



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION IX  
75 Hawthorne Street  
San Francisco, CA 94105**

**WASTE MANAGEMENT DIVISION  
RCRA ENFORCEMENT OFFICE  
RCRA COMPLIANCE EVALUATION INSPECTION REPORT**

**Purpose:** RCRA Compliance Evaluation Inspection (CEI)

**Facility Location:** Siemens Industries, Inc.  
2523 Mutahar Street  
Parker, AZ 85344

**U.S. EPA ID Number:** AZD982441263

**Date of Investigation:** March 7, 2012

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**Report Prepared By:** John D. Dixon

**Report Date:** April 2, 2012

Report written by John D. Dixon: \_\_\_\_\_

## INVESTIGATION

The purpose of the investigation was to determine if Siemens Industries, Inc. (herein Siemens or the facility) was in compliance with the federal environmental statutes and regulations, and the Resource Conservation and Recovery Act (RCRA), as amended, the regulations provided in the Code of Federal Regulations (CFR), Chapter 40, Parts 261-265, 268, 273, and 279.

On March 8, 2012, John D. Dixon, the inspector representing the U.S. Environmental Protection Agency (EPA), conducted an unannounced site investigation at Siemens. The inspector was accompanied by Ms. Terry Dock, Acting Environmental Director of the Colorado River Indian Tribes EPA. Upon arrival at the facility, the inspector contacted Mr. Monte McCue, Director of Plant Operations, and Mr. Roy Provins, Environmental Health and Safety Manager. The inspector informed them of the purpose and scope of the investigation. After providing introductions and credentials, the inspector explained that this was a routine inspection to determine whether or not the facility was in compliance with federal regulations concerning the proper management of hazardous wastes.

### Facility Background

<b>Facility Name</b>	Siemens Industries, Inc.
<b>Established</b>	1992
<b>Number of Employees</b>	Approximately 17
<b>Facility Size</b>	Approximately 12,800 square-foot warehouse facility with support buildings and outside process equipment/tanks/ancillary equipment. The facility is situated on approximately 10 acres of land.  See Attachment 1 (Facility Maps) for facility size details.
<b>Hours of Operation</b>	24 hours per day, 7 days per week
<b>Filed Notification of Hazardous Waste Activity</b>	May 6, 1991
<b>Facility Processes</b>	The facility reactivates spent carbon received from customers. An estimated 10 percent of the spent carbon reactivated at the facility is RCRA hazardous waste.  The reactivation process generally consists of receipt and storage of spent carbon, transfer to one of four spent carbon storage tanks, and top-feeding into a multiple-hearth furnace for multiple-stage heat treatment. Once reactivated, the carbon is stored in product tanks and packaged for resale/redistribution.  See Attachment 2 (Process Flow Diagram) for a visual depiction of the reactivation process. See Attachment 3 for a full description of the facility's equipment and the reactivation process.
<b>Waste Streams</b>	Siemens generates spent carbon (483,000 pounds in 2011), spent carbon placed in tanks for regeneration (11,815,380 pounds in

	<p>2011), wastewater from air scrubber blowdown (42,181,803 gallons discharged to POTW in 2011), filter cake from wastewater treatment (168,240 pounds in 2011), and hazardous debris (42,060 pounds in 2011). Each of these waste streams is considered to be hazardous waste (hazardous waste codes include all waste codes received at the facility). The 2011 quantities are derived from the facility's 2011 Hazardous Waste Biennial Report. Copies of the generator pages of this report are included in Attachment 4. A copy of a 2011 Hazardous Waste Generator Summary Sheet (tallying the filter cake and hazardous debris shipments in 2011) is included as Attachment 5.</p> <p>Other regulated wastes include universal waste lamps, universal waste batteries, and used oil.</p> <p>Nonhazardous wastes include empty, triple-rinsed steel drums and general packaging/office-type refuse.</p>
<b>GPS Coordinates</b>	34.13248920°N, 114.27261927°W from Warehouse entry gate.
<b>Generator Status</b>	Large Quantity Generator (LQG); Interim Status hazardous waste treatment/storage facility.
<b>Last Inspection</b>	According to EPA's RCRA-info database, the last RCRA compliance evaluation inspection of the facility was conducted by EPA on April 19, 2011.

