Properly Managing E-Cigarettes & Vaping Waste Streams



#### **Don Stillwaugh**

**Environmental Specialist 2** 

**Pinellas County Department of Solid Waste** 

NEWMOA - NERC Webinar 27 April 2023



# **Federal Legislation**



#### **Resource Conservation and Recovery Act**

-Principal Federal Law governing the storage & disposal of solid and hazardous waste

# Florida Legislation



In 1985 Florida received authorization to establish its own hazardous management and regulatory program

Florida adopted portions of the Federal Regulations in its Florida Administrative Code (FAC) Rule 62-730

# It's a Florida thing



**Used Oil/Filters** 

**Mercury-containing Lamps** 

**Weekly Inspection logs** 

**Disposal Records Requirement (VSQG)** 

# Florida Legislation



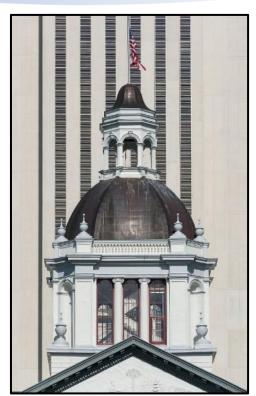
#### **Small Quantity Generator Program**

F.S. 403.7225

F.S. 403.7226

F.S. 403.7234

F.S. 403.7236



DXR CC BY-SA 4.0



**Assess** 

**Notify** 

Verify



**Record Data** 

**Educate** 

**Offer Compliance Assistance** 



All 67 Counties in Florida have SQG Programs

**Wide Variety of Arrangements** 

With & Without Enforcement



**Total Facilities.....248,000+** 

**Counties with as few as.....13, 17, 18** 

Counties with as many as.....15,000+

# **Pinellas County SQG Program**





956,615 (2021)

Table 1. Density Measures and Rank

Rank	Total Land Area <sup>1</sup>		Excluding
	Density	County	Density
1	3,348	Pinellas	5,070
2	1,445	Broward	4,008
3	1,367	Seminole	3,639
4	1,315	Miami-Dade	2,325

# **Pinellas County SQG Program**





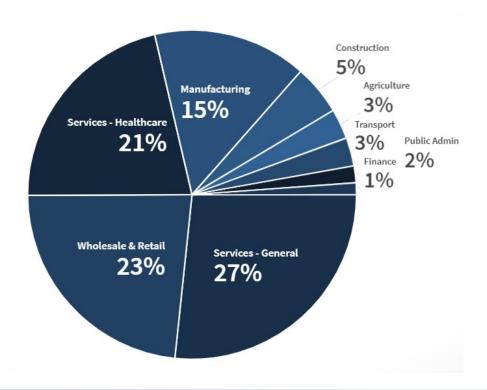
### No County Business License

Total employer establishments (2020) – 29,940\*

\*https://www.census.gov/quickfacts/pinellascountyflorida

# **Pinellas County SQG Program**







**Dumpster – size, frequency of collection** 

**Recycling – which materials? other opportunities?** 

**Product Substitution – reduce regulated waste streams** 





Where Does It Go? Search Tool

**Clean Marina (Liaison role)** 

**Charity Free Disposal Waiver** 



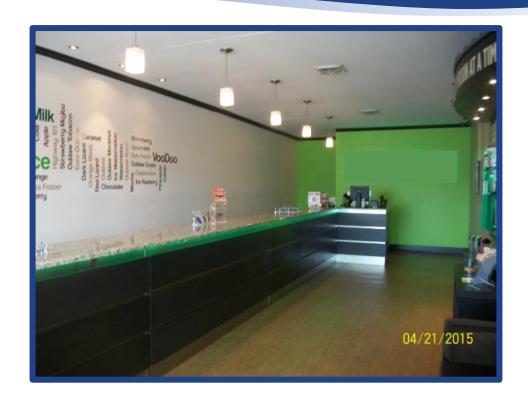


















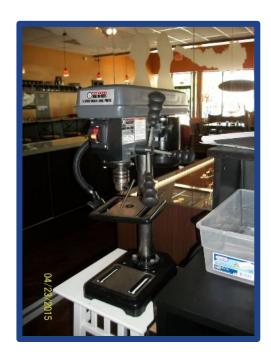


















Image courtesy Cuttwood Vapors



### clue·less

[ˈklooləs] 📢

#### ADJECTIVE

having no knowledge, understanding, or ability:







https://pinellas.gov/guideto-electronic-nicotinedelivery-system-disposal/



#### FDA "Deeming Rule"

Effective 8 August 2016

Extended FDA's authority to cover ENDS, E-liquids, components and parts...

- > Tobacco Product Retailer
- > Tobacco Product Manufacturer
- **>** Both

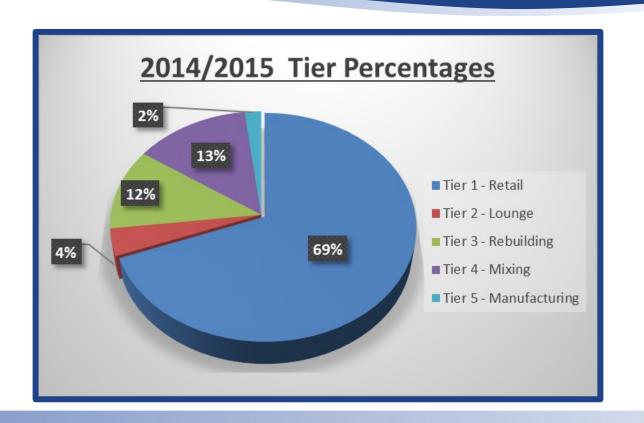
Retailers & Manufacturers are subject to inspection by FDA



