



State of Ohio Environmental Protection Agency

Northwest District Office

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Ted Strickland, Governor
Lee Fisher, Lieutenant Governor
Chris Korleski, Director

Re: Midwest Guardian
OHD 048782049
Auglaize County
Hazardous Waste
Notice of Violation 2

October 10, 2007

CERTIFIED MAIL
7006 0100 0003 7708 5923

Mr. Donald Miller, Jr.
Vice-President
Midwest Guardian, Inc.
100 Keller Drive
P.O. Box 2041
Wapakoneta, Ohio 45895

Dear Mr. Miller:

On September 19, 2006, you accompanied Randy Ohlemacher and me during Ohio EPA's inspection of Midwest Guardian, Inc. (MGI) at 100 Keller Drive in Wapakoneta, Ohio. We inspected MGI to determine its compliance with Ohio's hazardous waste laws as found in Chapter 3734. of the Ohio Revised Code (ORC) and Chapter 3745. of the Ohio Administrative Code (OAC). A letter dated November 24, 2006, explained the violations we found and what you needed to do to correct the violations. I received your response to this November 24, 2006, Notice of Violation letter (NOV) on June 8, 2007.

On July 24, 2007, you accompanied me during Ohio EPA's inspection of MGI at 100 Keller Drive in Wapakoneta, Ohio. I inspected MGI to determine its compliance with Ohio's hazardous waste laws as found in Chapter 3734. of the Ohio Revised Code (ORC) and Chapter 3745. of the Ohio Administrative Code (OAC). This letter will explain the violations I found, what you need to do to correct the violations, a compliance issue identified by the agency and what you need to do to respond to this compliance issue.

MGI is a privately owned company that recycles industrial lead acid batteries. Some of the batteries are liquid filled and some are gel filled. The company processes stationary batteries from the telephone industry and other utilities, railroad switches and locomotives, and also tow motors. These batteries are approximately 300-400 pounds each. MGI does not process car batteries or any other battery (such as a computer battery) lighter than 50 pounds. Instead, when they are found in a pallet of industrial batteries, MGI accumulates them and packages them on pallets for shipment to the secondary lead smelter. The smelter is the one that shreds these batteries and recovers the lead. MGI processes about 58,000 pounds of industrial batteries each day (about one and one half truckloads). A truck can haul about 40,000 pounds of batteries.

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Batteries are received by truck and unloaded with a fork lift, unwrapped and weighed. Then the caps are removed. If the battery case is tarred or the cells are swollen, the corners of the steel case are cut with a torch in the Torch Booth in order to expand the case and get the cells out. Next the batteries are moved by fork lift to the recycling room where they are turned upside down to empty the acid. The acid drains along the floor to the above ground tank through a pipe in the side of the back wall. If the acid is suitable for recycling it is drained into a large portable container that can be moved to the acid recycling operation, in another area of the facility. Once the acid is removed, the battery cases are shook to remove the cells. The top of each cell is cut off and the cell is cut in two. The battery plates and separators are removed and drained further in the "storage" bins. The cases are rinsed in water to soften the lead oxides and then the oxides are knocked out and collected. The cases are air dried and segregated into either a recyclable group or non-recyclable group. The recyclable plastic cases are shredded. Approximately 90% of the battery cases are recyclable now.

The non-recyclable plastic portion of cases are not shredded (these include the tops of the case); they are left whole and discarded as a hazardous waste. The lead grids, separators, lead oxides and gels are packaged as a hazardous waste to be sent to the secondary lead smelter. The posts or lugs are removed and melted in a furnace at MGI and formed into lead counterweights or ingots.

The acid from stationary batteries that are not in steel cases can be recycled in the following manner. The batteries are drained over a large cone bottom open top container in the battery recycling room. This container is moved by fork lift to the acid recycling system in another part of the facility. There it is pumped into a series of three 500-gallon tank-like poly containers where small amounts of solids are allowed to settle out. Then the liquid is put through a three step filter system and pumped into a mix tank where high strength sulfuric acid can be added to make various acid blends. It can be sold to farm implement and tow motor companies. These companies buy the acid in bulk, since they store batteries dry and add acid only when the battery is purchased or put into service. Waste acid is accumulated in a 7,000 gallon above ground stainless steel tank. This acid contains iron and would foul a new battery.

