

The History, Development and Costs of the
Permanent HHW Collection Center at the Buckman
Road Recycling and Transfer Station

*New Mexico SWANA Roadrunner Chapter Annual Meeting
December 9, 2016*

Presented by:

Randall Kippenbrock, P.E.

Santa Fe Solid Waste Management Agency

Brief History

- Prior to 1965 – Management of solid waste was considered the responsibility of state and local governments
- 1965 – Solid Waste Disposal Act – To promote better solid waste disposal methods by providing grants to state and local governments for research and technical assistance
- 1970 – Resource Recovery Act
- 1976 – Resource Conservation and Recovery Act

Brief History

- RCRA – Primary goals
 - Protection of human health and the environment
 - Reduction of waste and conservation of natural resources
 - Reduction/elimination of hazardous waste generation
- Act – divided into 10 subtitles (A-J)
 - Subtitle C – Hazardous waste management
 - HHW – 40 CFR 261.4(b)(1)
 - Subtitle D – Nonhazardous solid waste management
 - October 9, 1993

Brief History

- 1995 – Santa Fe Solid Waste Management Agency
 - Created by the City of Santa Fe and Santa Fe County via Joint Powers Agreement
 - Six board members (three city councilors, three county commissioners)
- 1997 – Caja del Rio Landfill
- 1998 – City of Santa Fe Transfer Station

Brief History

- 2000– First annual HHW collection event
- 2006 – 7th annual HHW collection event
 - 946 vehicles

Brief History

- 2006 – Agency entered into a 20-year lease agreement with the City of Santa Fe for the transfer station – Buckman Road Recycling and Transfer Station (BuRRT)
 - Permanent HHW collection center (future)
 - E-waste collection year round
- 2008 – Created an HHW handler position
 - Manage the CFC recovery, scrap metal from the tipping area, and E-waste

Brief History

- 2009 – Agency entered into a contract with a consulting firm for an HHW collection center
 - Data gathering
 - Evaluation of alternatives
 - Development of preliminary site plan
 - Final design and permitting
 - Preparation of HHW disposal bid document
 - Preparation of site operating plan
 - Bidding and construction management
 - contingency

Brief History

- 2009 – Agency’s board requested ways to improve ways for recycling customers to reach the recycling drop-off center without going through the same lane as trash customers
- 2009 – Agency’s board approved the site locations for an HHW permanent collection center and a recycling drop-off center
- 2011 – Commenced construction
- September 14, 2012 – Grand opening of the HHW collection center