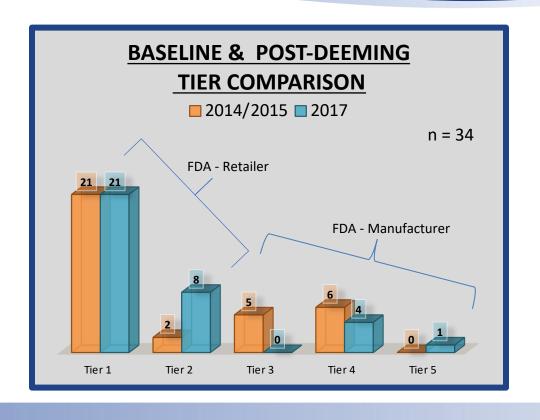














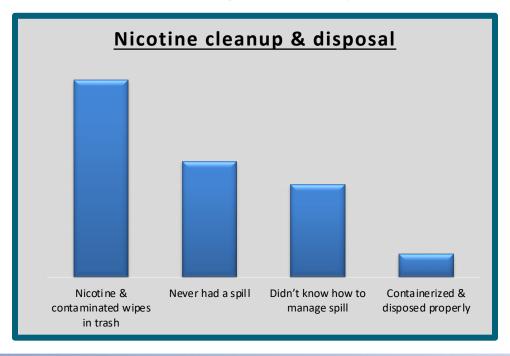
Post-"Deeming Rule" inspections

"How do you manage...."

- Customer returns?
- Expired products?
- Spills/breakages?



#### Post-"Deeming Rule" inspections









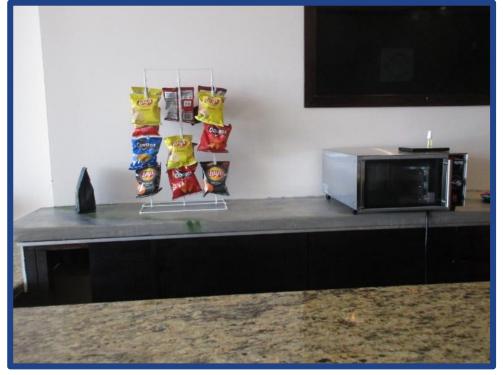


































































Pinellas	*	Booken Ware Assessment Incident Small Quantity Geograph Peoples 300: 112° August North Sc. Petendorg, FL. 33714 (127) 454-7500
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	As a Reco Management Practice of water street determination should	
	Across Case own to capty of both product and propolitics page to disease be depressated to be considered expe- of providing	
	Used Oil Management:  "Used oil only or containers that are not concluded inside a resum- protected from the oparties.  "Used oil onlike or possiblese must be clearly, beliefed with the "Used oil onlike or possiblese must be clearly, beliefed with the "I lead oil oil management for are not this block oil and treat be rather, such as adold concrete or against, with assensing on to told USE oil for softeners for beinging constraint within the	cods "Usual CNI."  ratored on an elf-implementals  common that has the common
	Used Oil Filter Management:  Ded oil filter management:  Ded oil filter mane be stored in above getand consistent that service institute of affects on charmonisms out to Used oil filter containers must be scaled or otherwise primaries of importantible and face.  Ded of Oil filter containers must be clearly lawled with the wor	has really all leakage. I have needer and street on an
	Mercury-Containing Lamp Munagement:  Mercury-containing loops may just be disposed of in regular in permitted bacility.  Large must be started in a closus container labeled Topest Me.  [1] Broken loops must be strend along started in a square, light-Warden Mercury-Consensing Lattre Set Reporting.	roury Lamps."
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Additional Co.	servery and Nation	
Conducted By:	Received hy:	
	SQG Sequence	Facility Contact





Waste Disposal Documentation was not available for review. Waste disposal documentation must be retained on-site for a minimum of three (3) years.

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Additional Comments and Notes:

Discussed E-juice with Nicotine as Potentially Acute Hazardous Waste

- ENDS brochuse provided

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ENDS brochuse provided & discussed

Discussed "Tobacco Retailer" us "Tobacco Manufacturer" FDA "Deening Rule"





































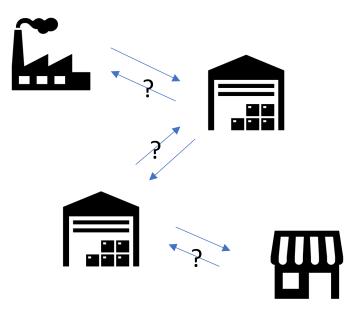


























VSQG to LQG Consolidation







# **Business Day Collection Event**







# **Business Day Collection Event**







## **Business Waste Collection Event**



Name of Waste	Quantity	Contract Price	TOTAL COST
Tox (19 (E-ciss)	215	1.45/16	2.90
Dulbs	142	0.60/16	8.40

### **Household Hazardous Waste**







#### **Household Hazardous Waste**







Images courtesy – Jennifer Volkman – Minnesota Pollution Control Agency

#### **Household Hazardous Waste**



#### Appendix 6.31 Electronic Cigarette Disassembly Guidelines

12/16/2022

Tools – 10 specific tools

Containers – 6 specific types

#### Disassembly:

- General SOP
- For metal round models with plastic ends
- For metal short rectangular models with screws
- For metal long flat models without screws
- For plastic long flat models
- For cigarette look-alike models
- For models that cannot be disassembled





#### "Curiouser and curiouser!"

-Lewis Carroll,
Alice's Adventures in Wonderland

Sir John Tenniel – Wikimedia Commons
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https://pinellas.gov/guideto-electronic-nicotinedelivery-system-disposal/

