

# **VOLUME REDUCTION, MERCURY RECOVERY, MERCURY RECLAMATION PROCESSES**



## COMPLIANCE INSPECTION CHECKLIST

	ANNUAL (INS1, INS2)  RE-INSPECTION (FUI)	COMPLAINT/E	DISCOVERY (CI)
AIRS ID#: 0730094 DAT	TE: <u>6/28/2012</u>	ARRIVE: <u>10:45</u>	DEPART:
FACILITY NAME: VE	OLIA ES TECHNICAL-TALLA	HASSEE	
FACILITY LOCATION	: 342 Marpan Lane		
	TALLAHASSEE 32305	5	
OWNER/AUTHORIZEI Email: CONTACT NAME: GI Email: greg.newton@ ENTITLEMENT PERIO	veoliaes.com		PHONE: Mobile: PHONE: (602)233-2955 Mobile: Derating without Entitlement!
PART I: INSPECTION  IN COMPLIANC	COMPLIANCE STATUS (che	·	) SNIFICANT Non-COMPLIANCE
<ul><li>(check  appropriate</li><li>1. Does the facility of reclamation process</li></ul>	ECHNOLOGY – Rule 62-210.30 e box(es))	00, F.A.C.	
F.A.C.? (Rule 62-22. Does this facility e 62-210.300(4)(c)1.  3. Was the highest re Safety and Health vapor as set forth i.  4. Is the area in which enclosed and kept 62-296.417(1)(b)-5. Does this facility can dual air hand b. a single air h.	perate any emissions units other isses and emissions units which are 300(3)(a), or (b), F.A.C., or have 210.300(4)(c), F.A.C.)	te exempt from perme been exempted from the been exempted from 10 tons per year or requal to or less than the ssible exposure limite? (Rule 62-296.417(1) refined in Rule 62-73 rocessing mercury controls? (Check the executy controls?	n permitting under Rule 62-4.040,

#### PART II: CONTROL TECHNOLOGY - Rule 62-210.300, F.A.C. (continued) (check **☑** appropriate box(es)) \*Dual Air Handling Systems 6. Has the owner or operator installed a primary air handling system with air pollution control equipment in order to reduce the mercury content of the air collected during the volume reduction and mercury recovery and reclamation processes? (Rule 62-296.417(1)(c)1., F.A.C.)-----Yes No 7. Is the air collected by the primary system, vented within a fully enclosed area of the facility after the air is filtered through the air pollution control equipment? (Rule 62-296.417(1)(c)2., F.A.C.)------☐Yes ☐ No 8. Once each day, while mercury-containing lamps or devices are being processed, is a sample of air collected from within the fully enclosed area of the facility in which the air collected by the primary air handling system is vented? (Rule 62-696.417(1)(c)3., F.A.C.)------Yes No a) Is the mercury content of the sample determined and compared with the OSHA PEL?------Yes No 9. Does the owner or operator operate, monitor, and maintain the primary system air pollution control equipment in such a manner as not to exceed the OSHA PEL for mercury vapor within the fully enclosed area of the facility in which the air collected by the primary air handling system is vented? (Rule 62-296.417(1)(c)4., F.A.C.)-----☐Yes ☐ No 10. Has the owner or operator installed a secondary air handling system in order to maintain negative pressure in the fully enclosed area of the facility in which the air collected by the primary system is vented? (Rule 11. Has the owner or operator installed, and do they operate, monitor and maintain air pollution control equipment to reduce the mercury content of the air collected by the secondary air handling system? )Rule 62-696.417(1)(c)6., F.A.C.)-----☐Yes ☐ No 12. Is the primary air handling system with air pollution controls independent and separate from the secondary air handling system with air pollution controls? (Rule 62-696.417(1)(c)7., F.A.C.)------Yes No a) Do the primary and secondary air handling systems air pollution controls incorporate carbon filters or equivalent technology?-----☐Yes ☐ No \*\*Single Air Handling Systems with Redundant Mercury Controls 13. Does the owner or operator operate, monitor, and maintain an air handling system with redundant air pollution control equipment in order to reduce the mercury content of the air collected during the volume reduction, and ⊠Yes □ No mercury recovery and reclamation processes? (Rule 62-296.417(1)(d)1., F.A.C.)------14. Does the redundant air pollution control equipment incorporate at least two (2) carbon filters or equivalent technology arranged in series so that the air passes through both filters before being released? (Rule 62-296.417(1)(d)2., F.A.C.)------⊠Yes □ No a) Is each filter designed to ensure compliance with the OSHA PEL for mercury vapor at the emission point in the event of a single filter failure?-----⊠Yes □ No b) Was the highest reported exposure limit observed equal to or less than the OSHA PEL of $1 \text{ mg}/10\text{m}^3$ for mercury vapor?-----⊠Yes □ No 15. As the facility processes any mercury-containing lamps or devices once each day, and while mercury-containing lamps or devices are being processed, is a sample of air collected downstream of the first carbon filter (or equivalent technology) and upstream of the second? (Rule 62-296.417(1)(d)3., F.A.C.)------⊠Yes ☐ No a) Is the mercury content of the sample determined and compared with the OSHA PEL?-----⊠Yes □ No 16. Does the owner or operator, operate, monitor and maintain the air pollution control equipment in such a manner as not to exceed the OSHA PEL for mercury vapor downstream of the first carbon filter (or equivalent technology) and upstream of the second? (Rule 62-296.417(1)(d)4., F.A.C.)------ $\boxtimes$ Yes $\square$ No