Construction Cost Summary

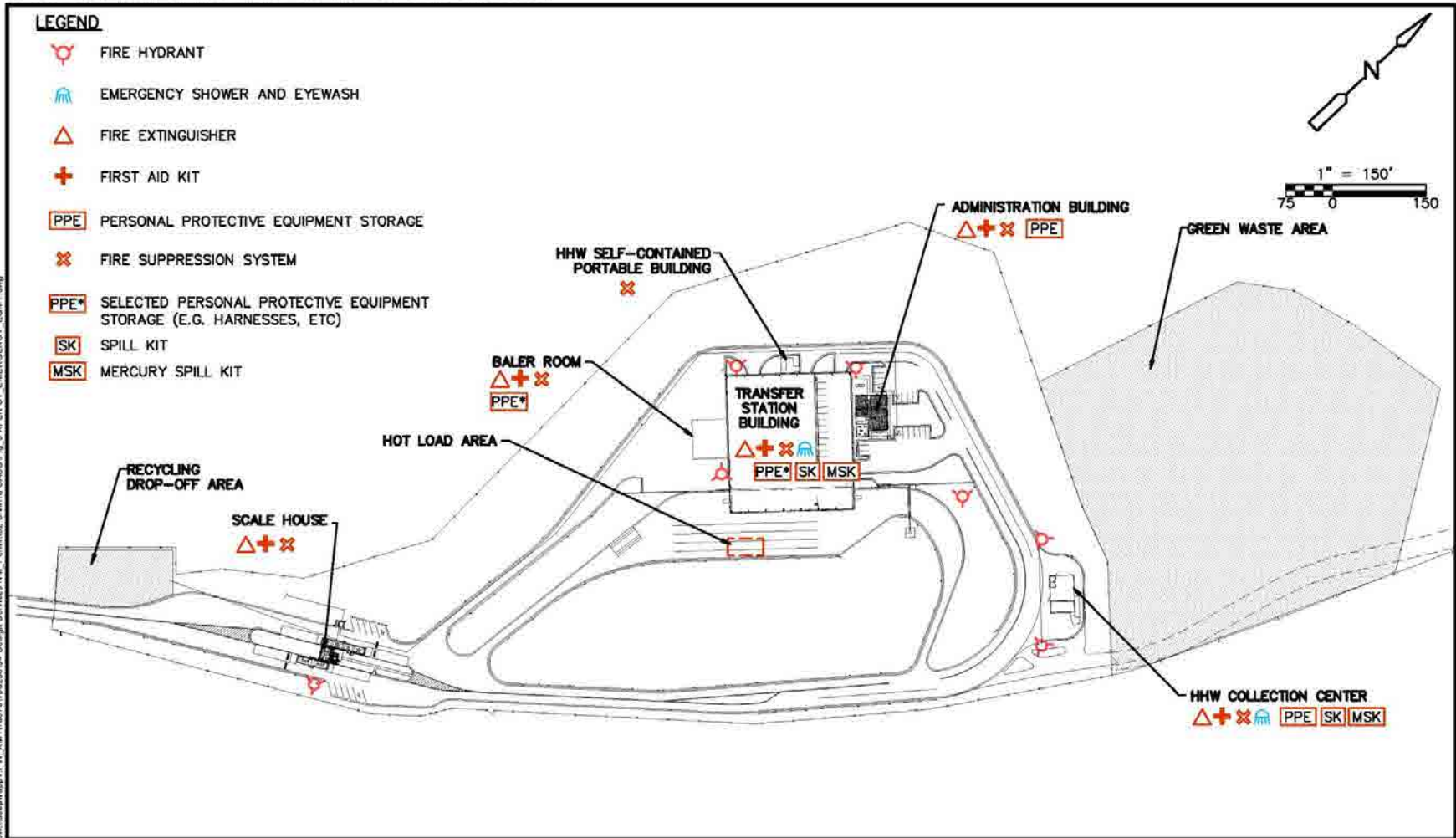
- Engineering Services – \$227k
 - \$94.58
- HHW Collection Center – \$670k
 - \$280/sf
- Recycling Drop-Off Area – \$105k
 - \$10.94/sf

BuRRT Facility



BuRRT Facility Site Plan

© 2016 CDM SMITH ALL RIGHTS RESERVED. REUSE OF DOCUMENTS, THESE DOCUMENTS AND DESIGNS PROVIDED BY PROFESSIONAL SERVICE, INCORPORATED HEREIN ARE THE PROPERTY OF CDM SMITH AND ARE NOT TO BE USED, IN WHOLE OR PART, FOR ANY OTHER PROJECT WITHOUT THE WRITTEN AUTHORIZATION OF CDM SMITH.



XREF: jobname: S02PL000_ASHPL000_AAMP000_A02P000_XBASECONT_S0APL000_Images: []
 Last saved by: WUNDERSONCA, Time: 6/8/2016 1:47:55 PM
 pwwdsapwsp01\FWJ\SM11067810923004_Design_Services\NM_Permit02_Cuante CAD\Fig_3_XREF_ST_EMERGENCY_EQMNT.dwg



