reference and made a part of this approval and of any operating license which may be issued for the facility based upon this approval.
4. Badger Disposal shall comply with all applicable statutes and rules relating to spills, leaks, or other releases of hazardous waste or other hazardous substances, including ch. 292, Wis. Stats., subch. D of ch. NR 664, Wis. Adm. Code, and chs. NR 700 to 754, Wis. Adm. Code.
5. The licenses for operating the container storage units, the tank storage units and the treatment (fuel blending) unit are subject to the annual renewal of operating license fees listed in Appendix II, ch. NR 670, Wis. Adm. Code.
6. The Department reserves the right to require corrective action by Badger Disposal under the authority of s. 291.37, Wis. Stats., and chs. NR 660 to 679, Wis. Adm. Code.
7. Badger Disposal shall comply with all applicable requirements of the Department's air pollution control rules stated in chs. NR 400 to 499, Wis. Adm. Code, and directives including but not limited to obtaining all necessary permits to operate in accordance with these rules.

Badger Disposal shall notify the Department of any change in operation that results in an increase in the maximum potential emissions of an air contaminant or which results in the emission of an air contaminant not previously emitted.

8. Badger Disposal shall comply with all applicable air management permit conditions and hazardous waste licensing conditions. When two or more operating limitations apply, the most stringent operating limitations take precedence.

9. Trucks containing hazardous waste may not be parked on the public road adjacent to the Badger Disposal facility overnight or over the weekend.

10. Until the fence is re-located onto the Badger Disposal property, Badger Disposal shall ensure the integrity of that portion of the fence located on property not owned by Badger Disposal.

11. The drum crusher unit may only be used to crush drums that are empty, as defined in s. NR 661.07(2), Wis. Adm. Code. Before using the drum crusher unit to crush non-empty drums, Badger Disposal shall submit a modification request for operation of a miscellaneous unit.

12. The aerosol can puncturing device shall be operated in accordance with good engineering practices. The air emissions from the puncturing operations shall be captured using a control device such as a carbon adsorption system. The carbon unit on the puncturing device shall be replaced with fresh carbon at a regular, predetermined time interval that is no longer than the carbon service life.

13. Empty containers stored outside shall be kept under cover or sheltered.

14. The surface area to the east of the existing warehouse building that is used to access Dock #2 for fuel blending operations shall be paved with an impervious surface. An outline of activities related to the paving of the roadway and turn-out, including timeframes, shall be submitted to the Department within one month of the date of the final feasibility and plan of operation determination. If the grading and paving operations are not according to sheet 3 of 16 in Appendix P of Volume II of the FPOR, Badger shall submit a class 1 modification request for the paving activity.

15. Badger Disposal shall supply information demonstrating compliance with s. NR 664.0032(4), Wis. Adm. Code, within one month of the date of the final feasibility and plan of operation determination. Section NR 664.0032(4), Wis. Adm. Code, requires the facility to be equipped with water at adequate volume and pressure to supply water hose streams, foam producing equipment, automatic sprinklers or water spray systems.

16. Within 60 days of the date of the final feasibility and plan of operation determination, Badger Disposal shall submit a revised Part A form 8700-23 which includes the current fuel blending operations in a tanker truck (T04 process code).

**Specific Conditions For All Hazardous Waste Storage and Treatment Units**

17. Badger Disposal may store or treat only hazardous wastes bearing the waste codes listed in the Part A application signed and dated March 3, 2006. Wastes with similar characteristics, yet different hazardous waste codes, may only be managed at the facility after receiving written approval from the Department following a modification to this determination and the submission of a revised Part A application.
18. Badger Disposal may not store hazardous waste in quantities greater than those stated below:
- a. Existing warehouse: A maximum of 720 55-gallon containers or 39,600 gallons of hazardous waste or a maximum of 1,500 containers or 82,500 gallons of nonhazardous waste. If a combination of hazardous and nonhazardous waste containers is stored in the existing warehouse, the total quantity may not exceed 1,720 55 gallon containers or 94,600 gallons with no more than 39,600 gallons of hazardous waste and no more than 82,500 gallons of nonhazardous waste stored at any time. The quantity of 6,000 gallons of hazardous waste in containers waiting to be fuel blended or already pumped into the vacuum truck shall count towards the maximum capacity of 39,600 gallons of hazardous waste.
  - b. Addition to the existing warehouse: A maximum of 492 55-gallon containers or 27,060 gallons of non-ignitable hazardous waste or a maximum of 984 55-gallon containers or 54,120 gallons of nonhazardous waste. If a combination of hazardous and nonhazardous waste containers is stored, the total quantity may not exceed 984 55-gallon containers or 54,120 gallons with no more than 27,060 gallons of non-ignitable hazardous waste stored at any time.
  - c. Tank Farm: A maximum of one 2,000 gallon above ground blending tank in the re-pack area of the existing warehouse and four 12,000 gallon above ground storage tanks in a tank farm.
  - d. Lab pack building: A maximum of 145 55-gallon containers or 7,975 gallons of hazardous waste with no more than 29 55-gallon containers or 1,595 gallons stored in each of 5 distinct containment areas. A maximum of two 5,500 gallon above ground storage tanks with one tank storing acid waste and one tank storing basic waste.
  - e. Bulk solids storage area: One 20 cubic yard roll-off box of hazardous waste located in the repack area on the east side of the existing warehouse building. A maximum of six 20 cubic yard roll-off boxes of hazardous waste in the bulk solids storage area.
19. All hazardous waste storage and treatment activities shall be confined to the areas specified for those purposes in the approved FPOR.
20. Badger Disposal shall analyze each waste stream in accordance with the waste analysis procedures set forth in the waste analysis plan in Appendix D of the March 17, 2006 FPOR.
21. Prior to blending or bulking, the compatibility of the waste streams shall be evaluated by the direct mixing of samples of the wastes that are to be commingled.
22. Waste received from off-site shall be processed or moved into a container or tank storage area within 24 hours of the hazardous waste arriving at the facility.