### **Facility Inspection**

The inspector and Ms. Dock were given a tour of the facility by Mr. Provins. The following tables summarize the areas inspected, and the potential violations observed during the CEI. Photographs taken during the CEI are included in the attached Photo Log (Attachment 6).

#### **Interim Status (IS) Container Storage Area in Warehouse**

<b>Location</b>	<b>Container Type</b>	<b>Waste Type</b>	<b>Potential Violation</b>	<b>Photo</b>
IS Container Storage Area	26, 55-gallon containers	Hazardous waste spent carbon (various waste codes)	None	3, 4, 5, 6, & 7
IS Container Storage Area	Numerous 55-gallon containers	Nonhazardous waste spent carbon	None	3, 4, 5, 6, & 7
IS Container Storage Area	76, 55-gallon containers	Filter press cake (sludge) (F001-F005)	One hazardous waste storage container is not in good condition	11, 12, 13, & 14
IS Container Storage Area Satellite Accumulation Area (SAA)-1	One 55-gallon container	Hazardous warehouse debris	None	17

Location	Container Type	Waste Type	Potential Violation	Photo
IS Container Storage Area	Seven one-cubic-yard bags	RCRA-exempt spent carbon (characteristic sludge that will be reclaimed)	None	19 & 20
IS Container Storage Area	Two portable tanks	Excess recycle water	None	21 & 22
IS Container Storage Area	Two portable tanks	Hazardous spent carbon and clasters	None	23, 24, & 25
IS Container Storage Area	One 55-gallon container	Used oil	None	26
IS Container Storage Area	Several four-ounce containers	Hazardous spent carbon retain samples (various waste codes)	None	27



Photo #3: Numerous 55-gallon containers of spent carbon (26 hazardous waste storage containers; rest are nonhazardous) in the IS container storage area.



Photo #4: Another view of the 55-gallon spent carbon storage containers in the IS container storage area.



Photo #11: 76, 55-gallon hazardous waste storage containers holding filter press cake in IS container storage area.



Photo #13: View of hazardous waste storage container on bottom right in Photo #11. The container is not in good condition (dented).



Photo #21: Portable tanks holding hazardous excess recycle water in the IS container storage area.



Photo #23: Portable tanks holding hazardous waste spent carbon and clusters in the IS container storage area.



Photo #26: Used oil storage container in the IS container storage area.



Photo #27: Hazardous spent carbon retain samples in the IS container storage area.

The inspector noted that all 55-gallon hazardous waste spent carbon containers (see Photos #3 through 7) were structurally sound, closed, labeled with the words “hazardous waste,” and marked with accumulation start dates. The earliest accumulation start date noted was approximately six weeks before the date of the CEI.

The inspector noted that all 76, 55-gallon hazardous waste filter press cake storage containers (see Photos #11 through 14) were closed, labeled with the words “hazardous waste,” and marked with accumulation start dates. The earliest accumulation start date noted was approximately four weeks before the date of the CEI. One of these containers (see Photos #13 & 14) was significantly dented. No leaks or spills were observed from this container, but the inspector determined that this container was not in good condition. All other containers appeared to be in good condition.

The two portable tanks holding hazardous recycle water (see Photos #21 & 22) were structurally sound, labeled with the words “hazardous waste,” and marked with accumulation start dates of August 23, 2011. The two portable tanks holding hazardous waste spent carbon and clusters (see Photos #23 through 25) were structurally sound, labeled with the words “hazardous waste,” and marked with accumulation start dates of August 29, 2011 and January 13, 2012.

