Environmental, Health and Safety Compliance and Systems Audit in Response to:

Washington State Preferred Performance Measures for Direct Processors

WAC 173-900-650

Facility Audited: Auditor: Date: Total Reclaim Inc. Kelley Keogh 05-17-17

#### Scope of Audit

This custom audit report has been designed to meet the specific requirements of the State of Washington's "Environmentally Sound Management Performance Measures for Direct Processors – Preferred Status" qualification requirements. The WA State standards, WAC 173-900-650, were interpreted and a facility checklist was prepared to meet the standards requirements that related directly to the operations. The audit consisted of confirming the nexus between the two documents and the operations.

Kelley Keogh of Greeneye Partners performed an onsite audit of the two sites and the trailers located at Harbor Island, to meet the WA State standards, WAC 173-900-650 with a special emphasis on verifying the 2016 mass balance report, analyzing facility's closure plan, closure cost estimate and financial instrument.

The facilities are located at:

2200 6<sup>th</sup> Avenue S Seattle, WA

1930 6<sup>th</sup> Avenue S Seattle, WA

#### Audit Summary

Facility Information:

**EPA#** WAD009482803 (2200 6<sup>th</sup> Avenue S) and WAH000044416 (1930 6<sup>th</sup> Avenue S)

**Size:** 47,000 sq. ft. (2200 6<sup>th</sup> Avenue S), 25,000 sq. ft. HVAC unit management (1930 6<sup>th</sup> Avenue S), 33,000 sq. ft. Storage and Flat Panel display devices (1930 6<sup>th</sup> Avenue S)

Facility age: Built 1959 Hours: 7:30am-4:00pm 5 days Combined sites # of Employees: 75 FT employees

The following is a summary of a comprehensive review for compliance of operations in response to the Washington State Department of Ecology Preferred Performance Standards for Direct Processors of Electronics Processors - WAC 173-900.

**1. Responsible Management Priorities** – *Facility Maintains Compliance with Standards* 

*The Facility Maintains the* Environmental Management System Manual (EM-01) Section 4.5 – addresses continuous improvement through management and operational evaluations. The 2200 6<sup>th</sup> Avenue S facility is ISO 14001:2015 Exp. 10-13-19 and OHSAS 18001:2007 Certified Exp. 10-13-19.

## 2. Legal Requirements – Facility Maintains Compliance with Standards

The Washington State Department of Ecology (WA DOE) conducted a RCRA inspection of the facility in May, 2016. The issues identified were resolved and in December, 2016, WA DOE provided a letter stating that the issues on non-compliance have been closed and that there are no outstanding issues from that violation.

February 9<sup>th</sup> 2017 another inspection was conducted and a violation regarding an excess of the 180-day storage limit for dangerous waste (flat screens) and incorrect labeling for crushed lamp bulbs. Resolution to both issues have been submitted to WA DOE and the facility is awaiting a return to compliance letter.

Currently the facilities maintain compliance with all legal requirements pertaining to their operations. Permits and plans are in conformity with actual operations, which were reviewed and confirmed during the original site visit. The facility contracts with a third-party audit firm to conduct audits of their downstream vendors to WA DOE Specifications. Permits and written plans conformity with actual operations were reviewed and confirmed during site visit.

**3. Environmental, Health, and Safety Management Systems** – *Facility Maintains Compliance with Standard - Facility Maintains an* Environmental, Health, and Safety Management System.

The facility is working with Puget Sound Clean Air Authority on finalizing Notice of Construction for the flat screen processing line, while continuing to run smasher, shredder, glass break line which may be required to be under this permit as well. The company is working with Rambol Engineering to permit this process. During this time, they had been storing flat screens because the processing line had been shut down and they exceeded their 180 days' storage limit on them. Because of this they received a N.O.V from the WA DOE. They are now manually processing the units at the facility or sending large flat screens for tear down to Intelligent Lifecycle Solutions in S.C. and smaller units to Intelligent Lifecycle Solutions in Reno, N.V. These two sites have recently been audited by a third-party auditing firm for compliance. The final reports are due by the end of May 2017.

#### 4. Recordkeeping – Facility Maintains Compliance with Standards

TRI's Environmental Management System Manual (EM-01) Section 4.5.4 Control of Records/ EP-08- Control of Records sets forth the policy. Facility has all records available upon request. Auditor verified that documents since 2014 are kept in back-up and removed from site overnight and weekends. (No change 05-17)

#### 5. On-site requirements - Facility Maintains Compliance with Standards

Material is handled, packaged, labeled and stored in compliance with standards. Facility manages a 2-3 day turn around on inbound to outbound material transport to increase profit margin and maintain necessary space for new material. Site is gated and alarm controlled. Worker safety is protected through engineering controls and was observed by auditor. Workers wear and maintain PPE. The health and Safety training is consistent with requirements for the operation and the facility has systems in place to ensure employee comprehension. IH Monitoring and medical reviews are conducted as

appropriate. TRI is pro-active regarding new processes and appropriate testing is conducted as implementation begins. TRI employs a highly qualified EHS Professional with extensive EHS experience.

