Health Agencies/EPA Fish Advisories Meeting
Attendee list and Overview

Attendees:

Facilitator: Andy Dunau	
EPA (National Office)	
Steve Ridenour, Environmental Protection Specialist	EPA, Office of Superfund, Remediation and Technology Innovation (OSRTI)
Melissa Dreyfus, Environmental Health Scientist	
Richard Jeng, Environmental Engineer	
Silvina Fonseca, Environmental Engineer	
Jyl Lapachin, Physical Scientist	EPA, Headquarters
Steve Jones, ATSDR Regional Director, Washington, DC	ATSDR Liaison to EPA Headquarters
Region 10	
Becky Chu, Remedial Project Manager	EPA, WA, Region 10
Running Grass, EJ Program Coordinator	EPA, WA, Region 10
Lon Kissinger, Risk Assessor	EPA, WA, Region 10
Cami Grandinetti, Remedial Program Manager	EPA, Region 10
Elizabeth Allen, Toxicologist, Portland Harbor	EPA, Region 10
Kristine Koch, Remedial Project Manager, Portland Harbor	EPA Region 10
Shawn Blocker, Site Cleanup Unit Manager	EPA, Region 10
Sean Sheldrake, Remedial Project Manager	EPA, Region 10
Karen Larson, Environmental Health Scientist	ATSDR, Region 10
Sven Rodenbeck, Acting Regional Director	ATSDR, Western Branch
Region 9	
Sophia Serda	EPA, CA, Region 9
Karen Jurist, Site Manager	EPA, CA, Region 9
Robert Knowles, Regional Director	ATSDR, Region 9
Jamie Rayman, Community Involvement/ Health Ed.	ATSDR, Region 9
Washington	
Joanne Snarski, Program Manager	WA Dept of Health (DOH), Site Assessments and Toxicology (SAT)
Liz Carr, Fish Program Coordinator	WA DOH, Fish Advisories Program
Rhonda Kaetzel, Toxicologist	Public Health Seattle & King County (PHSKC), Environmental Health Services (EHS) Division
Sinang Lee, Health Educator	
Oregon	
Julie Early Sifuentes, Manager	Environmental Public Health (EPH) Oregon Health Authority (OHA)
Karen Bishop, Health Educator	Environmental Health Assessment Program, EPH, OHA
Dave Farrer, Toxicologist	Healthy Communities Unit, EPH, OHA
Rebecca Hillwig, Environmental Health Specialist	Healthy Communities Unit, EPH, OHA
California	
Danny Kwon, Research Scientist	California Dept of Public Health (CDPH), Environmental Health Investigations Branch (EHIB), Site Assessment Section
Russ Bartlett, Environmental Health Scientist	CDPH, EHIB, Site Assessment Section
Alyce Ujihara, Research Scientist	CDPH, EHIB, Exposure Assessment Section
Bob Brodberg, Chief	CalEPA, Office of Environmental Health Hazard Assessment

Meeting Goals:

- To identify with EPA and ATSDR the limitations and opportunities within the Superfund process to assure consistent and reliable resources for fish consumption outreach.
- To facilitate improved collaboration between federal, state, and local agencies and EPA's regional work around fish advisories at Superfund Sites.

Discussion Overview:

State Public Health agencies, sometimes with the support of local health departments, issue and implement fish advisories that ultimately are used as Institutional Controls at Superfund sites. Public Health agencies are responsible for assessing impacts to human health associated with contaminants at these sites through their State's Site Assessment Section (SAS) and/or Cooperative Agreement Programs funded by the Agency for Toxic Substances and Disease Registry (ATSDR). However, health agencies face the challenge that there is often limited financial support for long-term fish advisory education and outreach during the multiple stages of the Superfund Process. This time period stretches from when the site is listed, during early actions, and after a Record of Decision (ROD) is reached. Most often, the affected communities that live and fish near Superfund sites include non-English speaking immigrant populations and those with low socioeconomic status. Reaching these overburdened communities is very resource intensive.

We are aware that there is funding, such as competitive grants from EPA to address environmental justice issues (e.g., EJ Small Grants, Ecology Public Involvement Grants) but "one-off" funding makes continual and consistent messaging challenging. Often the public health agency must compete against community groups for this funding. In addition, this type of funding does not end up building and sustaining capacity for our community partners to properly address the public health impacts of eating contaminated fish from these areas and it does not support effective behavior change.

Sites that will be discussed today are the Lower Duwamish Waterway (Region 10), Portland Harbor (Region 10), and Klau/Buena Vista Mine (Region 9).

