

DEPARTMENT OF ENVIRONMENTAL QUALITY  
STATE OF WYOMING

Jim Ruby, Executive Secretary  
Environmental Quality Council

IN THE MATTER OF THE )  
ADMINISTRATIVE ORDER ON )  
CONSENT ISSUED TO: )  
TATOOINE INDUSTRIES INTERNATIONAL, INC. )  
DBA TATOOINE ELECTRONIC SYSTEMS )

Docket No. 5129-13

ADMINISTRATIVE ORDER ON CONSENT (AOC)

W.S. §35-11-502(a) requires a permit from the Wyoming Department of Environmental Quality (DEQ) for the location, design, construction, operation, modification or closure of a solid waste management facility. On April 26, 2011, DEQ issued Notice of Violation number 4827-11 (NOV 4827-11) to Tatoonie Industries International, Inc., a Wyoming corporation doing business as Tatoonie Electronic Systems (Tatoonie), for failing to obtain such a permit for solid waste activities occurring at 4390 I-80 Service Road, Burns, WY. Wastes managed at the facility include but are not necessarily limited to Cathode Ray Tubes (CRT), printed circuit boards (PCB), electronic components containing mercury, electronic component cabinets/casings, crushed glass from CRTs, whole computers, and various electronic controllers/components.

Tatoonie has initiated the permit application process. This AOC is intended to authorize interim operation of this facility pending issuance or denial of a permit by the Department and establishes the following schedule of specified actions for Tatoonie to assure compliance with regulatory requirements under W.S. §35-11-502 and Chapters 1, 6, 7 and 8 of the DEQ Solid Waste Rules and Regulations (SWRR) and applicable DEQ Hazardous Waste Rules and Regulations (HWRR), and to address compliance with federal requirements for the management of electronic wastes.

WHEREFORE IT IS HEREBY ORDERED THAT:

1. Beginning on March 1, 2013, Tatoonie shall adhere to the schedule set forth in Exhibit 1 to remove leaded CRT glass and intact CRTs to a facility authorized to accept such material.
2. Beginning on April 1, 2013, Tatoonie shall submit bimonthly reports (once every two months) to DEQ no later than the first week of the subsequent month documenting all incoming and outgoing CRTs and other electronic wastes and inventory at the end of the reporting period. The reports shall include, at a minimum, the inventory, shipping, and receiving records presented on a single ledger equivalent to Exhibit 2. Incoming and outgoing waste inventory documentation must include dates, origins (sources) of the waste, type(s) of electronic waste (designated as CRT, printed circuit boards, intact computers, etc.), estimated or scale weight of each load received or shipped, and volume estimates from transport cargo dimensions or other reliable methods as demonstrated by Tatoonie. If no weigh scales are available, Tatoonie may estimate weight from approximate bulk density of wastes and transport vehicle cargo dimensions. After Tatoonie has reduced the on-site tonnage below 250 U.S. tons, the reporting frequency may be reduced as mutually agreed by both parties.
3. No later than April 30, 2013, Tatoonie shall submit to DEQ's Solid Waste Permitting and Corrective Action Program for review and approval the proposed form and amount of financial assurance needed to assure proper removal and disposal of all electronic waste, hazardous waste,

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and sorted/processed electronic waste material that may be present at the facility, and for facility closure.

4. No later than February 28, 2014, Tatoonine shall demonstrate and document that at least seventy-five percent (75%) of electronic waste (primarily leaded CRT glass and intact CRTs) in the facility's inventory during the previous year has been recycled or sent to authorized off-site facilities.

5. For the purpose of this AOC, Tatoonine's financial assurance shall comply with W.S. 35-11-504 and Chapter 7 of the DEQ Solid Waste Rules. The amount of financial assurance shall be calculated based upon the following factors and updated annually:

- The number of truckloads needed to transport the wastes to a permitted facility;
- The capacity (volume) of each truckload;
- The name, location, and distance to each permitted facility;
- Per truckload transportation cost and solid waste management fees; and
- Cost of facility closure by a third party at maximum volumes.

6. Within 20 days after DEQ approves Tatoonine's proposed form and amount of financial assurance for the facility, Tatoonine shall post with DEQ the approved form of financial assurance in an amount calculated to be adequate to assure proper removal and disposal of all electronic waste and hazardous waste materials and sorted/processed electronic waste material that may be present at the facility, and for facility closure.

7. Tatoonine shall issue and maintain receipts for all waste materials received at the facility and shall obtain and maintain receipts for all waste materials transferred to a permitted facility, including the facility name, date of transport, and quantity of wastes transferred.

