

**SB 557 Uniform Tsunami Warning Signal Work Team  
Minutes from meeting on August 28, 2006**

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Attendees of conference call

Al Aya, Cleve Rooper, John Buchanan, Wayne Stinson, Tyree Wilde, Steve Scibelli, Dan Malin, Chris Jonientz-Trisler, and Jay Wilson

Absent

Don Baker, Tom Manning, Mark Metcalf, George Priest, and Ryan Sandler

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Meeting began with a brief history of prior tsunami work groups that met to work on tsunami warning systems. One benefit from these groups mentioned was changing the siren time from 90 seconds to 3 minutes in Cannon Beach.

**Goals and Objectives**

Group agreed that the aim would be to develop a minimum standard that would allow for older systems, such as electro-mechanical sirens, while new systems could adopt an enhanced standard for voice capable electronic devices.

Of the four SB 557 Section 2 rule requirements (signal, duration, volume, and location), location seemed to have the most question of interpretation of the legislature's intent. We discussed that for location, the emphasis should be on notifying outdoor areas and especially highly populated areas and remote areas difficult to notify otherwise.

**Uniform signal**

There was a lengthy discussion on older federal CPG 1-17 standards of Attack Warning (wavering pitch) and Attention or Alert Warning (steady pitch). Differences of opinion have been expressed by this team on wishing to continue to use the Alert-steady tone vs. adopting the Attack tone to better intrude on people.

Florence was using the Alert-steady tone for their signal & Winchester chimes for all-clear. People reported, with a lot of complaints, they didn't hear the steady tone. Florence officials met with an audiologist who tested the tones for effectiveness & audiologist concluded that the steady tone has limited frequency range, but people could better hear the wavering over background sounds. They switched to wavering and people reported being more receptive. Also, John Buchanan reported of an incident at a nuclear facility near Sacramento where a siren with a steady tone accidentally malfunctioned, blaring for hours at night with no one calling to complain or report it.

Do we need to have an inventory of who has what sirens and who controls the activation (city/county)? See the spread sheet compiled by Wayne.

**Message of siren signal**

If the sirens are activated at the issuance of a tsunami warning, what does it instruct the public to do? Evacuate immediately or tune in for instructions? Go to high ground outside of the yellow zone or leave beaches and low lying areas. Many agreed that for a warning the evacuation should be for the entire evacuation zone because it is difficult to educate public on multiple areas.

Al Aya pointed out Cannon Beach has 20 years of experience with tsunami evacuation planning and they are most concerned with behavior of visitors. Residents are better informed. Visitors are naïve about the ocean and hard to educate.

Douglas County, and others, state if they get a NOAA tsunami warning, they will tell communities to evacuate and not wait for additional information. This caused confusion between jurisdiction on June 14, 2005.

NWS and OERS will send out Emergency Alert System message to urge people to move to high ground, but not order evacuation.

Do we adopt the Hawaii standard for phased tsunami warning notifications? Al Aya reserved the authority to activate earlier if there are large numbers of tourist in area to facilitate evacuation.

### **Multiple purpose warning signal**

CPG 1-17 calls for a two tone system for notifying for a dominant hazard with Attack-wavering tone for immediate action and using the Alert-steady tone for calling public attention to emergency information. Tornado warning tells you to shelter in place which won't work for tsunami, since you have to leave the area on foot. We're asking people to leave buildings so the intended public action from the siren is critical since the Oregon coast has different types of threat compared to Midwest.

Does tsunami siren indicate distant event or possible low probability local event, like submarine landslide? We should stop saying you will have several hours to evacuate if you hear a siren.

Are these siren system to be used only for tsunami warnings? The question was raised if there is any other use for a siren notification, such as HazMat incident, that may require immediate action from public? Cannon Beach, Florence and Douglas County all stated their sirens were only for tsunami.

Al Aya – acknowledges having a single Attack-wavering tone could send people into the chemical spill area since people would leave their homes per tsunami signal instructions and may travel into incident.

City of North Bend has sirens in place for dam failure warning with 15 seconds on and 15 seconds off. Their tsunami evacuation maps include a distinct dam failure inundation zone.

Do any volunteer fire departments still use a siren for calling volunteers or for lunch time?

### **Testing**

Team members recognize the importance of consistent testing with published public information on testing schedule. Al asked what procedures were in place for Trojan Nuclear facility to test sirens. Jay will do some research on this and inquire on testing practices from CSEPP and Washington EMD.

Electromechanical sirens must be tested, at least as a "growl" test, to activated rotating mechanism to prevent corrosion and confirm operation.

### **Notes for next conference call**

Next call will be mid-September. Best time will be arranged as before via email agreement. Participants asked for CPG 1-17 FEMA HQ person to sit in on future call.

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