Marine Flare Pilot Collection Events

Huy Le, San Francisco Department of Environment
Bruce Fritz, Alameda County HHW
Wesley Won, San Mateo County EHS
One of our readers summed up the problem: "The Coast Guard told us to take them to the Fire Department. The Fire Department told us to take them to the Hazardous Materials Recycling Center" "The Hazardous Materials Recycling Center said they won't take explosives. We tried to donate them to sail/boating instruction groups…who all stated they had more than enough for their training. The (stores) that sell the flares don't have an answer, (they) are happy to replace my combustible flares with electronic flares . . . leaving us still with the problem of old flares."

Excerpt from Latitude 38, a Bay Area yachting magazine
What Are Boaters Doing With Them?
Barriers to Marine Flare Collection

- Storage Requirements
- Permits and Approvals
- Transportation Hurdles
- Cost
Alameda and San Mateo County
• $59K - HD27 Regional Grant

Alameda County
• $49K – HD29 Individual Grant

City & County of San Francisco
• $30K – HD29 Individual Grant
San Mateo County – November 2nd
Pilot Collection Event Results

City & County of San Francisco
• 51 Boaters Attended
• 2,175 Estimated Number of Flares Collected

Alameda County (2 events)
• 49 Boaters Attended
• 2,638 Estimated Number of Flares Collected

San Mateo County (2 events)
• 41 Boaters Attended
• 1,088 Estimated Number of Flares Collected
Survey Results – How Many Flares?

How many marine flares do you carry on your boat at any given time?

Number of Marine Flares

- 0-3: 14
- 4-6: 39
- 7-9: 40
- 10+: 41

Number of Respondents
Prior to this event what have you done with expired or unwanted marine flares?

- **Dispose of in landfill bin**: 1
- **Keep as backup on boat or dock box**: 86
- **Shoot them in air**: 11
- **Other**: 41

**Number of Respondents**
5 Collection Events

901 Flares Collected

135 Boaters Served

$77,062 Total Cost

Cost/Flare: $13
Cost/Boater: $570
Lessons Learned

• Appointment system and drop-ins
  o Fewer responses than expected

• Site choice
  o Control access and foot traffic
  o Plan for contingencies

• Regional multi-collection event
  o Manageable
  o Can save significant cost

• Outreach Efforts
  o Budget for media buy
Next Steps
Questions?

**Huy Le**, SF Department of the Environment  
(415) 355-3760  
Huy.Le@SFGov.org

**Bruce Fritz**, Alameda County HHW Program  
(510) 693-7525  
Bruce.Fritz@acgov.org

**Wesley Won**, San Mateo County Environmental Health Services  
(650) 655-6217  
wwon@smcgov.org
Collection Buckets for Expired Marine Flares
Expired Marine Flares at the San Francisco Collection Event
Hazardous Waste Label on Bucket
Approach to the San Francisco Collection Event
Sign for the Alameda Collection Event
Worker at a Collection Event
Buckets of Expired Flares at a Collection Event
A Degraded Expired Marine Flare