

Thurston County Environmental Health

Silver Recovery Unit



Dental Industry in Thurston Co.

- Twenty-two (22) of the 72 dental facilities (31%) were in compliance with state and local regulations, while 50 (69%) were not.
- The most common compliance issues involved improper silver recovery systems and improper scrap amalgam disposal.
- Thirty three (33) businesses contained improperly maintained or inadequate silver recovery systems for x-ray. Waste
- Eight (8) others improperly discharged spent x-ray chemicals into the municipal sewer or septic system.



Action for high rate of non compliance regarding silver waste?

- Thurston County Hazohouse and the LOTT Alliance Budd Inlet Treatment Plant installed Mark-9 silver recovery systems.
- These systems allow for free waste management service for local businesses that do not generate enough waste to maintain a cost effective contract with an environmental firm.

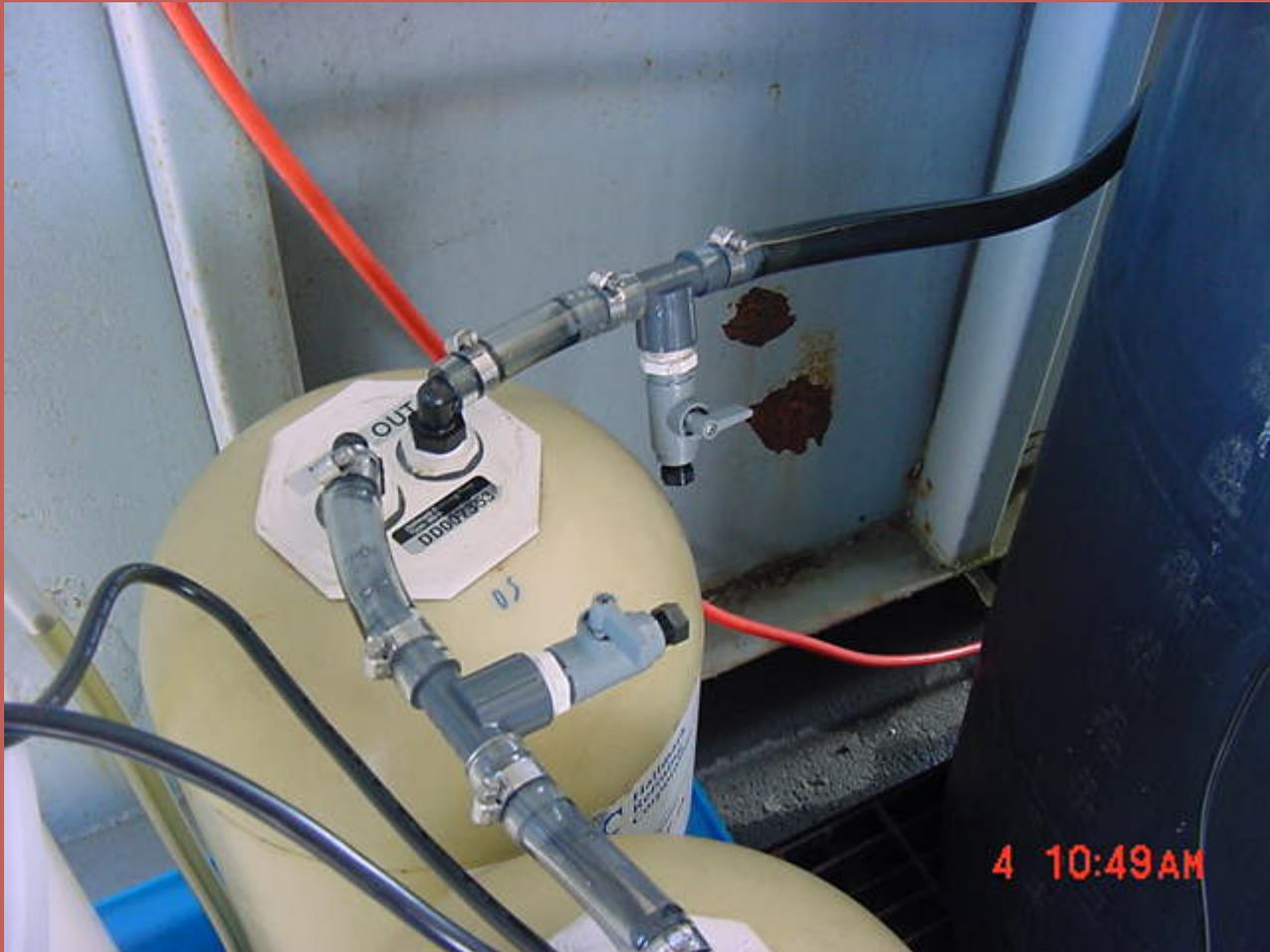


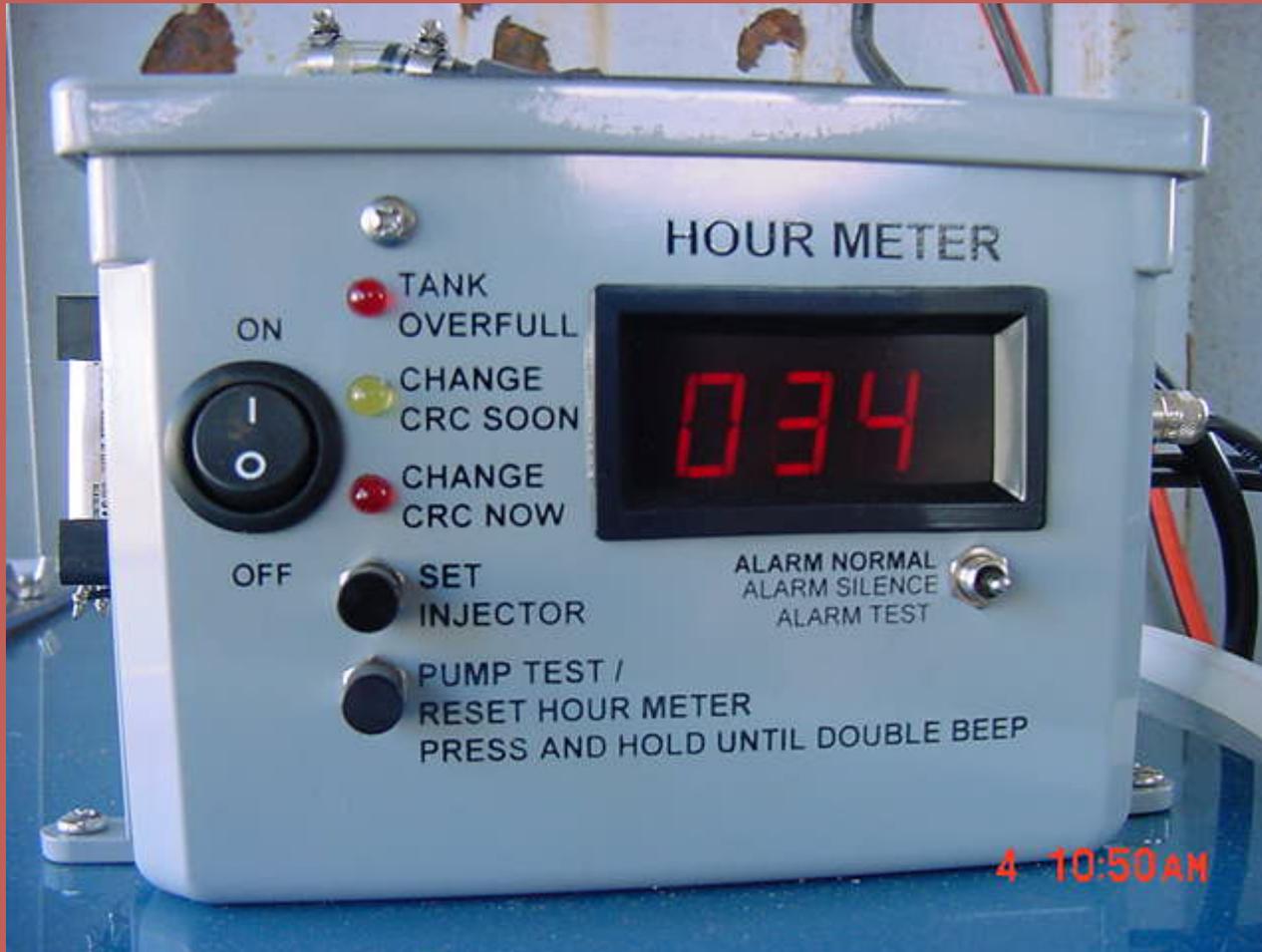
Mark-9 Silver Recovery System













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Thurston County HazoHouse
2418 Hogum Bay Road NE
Olympia, WA 98506

NAME		DATE
ADDRESS		
CITY, STATE, ZIP		
QUAN.	DESCRIPTION	
1	Spent Silver Fixer	
2	Spent Silver Recovery Unit	
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KEEP THIS SLIP FOR REFERENCE



FUNDING

Price of the unit - \$1215

- Ecology CPG (75%) = \$922
- County share (25%) = \$293

- Included in the cost of the unit is maintenance and sampling of the waste stream.



RESULTS

- During the first six months of operations, both sites collected approximately 300 gallons of silver bearing waste.
- 200 oz of silver for every 600 gallons of fixer.
- The contract was based on the price of silver at \$11.14 per ounce.
- Expected profit of \$800 dollars after 400 hours of service.



Information

 More information on the silver recovery system and the Dental Technical Assistance Report, contact Brad Zulewski at 360-754-4111 ext. 6451

www.thurston.wa.us/health/ehhw/TechAsst.html