MGI also recycles a very small quantity of lead sheathed copper communication cable, since most cable is fiber optic now. The cable is heated in a furnace which melts the lead sheath first. The lead is poured into ingots which are sold or it is made into lead parts such as counter weights. The paper wrap on the copper wires is slowly burned off. When the process is finished, the copper cable is removed from the furnace and the ash is washed off with a pressure washer. The water is filtered and recycled in a closed system. The ash and filters are added to the lead plates and oxides sent to Exide. The copper is sold to copper mills.

Some of the better looking tow motor batteries are set aside for about a week to allow a used tow motor business time to look at them and determine if they want them. MGI can also purchase cells already removed from their cases. The cells of smaller tow motor batteries are removed from their cases, drained, banded upright and sold to a secondary lead smelter.

The following hazardous wastes are generated:

1. Lead Plates and Separators (D002, D006, D007 & D008): This waste also includes floor sweepings, granulated corn cob type floor dry, filters, oxide sludge, gel plates and ash from the melting furnace. Most of this material is sent to Exide Technologies in Reading, Pennsylvania in plastic lined dump trailers. This waste is picked up the day after it is generated. Approximately 5,949 tons of this waste was generated in 2006.
2. Waste Acid (D002, D006, D007 & D008): This waste has tested above the regulatory limit for cadmium and chromium in the past, so these codes are included. Cadmium and chromium can be part of the positive plates in Absolite brand batteries. This waste is sent to Vickery Environmental by vac truck every three weeks. Approximately 402 tons of this waste was generated in 2006.
3. Battery Cases (D008): Both the cases to be recycled (that are shredded) and the cases left whole are labeled and manifested as hazardous waste. This material is sent to either Tulip Corporation in Niagra Falls, New York or EQ Detroit Inc. in Detroit, Michigan. The non-recyclable plastic is shipped in plastic lined dump trailers. The recyclable plastic, which is shredded, is shipped in cardboard gaylords. Approximately 153 tons of this material was generated in 2006.

MGI's lead plates/oxides are considered hazardous waste, and not scrap metal, therefore, the exclusion described in OAC Rule 3745-51-01 (C)(10) cannot be applied. A letter from US EPA further explains why the lead plates and oxides are a hazardous waste. According to the August 9, 1985, letter, lead plates are scrap metal, however the lead oxides are not. MGI does not separate them. Therefore, "Since the lead plates and lead oxide material (which is a regulated recyclable material) are mixed and sent to the smelter as a mixture, the entire mixture would be regulated."

The recyclable plastic cases can be shredded since this step is still part of your recycling process. However, the non-recyclable plastic cases cannot be shredded without a permit for treatment, since they are a hazardous waste (contaminated with lead (D008)) that is land disposed.

On September 19, 2006, I found the following violations of Ohio's hazardous waste laws. Some of the same violations were found on July 24, 2007 (and will be noted throughout this NOV):

**2. OAC Rule 3745-52-11
Waste Evaluation**

MGI has failed to adequately evaluate all of its waste properly, according to this rule, for the following reasons: You reported on September 19, 2006, that MGI places its spent fluorescent bulbs in the dump trailers used for the disposal of battery plates. In the process the bulbs are broken. The bulbs have not been evaluated to determine if they possess a characteristic of hazardous waste and they are not managed as a hazardous waste in the dump trailers, since the manifests do not include the hazardous waste number for mercury (D009). The bulbs are also not properly managed as a Universal Waste.

Therefore, MGI must cease placing spent bulbs of any kind in the dump trailers until they have adequately evaluated them.

In order to correct this violation, you must explain how MGI will handle all bulbs: either as Hazardous Waste or Universal Waste.

In a letter from Joseph Gregg, representing MGI, dated June 7, 2007, it is stated that the bulbs are no longer disposed of in the dump trailers. I verified during the July 24, 2007, inspection that MGI is properly managing the bulbs as Universal Waste. Therefore, this violation has been abated.

**3. OAC Rule 3745-270-09(A)
Special Rules Regarding Wastes that Exhibit a Characteristic**

If the generator determines that his waste displays a hazardous characteristic, the generator must determine underlying hazardous constituents (as defined in rule 3745-270-02 of the Administrative Code) in the characteristic waste.