SANTA FE SOLID WASTE MANAGEMENT AGENCY
 BUCKMAN ROAD RECYCLING & TRANSFER STATION
 SANTA FE, NEW MEXICO

Figure No.A-1
 Emergency Equipment Locations
 June 2016

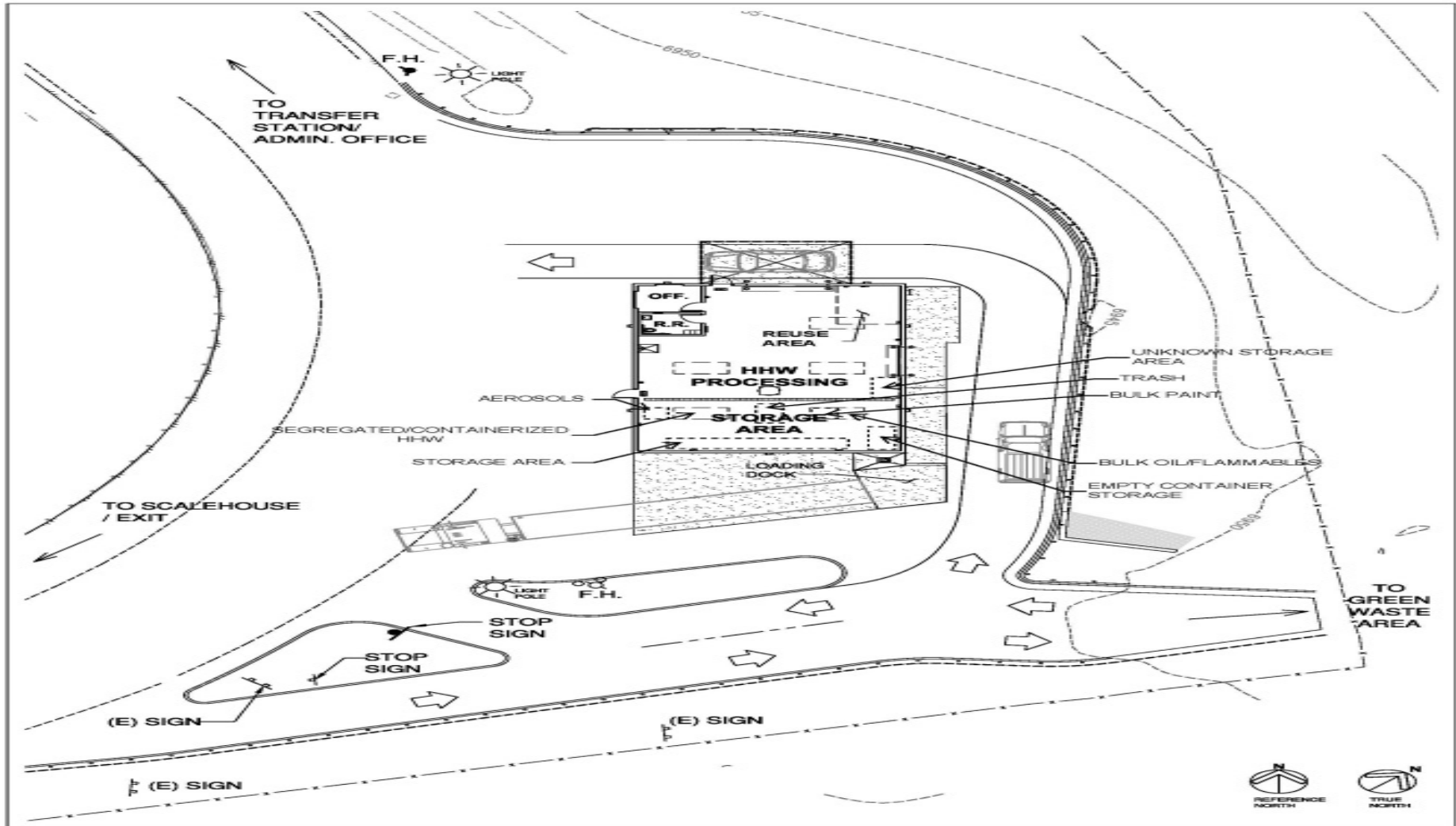
Recycling Drop-Off Area



HHW Collection Center

