

Pierce County LEPC Meeting Minutes

October 8, 2019

Attendance

Todd Kilpatrick, DEM (Acting Chair)
Jim Jaques, East Pierce Fire & Rescue
Hallie McCurdy, West Pierce Fire & Rescue
Josh Shelton, Tacoma EM
Jayson Lelli, Tacoma Power
Leyla Oxford, 10th Civil Support Team

Jeff Talkington, Phillips 66
Ty Gaub, U.S. Oil & Refining, Co.
Emily Boucher, U.S. Oil & Refining, Co.
Annie Merritt, WA EMD
Chelsey Bell, DEM
Susan Forsythe, WA EMD

Meeting Information

Location: 3600 Port of Tacoma Road, Tacoma, WA 98424
Start Time: 1:34 p.m.
Adjourned: 2:59 p.m.

Call to Order and Roll Call

Todd Kilpatrick welcomed everyone, and introductions were made.

Adoption of Agenda

Reviewed the agenda. Motion to approve made by Jeff Talkington. Seconded by Ty Gaub. All voted to adopt the agenda. None opposed. Motion carried.

Approval of Minutes

The meeting minutes for the July 9, 2019 regular meeting were reviewed. Jim Jaques made a motion to approve the minutes as they are. Josh Shelton seconded the motion. All voted to approve the minutes. None opposed. Motion carried.

Reports of Committee Members

- Quarterly Summary of Spills (Ty)
 - **Par Pacific (U.S. Oil & Refining Co.):** On September 7, at approximately 7:25 pm, the refining facility located within the Port of Tacoma experienced a “power outage” caused by an electrical storm that resulted in multiple processing units tripping offline. This led to the build-up of pressure within the refining process unit equipment to relieve to the flare system. The gaseous release resulted in the release of over 500 lbs. of sulfur dioxide (SO₂) to one of the refinery flares. While this quantity was above reportable limit, there were no reports health complaints from workers on site or nearby residents. WA EMD, the LEPC, and NRC were notified timely, which was a successful demonstration of notifications process. Upon completion of this initial notification process, U.S. Oil received a follow-up phone call from the WA Dept. of Ecology.
- SERC Update (Susan Forsythe)
 - The 2006 chemical, biological, radiological, nuclear, and explosive materials (CBRNE) Study update draft is complete. The SERC will have a final copy available around the end of the year. It is likely that the study will prompt the

SERC to create task force(s) to address areas of improvement on Washington State ability to respond to CBRNE and hazardous material incidents.

- The SERC has funds acquired from cost savings and voted to print brochures for LEPCs to distribute to the public. The subject of the brochures is how to prepare for hazardous chemical emergencies.
- A free HAZWOPER training event will happen between October 21–25 in Nespelem, WA. Lodging and per diem expenses may be reimbursed for local and tribal jurisdiction students traveling more than 50 miles each way. If you are representing private industries, you will be responsible for own travel cost.

Special Orders

- Election of new LEPC chair: Having received no confirmed nominations, tabled to next quarterly regular meeting (January 14, 2020).

Unfinished Business and General Orders

- Bylaws update: Having received no indication of interest from other committee members, Todd and DEM proceeded with reviewing and revising the LEPC bylaws. Source material included examples from other Washington counties, as well as other states. Todd will distribute draft revision to membership for approval at the next regular meeting (January 14, 2020). Pierce County Prosecuting Attorney's Office is also reviewing the draft bylaws. Prior to approving the bylaws, we must update the membership roster in accordance with the current bylaws and state statute.

New Business

- Confirmed the following dates for quarterly regular meetings in calendar year 2020...
 - First Quarter: January 14, 2020
 - Second Quarter: April 14, 2020 (NOTE: annual plan review)
 - Third Quarter: July 14, 2020
 - Fourth Quarter: October 13, 2020 (NOTE: general elections)

Program: *Results of HazMat Scenario*

- Chelsey Bell, Pierce County Department of Emergency Management

HazMat Scenario (see attachments for plume modeling done by Snohomish County). The requirements and methodology for Threat and Hazard Identification and Risk Assessment (THIRA) changed in May of 2018. In previous assessments on our capabilities to clean-up hazardous materials and take care of people who have been exposed we used a dirty bomb scenario developed by the WA Fusion Center in 2012. With the new methodology the Fusion Center reworked the most credible worst-case scenario and this time it did not include a hazmat component.