MGI has failed to determine the underlying hazardous constituents for its wastes. In order to correct this violation, 1. MGI may have each characteristic hazardous waste sampled and analyzed for inorganic underlying hazardous constituents and record each on the accompanying land disposal restriction form; or 2. MGI may contact the disposal facility(s) and have them provide documentation that they are capable of treating MGI's characteristic hazardous waste to below the regulatory level for the inorganic underlying hazardous constituents.

During the July 24, 2007, inspection I pointed out to you the list of underlying hazardous constituents found in OAC Rule 3745-270-48. MGI has still not determined the underlying hazardous constituents for its hazardous wastes. This violation remains outstanding.

**4. OAC Rule 3745-66-73(A)
Management of Containers**

A container holding hazardous waste shall always be closed during storage, except when it is necessary to add or remove waste. MGI has failed to keep all containers of hazardous waste closed. Specifically, a battery with two open cells was stored on the outside loading dock (see photos 1 and 2 enclosed).

Therefore, MGI must place all open battery cells within the disassembly room and provide photographic documentation that no open batteries are stored on the outside loading dock.

In a letter from Joseph Gregg, representing MGI, dated June 7, 2007, it is stated that staff have been instructed to keep all open batteries within the various process areas inside of the facility. As stated above, MGI must place all open battery cells within the Battery Recycling Area (disassembly room) which is identified as Area 5 in Midwest Guardian, Inc.'s Facility Management Plan, Appendix A to the June 26, 2000 Consent Order and Final Judgement Entry entered in Auglaize County Common Pleas Court Case 2000-CV-0110. In order to correct this violation, please confirm that open batteries will be placed within the Battery Recycling Area, which is Area 5.

**5. OAC Rules 3745-66-71 & 3745-66-73(B)
Condition and Management of Containers**

If a container of hazardous waste is not in good condition, or if it begins to leak, the owner or operator must transfer the hazardous waste from such container to a container that is in good condition or manage the waste in another manner that complies with the requirements of Chapters 3745-65 to 3745-69 and 3745-256 of the Administrative Code. A container holding hazardous waste shall not be opened, handled, or stored in a manner which may rupture the container or cause it to leak.

MGI has failed to transfer the contents of leaking containers (battery cells) to a container that is in good condition. I observed tow motor battery cells which were leaking (see photo 10 enclosed). These battery cells were stored on pallets on the floor of the acid recycling room. Therefore, they were handled and stored in a manner which has caused them to leak. These cells should not have been removed from the cases and placed on pallets on the floor. Once removed they should have been recycled on-site or placed in an acceptable hazardous waste container.

To abate this violation, MGI must place these broken and leaking cells in an acceptable container, manage them as a hazardous waste and avoid storing broken and leaking cells on pallets in the future. MGI must provide photographic documentation that no broken battery cells are in the acid recycling area and that all broken battery cells are in suitable containers and labeled as hazardous waste.

In a letter from Joseph Gregg, representing MGI, dated June 7, 2007, it is stated that staff have been instructed to process any battery with a breached case, regardless of its size. Therefore, MGI will not store broken batteries or cells. However, MGI must explain what it did with the broken and leaking cells that Ohio EPA observed on September 19, 2006.

**6. OAC Rule 3745-66-95
Tank System Inspection Requirements**

The owner or operator must inspect, where present, at least once each operating day: 1. The above ground portions of the tank; and 2. The construction materials and the area immediately surrounding the externally accessible portion of the tank system including secondary containment structures (e.g., dikes) to detect erosion or signs of releases of hazardous waste (e.g., wet spots, dead vegetation).

MGI has failed to inspect these areas each day that hazardous waste has been present in the tank system. Specifically, MGI has not conducted the required inspections on, at least, weekends and holidays. Therefore, MGI must conduct the required inspection each day that hazardous waste is in the tank system and provide documentation demonstrating that this has been done and recorded, for at least a four week period.

During Ohio EPA's July 24, 2007, inspection, you provided documentation that demonstrates MGI has conducted a daily inspection of its tank system since July 9, 2007. Therefore, this violation has been abated.

**7. OAC Rule 3745-65-31
Maintenance and Operation of Facility**

Facilities shall be maintained and operated to minimize the possibility of a fire, explosion, or any unplanned sudden or non-sudden release of hazardous waste constituents to air, soil, or surface water which could threaten human health or the environment.