8. Tatoonine may dispose potentially hazardous wastes (including, but not limited to leaded glass CRTs and electronic waste components that contain or have contained mercury, cadmium, or other extractable hazardous constituents) only at facilities authorized to accept such wastes. Tatoonine shall maintain a written record in facility files of all RCRA waste determinations for any such wastes. The RCRA waste determination must meet the requirements of DEQ HWRR, Chapter 8, Section 1(b) to document whether a waste is hazardous or non-hazardous and can reference established/documented characteristics for certain types of equipment or manufacture dates. The waste determination must be supported by readily available, published information directly applicable to the corresponding waste. Exhibits 3 and 4 provide examples of waste determinations for non-hazardous electronic waste combined with a load manifest to identify and document non-hazardous wastes. Tatoonine may prepare its own form, but the information must be equivalent to that in Exhibit 3. Any non-hazardous waste sent for disposal to a Wyoming facility shall have written documentation that a non-hazardous waste determination was provided to the receiving facility.

9. Tatoonine shall clearly and legibly label all containers of potentially hazardous electronic waste with the date the wastes were placed in storage, the general contents of the container (e.g., CRT glass, electronic mercury switches/components, Nickel/Cadmium batteries, electronic ballast), and specific potential hazard descriptor (e.g., CRT glass containing lead, leaded CRT glass, batteries containing Cadmium). Because containers may be reused, strikeouts or lines drawn through any previous dates on containers shall designate the most recent, applicable start dates for storage.



10. In every area storing electronic components that contain free, elemental mercury, Tatoonine shall maintain suitable, conventional mercury spill supplies and equipment [e.g., vacuum suction bulbs or powdered ('flour') sulfur] available within the same room of the building storing the components. In addition to compliance with all applicable DEQ HWRR, Tatoonine will adhere to HWRR, Chapter 14, including but not limited to, Section 1(d), Section 2(d)(iii) pertaining to mercury waste management, and all other sections of Chapter 14 applicable to Tatoonine's handling of mercury or other universal wastes covered by DEQ HWRR.

11. Tatoonine shall reduce leaded CRT glass and intact CRT inventories on-site to less than fifty (50) tons before August 1, 2013.

12. During any sixty-day rolling period, Tatoonine may not receive more electronic waste (other than leaded CRT glass and intact CRT's as described in paragraph 13) than the combined amount of electronic waste (other than leaded CRT glass and intact CRT's) that Tatoonine has recycled or shipped to authorized off-site facilities during the same sixty-day period. The total on-site inventory for electronic waste other than leaded CRT glass and intact CRT's shall not exceed 500 tons at any time.

13. Once Tatoonine decreases leaded CRT glass and intact CRT inventories on-site to below fifty (50) tons pursuant to paragraph 11, Tatoonine may not receive an amount of leaded CRT glass and inert CRTs during any sixty-day rolling period that exceeds the amount of leaded CRT glass and intact CRTs that Tatoonine has recycled or shipped to authorized facilities during the same sixty-day period.

14. Tatoonine is authorized to operate the electronic waste facility in accordance with this order, DEQ SWRR, and DEQ HWRR. Tatoonine must comply with any EPA RCRA electronic waste regulations for which DEQ may not have primacy, including, but not limited to 40 CFR 261.39 (requiring storage of broken CRTs inside either a building or a closed container) and 40 CFR 273.9 (mercury-containing equipment management). This authorization shall be valid for a period of eighteen (18) months from the date of this Order or until the facility obtains a solid waste permit, whichever occurs first. In the event the facility has not obtained a permit within eighteen (18) months, the facility is no longer authorized to operate unless an extension is mutually agreed upon.

15. The signatories are authorized to bind their respective parties to this AOC.

16. After execution by DEQ and Tatoonine, this AOC shall be filed with the Wyoming Environmental Quality Council (EQC).

17. This AOC is issued with Tatoonine's consent. Tatoonine will not file a request for hearing before the EQC to contest the validity of its terms under W.S. 35-11-701(c)(ii). However, Tatoonine reserves the right to request a hearing before the EQC to contest any later enforcement of the terms of this AOC related to permit review and approval.

18. The effective date of this AOC is the date the final signature is attached and is binding upon all successors of the facility.

19. The stipulated requirements of this AOC may be modified only by written agreement of both parties.


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The signatories certify that they are duly authorized to bind their respective Parties to this Administrative Order on Consent.