23. Badger Disposal shall sign off on manifests within 24 hours of receipt of the wastes.
24. When storing containers two high, containers of equal or larger size or quantity shall be stored on the bottom level.
25. When containers greater than 20 gallons in size are stored 2 high, pallets shall be used to separate the first level from the second level.
26. A minimum aisle space of 3 feet between all of the rows of containers shall be maintained at all times. Lines shall be clearly marked on the floor to delineate the rows of containers from the aisles.
27. Containers shall be placed in the storage areas so that labels are visible from the aisles.
28. Placards shall be used to clearly identify the separate storage areas for the different types of hazardous wastes stored, such as poisons, reactive, corrosive, and ignitable wastes.
29. If a spill occurs in a containment pallet or on the floor, the containment pallet or floor shall be decontaminated in accordance with the FPOR before another type of waste is stored on the containment pallet or floor.
30. All uncontained wastes and accumulated liquids, such as precipitation and wash waters, located within the secondary containment systems shall be removed from the diked area daily and managed as hazardous or nonhazardous waste, in accordance with the FPOR and chs. NR 660 to 679 or chs. NR 500 to 555, Wis. Adm. Code.
31. Badger Disposal may not store materials or equipment whose volume will adversely affect the secondary containment capacity of the storage or treatment units, other than the equipment considered in the secondary containment system calculations included in the FPOR.
32. All concrete-surfaced secondary containment structures shall be re-sealed or repaired with a chemically resistant material as needed to maintain an impervious surface.
33. Badger Disposal may not store more than 10 pounds of each type of the dioxin precursors (e.g. chlorobenzenes, chlorophenols, phenol or U019 benzene) or dioxin containing wastes until the following procedures are completed and written approval is received from the Department.
  - a. Evaluate and, if necessary, revise the closure cost estimate to account for storing or treating increased quantities of dioxin wastes.
  - b. Increase the financial assurance if the revised closure cost estimate is greater than the amount of the existing closure financial assurance.
  - c. Submit the revised closure cost estimate and closure financial assurance to the Department for review and approval.

**Specific Conditions – Existing Warehouse Building and the Addition**

34. The storage of containers of nonhazardous waste is subject to the requirements stated in the solid waste license and chs. NR 500 to 555, Wis. Adm. Code.

35. Containers of hazardous waste liquids and lab pack drums shall be placed on spill pallets.

36. Containers of hazardous waste solids and lab packs may be stacked two high. Containers of hazardous waste liquids shall be stored on a single level.

37. Containers of nonhazardous waste and containers of hazardous waste may not be stored on the same spill containment pallet.

38. The containers shall be stored in the existing warehouse in the configuration depicted on drawing #05490-D1 dated 08/25/2006 except that containers of hazardous waste may not be stored in the two rows with no aisle space.

39. Containers of ignitable or reactive waste shall be located more than 50 feet from the property line except when containers are staged for loading or unloading onto a vehicle in the north loading dock (Dock #1). These staging activities shall be limited to the same calendar day as the waste delivery or pick-up day.

40. When containers are combined with other containers in the lab packs, the containers may not be opened. The contents of containers in the lab packs may not be combined with the contents of any other containers in the lab packs.