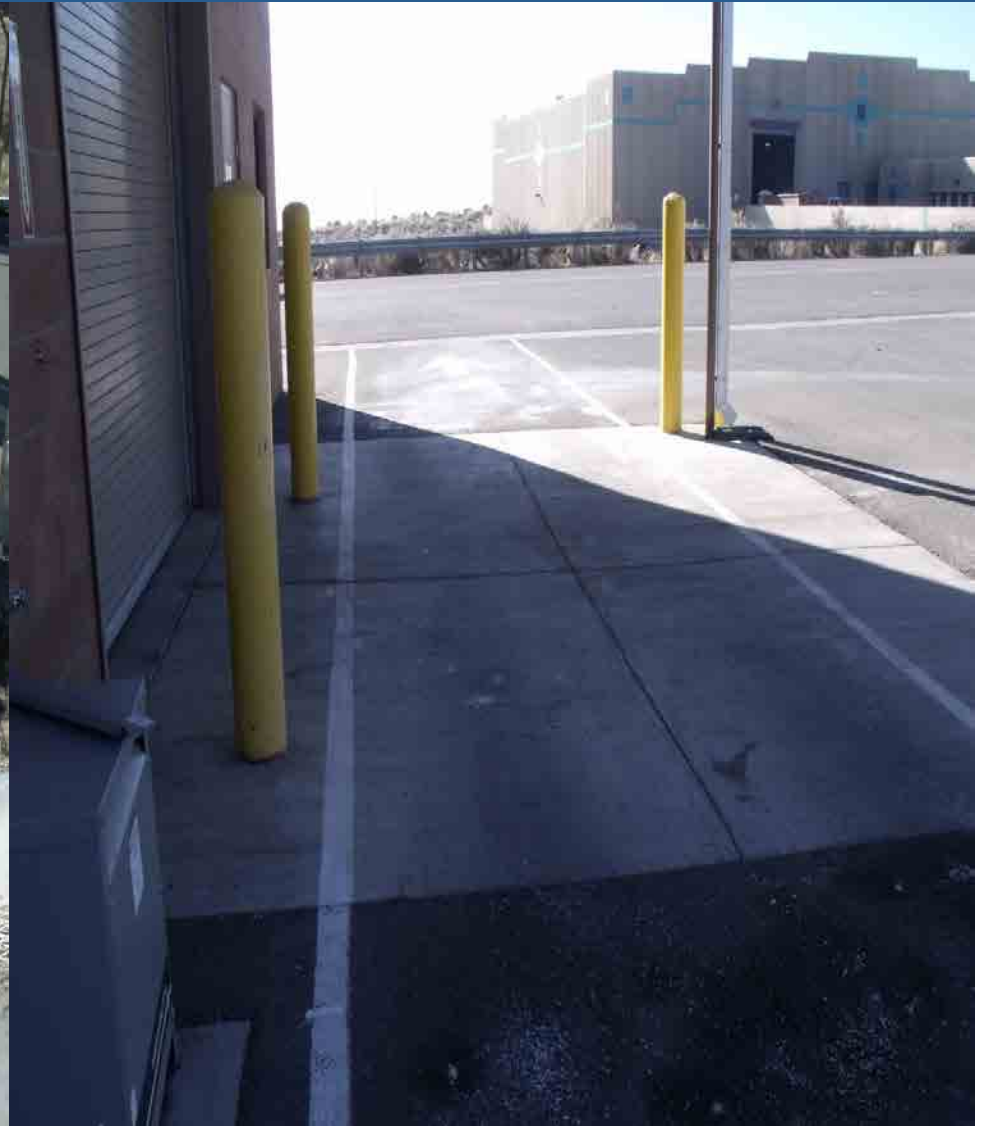


HHW Collection Center

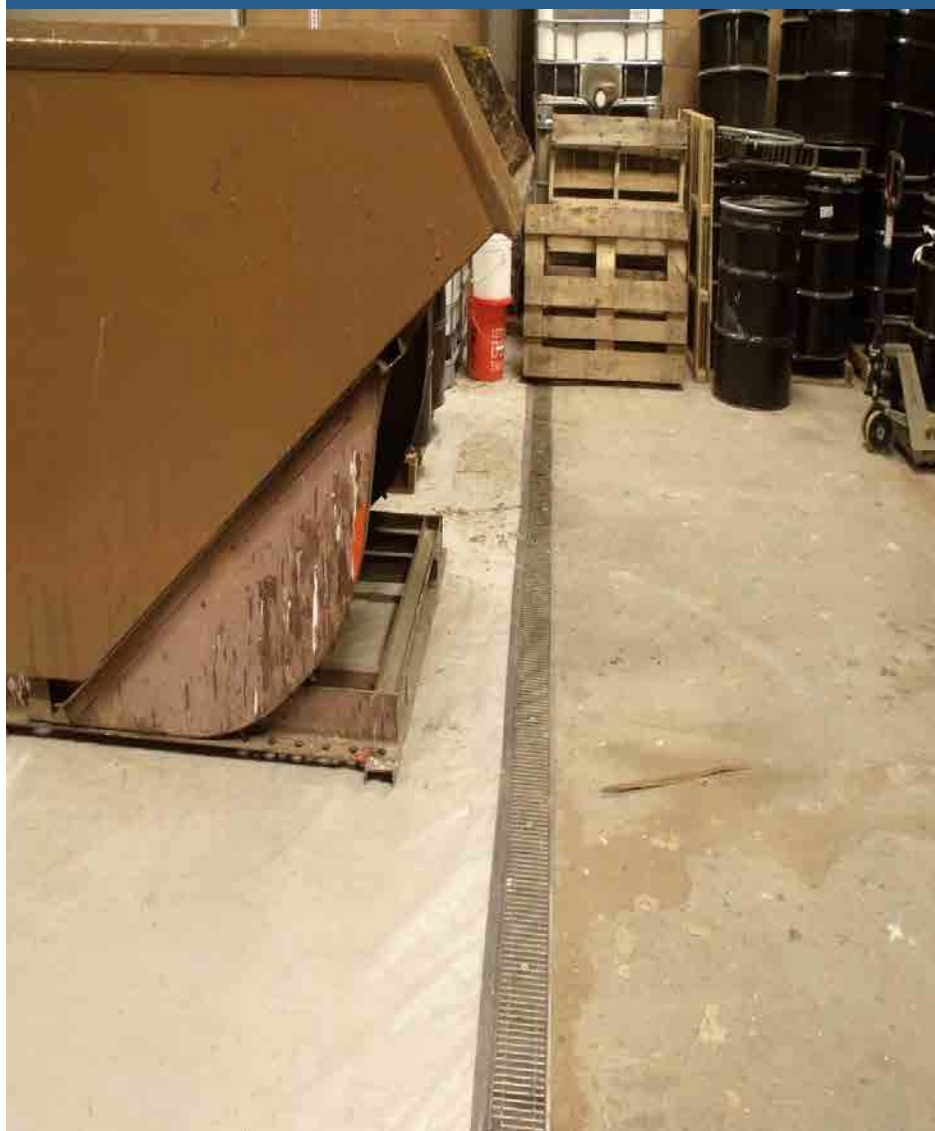


 <p>ARCHITECTS ENGINEERS PLANNERS</p> <p>J.R. Jarama & Associates 2500 COTUIT BLVD. SUITE 100 MILITARY TRAIL SANTA FE, NM 87507 505.825.1234</p>	<p>PROPOSED HHW PROJECT FOR:</p> <p>SFSWMA HHW COLLECTION FACILITY</p> <p>BUCKMAN ROAD RECYCLING AND TRANSFER STATION 2600 BUCKMAN ROAD SANTA FE, NEW MEXICO 87507</p>		<p>FACILITY SITE PLAN</p> <p>JRMA Project No. 4116</p> <p>A1.1a</p>
	<p>1</p>		