HEALTH PERSPECTIVE:
Overview:

- After a site is listed on the National Priorities List (NPL) the Superfund process will take many years, often decades, before the clean-up and deletion of a site from the NPL.
- ATSDR-State health department cooperative agreement program staff are responsible for conducting a Public Health Assessment (PHA), evaluating the levels of contaminants, exposure pathways, and health hazards resulting from site-related exposures. They also recommend actions that agencies (including local public health) and the public can take to reduce or avoid exposures.
- If a fish advisory is issued as part of the PHA process, state and local health departments are responsible for assuring that impacted communities are aware of the risks and have enough knowledge to change their behavior to protect themselves.
- State staff and cooperative agreement program staff time is limited due to staff working on multiple sites throughout each state. Therefore, ongoing fish consumption outreach is not carried out.
- Local health departments are often expected to address this issue at the community level but often don't have the staff or resources to focus on this issue or validate true behavior change.
- Often the sites raise environmental justice concerns because the impacted communities are ethnically diverse and underserved, and bear greater health risks than other more well-off communities.

STATE EXAMPLES:

State: Washington
Site: Lower Duwamish Waterway
Year Listed: 2001
Fish Advisory Issued: 2003
Current Status: 2014 Record of Decision (ROD) completed. Fishers Study underway.
Estimated Completion: Timing of the work is still being evaluated.
EPA Funds: No direct funds to health agencies other than through ATSDR

Overview:

- It has been 14 years since the LDW site was listed on the NPL (2001) and 12 years since the fish advisory was issued (2003).
- LDW Fish Advisory is the most restrictive in the state: "Do not eat resident fish, shellfish or crab."
- Initially in 2001-2006, the WADOH Site Assessment Section staff (SAS) funded through ATSDR conducted extensive outreach and produced signs for the advisory.
- SAS staff work on other sites throughout the state and have limited capacity for ongoing outreach..
- In 2010, PHSKC recognizing the need to address ongoing fish consumption in the Duwamish. PHSKC performed interviews with fishers. PHSKC and DOH Fish Program developed the interview questions. PHSKC study raised to EPA and Ecology's attention the need for a more refined "Fishers Study" to better understand the fish consuming community of the Duwamish for purposes of risk communication.
- In 2012, EPA initiated the "Fishers Study" effort, and has continued coordinating with DOH SAS and PHSKC on the development of the Statement of Work, Work Plan, Implementation Plan and quarterly study updates. However, to date, Health agencies have not received additional financial support to participate in this effort via the LDW Superfund program.
- In 2013 Ecology, DOH SAS, PHSKC, ATSDR and EPA collaborated to develop a fish advisory poster to distribute at local festivals and Sea Mar Clinics in the LDW communities. Ecology funded the design and printing of the poster.
- In 2013 DOH Fish Program worked with PHSKC to update signs that highlighted that salmon are a healthy choice from the river. Signs were paid from state funds. PHSKC maintains these signs with existing budgets.
- 2014 ROD reached: EPA's 2014 ROD relies on "Institutional Controls"- including the existing advisory- to protect fish consumers in the LDW. EPA is evaluating who will lead the effort to assess the ICs and develop outreach strategies, as well as mechanisms to fund the outreach efforts.
- Stakeholders make comments that "Fish Advisories" are not effective and that signs are not enough. Health agencies agree, however, the State relies on signs due to limited resources. State/Local Health Departments are often singled out for not protecting the public.

State: Oregon
Site: Portland Harbor Superfund Site
Year Listed: 2000
Fish Advisory Issued: 2004
Current Status: EPA is working with the PRPs to finalize the RI and FS. Anticipated date for a proposed cleanup plan: 2016. Record of Decision is still years out.
Estimated Completion: ?

EPA Funds: I am unaware of any direct EPA funds. However, in 2013 EPA provided resources and expertise toward revising and updating the Portland Harbor fish advisory signs. (They had been in need of revising because the signage from 2004 was in disrepair and had outdated phone numbers listed on them.) EPA actively engaged with OHA during this time, reached out to several ethnically and racially diverse groups, and conducted focus groups to create a new Portland Harbor sign.

A community group (Willamette Riverkeepers) took the initiative to pay for four (4) signs to be created and worked with EPA, OHA, the City of Portland and Portland Parks and Recreation, to post those signs in locations where they knew people were fishing. The Portland Harbor Superfund site is almost 12 miles in length and so there was an obvious need for more signs.