On February 9<sup>th</sup> 2017 an inspection was conducted and a violation regarding an excess of the 180-day storage limit for dangerous waste (flat screens) and incorrect labeling for crushed lamp bulbs. Resolution to these issues have been submitted to WA DOE and the facility is awaiting a return to compliance letter.

# 6. Materials of Concern - Facility Maintains Compliance with Standards

Auditor observed Materials of Concern being handled in accordance with standards. (No change 05-17)

# 7. Recycling – Facility Maintains Compliance

Materials managed to ANSI and OSHA standards - observed during site visit. Auditor observed dismantling and separation to marketable levels for the best use and highest grade of recycling and a very clean and efficient warehouse processing area.

# 8. Reuse - Facility Maintains Compliance with Standards

The reuse and refurbish department meets all the WA State Processor requirements as well. Auditor observed complaint practices during audit.

## 9. Disposal of Residuals - Facility Maintains Compliance with Standards

Facility waste management follows state and federal guidelines as observed by auditor. No materials of concern go to landfill or incineration. Waste is managed and separated to minimize material going to landfill. (No change 05-17)

## 10. Refurbishment - Facility Maintains Compliance with Standards

TRI has a reuse and refurbish department. Auditor observed software to erase hard drives, testing methods for working monitors and repair methods for CPU's and monitors. Sales for refurb and reuse are to individual clients and local non-profit. (No change 05-17)

## 11. Transport – Facility Maintains Compliance with Standards

Auditor observed appropriate packaging and labeling of all material. Facility uses company drivers for most transportation - trains online in DOT procedures - contracts with Fed Ex and other DOT permitted transporters. **(No change 05-17)** 

## **12. Prison Labor –** Facility Maintains Compliance with Standards

TRI does not use prison labor. (No change 05-7)

## 13. Facility Access – Facility Maintains Compliance with Standards

TRI allows WA DOE full record and site access. (No change 05-17)

# **14. Notification of Penalties and Violations** – *Facility Maintains Compliance with Standards*

TRI agrees to notify WA State DOE of any violations or penalties incurred on behalf of operations within 30 days of notification.

# **15. Due Diligence Downstream** - Facility Maintains Compliance with Standards

Documentation of all material through final destination is conducted and records maintained. CRT's and Circuit Boards are exported and the documentation is in place. Onsite audits performed by an independent auditing firm are used to verify compliance for the circuit board, battery and glass vendors in the downstream material processing chart.

# **16. Exporting –** *Facility Maintains Compliance with Standards*

Facility is compliant with WA DOE and FED EPA standards. The Circuit Boards go to an OECD Country – either South Korea or Japan and processed CRT Glass goes to Camacho in Spain via Mexico or to Teck Metals in B.C. All battery chemistries are managed within the US.

# **17. Insurance -** *Facility Maintains Compliance with Standards*

TRI maintains more than adequate insurance to cover their employees, operations and pollution liability. Auditor has reviewed coverage with an expiration date of 07-01-17.

# **18. Closure EHSMS and Financial Responsibility** – *Facility Maintains Compliance with Standards*

TRI maintains closure plans with cost estimates for closure and an independent financial mechanism and a designated responsible party to manage the process. The Closure Plan Cost estimates were revised 5-18-17

\$105, 083 is the current closure cost estimate and \$180,925 is currently held in a bond to finance closure of the facility.

## **19. Facility Security -** *Facility Maintains Compliance with Standards*

TRI facility is locked and the yard is surrounded by fence with gates. Alarm systems that is monitored 24/7 by a third party. Visitors sign in, are given a badged and are escorted onsite. Employees have key fob access to the building. Keys are used to access Asset Management Department's and storage trailers. Facility has 15 cameras with recordings stored on a DVR for 14 days.

## **Auditor Qualifications**

The audit was conducted by Kelley Keogh an ISO 9001, ISO 14001,OHSAS 18001, e-Stewards and R2 internal auditor. Kelley is the Co-Founder/Managing Director of Greeneye Partners, LLC. Their main body of work is in the electronics processing and recycling fields. The State of Washington's DOE maintains Kelley Keogh's auditor qualifications on file.