To fill this gap Emergency Management Agencies from Pierce, King, Snohomish, and Cities of Bellevue and Seattle decided to develop a scenario that impacted two of our ports. Pierce County has a THIRA as well from 2012 that included a Chlorine spill right outside of the Port of Tacoma. We then asked Snohomish

County to use their new modeling tool with Chlorine as the chemical and to provide a few different weather conditions for us to select from.

The Port of Tacoma is in the process of vetting the modeling but need additional input from stakeholders about cause to help us develop the scenario. Discussion about chemical used. Chlorine is good and so would ammonia. We could also look at Tier 2 reports to select chemical. Cause of incident, terrorism is what refineries and 10th CST exercise the most. The scenario will be developed and sent out to review in coordination with the Port of Tacoma in the coming weeks. The scenario must be finished by November 29. If there are any questions, please contact Chelsey Bell at chelsey.bell@piercecounitywa.gov or 253-798-2122.

Open Forum and Announcements

- Jeff and Ty: This past quarter, both Phillips 66 and U.S. Oil & Refining Co. had their worst-case spill drills. The Tacoma-Pierce County EOC hosted the Phillips 66 drill, while the U.S. Oil drill was once again held at the Emerald Queen conference center. The Phillips 66 drill focused on proactive versus reactive phases as well as planning into the next operational period and featured widespread use of new software. The scenario for the triennial U.S. Oil drill was a 300,000-barrel tank releasing 55,000 barrels of crude oil. Having been recently acquired by Par Pacific, the U.S. Oil drill also featured additional resources from their parent company that they previously did not have access to. Additionally, both drills included partners from the LEPC and other agencies within the community. Jeff and Ty thanked the participating agencies in attendance.
- Susan:
 - There are conversations about the Cascadia Rising 2022 earthquake exercise having an oil spill component.
 - Welcome to Annie Merritt, new LEPC-HazMat planner at WA EMD! Annie will be supporting the southwestern Washington region from her office in Longview.
- Chapter 173-182 WAC update: Todd submitted comments to the WA Dept. of Ecology on behalf of the LEPC. Comments were due on October 6.

Plume Results

Chlorine

CAS 7782-50-5

UN 1017 [Guide 124 - GASES - TOXIC and/or CORROSIVE - OXIDIZING](#)

