



U.S. Department
of Transportation

1200 New Jersey Avenue SE
Washington, DC 20590

**Pipeline and Hazardous
Materials Safety
Administration**

AUG 03 2011

Mr. Billy Puk
HHWCF & Operation Manager
Recology San Francisco
501 Tunnel Avenue
San Francisco, CA 94134

Ref. No.: 11-0136

Dear Mr. Puk:

This responds to your June 9, 2011 letter regarding the requirements under the Hazardous Materials Regulations (HMR; 49 CFR Parts 171–180) applicable to the transportation of household hazardous wastes, specifically aerial marine flares. You state that your organization, the Household Hazardous Waste Collection Facility for San Francisco, California, regularly collects unwanted and expired aerial marine flares from the general public in order to properly treat and dispose of them. Further, you cite an interpretation letter (09-0289) PHMSA previously issued which discussed household hazardous waste transported by a municipal government agency using either its own employees or independent contractors employed by the municipal government agency, and the applicable requirements of the HMR. Specifically, you ask whether the transportation of a consolidated household hazardous waste shipment of aerial marine flares from a collection center by a third party to a treatment, storage, and disposal facility (TSDF) for a final disposal is excepted from the HMR.

The answer is no. The exception provided in § 173.12(g) does not apply to the transportation of a consolidated household hazardous waste shipment from a collection center by a commercial carrier to a TSDF. However, the transportation of consolidated household hazardous waste by a government employee from the collection center to a TSDF, solely for noncommercial government purposes, is not “commercial” transportation for purposes of the HMR and, therefore, is not subject to regulation under the HMR (see § 171.1(d)(5)).

I hope this satisfies your inquiry. Please contact us if we can be of further assistance.

Sincerely,

T. Glenn Foster
Chief, Regulatory Review and Reinvention Branch
Standards and Rulemaking Division

Nickels
\$173.12(g)
Exceptions
11-0136

6/9/11

Drakeford, Carolyn (PHMSA)

From: Betts, Charles (PHMSA)
Sent: Wednesday, June 08, 2011 5:12 PM
To: Drakeford, Carolyn (PHMSA)
Subject: FW: Request: waste Aerial / Marine Flares HMR transportation interpretation letter

From: Billy Puk [<mailto:cpuk@recology.com>]
Sent: Wednesday, June 08, 2011 4:37 PM
To: Betts, Charles (PHMSA)
Cc: Lynch, Robert (PHMSA); 'Vivian Matuk'; Antonia Becker; Martyn.Rich@epamail.epa.gov
Subject: Request: waste Aerial / Marine Flares HMR transportation interpretation letter
Importance: High

Dear Mr. Charles Betts:

My name is Billy Puk. I am the Household Hazardous Waste (HHW) Collection Facility (HHWCF) and Operation Manager at Recology San Francisco. Recology San Francisco operates the Municipal Solid Waste Transfer Station and Permanent HHWCF in San Francisco, CA. Along with several interested parties focusing on the growing issue of proper disposal on unwanted or expired aerial/marine flares, I request your expertise to interpret or resolve our current obstacle on the safe transportation of such flares under the current federal hazardous material transportation (HMR) rules. By using the word "unwanted" in this context, the flares are still functional and non-expired, but the generator/owner just does not want them and declares the flares as waste.

The CA Department of Toxic Substances Control (DTSC), California Department of Boating and Waterways, CalRecycle, CalEMA, California State Coastal Commission, and Household Hazardous Waste Program folks in CA started a working group to find a solution for proper disposal of unwanted or expired aerial/marine flares. Primarily, the flares are generated from the recreational boaters (including residents permanently living on the boat) and small business fishermen (under the exemption of 40 CFR 261.5 as a Conditionally Exempted Small Quantity Generator, CESQG). In California, such CESQG waste generation is under the umbrella of HHW. The condition of the unwanted or expired flares is usually intact. Rarely, we would receive some deteriorated flares due to weathering or other reasons. In our HHWCF settings, we know that we can collect the flares as HHW, but we have a problem of sending them to a treatment, storage, and disposal facility (TSDF) for a final disposal due to DOT requirement on either flare types as explosive (1.2, 1.3, or 1.4). These disposal facilities are outside of California (IL, LA and TX).

I personally phoned several times to US Coast Guard (USCG), which requires and enforces boaters to carry aerial/marine flares on board for an emergency situation and decommissions the expired ones, to discuss issue on the proper disposal of unwanted or expired flares. While I had not revealed myself as a HHW facility manager but a responsible citizen, none of the USCG representatives on the phone could provide me a clear answer. Simply, all USCG representatives referred me to the local police or fire departments for proper disposal option. Repeatedly, I then tried both police (including Bomb Squad) and fire departments both in the City and County of San Francisco and California State counterparts (i.e. CA Highway Patrol and CA State Fire Marshall) as a private citizen. No agency could provide me a definite disposal option but referring back to USCG for proper disposal. As such situation goes round and round with no clear direction, an average generator would directly dispose the unwanted or expired aerial/marine flares through waterway or solid waste (trash) channel. If the unwanted or expired flares ended up in the trash, the flares would be sent to landfill and could create any unpredictable consequences as a result of reacting with other landfilled wastes. If the flares were thrown into our waterway, the chemical constituents of the flares would slowly degrade over time and have negatively impacted in our ecosystem and damaged the marine lives. Therefore, HHWCF's in CA are trying to help such boaters to minimize such negatively environmental impact.

