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Agency

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FY2009 Region 10 Tribal Solid and Hazardous Waste Team Report

Office of Air, Waste & Toxics, EPA Region 10
Tribal Waste Program

Description of the problem:

Too many tribal households in Region 10 lack basic sanitation, which includes access to safe, reliable solid waste collection, recycling and disposal. Tribes have tried to piece together limited funding and manpower, but many lack the economic resources to meet the day to day costs of running rural waste systems. This economic squeeze, combined with dumping from off-reservation sources has generated over 500 open dumps in the region, nearly 70 of which are ranked a high health threat by the Indian Health Service.

Dump Near Houses

Tribal members are concerned about wastes harming the health of community members and the environment they rely on for subsistence food and drinking water. Hazards in many of these open dumps include household cleaners, paints and solvents, toxic metals from batteries, electronics and appliances, waste oils, medical waste, and sewage. Contaminants from waste can pose a threat to subsistence fish, game, and plants. Burning wastes can impact clean air, and leaching waste can threaten drinking water.

Tribes are organizing and advocating for stronger, more coordinated federal support for solid waste sanitation. At the same time, federal resources dedicated to solid waste work are limited and stretched across a maze of federal programs and authorities. This leaves tribes to struggle from year to year to maintain waste system staff and equipment. On top of this are the daunting costs to build transfer stations and landfills, and closing and cleaning up open dumps.

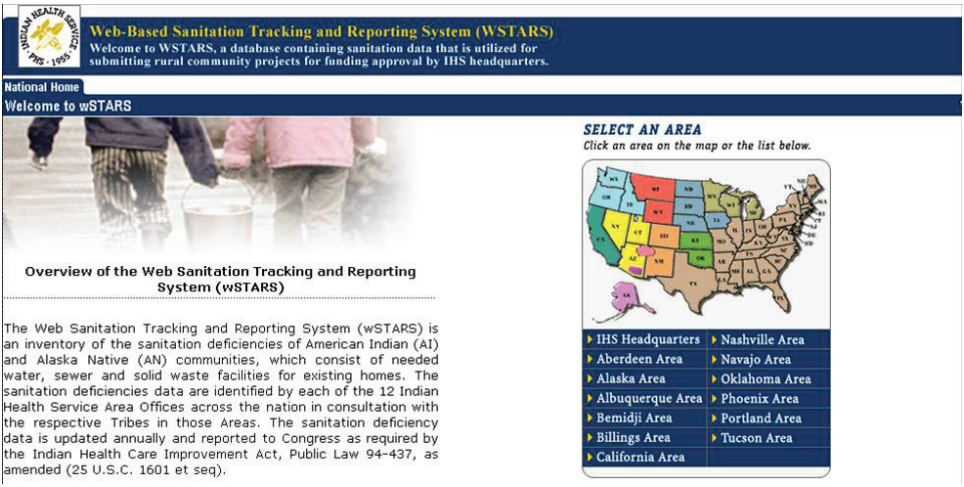
Fish on Drying Rack

Strategy to address the problem:

In FY2009, the EPA Region 10 Tribal Solid and Hazardous Waste Team continued to work on the national front to quantify the open dump threat, participate in the development of FY 2011 OSWER and multi-region national budget initiatives and tell the story of tribal sanitation needs. Even so, funding still falls well short of need, but the GPRA measures which Region 10 helped forge are starting to pay off. In 2007

we worked with the Indian Program Policy Council and other Offices to get new national GRPA measures adopted. One of these measures is to close, clean-up and upgrade open dumps in Indian country and other tribal lands. For the last two years this GPRA measure has raised the national visibility of the problem of open dumps on tribal lands and it has underscored the need for a new, current open dumps inventory *so that EPA and Tribes know the scale of the problem*.

EPA Regional Offices and the Indian Health Service have just completed this inventory which shows that the number of open dumps in Indian country has climbed from 1200 in 1998 to above 3000 in 2009. This includes 578 dumps in Region 10, 69 of which are high health threat. With this current information, Tribes and EPA offices are now armed with the data they need to support bold national initiatives for closing open dumps.