Battery case chips (D008) are accumulating on the floor of the outside loading dock area where they are supposed to be accumulated in cardboard gaylords. The chips apparently bounce out of the box when it reaches a full level. MGI has not been able to control the collection of these chips. This accumulation area is under a roof, however, there appears to be evidence that, at some point in time, acid has eroded the concrete floor and waste has possibly run off onto the ground. Ohio EPA believes that rainwater could wash lead from the hazardous waste laying on the concrete pad onto the surrounding ground.

Therefore, MGI must develop some method of preventing the escape of hazardous constituents from this accumulation area. You must describe this method and when it will be put into use.

During Ohio EPA's July 24, 2007, inspection, I observed that a new concrete floor has been poured in this area and a new door was installed. There were no battery case chips on the floor of this area. You explained that you are about to attach seals around the chute of the chipper. This violation will be abated once you have completed your improvements. Please inform me when you have completed them.

Ohio EPA is still in the process of evaluating your accumulation of batteries prior to recycling.

General Compliance Issue:

In a letter from Joseph Gregg, representing MGI, dated June 7, 2007, references are made to the Midwest Guardian, Inc. Facility Management Plan, Appendix A to the June 26, 2000 Consent Order and Final Judgement Entry entered in Auglaize County Common Pleas Court Case 2000-CV-0110. (Hereinafter referred to as the "FMP.") These references are made in order to claim that batteries are being stored in areas identified in the FMP.

However, upon review of the diagram in Exhibit A of the FMP, Ohio EPA has determined that only a small portion of the main warehouse is to be used for the storage of spent batteries; that is Battery Prep Area 2. (See the attached copy of the diagram.) On September 19, 2006, Mr. Randy Ohlemacher and I observed an open spent battery in the Truck Receiving Area (truck dock), outside the Battery Prep Area 2. On the same date we observed many batteries being stored in the large open area of the Main Warehouse, most of which were outside the Battery Prep Area 2. On July 24, 2007, I again observed batteries being stored in the large open area of the Main Warehouse, most of which were outside the Battery Prep Area 2.

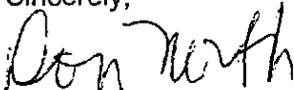
MGI must explain to Ohio EPA, in writing, how it will address this discrepancy.

You may want to consider the opportunity to have a pollution prevention assessment at your facility. I encourage you to schedule an assessment because there are often many opportunities for facilities to reduce waste and save money. Please feel free to contact Ohio EPA's Office of Compliance Assistance and Pollution Prevention at (614) 644-3469 about your interest in an assessment.

The Division of Hazardous Waste Management has created an electronic news service to provide you with quick and timely updates on events and news related to hazardous waste activities in Ohio. If you haven't already, we encourage you to sign-up for this free service. You can find more information at the following Web link <http://www.epa.state.oh.us/dhwm/listserv.html>. Please feel free to share this information with your colleagues.

If you have any questions about the inspection or this letter, please feel free to contact me at (419) 373-3074. You can find copies of the rules and other information on the division's web page at <http://www.epa.state.oh.us/dhwm>. Ohio EPA also has helpful information about pollution prevention at the following web address: <http://www.epa.state.oh.us/opp>.

Sincerely,



Don North
District Representative
Division of Hazardous Waste Management

/csl

pc: Colleen Weaver, DHWM, NWDO
Cindy Lohrbach, DHWM, NWDO
Harry Sarvis, DHWM, CO
DHWM, NWDO, Midwest Guardian File
ec: Don North, DHWM, NWDO

NOTICE:

Ohio EPA's failure to list specific deficiencies or violations in this letter does not relieve your company from having to comply with all applicable regulations.

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Sent To **MIDWEST GUARDIAN INC**

Street, Apt. No., or PO Box No. **100KELLER DR**

City, State, ZIP+4 **WAPAKONETA OH 45895**

PS Form 3800, June 2002 See Reverse for Instructions

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1. Article Addressed to:

MR. DONALD MILLER JR
VICE PRESIDENT
MIDWEST GUARDIAN INC
100 KELLER DR
PO BOX 2041
WAPAKONETA OH 45895

DHWM/Don N. /csl

2. Article Number
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 A. L. Ketcham Agent
 Addressee

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