The IS container storage area is a bermed storage area with sumps to collect any spills or water. All water collected in the sumps is pumped to the Recycle Water tank T-9. No spills or water was observed outside of the bermed container storage area. The inspector observed emergency response equipment and materials (fire extinguisher, spill control/cleanup materials, eye wash station, emergency shower, emergency alarm, fire sprinkler system) in the IS container storage area. The inspector also observed adequate aisle space between hazardous waste storage containers. Weekly inspections are performed and documented. Other than the one hazardous waste storage container of filter press cake that was deemed to be not in good condition, no potential violations or concerns were noted with the IS container storage area.

Note: Facility personnel emptied the filter press cake from the dented container shown in Photos #13 & 14 into an undamaged hazardous waste storage container during the CEI. The dented container was triple-rinsed and placed in the empty container storage area for disposal (see Photos #15 & 16 below).



Photo #15: Dented container shown in Photo #13 after facility personnel emptied sludge, rinsed the container, and placed the container in the empty container storage area.



Photo #16: Facility personnel emptied sludge from the dented container shown in Photo #13, triple rinsed the container, and placed it in the empty container storage area.

**90-Day Hazardous Waste Container Storage Area**

Location	Container Type	Waste Type	Potential Violation	Photo
Outside Near Hopper H-1	One 25-cubic-yard container	Hazardous waste debris	None	40, 41, & 42



Photo #40: 90-day hazardous waste storage container of debris near Hopper H-1.

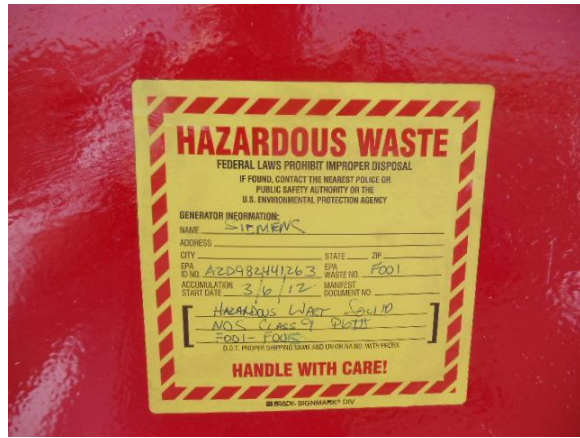


Photo #42: View of the label on the hazardous waste storage container shown in Photo #40.

### Hopper H-1 Baghouse

Location	Container Type	Waste Type	Potential Violation	Photo
Baghouse SAA	One 55-gallon container	Hazardous waste fines	None	47

### Warehouse Loading Area

Location	Container Type	Waste Type	Potential Violation	Photo
Inside Warehouse Door, SAA	One 55-gallon container	Hazardous warehouse debris	Satellite accumulation container not closed	48 & 49



Photo #48: Warehouse Loading Area satellite accumulation container; lid is damaged and will not close.



Photo #49: View inside of the satellite accumulation container shown in Photo #48.

Note: Facility representatives replaced the damaged satellite accumulation container lid during the CEI with a lid that closed the container (see Photo #50).



Photo #50: Satellite accumulation container shown in Photo #48 after facility representatives replaced the lid.

**Outside**

Location	Container Type	Waste Type	Potential Violation	Photo
Outside Process Area SAA	One five-gallon container	Hazardous waste debris [personal protective equipment (PPE)]	None	51

**Testing Lab**

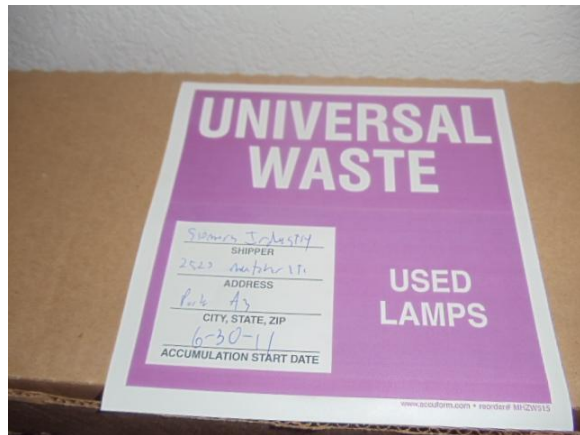
Location	Container Type	Waste Type	Potential Violation	Photo
Testing Lab	Two fiberboard containers	Universal waste lamps	Universal waste storage containers not labeled “universal waste-lamp(s)” or “waste lamp(s)” or “used lamp(s);” and not dated or tracked to show accumulation time	54, 55, & 56
Testing Lab	None	Five, uncontainerized universal waste lamps	Universal waste storage containers not stored in closed containers; not labeled “universal waste-lamp(s)” or “waste lamp(s)” or “used lamp(s);” and not dated or tracked to show accumulation time	54, 55, & 56
Testing Lab	One five-gallon container	Universal waste batteries	None	54, 55, & 56
Testing Lab SAA	One five-gallon container	Hazardous debris (PPE)	None	61