Emergency Features



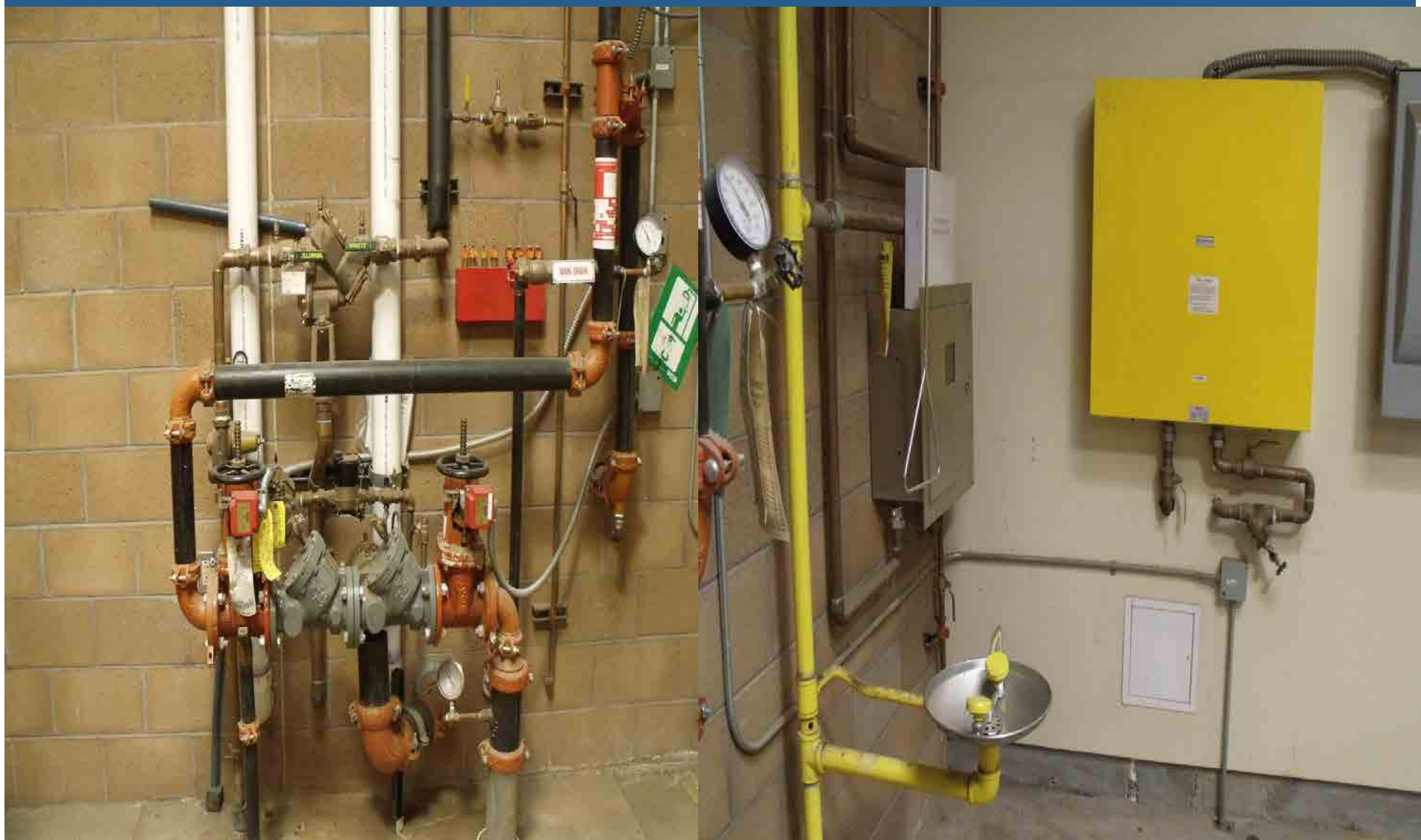
Emergency Features



Emergency Features



Emergency Features