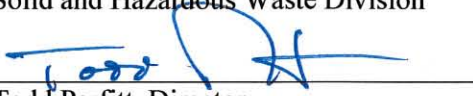
WE HEREBY CONSENT to the provisions of this Administrative Order on Consent:

FOR THE WYOMING DEPARTMENT OF ENVIRONMENTAL QUALITY:

Date: 2/11, 2013

By:   
Carl Anderson, Administrator  
Solid and Hazardous Waste Division

Date: 2/11, 2013

By:   
Todd Parfitt, Director  
Wyoming Department of Environmental Quality

FOR TATOOINE INDUSTRIES INTERNATIONAL, INC., doing business as TATOOINE ELECTRONIC SYSTEMS:

Date: 2-8, 2013

By:   
Jeff Stumpf  
President

**EXHIBIT 1**

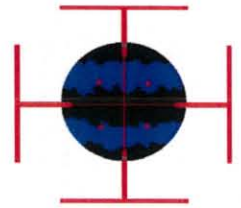
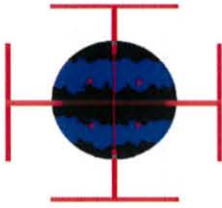
**TATOOINE ELECTRONIC SYSTEMS INC.**

6520 HINESLEY RD

CHEYENNE, WY 82001

PHONE: 307-632-0054 FAX: 307-632-5113

EMAIL: SINDER@TATOOINEINC.COM



**Glass Removal Schedule**

<b>Date</b>	<b>Glass Weight</b>
March 2013	40,000 LBs
April 2013	80,000 LBs
May 2013	120,000 LBs
June 2013	160,000 LBs
July 2013	200,000 LBs
August 2013	240,000 LBs
September 2013	280,000 LBs
October 2013	320,000 LBs
November 2013	400,000 LBs
December 2013	480,000 LBs
January 2014	560,000 LBs
February 2014	640,000 LBs
March 2014	720,000 LBs
April 2014	800,000 LBs
<b>Total Weight Out</b>	<b>800,000 LB's (400 tons)</b>

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**EXHIBIT 2 - Redordkeeping Ledger Example Option for Electronic Waste Accounting**

**Shipments Received**

**Shipments Sent Out**

Month/Year (for heading and/or monthly TOTALS)		Date if Entering Specific Shipment	Material Description	Source company or other organization)	Tons (weighed or estimated)	Cu. Yds. volume (estimated)	Month/Year (for heading and/or monthly TOTALS)		Date if Entering Specific Shipment	Material Description	Receiving company or other organization)	Tons (weighed or estimated)	Cu. Yds. volume estimated.
OCT Totals		Oct-12											
NOV Totals		12-Nov											
DEC Totals		12-Dec											
JAN Totals		13-Jan											
FEB Totals		13-Feb											
MAR Totals		13-Mar											
APR Totals		13-Apr											
MAY Totals		13-May											
JUN Totals		13-Jun											
JUL Totals		13-Jul											
AUG Totals		13-Aug											
SEP Totals		13-Sep											
OCT Totals		13-Oct											
12-month TOTALS													

Previous 12-months total shipments offsite/total shipments received x 100 (estimates 12-month % recycle and/or turnover rate) =

Current inventory at end of bimonthly reporting period =



## EXHIBIT 3

### Example Option for Electronic Waste Load Description

<p><b>Description of waste</b> (examples include but not limited to CRTs, crushed glass, printed circuit boards, plastic and/or metal component casings, etc.):</p>	<p><i>Example for illustrative purposes only: Crushed CRT monitor glass</i></p>
<p><b>Volume</b> (estimated cubic yds.):</p>	<p><i>Example for illustrative purposes only: 3 yds.</i></p>
<p><b>Weight of</b> (estimated or scale):</p>	<p><i>Example for illustrative purposes only: 2.1 tons</i></p>
<p><b>Transporter:</b></p>	<p><i>Example for illustrative purposes only: Andromeda</i></p>
<p><b>Narrative of non-hazardous waste determination</b> asserting waste generator knowledge of factors demonstrating non-hazardous nature of waste (examples include but not limited to type of CRT (color or monochrome, date of manufacture, MSDS, previous analytical results and/or published evaluations, conventionally accepted non-hazardous solid wastes such as plastics, pallets, electronic cabinets/shells, etc.):</p>	<p><i>Example for illustrative purposes only: Non-hazardous CRT glass from monochrome monitor front glass conventionally accepted as non-hazardous with documentation from attached cover page and Table 4.1 from <b>FLORIDA CENTER FOR SOLID AND HAZARDOUS WASTE MANAGEMENT at University of Florida indicating all monochrome CRTs in study tested as non-hazardous (Exhibit 4).</b></i></p> <p><i>Alternate illustrating example for recycling otherwise RCRA-hazardous CRT glass: Exempt recycled leaded CRT glass for recycle at authorized facility covered by EPA exclusion in regulations at 40 CFR 261.39 and any corresponding DEQ HWRR.</i></p>
<p><b>Comments or other descriptors</b> (attachments if/as applicable)</p>	<p><i>Example for illustrative purposes only: Cover page and Table 4.1 from <b>FLORIDA CENTER FOR SOLID AND HAZARDOUS WASTE MANAGEMENT at the University of Florida</b></i></p>