PART III: <u>RECORDKEEPING REQUIREMENTS</u> —Rule 6 (check ☑ appropriate box(es))	52-210.300(3)(a)27. & 28., F.A.C. & 62-210.300(	4)(c)1., F.A.C.
(check is appropriate box(es))		
<ol> <li>Does the owner or operator of this facility which is subjinformation that specifies and includes: (Rule 62-296.41 a) the date, place and time of measurement?</li></ol>	quipment?g data and supporting information, and make period of at least five years from the date of	Yes No
		1
PART IV: GENERAL CONDITIONS/MAINTENANCE R	<b>EQUIREMENTS</b> – Rule 62-210.300(4)(e)6., 8.,	& 12., F.A.C.
(check <b>☑</b> appropriate box(es))		
1. Does the owner or energical make a very recognishing offs	et to conduct the specific activity outhorized by	
Does the owner or operator make every reasonable efforgeneral permit in a manner that minimizes adverse effective.		t 
adjacent property, where applicable, and on the environ		
water quality, or air quality?		⊠Yes □ No
2. Does the owner or operator maintain the permitted facil		⊠Yes ☐ No
3. Has the owner or operator allowed the circumvention of		□Yes ⊠ No
4. Has the owner or operator allowed the emission of air p	ollutants as the result of the malfunction of, or	DV. DV.
inoperable condition of applicable air pollution control	devices?	□Yes ⊠ No
PART V: SPECIAL CONDITIONS AND PROCEDURES		3
PART V: SPECIAL CONDITIONS AND PROCEDURES  (check ☑ appropriate box(es))		5
(check <b>☑</b> appropriate box(es))		5
		3
(check ☑ appropriate box(es))  A. New or Modified Process Equipment		5
<ul> <li>(check ☑ appropriate box(es))</li> <li>A. New or Modified Process Equipment</li> <li>1. Since the last inspection has there been</li> </ul>	– Rule 62-210.300(4)(d)4., F.A.C.	⊠Yes □No
(check ☑ appropriate box(es))  A. New or Modified Process Equipment	– Rule 62-210.300(4)(d)4., F.A.C.	⊠Yes □No
<ul> <li>(check  appropriate box(es))</li> <li>A. New or Modified Process Equipment</li> <li>1. Since the last inspection has there been <ul> <li>a) installation of any new process equipment?</li> <li>b) alterations to existing process equipment without</li> </ul> </li> </ul>	- Rule 62-210.300(4)(d)4., F.A.C.	⊠Yes □No
<ul> <li>(check ☑ appropriate box(es))</li> <li>A. New or Modified Process Equipment</li> <li>1. Since the last inspection has there been <ul> <li>a) installation of any new process equipment?</li> <li>b) alterations to existing process equipment without</li> <li>c) replacement of existing equipment substantially of</li> </ul> </li> </ul>	- Rule 62-210.300(4)(d)4., F.A.C.  replacement?	□Yes ⊠No
<ul> <li>(check ☑ appropriate box(es))</li> <li>A. New or Modified Process Equipment</li> <li>1. Since the last inspection has there been <ul> <li>a) installation of any new process equipment?</li> <li>b) alterations to existing process equipment without</li> <li>c) replacement of existing equipment substantially or recent notification form?</li></ul></li></ul>	replacement?lifferent than that noted on the most	
(check ☑ appropriate box(es))  A. New or Modified Process Equipment  1. Since the last inspection has there been a) installation of any new process equipment? b) alterations to existing process equipment without c) replacement of existing equipment substantially or recent notification form? d) If you answered YES to any of the above, did the	replacement?different than that noted on the most	□Yes ⊠No
<ul> <li>(check ☑ appropriate box(es))</li> <li>A. New or Modified Process Equipment</li> <li>1. Since the last inspection has there been <ul> <li>a) installation of any new process equipment?</li> <li>b) alterations to existing process equipment without</li> <li>c) replacement of existing equipment substantially or recent notification form?</li></ul></li></ul>	replacement?	□Yes ⊠No
(check ✓ appropriate box(es))  A. New or Modified Process Equipment  1. Since the last inspection has there been	replacement?	□Yes ⊠No □Yes ⊠No
(check ✓ appropriate box(es))  A. New or Modified Process Equipment  1. Since the last inspection has there been	replacement?	□Yes ⊠No □Yes ⊠No
<ul> <li>(check  appropriate box(es))</li> <li>A. New or Modified Process Equipment</li> <li>1. Since the last inspection has there been <ul> <li>a) installation of any new process equipment?</li> <li>b) alterations to existing process equipment without</li> <li>c) replacement of existing equipment substantially or recent notification form?</li> <li>d) If you answered YES to any of the above, did the notification form and appropriate fee (Rule 62-4.</li> </ul> </li> </ul>	replacement?	□Yes ⊠No □Yes ⊠No
(check ✓ appropriate box(es))  A. New or Modified Process Equipment  1. Since the last inspection has there been	replacement?	□Yes ⊠No □Yes ⊠No
<ul> <li>(check  appropriate box(es))</li> <li>A. New or Modified Process Equipment</li> <li>1. Since the last inspection has there been <ul> <li>a) installation of any new process equipment?</li> <li>b) alterations to existing process equipment without</li> <li>c) replacement of existing equipment substantially or recent notification form?</li> <li>d) If you answered YES to any of the above, did the notification form and appropriate fee (Rule 62-4. local program office?</li></ul></li></ul>	replacement?	□Yes ⊠No □Yes ⊠No
(check ✓ appropriate box(es))  A. New or Modified Process Equipment  1. Since the last inspection has there been	replacement?	□Yes ⊠No □Yes ⊠No