Emergency Features



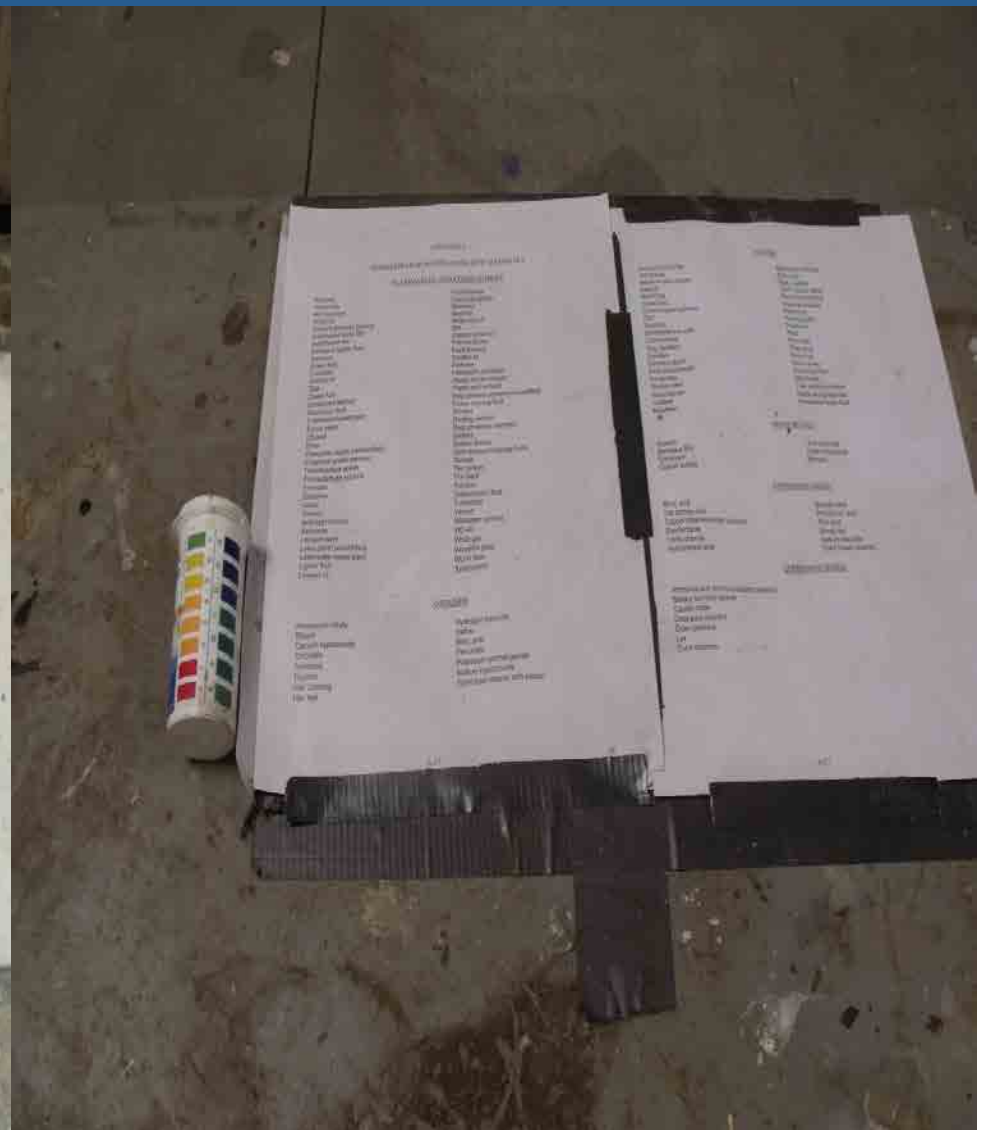
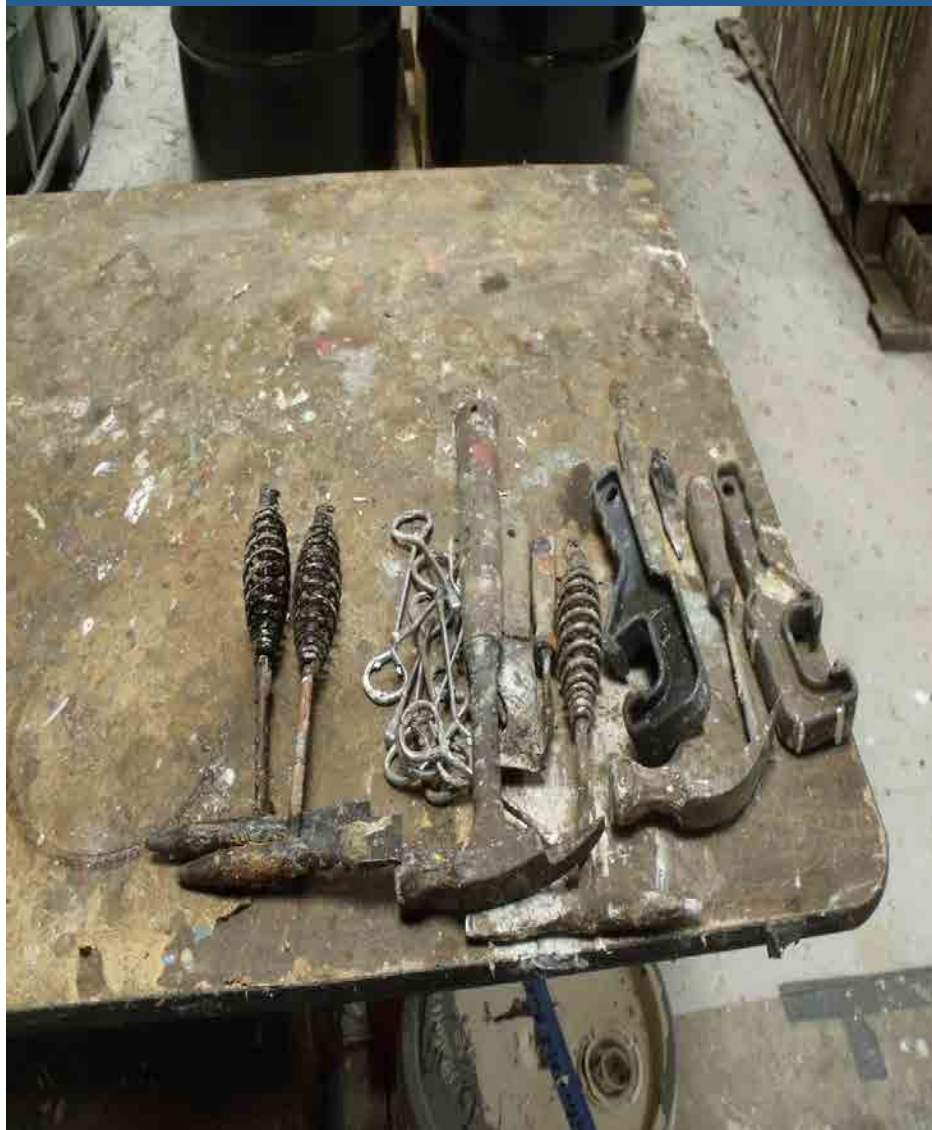
Emergency Features