Recently, the HHW collection program has already given approval by DOT-PHMSA in an interpretation letter (click [here](#); PHMSA Interpretation # 09-0289 dated on February 5, 2010) to be exempted in the HMR, including both private (must be a contractor employed by the corresponding public entity) and public entities, to run the Door-to-Door HHW Collection Program. Can such exemption specified in this interpretation letter extend to a third party carrier transporting solely household generated (by definition mentioned above) waste aerial/marine flares between HHWCF and final treatment, storage and disposal facility (TSDf) across the country, please? When none of the closest TSDf is permitted to manage the unwanted or expired flares through incineration, we would have to send the flares to Colfax, LA, which travels almost half of the country from California!

Given the final disposal sites are far away from California and the current economically constraining situation in both public and private sectors nationwide, a change in the mode of transportation (change from a DOT classified hazardous material, i.e. explosive, to a non-hazardous material) would drastically change the cost of transportation, if DOT can uphold the definition of "household waste" on aerial/marine flares, specifically generated from recreational boaters and CESQG, to be exempted. In other words, when DOT allows individual boater, including both commercial and recreational, carry such explosive in the US water without placarding as hazardous material regardless of the amount of explosive material in each flare, when USCG, instead of DOT-PHMSA, enforces 33 CFR 175.101 – 175.140, should such exemption extend to the end-of-life management and transportation between HHWCF and TSDf to prevent any negative impact to our environment?

Or can aerial/marine flares reclassify from explosive (1.2, 1.3 or 1.4) to oxidizer (5.1) like uranium nitrate was delisted from radioactive (7) to non-hazardous back in 2004, please? Currently, the main hazardous material constituents in such flares are black powder (1.1 D or 4.1, if for small arms and US only), magnesium (4.1 or 4.3, if powder form), potassium perchlorate (5.1), potassium chlorate (5.1), strontium nitrate (5.1) and strontium peroxide (5.1). The only concern is the black powder in the aerial/marine flares. When the size of a small arm is about the size of such flare, I would expect that each flare has the similar amount of black powder as found in the small arm to create the same effect in firing the marine signals in an emergency situation in the water. Since black powder can be classified as 4.1 for small arms and transported domestically only, would DOT still concern the amount of black powder in each flare to be significantly triggering an explosion during transportation?

If none of my suggestion/comment satisfies HMR exemption, how would DOT-PHMSA suggest our HHWCF's to send the collected waste aerial/marine flares between HHWCF and TSDf under the current HMR that is economically sounded?

I am looking forward to your response in DOT-PHMSA interpretation letter. Thank you very much.

Sincerely yours,

Billy Puk

HHWCF & Operation Manager

Recology™ San Francisco

WASTE ZERO

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PS: Since the 2013 America's Cup will be hosted in San Francisco, CA, USCG may have to start the enforcement of carrying non-expired, functional flares on boats soon. We, HHWCF folks, will then expect the increase of collection and disposal request of the aerial/marine flares from the boaters. Therefore, DOT-PHMSA's response is highly important to our HHWCF operations in the City and County of San Francisco and surrounding Bay Area's jurisdictions.

cc: Vivian Matuk, CA Department of Boating & Waterways & CA Coastal Commission
Antonia Becker, CA Department of Toxic Substances Control
Rich Martyn, US Environmental Protection Agency
Robert Lynch, US Department of Transportation

From: robert.lynch@dot.gov [mailto:robert.lynch@dot.gov]

Sent: Thursday, May 12, 2011 4:38 PM

To: Billy Puk

Subject: RE: Aerial / Marine Flares

Yes, I should be available on May 23rd.

What you need to do is to submit your request in writing with any supporting materials to our Office of Hazardous Materials Standards and they will respond back to you in writing. You can use the explanation in your email that you sent to Dan Derwey on April 27th 2011. You may email your request directly to Mr. Charles Betts. His email is: charles.betts@dot.gov

I have already communicated with Mr. Betts. When he receives your email he will direct it to one of his staff for your reply in writing.

When you return from vacation send me an email and we can talk if you like.

Just for my information are these flares that are collected in good shape, bad shape, damaged or out lived their expiration dates (I don't know if flares have expiration dates, just thought I would asked)

Until you return enjoy the rest of your vacation.

Bob Lynch
Senior Compliance Investigator
US DOT/PHMSA/Field Operations
robert.lynch@dot.gov

From: Billy Puk [mailto:cpuk@recology.com]

Sent: Thursday, May 12, 2011 6:39 PM

To: Lynch, Robert (PHMSA)

Subject: Re: Aerial / Marine Flares

Hi Robert,

How are you? I am sorry that I am on vacation currently. I won't be able to discuss with you until my return of work on May 23, 2011. Are you available by then?

Billy

From: robert.lynch@dot.gov <robert.lynch@dot.gov>

To: Billy Puk

Sent: Thu May 12 12:14:48 2011

Subject: Aerial / Marine Flares

Good afternoon Mr. Puk,

I tried calling you early today and got your answering service. It's in regards to your question on the aerial / marine flares. I was contacted by Dan Derwey.

Robert Lynch
U.S. DOT/PHMSA/Field Operations
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(202) 366-6502