**Specific Conditions – Construction of New Units**

41. Badger Disposal may not treat or store hazardous waste in a newly constructed, modified or expanded portion of the facility until the following procedures are completed and written approval is received from the Department. Changes in the types of hazardous waste handled or in the processes or equipment used to treat, store or dispose of hazardous wastes are examples which may constitute a facility expansion or modification.

- a. Badger Disposal shall notify the Department at least 30 days prior to initiating construction at the site.
- b. The proposed hazardous waste storage or treatment units shall be constructed in accordance with the approved FPOR, this conditional approval, the container standards stated in ch. NR 664 subch. I and the tank and ancillary equipment standards stated in ch. NR 664 subch. J, Wis. Adm. Code.
- c. If the proposed construction of the storage or treatment unit does not meet the specifications stated in the approved FPOR, a modification request shall be submitted to the Department in accordance with s. NR 670.042, Wis. Adm. Code.
- d. Within 15 days after completing construction, a written statement shall be submitted to the Department certifying that the facility was constructed in substantial compliance with the approved FPOR or subsequent modification approval, as required by s. NR 664.0025, Wis. Adm. Code.

- e. Technical data, such as design drawings, design specifications and engineering studies shall be certified by a registered professional engineer.
- f. The Department has inspected the newly constructed units or waived the construction inspection.

42. Before operating any RCRA air emission control devices constructed after the issuance of this determination, Badger Disposal shall submit to the Department a letter signed by an authorized representative and a registered professional engineer. The letter shall state that the portions of the facility covered by this approval (including all air emission control devices required by this approval) have been constructed in compliance with the applicable conditions of this approval. The air emission control devices may not be operated until either:

- a. The Department has inspected those portions of the facility and finds them in compliance with the conditions of this approval; or
- b. The Department waives the inspection, if the inspection is not conducted within 30 days from the receipt of the certification.

43. The notification of construction for the bulk solids storage area shall include a description of the procedures that will be followed to assure compliance with the containment standards stated in s. NR 664.0175(3), Wis. Adm. Code.

44. Sufficient aisle space shall be maintained in the bulk solids storage area to allow for unobstructed movement of personnel and equipment in an emergency and to allow for inspections of the storage area.

45. F020, F021, F022, F023, F026 or F027 wastes may not be stored in the bulk solids storage area unless the containment requirements of s. NR 664.0175(2), Wis. Adm. Code, are met.

46. The following detailed information shall be included with the notification of construction for the tank farm:

- a. Spill containment calculations for the proposed tank farm which clearly indicates adequate containment capacity for the volume of one storage tank and a 25 year, 24 hour storm (see page 1 of Appendix A in Appendix H of the March 2006 FPOR).
- b. A revised plan for the tank farm loading/unloading pad which provides a minimum containment capacity for one 6,000 gallon tanker truck (see page 1 of Appendix A in Appendix H of the March 2006 FPOR).
- c. A description of the monitoring that will be conducted regularly on the ancillary equipment (see page 5-2 of the March 2006 FPOR).
- d. Specifications regarding containment and detection of releases, as required by s. NR 664.0193, Wis. Adm. Code.

47. Badger Disposal shall obtain and submit to the Department a written assessment for each new tank system or component, in accordance with s. NR 664.0192, Wis. Adm. Code, at least 30 days before the tank is used to store or treat hazardous waste.

48. The following detailed information shall be included with the notification of construction of the lab pack building:

- a. Specifications for the liner used in the carbon steel storage tanks demonstrating chemical compatibility between the liner and the corrosive wastes stored in the tanks (see page 20 of Appendix K of the FPOR).
- b. Specifications regarding containment and detection of releases, as required by s. NR 664.0193, Wis. Adm. Code.

49. All containers that are being unpacked in the lab pack bays shall be moved back into the licensed container storage areas in the lab pack building by the end of the calendar day. The drum into which wastes are being packed may remain in the lab pack bay and shall meet the container standards stated in subch. I of ch. NR 664, Wis. Adm. Code.

Dated: \_\_\_\_\_

WISCONSIN DEPARTMENT OF NATURAL RESOURCES  
For the Secretary

\_\_\_\_\_  
Franklin C. Schultz  
Waste and Materials Management Program Supervisor  
Southeast Region

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Sandra Miller  
Waste and Materials Management Specialist  
Licensing and Policy Review Coordinator

### **NOTICE OF APPEAL RIGHTS**

If you believe you have a right to challenge this decision made by the Department, you should know that Wisconsin statutes, administrative codes and case law establish time periods and requirements for reviewing Department decisions.

To seek judicial review of the Department's decision, sections 227.52 and 227.53, Stats., establish criteria for filing a petition for judicial review. Such a petition shall be filed with the appropriate circuit court and shall be served on the Department. The petition shall name the Department of Natural Resources as the respondent.