Health & Safety Features



Tools and Equipment



Tools and Equipment



Tools and Equipment



Containers and Labels



Labels



Labels



HHW Collection Center Operations Plan

- General Information
- CESQG
- Operational Plan
- Preparedness and Prevention
- Inspection
- Training
- Recordkeeping and Reporting

HHW Program Analysis (2012-Present)

Year	Number of Customers	Net Cost	Net Cost/Pound
2012	487	\$31,489	\$1.71
2013	1,236	\$95,397	\$1.45
2014	1,383	\$99,714	\$0.96
2015	1,090	\$80,337	\$1.06
2016	976	\$83,689	\$0.89
Overall Total		Cost /Customer (vehicle)	\$77.43
		HHW Cost /Pound	\$1.12
		Pound/Customer	69.2

Amnesty Events – 3rd Party

Year	2004	2005	2006	2007	2008	2009
Participation	809	-	946	-	686	694
Weight Processed	145,141	175,607	185,507	130,037	186,566	70,553
Annual Cost	\$52,346	\$55,502	\$71,967	\$54,590	\$44,174	\$54,525
Cost per Customer	\$60.70	-	\$76.08	-	\$64.39	\$78.57
Cost per Pound	\$0.36	\$0.32	\$0.39	\$0.42	\$0.24	\$0.77

Amnesty Events – 3rd Party

Year	2011	2014 Spring	2014 Fall	2015	2016
Participation	627	251	252	296	241
Weight Processed	71,335	14,171	16,983	15,944	15,944
Annual Cost	\$45,028	\$21,895	\$13,415	\$17,615	\$17,615
Cost per Customer	\$71.82	\$87.23	\$53.23	\$59.51	\$73.09
Cost per Pound	\$0.63	\$1.55	\$0.79	\$1.10	\$1.10

HHW Collection Center

Year	2012 Sept.	2013	2014	2015	2016 Nov 19
Participation	487	1,236	880	794	735
Weight HHW Processed	16,004	58,973	56,323	51,599	53,253
Weight Used Oil Processed	2,456	6,664	16,088	8,536	24,768
Annual Cost	\$25,063	\$73,548	\$42,370	\$40,860	\$46,708
Cost per Customer	\$51.47	\$59.50	\$48.15	\$51.46	\$63.55
Cost per Pound	\$1.36	\$1.12	\$0.59	\$0.68	\$0.60

Amnesty Events and HHW Collection Center

Year	2012 Sept.	2013	2014 2 events	2015 1 event	2016 1 event Nov 19
Participation	487	1,236	1,383	1,090	976
Weight Processed	18,460	65,637	103,565	76,079	93,965
Annual Cost	\$25,063	\$73,548	\$77,680	\$58,476	\$64,323
Cost per Customer	\$51.47	\$59.50	\$56.17	\$53.65	\$65.91
Cost per Pound	\$1.36	\$1.12	\$0.75	\$0.77	\$0.68

Summary

- Pros
 - Lower cost per customer (vehicle)
 - High customer service with little wait time
 - Convenience with known operating hours
- Cons
 - High capital cost expenditures
 - Potentially long approval time for permitting, etc.
 - Ongoing O&M
- Combination of permanent HHW collection facility with annual events is doable

Thank You!

Randall Kippenbrock, PE
rkippenbrock@sfswwa.org

Danita Boettner, PE
dboettner@sfswwa.org

Questions? Email us at: info@sfswwa.org