Photos #54 & 56: View of universal waste batteries storage container (red container), two unlabeled and undated/tracked universal waste lamps storage containers, and five uncontainerized universal waste lamps in the Testing Lab.

Note: Facility representatives placed the “loose” universal waste lamps in a storage container, and labeled all three universal waste lamps storage containers with the words “universal waste used lamps” and an accumulation start date of June 30, 2011 during the CEI (see Photos 57 through 60).



Photos #57 & 60: View of the universal waste lamps storage containers and a close-up of the labeling after facility representatives containerized, labeled, and dated the universal waste lamps during the CEI.

## **RECORDS REVIEW**

### **Hazardous Waste Manifests**

The inspector reviewed hazardous waste manifests for offsite shipments from 2009 to the present. No potential violations were noted. Copies of all manifests and associated documentation [e.g., land disposal restriction (LDR) notifications] for the last three waste shipments (November 29, 2011, December 21, 2011, and March 6, 2012) are included in Attachments 7 through 9.

### **Land Disposal Restriction (LDR) Notification Forms**

The LDR notification forms associated with the hazardous waste shipments from 2009 to the

present were reviewed. It was noted that the LDR notification forms list numerous characteristic and listed hazardous waste codes for the waste generated as Siemens. No potential violations were noted. LDR notification forms for the November 29, 2011, December 21, 2011, and March 6, 2012 hazardous waste shipments are included in Attachments 7 through 9.

#### **Hazardous Waste Biennial Report**

As an LQG, the facility filed a 2011 Hazardous Waste Biennial Report with EPA on February 27, 2012. The inspector reviewed this report and noted no concerns. Copies of the generator pages of the facility's 2011 Hazardous Waste Biennial Report are included as Attachment 4.

#### **Training**

The facility has a written training plan that maps each employee's name to a written job description and the initial/continuing training required. The inspector reviewed select operator training records during the CEI and noted no potential violations or concerns.

#### **RCRA Contingency Plan**

The inspector reviewed Siemens' RCRA Contingency Plan against the requirements of 40 CFR §265 Subpart D. It was noted that all requirements appear to be adequately addressed. No potential violations or concerns were noted.

## **POTENTIAL VIOLATIONS**

### **1. Failure to keep satellite accumulation containers closed**

40 CFR § 262.34(c)(i)

*(c)(1) A generator may accumulate as much as 55 gallons of hazardous waste or one quart of acutely hazardous waste listed in §261.31 or §261.33(e) in containers at or near any point of generation where wastes initially accumulate which is under the control of the operator of the process generating the waste, without a permit or interim status and without complying with paragraph (a) or (d) of this section provided he:*

*(i) Complies with §§265.171, 265.172, and 265.173(a) of this chapter.*

40 CFR § 265.173(a)

*(a) A container holding hazardous waste must always be closed during storage, except when it is necessary to add or remove waste.*

**Findings:** *One (1) of five (5) satellite accumulation containers (Warehouse Loading area) was not closed.*

**Note:** *Facility representatives closed the satellite accumulation container during the CEI. See walkthrough section of this report for further information on the facility response.*