On the home front, the Team connected with tribes and stakeholders in many settings – delivering technical assistance and facilitating forums for problem solving. Importantly, the Team is exploring the intersection of waste, energy and climate – looking to build opportunities for holistic approaches in partnership with tribes. The work we do helps further the Region 10 Office of Air, Waste and Toxics priorities, the Region 10 Tribal Environmental Health Priority, Region 10 Strategic Endeavors, and EPA Strategic Plan. Our work is guided by the ***Office of Solid Waste and Regional Tribal Integrated Waste Management Strategy***. Outputs and outcomes are measured through the EPA Tribal Solid Waste Strategic Targets.

FY2009 highlights:

Tribes and EPA Partner – Strategic Targets Met and Exceeded:

- Cleaned up 10 open dumps impacting tribal lands, exceeded target of 6
- Developed 12 integrated waste management plans, met target of 12
- Provided technical assistance to 96 distinct tribes, exceeded target of 54
- Investigated 1 illegal dumping case, met target of 1
- Conducted 31 compliance activities with tribes, no target

Open Dumps and Integrated Waste Management Plans:

Yakama Nation Cleans Up Dumps and Steps Up Enforcement:
This year the Yakama Nation continued to dedicate tribal resources and Indian General Assistance Program (IGAP) dollars to fund major solid waste program initiatives. They maintained close communications with Team solid waste liason Al La Tourette – engaging on a variety of technical assistance issues. In FY2009 the Team documented 10 illegal dump sites cleaned up by Yakama Nation through IGAP funds - more are being addressed by the tribe each season.

Yakama Nation Facility Management Solid Waste Program

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2009 also marked the adoption of Yakama Nation's new solid waste ordinance geared toward the major problem of illegal dumping from off reservation, including agricultural waste from the surrounding rural area. Al worked with Yakama solid waste staff to research software for mapping solid waste sites, code enforcement, and utility infrastructure. The ability to track and map these program areas could foster a more holistic, cutting edge approach to management at Yakama. And good timing - this year Yakama Nation and EPA did joint inspections of solid and hazardous waste dumping and burning sites. The inspections have led to further investigation under the Federal Air Rules for Reservations.

Impact: Yakama Nation is getting to the root of the problem of illegal dumping and creating tools to prevent new dumps from forming.

Eek Takes Steps To Sanitation Improvements:
Team solid waste liaisons Ted Jacobson and Larson King helped move sanitation projects forward at Eek, Alaska this year. The Eek dump site had grown to a serious health threat needing focused attention from EPA and other agencies. The dump site is less than ¼ mile from the village and is located over shallow groundwater. Dumping was uncontrolled and waste was not separated or covered. Garbage and honey bucket waste were comingled on the ground – standing water was common and frequent uncontrolled burning was practiced. Access to the dump was limited to a small board walk from which villagers tracked sewage and other waste home from the dump.

Eek Dump Before

Eek Dump After

This year Ted and Larson visited Eek - sounding a warning bell and helping to convene a gathering of village and city leaders with agency staff. At several subsequent meetings with the community leaders, EPA, and USDA-Rural Development, Ted and Larson provided technical and cultural support to help the group identify a path forward. As a result, the village, through IGAP funds, sponsored clean up work at the dump to make it safer until a new landfill could be built. USDA worked with village leaders to apply for funds to close the dump and build a new, compliant landfill. Engineering and environmental reports have already been approved by USDA. In addition, Eek was selected by EPA to be one of five villages to participate in a research project to study the fate and transport of dump contaminants and their potential effects on drinking water sources. The study begins this year. Critical to success is a newly funded project to construct a waste water/sewage system that will replace the old honey bucket system in Eek.

Impact: The sanitation crisis at Eek is being addressed by multiple agencies and the community at large working together.

Makah Tribe Meets with Federal Agencies on Waste Management:
In June of this year, Kristin Hall coordinated a stakeholder meeting with Makah Tribe and federal agencies on the serious waste problems at Makah Reservation. Participating agencies included Indian Health Service, US Department of Agriculture-Rural Development, Bureau of Indian Affairs, Army Corps of Engineers, and the Agency for Toxic Substances and Disease Registry. At the meeting, Acting Regional Administrator Michelle Pirzadeh reaffirmed EPA's trust responsibility as lead regulatory agency for waste management. As the group came together, it gave the Tribe and agencies a chance to share information on their programs and explore potential paths forward. The Makah Tribe is working to close their large dump site that also historically served the US Air Force station and other federal entities based at Makah Reservation.