**EXHIBIT 4 – Example Excerpts from Publications Supporting Non-Hazardous Waste Determination**

**CHARACTERIZATION OF LEAD LEACHABILITY FROM  
CATHODE RAY TUBES USING THE  
TOXICITY CHARACTERISTIC LEACHING PROCEDURE**

December 1999

Timothy G. Townsend, Principal Investigator  
Stephen Musson  
Yong-Chul Jang  
Il-Hyun Chung

State University System of Florida  
**FLORIDA CENTER**  
**FOR SOLID AND HAZARDOUS WASTE MANAGEMENT**  
2207 NW 13 Street, Suite D  
Gainesville, FL 32609

Report #99-5

**Table 4.1 Summary of TCLP Leachable Lead Concentrations for All Samples**

Maker	TV/ Mon	Color/ Mono	Year Man.	Tube Maker	Leachable Lead Concentration (mg/l)			
					Neck	Funnel	Face	Weighted Average
Acer	MON	C	93	Panasonic	9.5	347.3	<1.0	57.2
Digital	MON	M	90	Clinton	4.2	<1.0	<1.0	<1.0
Elite	MON	C	92	Chunghwa	9.7	81.2	<1.0	19.3
Emerson	TV	C	84	Goldstar	6.5	6.6	<1.0	1.5
Gateway	MON	C	93	Toshiba	9.0	9.2	<1.0	3.2
Gateway	MON	C	92	Toshiba	12.8	174.5	<1.0	54.1
Hp	MON	M	84	Matsushita	<1.0	<1.0	<1.0	<1.0
Hp	MON	M	85	Matsushita	1.7	<1.0	<1.0	<1.0
IBM	MON	C	87	Matsushita	9.5	38.4	<1.0	9.4
IBM	MON	C	89	Panasonic	9.5	142.9	<1.0	41.5
IBM	MON	M	92	Phillips	1.1	<1.0	<1.0	<1.0
Intec	MON	C	89	Samsung	8.2	200.6	<1.0	60.8
Intec	MON	C	89	Hitachi	13.6	403.6	<1.0	85.6
Memorex	MON	C	97	Toshiba	10.1	103.0	<1.0	21.3
Memorex	MON	C	97	Kch	12.7	49.4	<1.0	15.4
Memorex	MON	C	98	Samsung	7.0	25.7	<1.0	6.1
Memorex	MON	C	98	Chunghwa	10.9	7.8	<1.0	2.3
Memorex	MON	C	97	Toshiba	8.4	34.9	<1.0	9.1
Memorex	MON	C	98	Samsung	7.1	7.1	<1.0	2.2
Memorex	MON	C	97	Chunghwa	8.3	35.3	<1.0	10.6
NEC	MON	C	87	NEC	11.3	50.3	<1.0	10.7
Orion	TV	C	96	Orion	9.1	132.5	<1.0	33.1
Panasonic	TV	C	84	Matsushita	22.4	11.8	<1.0	3.5
Quasar	TV	C	84	Quasar	13.6	182.4	<1.0	43.5
Samsung	MON	M	89	Samsung	<1.0	<1.0	<1.0	<1.0
Seiko	MON	C	87	NEC	9.1	100.0	8.0	26.6
Sharp	TV	C	94	Sharp	8.7	16.4	<1.0	4.4
Sharp	TV	C	84	Sharp	7.9	6.0	<1.0	1.5
Tandy	MON	C	85	Sharp	17.6	116.1	<1.0	35.2
Techmedia	MON	C	95	Samsung	<1.0	20.1	<1.0	6.9
Teknika	TV	M	86	Phillips	1.6	<1.0	<1.0	<1.0
Trx	MON	C	91	Chunghwa	7.5	10.0	<1.0	2.8
Zenith	TV	C	94	Zenith	18.3	198.8	<1.0	54.5
Zenith	TV	C	94	Zenith	15.8	7.1	<1.0	1.6
Zenith	TV	C	77	Zenith	<1.0	97.7	<1.0	21.9
Zenith	MON	C	85	Toshiba	7.5	92.1	<1.0	21.5
Averages					8.6	75.3	0.2	18.5