### **2. Failure to store universal waste lamps in closed containers**

40 CFR § 273.13(d)(1)

*(d) Lamps . A small quantity handler of universal waste must manage lamps in a way that prevents releases of any universal waste or component of a universal waste to the environment, as follows:*

*(1) A small quantity handler of universal waste must contain any lamp in containers or packages that are structurally sound, adequate to prevent breakage, and compatible with the contents of the lamps. Such containers and packages must remain closed and must lack evidence of leakage, spillage or damage that could cause leakage under reasonably foreseeable conditions.*

**Findings:** *Five universal waste lamps in the Testing Lab were not stored in containers.*

**Note:** *Facility representatives containerized the five universal waste lamps during the CEI. See walkthrough section of this report for further information on the facility response.*

### **3. Failure to transfer hazardous waste from a container not in good condition**

40 CFR §265.171

*If a container holding hazardous waste is not in good condition, or if it begins to leak, the owner or operator must transfer the hazardous waste from this container to a container that is in good condition, or manage the waste in some other way that complies with the requirements of this part.*

**Findings:** One hazardous waste storage container holding hazardous filter cake was observed to be in poor condition (dented container).

**Note:** Facility representatives transferred the hazardous waste out of the dented storage container during the CEI. See walkthrough section of this report for further information on the facility response.

#### **4. Failure to label universal waste lamps storage containers**

40 CFR §273.14(e)

*A small quantity handler of universal waste must label or mark the universal waste to identify the type of universal waste as specified below:*

*(e) Each lamp or a container or package in which such lamps are contained must be labeled or marked clearly with one of the following phrases: “Universal Waste—Lamp(s),” or “Waste Lamp(s),” or “Used Lamp(s).”*

**Findings:** Two (2) of two (2) universal waste lamps storage containers in the Testing Lab were not labeled with the specific wording “universal waste – lamp(s)” or “waste lamp(s)” or “used lamp(s).”

**Note:** Facility representatives labeled the two universal waste lamps storage containers during the CEI. See walkthrough section of this report for further information on the facility response.

#### **5. Failure to date or otherwise track accumulation time for universal waste lamps**

40 CFR § 273.15(c)

*(c) A small quantity handler of universal waste who accumulates universal waste must be able to demonstrate the length of time that the universal waste has been accumulated from the date it becomes a waste or is received. The handler may make this demonstration by:*

*(1) Placing the universal waste in a container and marking or labeling the container with the earliest date that any universal waste in the container became a waste or was received;*

*(2) Marking or labeling each individual item of universal waste (e.g., each battery or thermostat) with the date it became a waste or was received;*

*(3) Maintaining an inventory system on-site that identifies the date each universal waste became a waste or was received;*

*(4) Maintaining an inventory system on-site that identifies the earliest date that any universal waste in a group of universal waste items or a group of containers of universal waste became a waste or was received;*

*(5) Placing the universal waste in a specific accumulation area and identifying the earliest date that any universal waste in the area became a waste or was received; or*

*(6) Any other method which clearly demonstrates the length of time that the universal waste has been accumulated from the date it becomes a waste or is received.*

***Findings:*** *None of the universal waste lamps accumulating in the Testing Lab were dated or otherwise tracked to demonstrate length of time of accumulation.*

***Note:*** *Facility representatives marked an accumulation start date on the universal waste lamps storage containers during the CEI. See walkthrough section of this report for further information on the facility response.*

### Attachments

1. Facility Maps
2. Process Flow Diagram
3. February 2007 Part B RCRA Permit Application, Section D – Process Information (downloaded from EPA Region 9 website)
4. 2011 Hazardous Waste Biennial Report (Generator Wastes Only)
5. 2011 Hazardous Waste Generator Summary Sheet
6. Photo Log
7. Hazardous Waste Manifest, LDR Notification, and Supporting Documentation for November 29, 2011 Shipment
8. Hazardous Waste Manifest, LDR Notification, and Supporting Documentation for December 21, 2011 Shipment
9. Hazardous Waste Manifest, LDR Notification, and Supporting Documentation for March 6, 2012 Shipment