Makah Warmhouse Beach Dump

Since the meeting, the Makah Tribe signed a funding agreement with USDA-Rural Development to construct a solid waste transfer station on the reservation. In addition, the Tribe is pursuing next steps with the Army Corps of Engineers and EPA on assessing and closing the dump site.

Impact: Tribal leaders are committed and engaged with agencies in a more direct and coordinated way to solve Makah's waste problems.

EPA Investigates Landfill Complaints at Nez Perce:
FY2009 marked the continued investigation of Simmons Non-Municipal Solid Waste Landfill located within the boundaries of the Nez Perce Reservation. EPA Region 10 has been aware of the site since 2005. Responding to complaints from the Nez Perce Tribe and a local citizen, EPA inspected the landfill three times via three different programs. To date, EPA has not found violations of RCRA however EPA did find storm water violations that resulted in a penalty of $2850 issued in July 2007.

Team leader Fran Stefan coordinated Region 10's program response to complainants, including talking points for the media. Fran represented EPA at stakeholder meetings convened by Idaho Senator Craig's office which included reps from the Nez Perce Tribe, Idaho Department of Environmental Quality (DEQ), North Central District Health Department, Army Corps of Engineers, and Simmons Sanitation. In addition, Fran and Al La Tourette visited the site and met with complainants to better understand the alleged solid waste issues. As a result of the meetings, Idaho DEQ funded limited sampling on site. At this juncture, the site has been turned over to the Region 10 Superfund Site Assessment Team for further investigation and sampling. The goal of the work is to determine whether the site is potentially impacting surface waters in the area of the site and downstream.

Impact: EPA responds to complainants in a coordinated and thoughtful way and seeks to understand whether the dump poses hazards to human health and the environment.

Inter-Agency Agreement with Indian Health Service Funds 8 Plans in Village Alaska:

Kim Farnham of the Team manages an Inter-Agency Agreement with Anchorage Indian Health Service. The agreement provides a mini-grant program to tribes to create integrated waste management plans and implement small projects. The tribes get hands-on training using an Alaska-based computerized planning template. The following tribes completed plans in FY2009: Holy Cross Village, Native Village of Marshall, Native Village of Ouzinkie, Native Village of White Mountain, Takotna Village, Native Village of Port Heiden, and Native Village of Kipnuk, Native Village of Diomede. In addition, three sub-recipients received funding for implementation projects. Takotna Village used funding to purchase an oil cat and a generator to blend used oil fuel; Holy Cross Village purchased a burn unit for their landfill; and Native Village of White Mountain purchased a storage van to store discarded white goods in the landfill salvage area.

Impact: 8 tribes complete integrated waste management plans and engage their communities. 3 tribes implement low-cost solutions to waste problems.

Collaboration:

Team Explores Green Opportunities:
The Team has been exploring EPA's potential role in bringing tribes and other stakeholders to the table around green building and other green efforts in the region. Team member Kim Farnham met with representatives from tribes, local governments, non-profits, and EPA staff from the office's Resource Conservation Challenge program to gather information and draft a green strategy. The goal of the strategy is to develop EPA's capacity to serve as a resource for tribes seeking to develop and implement green projects in Indian country.

Kim is working to engage tribes in order to test the waters for a future, EPA Region 10-sponsored tribal green workshop. If tribes are interested and want a forum on green issues, Kim will work with the Team to provide the opportunity. A future tribal green workshop may potentially include sharing information about green building projects, green casinos and resorts, clean energy initiatives and funding sources for tribes.

Impact: This effort is building a new network within the Region and may develop into a more formal resource for tribes.