### **COMMENTS:**

I met with Randy Williams. Mr. Williams provided monitoring records and monitoring equipment calibration records. No issues were noted. Daily sample point data (since the last inspection) appeared to be under the OSHA PEL threshold limit.

Afterwards we observed the facility equipment. No equipment changes were noted, with the exception that the facility was now attempting to reinstate a compact flourescent light bulb processing area.

For this new process area, a processing station consisting of a steel rectangular box was present. The box is a partial enclosure where the glass portion of the bulb would be separated from the base (screw) portion. An open area on top of the box provided employee access. The box was connected to a duct pipe that leads to a filter, then two carbon canisters connected in series, along with an induced draft fan. The fan provided a localized negative pressure work area inside the box.

After filtration, the exhaust was vented through a stack pipe to the inside of the building. In addition, a pull-over curtain was installed between the processing equipment area and the remaining interior of the building. Due to large gaps at the head and base, the curtain did not appear to fully provide a negative pressure enclosed room area.

The carbon filters did not yet have a sampling port installed. Mr. Williams indicated that the new area was experimental and that initial processing had "started this week." The new processing line was not in operation during the inspection.

I recommended that the area be fully enclosed for negative containment and a sampling port be installed between the filters.

#### Recommendations:

Ms. Dunwoody was contacted by phone on 7/20/2012 for the expired permit. She indicated she would look into the issue.

A new processing line for compact flourescent light bulbs appeared to be installed and is under consideration at the facility. Please submit the appropriate revised Permit application information for the additional unit (new equipment installation).

Monitoring records should be established and maintained for the new compact bulb processing line. A carbon canister monitoring port should be properly installed for the new control equipment.

Possible violations or issues:

The permit entitlement has expired.

The facility should submit permit modification information for the new CF bulb processing line.