Initial Location and Time

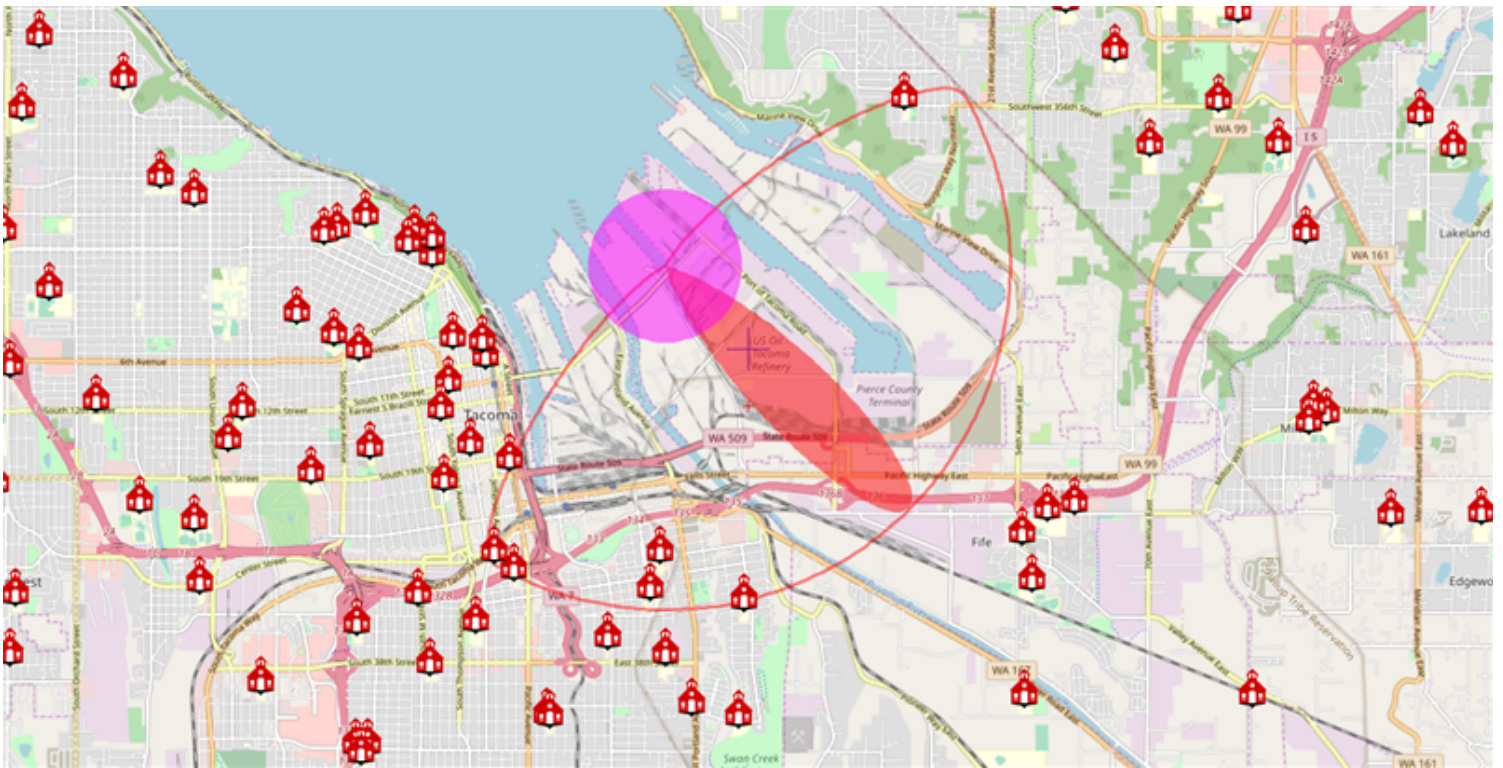
Tacoma, WA, USA

47° 15' 55.67" N 122° 24' 44.18" W

08/23/2019 13:26:18 GMT -07:00

Meteorology					
Temperature	71 °F	Wind Speed	3.6 mph	Wind Direction	315 °
Cloud Cover	50 %	Terrain	Urban/Forest	Stability/Theta	B/74.6°
Container (Railcar)					
Diameter	9 ft	Length	50 ft	Orientation	Horizontal
Percent Full	95 %	Volume	23795 gal	Max Liquid Mass	267873 lb
Source					
Source Type	Hole or Pipe Release	Hole Diameter	2 in	Hole Height	0 ft