Tribal Solid Waste Liaisons Ride the Circuit:
In FY2009, Team solid waste liaisons traveled thousands of miles to visit 19 villages and reservations throughout Region 10. Liaisons visited landfills and dump sites and provided technical assistance on how to improve solid waste systems. Liaisons Al La Tourette and Ted Jacobson have nearly 30 years of combined experience working in waste management. Al has also built considerable expertise in geographic information systems – locating and mapping dozens of dump sites in the Pacific Northwest region and training tribal staff to do the same. Ted Jacobson is an experienced trainer for the **Rural Alaska Landfill Operators Training Course** (RALO) – this year Ted served as a trainer at three RALO courses, training reps from 24 villages in Alaska on best management practices.

St. Mary's RALO Class Picture

Impact: Liaisons build capacity to improve solid waste sanitation village by village, tribe by tribe.

Alaska Conference Marks 14th Year:
The Office of Air, Waste and Toxics funded the 14th Annual Alaska Tribal Conference on Environmental Management in FY2009 through an Inter-Agency Agreement with Indian Health Service. 400 people attended the conference - many of whom represented tribes and native villages in Alaska. Team member Kim Farnham presented a session on outcomes and outputs for grant recipients and facilitated a panel on funding sources for solid waste. Attendees learned about how to document project work in terms of public health and environmental results. They also learned about resources for planning, assessment, implementation, and dump cleanup.

Team liaison Ted Jacobson participated in a moderated session on best management practices at dump sites - teaming up with Alaska Department of Environmental Conservation staff to discuss how to comply with Class III Landfill best management practices and how to extend the life of landfills. Ted provided attendees with information on the Waste Management Index and Waste Burning Index, tools to help communities rate themselves on waste practices and move toward safer and more effective practices.

Impact: Tribes in Alaska have tools and information to make solid waste improvements in their communities. They also are trained on grant-writing and funding sources.

Tribal Solid Waste Advisory Network Provides Hands-On Training:

TSWAN

Tribal Solid Waste Advisory Network

In FY2009 and FY2010, the Tribal Solid Waste Advisory Network (TSWAN) is providing free, hands-on training to tribes on the TSWAN Integrated Waste Management Plan Template. Elaine Welk of the Team is coordinating logistics and support for the training. Several years ago, the Team managed an EPA grant with TSWAN to develop the template and to employ a circuit rider to help tribal staff doing waste sorts, gathering data, and drafting plans. Now TSWAN is trying a new model of assistance - TSWAN staff will provide attendees with a copy of the planning template and hands-on, computer-based assistance to draft a plan using a tribe's specific solid waste data. If attendees bring key solid waste data to the training, they can walk out with a draft plan in hand.

In FY2009, through an EPA Tribal Hazardous Waste Grant, TSWAN also provided training to 31 tribal staff on Meth Lab Awareness. Maria Tartaglia served as Project Officer on the grant and Elaine Welk of the Team organized the logistics and travel arrangements for the training. The training was held at Quinault Indian Nation in coordination with University of Washington and Washington State Patrol. The two-day session included classroom time and hands on training through mock meth lab waste scenes staged by the Washington State Patrol. The focus of the training was to help tribal staff identify mobile meth labs which are often stolen cars driven onto the reservation and subsequently abandoned. The training also was geared to help tribal staff safely manage the waste left behind after the drugs are manufactured. The wastes from meth production are hazardous - and can be harmful to health and the environment if not handled properly.

Impact: Tribes have free training to write integrated waste management plans and identify hazardous wastes left behind at abandoned meth labs.

Yukon River Tribes Work with EPA to Help Others Build Backhaul Programs: In August, 2009, Team Lead Fran Stefan attended the Yukon River Inter-Tribal Watershed Council (YRITWC) Summit at Helens Fish Camp near Whitehorse, Yukon Territory, Canada. Tribal leaders at the Summit highlighted the huge success of the YRITWC Backhaul Program. As of 2008, the program has processed over 10 million pounds of solid waste from villages – including lead-acid batteries, white goods, electronics, motorized vehicles, used oil, used glycol, and fluorescent light bulbs. Leaders say their communities are cleaner and they are proud of the changes.

Over the years, the Team has managed multiple grants to YRITWC through the EPA Tribal Hazardous Waste Grant program which has included education and training to tribes to help them participate in backhaul projects and develop integrated waste management plans. With funding from the EPA IGAP, YRITWC has also developed a "how-to" manual to help others backhaul waste. This manual can be downloaded from the web site as a way to jump start and improve waste backhaul in Alaskan villages and other communities.