	Date of Last Review: 5/15/2017						
Recycling Process or Material	Waste Category	Waste Transfer Site or Intermediate Processing Site	Waste Transfer Site or Intermediate Processing Site	Ultimate Disposal Site & Disposal Method			
Glass/CRT <ul> <li>Lead-Bearing</li> </ul>	FM/MOC Non- Regulated RCRA – Exempt			India			
Glass/CRT • Lead-Bearing	FM/MOC Non- Regulated RCRA – Exempt			Canada			
Glass/CRT • Lead-Bearing	FM/MOC Non- Regulated RCRA – Exempt			Spain			
Glass/CRT • Non-lead bearing	Non- regulated			USA			



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Recycling Process or Material	Waste Category	Waste Transfer Site or Intermediate Processing Site	Waste Transfer Site or Intermediate Processing Site	Ultimate Disposal Site & Disposal Method		
Batteries • Lead Acid (Wet/Dry)	FM/MOC Non- Regulated RCRA – Exempt			USA		
Batteries • Ni-Cad (Wet/Dry) • Nickel Metal Hyd. • Alkaline • Lithium • Lithium Ion • Mixed Batch	FM/MOC Universal Waste			USA		
Batteries • Alkaline	FM/MOC Non- Regulated			USA		
Circuit Boards (Processors)	FM/MOC Non- Regulated			USA		



Date of Last Review: 5/	Date of Last Review: 5/15/2017							
Recycling Process or	Waste	Waste Transfer Site or	Waste Transfer Site or	Ultimate Disposal Site & Disposal				
Material	Category	Intermediate Processing Site	Intermediate Processing Site	Method				
Circuit Boards	FM/MOC							
	Non-							
	Regulated			Japan				
				Korea				
Circuit Boards	FM/MOC Non-							
	Regulated			Japan				
				Korea				



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Recycling Process or Material	Waste Category	Waste Transfer Site or Intermediate Processing Site	Waste Transfer Site or Intermediate Processing Site	Ultimate Disposal Site & Disposal Method				
Circuit Boards (Memory)	FM/MOC Non- Regulated			USA				
Glycol • Projection Tube Coolant	Non-FM Special Management Required			USA				
Ink and Toner Cartridges	Non-FM Special Management Required			USA				



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Ink and Toner Cartridges	Non-FM Special Management Required			USA		
Plastics	Problematic Components or Materials (PCM)			China		
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Plastics	Problematic Components or Materials (PCM)			China		



Recycling Process or Material	Waste Category	Waste Transfer Site or Intermediate Processing Site	Waste Transfer Site or Intermediate Processing Site	Ultimate Disposal Site & Disposal Method
Plastics	Problematic Components or Materials (PCM)			USA
Electronics & Metals	FM/MOC Non- Regulated			USA
Reuse/Refurbishing	Fully tested and Functional Refurbished equipment for resale			USA
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Recycling Process or Material	Waste Category	Waste Transfer Site or Intermediate Processing Site	Waste Transfer Site or Intermediate Processing Site	Ultimate Disposal Site & Disposal Method				
Reuse/Refurbishing	Refurbished equipment			Reuse				
	for resale			USA				
Reuse/Refurbishing	Refurbished equipment			Reuse				
	for resale			USA				
Reuse/Refurbishing/ Recycling	Refurbished equipment			Reuse or Recycling				
	for resale or FM/MOC Non- Regulated			USA				
Fluorescent light tubes and Mercury Bearing Products	FM/MOC Universal Waste			Recycling				
				USA				



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Recycling Process or Material	Waste Category	Waste Transfer Site			ransfer Site or diate Processing Site	Ultimate Disposal Site & Disposal Method
Mercury Bearing Products and Mercury Phosphor Powder	RCRĂ	Intermediary	Intermediary		Intermediary	USA
		Intermediary	Intermediary		Recycling 	USA
PCB-Containing Ballasts	TSCA					
Metals – • Ferrous • Non-ferrous	Non- Regulated		1			Recycling USA
Metals – • Ferrous • Non-ferrous	Non- Regulated					Recycling USA



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Recycling Process or Material	Waste Category	Waste Transfer Site or Intermediate Processing Site	Waste Transfer Site or Intermediate Processing Site	Ultimate Disposal Site & Disposal Method			
Metals – • Ferrous • Non-ferrous	Non- Regulated			Recycling USA			
Metals – • Ferrous • Non-ferrous	Non- Regulated			Recycling USA			
Metals – • Ferrous • Non-ferrous	Non- Regulated			Recycling USA			
Metals – • Ferrous • Non-ferrous	Non- Regulated			Recycling USA			
Metals – • Ferrous • Non-ferrous	Non- Regulated			Recycling Canada			



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Recycling Process or Material	Waste Category	Waste Transfer Site or Intermediate Processing Site	Waste Transfer Site or Intermediate Processing Site	Ultimate Disposal Site & Disposal Method
Metals – • Ferrous • Non-ferrous	Non- Regulated			Recycling USA
Solid Waste – • Off-spec Plastic • Off-spec Wood	Non- Regulated Municipal Solid Waste			Municipal Solid Waste USA

## WMMFA – Processor Contract Renewal 2017

The CONTRACT executed for calendar year 2016 is hereby renewed for calendar year 2017 by signature the persons signing below, who warrant they have the authority to execute the contract renewal.

CONTRACTOR - TOTAL RECLAIM Signature 12-15-16 Title Date

Washington Materials Management and Financing Authority Signature

16 1201 Date Title