In 2014 OHA's ATSDR Cooperative Agreement Program (EHAP) paid for six (6) more signs to be made. Those signs have not yet been posted because of lack of funding and staff resources. EHAP plans to ask the PRPs to pay for posting the signs.

Overview:

- In 2002, ATSDR identified the consumption of contaminated fish as the major exposure pathway at Portland Harbor.
- In 2002 ATSDR recommended two large-scale efforts: a large fish sampling effort and educational outreach to inform the community about the potential health risks from eating fish from Portland Harbor.
- Both subsistence and recreational fishing occur within Portland Harbor.
- State public health staff followed up on ATSDR's 2002 recommendations, and interviewed numerous individuals about fishing access, transient camp locations, recreational sites and activities, fish and meal preference, consumption and preparation practices and other relevant information needed to determine outreach needs.
- Those at most risk were identified as traditionally hard to reach populations, including specific ethnic and racial groups and transients. Certain traditional food preparation methods put some of these populations at increased risk for contamination. For example, carp are consumed by numerous ethnicities, including people of Asian and Eastern European descent. Interviews found that whole body carp is used for soup and making fish paste (which is often fed to infants and children). Ingesting carp from Portland Harbor is a health hazard due to PCBs.
- Oregon Public Health issued an advisory for Portland Harbor in 2004 and, under the funding umbrella of ATSDR, implemented an extensive community outreach campaign in response to the findings. The advisory is based on high levels of PCBs. This is in addition to an existing fish advisory for the entire stretch of the Willamette River, for mercury.
- It has been 11 years since the Portland Harbor fish advisory was issued, the site is almost 12 miles in length.
- Over the years, signage became damaged and outdated, and community outreach efforts waned due to lack of funds and capacity. There is an ongoing need for continued and sustained fish consumption outreach. EPA's efforts in 2012-13 helped breathe some new life into the outreach efforts, with development of revised and updated signage and their outreach at the CAG and the Portland Harbor Community Coalition. We have a collaborative, working relationship with our regional EPA colleagues, and have worked together over the years to do what we can at Portland Harbor. However, it was under the umbrella of ATSDR funding (EHAP) that the signs were printed – and there are still six sitting and waiting to be posted. OHA only recently found out that the PRPs are willing to pay for sign installation, in spite of being asked a couple of years ago if they would pay for new signs. Oregon is funded only through their cooperative agreement program with ATSDR (EHAP) to provide education

and outreach at superfund sites, and does not have the capacity to provide the type of outreach efforts the Portland Harbor requires to protect public health. EHAP works simultaneously on multiple sites throughout the state, including other superfund sites.

- Multnomah County, as all counties in Oregon, has minimal capacity for this work. In fact, there is such a need for funding at the county level for all environmental public health work, to reach beyond just inspections for restaurants, pools and lodging facilities.

_____

State: California
Site: Klau/Buena Vista (San Luis Obispo County)
Year Listed: 2006
Fish Advisory Issued: 2007 (interim); updated in 2009
Current Status: Feasibility Study completed in 2014
Estimated Completion: ?
EPA Funds: EPA has just printed warning signs that will soon be posted

Overview:

- The Klau/Buena Vista Superfund site consists of two abandoned mercury mines that operated for approximately 100 years prior to 1970.
- The site is a primary source of mercury contamination to downstream reservoirs, including Lake Nacimiento.
- The advisory for Lake Nacimiento is very restrictive due to the high levels of mercury in fish. Sensitive populations (women ages 18-45 and children ages 1-17) should not eat most types of fish from the lake.
- Lake Nacimiento is a popular fishing destination for Southeast Asians, especially Hmong, who reside in Central Valley communities, located more than 100 miles away.
- These populations travel to Lake Nacimiento to catch white bass, a species that is not available in any other California waterbodies.
- Both CDPH and EPA have had challenges in playing a lead role on conducting health-based education for the affected communities. CDPH has collaborated with EPA on several outreach activities including the development of a warning sign, an educational video, and limited media activities. CDPH has contributed significant staff time and funding to these efforts.
- Community members have contributed time to assist with outreach efforts, and have recommended additional activities to reach their communities.
- We have not been able to implement these activities due to lack of funding and staff time.

Questions:

- How can we improve this process? How can we ensure that fishers' health are protected throughout this process?
- When EPA does the initial site planning can fish advisory outreach be included in the remedial investigation? E.g., develop and fund an interim Fish Advisory IC plan during the remedial investigation stage?