Impact: Communities are learning from the YRITWC and getting a running start on moving wastes out of their villages.

Yukon River

YRITWC Documentary Film – Climate Change and Waste on Yukon River: Maria Tartaglia of the Tribal Solid and Hazardous Waste Team is managing a grant with YRITWC to film and document the impacts of climate change and waste on the Yukon River – and the efforts tribal villages are putting forth to address the issue. On the final day of the YRITWC Summit in August, attendees previewed the documentary filming to date, developed by an award-winning indigenous film maker and crew. The Summit provided an opportunity to interview tribal leaders for the final footage of the documentary.

Impact: This film will help shed light on the connections between climate change and waste and what tribes are doing to address the issue.

Grant Management and Funding:

In FY2009, Kim Farnham, Maria Tartaglia and Kristin Hall served as Project Officers to manage $841,487 in grants and inter-agency funding. This included 6 grants to individual tribes and tribal consortia and 1 Inter-Agency Agreement with Indian Health Service that funded mini-grants to 11 tribes. In addition, Kim Farnham coordinated review of 7 tribal applications to the national Inter-Agency Tribal Solid Waste Management Assistance Project. Applications from tribes in Region 10 were down, perhaps in part due to a steady decline in funding available to the project. In 2003, total federal agency contributions to the funding project peaked at over $4M (partner agencies include EPA, IHS, BIA, USDA, HUD, DoD). In 2009, funded was down to just $1M nationally – to serve over 500 tribes. Only 1 Region 10 tribe was a finalist being considered for FY09 grant funding.

Impact: 17 tribes and tribal consortia used EPA funding to make solid waste program progress.

The RCRA Tribal Solid Waste Funding Story:
In FY2009, the Team participated in national efforts to address tribal solid waste and dump clean up funding. Early on, Region 10 responded to a Lead Region effort to quantify tribal solid waste need, including dump cleanup and infrastructure. The second effort collaborated with OSWER to craft a tribal waste initiative for the FY2011 President's Budget. This effort proposed dedicated funding to clean up open dumps impacting tribal lands. It also folded in a Region 10 proposal that addressed the specific needs of Alaskan villages, including training, planning, implementation and backhaul. This initiative was selected as one of OSWER's top two funding initiatives to forward to the EPA Budget Forum.

A third national effort was proposed by Regions 8 and 9 to address multiple needs on tribal lands, including dump cleanup. This effort built on data from all the regions and went forward to the EPA Budget Forum for consideration. It is not yet clear whether these initiatives will go forward in the FY2011 President's Budget.

Impact: Regions and OSWER are working together on solid waste initiatives for the future.

RCRA Tribal Sub-Region:

In FY2009, Regions 8 and 10 handed off the RCRA tribal Sub-Lead Region role to Region 9. Fran Stefan of the Team worked with Region 8 to transition the role to Heather White of Region 9. It was a natural time to transition since Regions 8 and 10 had completed the effort to establish the *OSW and Regional Tribal Integrated Waste Management Strategy*, including two national Tribal Solid Waste strategic targets. The targets have raised the visibility of tribal solid waste needs, especially the problem of open dumps. The regions are now moving into a new phase which includes cleaning up dumps, and preventing them from re-forming - focusing on waste minimization, recycling, and green building.

Impact: Region 10's Sub-Lead role has wrapped up, but we continue to work with Region 9 and the EPA Office of Resource Conservation and Recovery on mapping future direction for the program.

On The Horizon

- Continue to meet and exceed Tribal Solid Waste Strategic Targets
- Continue dedicated technical assistance and training to tribes on waste management
- Continue to facilitate stakeholder meetings as needed on solid waste issues
- Develop and begin implementing a tribal green strategy
- Identify projects at the intersection of waste, climate change and tribes
- Work to leverage funding for solid waste and dump clean up
- Investigate forming a state-federal Alaska solid waste workgroup
- Update tribal solid and hazardous waste web page
- Explore new ways to communicate with and engage tribes