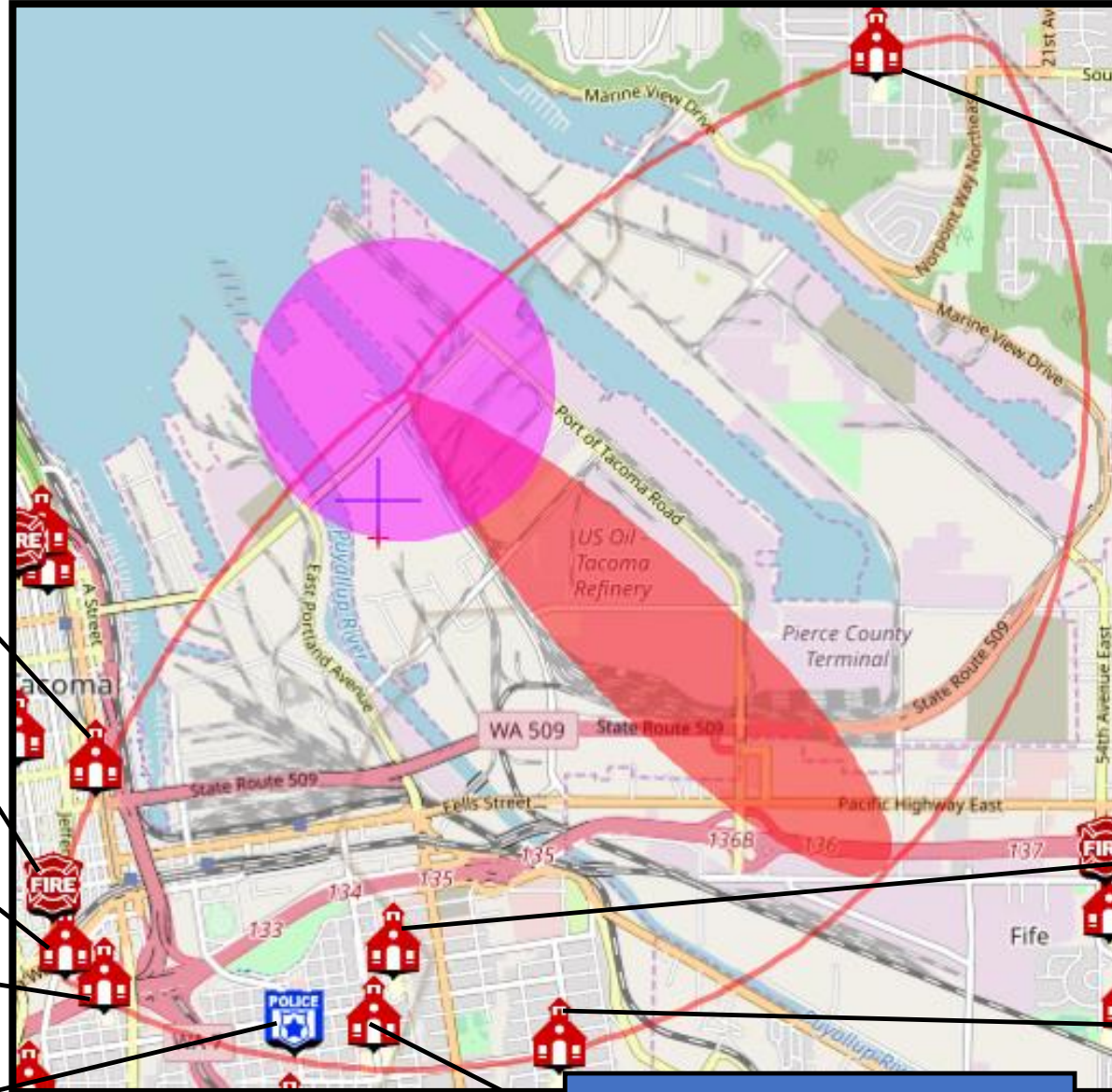
Results				
Level of Concern	Downwind Distance	Max Crosswind Distance	Plume Arrival	Plume Duration
Initial Isolation Zone (ERG 2016)	3000 ft (in all directions)		-----	-----
IDLH 10 ppm	2.5 miles	993 yd	21m:47s	Continuous



Important Information

When using the PEAC application, be particularly careful in selecting and inputting chemical and model parameters. Model predictions can be especially sensitive to low wind speeds, stable atmospheric conditions, and the time of day around sunrise and sunset. The results provided by the PEAC application do not take into consideration the effects of local topography, objects near the source, fire, chemical reactions, aerosol formation, particulates, chemical mixtures, or changes in wind direction. The plume results display also assumes constant meteorology and terrain. If the "Build tear-drop shaped plume" modeling option is selected, the approximate toxic cloud shape for the meteorology and terrain selected is displayed, but shifts in wind pattern, changing terrain, and obstructions will change the behavior. Normal variation in wind direction for the meteorology selected is indicated by the same color arcs or circles on the display, or the "theta" angle from centerline (180° indicates a full circle, e.g. the plume can travel in any direction). In the tear-drop shaped mode, the ERG PAD Large and Small Spill distances are not available for mapping. If an "instantaneous release" or "BLEVE/sudden pressure release" is selected, an additional 10-minute time is assumed for essentially clearing the airborne toxic chemical from the source for the purpose of estimating the plume cloud duration. There could still be residuals of the chemical near the source or otherwise entrained resulting in some chemical being measured after the estimated duration. Shifting conditions may shorten the duration at a particular location. In addition, sunlight, air moisture, air oxygen, and particulates may react with many airborne toxic chemicals as the plume travels far from the source rendering them less toxic, especially over 7 miles (11 km). If "Specify mass/volume released or release rate for PAD modeling" is selected under options be aware that for solutions, the Source Strength is to be entered in on an "as is" basis, meaning the user should enter in the mass/volume for the whole solution. The Source Strength will be reduced internally to the concentration of the solute for the purposes of the dispersion model. If a solution has a concentration range, the highest concentration will be used. Also, beware that the Protective Action Distance calculation assumes the entire mass is vaporized.

Port of Tacoma



Northeast Tacoma Elementary

Tacoma School of the Arts

Fire Station #2

Holy Rosary School

Willard School

Tacoma PD Sector 4

Rogers Elementary

Roosevelt Elementary

Gault Middle School