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# TRIBAL WASTE Journal

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## AGAINST ALL ODDS: TRANSFER STATION TRIUMPHS

REGION 8 ROC: STRENGTH THROUGH PARTNERSHIPS

FUNDING YOUR TRANSFER STATION

LUSCIOUS LANDFILLS, GARBAGE MONSTERS, AND MORE

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United States Environmental Protection Agency
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# RESOURCE CONSERVATION CHALLENGE

## Campaigning Against Waste

Welcome to the second issue of the *Tribal Waste Journal*, an important communications tool of my Resource Conservation Challenge. The Challenge asks all Americans to take personal responsibility for their day-to-day decisions and to take one small action every day to conserve our natural resources. By 2005, we aim to reach a national recycling rate of 35 percent and cut in half 30 priority chemicals found in hazardous waste. Native American tribes and Alaskan Native villages of course play an important role.

The Challenge asks everyone to adopt a resource conservation ethic, to operate more efficiently and purchase more wisely, and to make and use environmentally sound products. You have already been hard at work on similar goals, and I commend your commitment to developing safe solid waste management options for your communities. It is clear that you have accepted and overcome environmental challenges of your own. You have assumed responsibility for improving your environment, sought change through partnerships and sharing, and used native cultural symbols and words to change old disposal habits.

I encourage you to continue to campaigning against waste and working side-by-side with your tribal communities, federal agencies, states, and industry to improve the environment in Indian country. I know you will appreciate the stories in this issue about how many tribes have worked "against all odds" to fund and build their transfer stations. You too can enjoy similar rewards through determination, perseverance, and positive relationships.

Marianne Lamont Horinko
Assistant Administrator
Office of Solid Waste and Emergency Response

# THE TRIBAL VOICE

## Changing Destiny: Region 8 Tribes Carve a Bright Future Through Partnerships

Kim Clausen-Jensen's environmental work is legendary among tribes in Region 8. Ms. Clausen-Jensen directs the Oglala Sioux Environmental Protection Program, which recently opened a landfill to provide tribal members with a safe disposal option. It took 7 years to plan, design, and construct the landfill, but patience and persistence paid off. The tribe obtained funding from 12 different agencies and completed the project. Ms. Clausen-Jensen believes that collaboration is the key to success. Through her position as chairwoman of the Regional Operations Committee (ROC), she works with other tribes in Region 8 to form partnerships. The *Tribal Waste Journal* (TWJ) wanted to know how ROC members work together and with government agencies to address environmental problems. With this and other questions in mind, we spoke with Ms. Clausen-Jensen on October 30, 2002. The following are excerpts of the interview:

**TWJ:** How did ROC get started?

**Ms. Clausen-Jensen:** In 1995, the Region 8 tribes formed ROC to address environmental issues. We [the Oglala Sioux Tribe] already had a tribal operations committee and thought, why don't we create a regional one? It is amazing that a few people can change destiny. We were the first tribes in the nation to form a regional entity to address environmental concerns. Our goal is to achieve a better quality of life for the Native American people, which have been forgotten.

Representatives from most of the 27 tribes in Region 8 attend ROC meetings quarterly in Indian country. At the last meeting, 22 tribes were represented. We also invite government officials to participate in the meetings.

**TWJ:** Has ROC influenced the relationship between EPA and the tribes?

**Ms. Clausen-Jensen:** ROC encouraged EPA Region 8 to form a single office to coordinate tribal grants and issues. EPA Region 8 responded to our concerns by creating the Tribal Assistance Program (TAP) office. TAP makes it easier for tribes to manage the federal funds they receive. There are individuals in the TAP office that can explain how federal dollars can be used. These employees help the tribes ensure that they are using the funding legally. To manage our grants effectively, we need to understand the intent of the federal laws.

TAP and ROC have enabled tribal representatives to build relationships with EPA officials and employees of other federal agencies. We get to know everyone from top officials to grant managers. We actually like the people at EPA and IHS. Our relationship is not 100 percent perfect, but we've created something that is

unique and works. It is like a marriage—we might not get along all of the time, but we don't want to get a divorce. Once you have a foundation of mutual respect and trust, you can tackle any project.

**TWJ:** How did tribes use ROC to build partnerships with other federal agencies?

**Ms. Clausen-Jensen:** I don't think that enough can be said about the benefits of partnering. ROC broke through the barriers with federal agencies by encouraging tribal representatives to form relationships with representatives from federal agencies. It's easier to work together when you know each other and understand one another's capabilities. In 2000, ROC encouraged EPA Region 8 and 30 other federal agencies such as BIA, USDA, IHS, and HUD to sign an MOU [memorandum of understanding]. Under the MOU, ROC and the federal agencies agreed to work together to remove barriers to effective environmental management in Indian country.

BIA, EPA, and your tribe might have small pots of money available for a project. Putting them together can form a large pot. You can't work on environmental projects in a vacuum in Indian country because the issues are too big. ROC pulls federal agencies into the overall project planning process from the beginning. Everyone comes to the table with a blank check and volunteers to pay for a portion of the project.

**TWJ:** How does ROC encourage tribes to share information?

**Ms. Clausen-Jensen:** ROC was instrumental in increasing communication among tribes. Now, we know our sister tribes well enough to call them up and share information. If one tribe has established a program to deal with a particular issue, that tribe can send representatives to another tribe to share knowledge and copies of grants and codes. We call it bartering—one tribe sends their RUS [Rural Utility Service] grant application to another tribe in exchange for its GAP grant application. These documents can serve as a template for other tribes, allowing them to avoid reinventing the wheel.

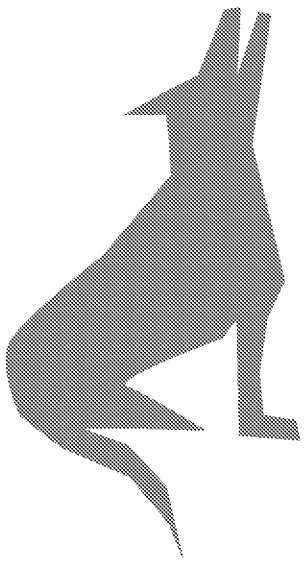
**TWJ:** How do ROC representatives reach consensus and prioritize projects?

**Ms. Clausen-Jensen:** Over the last few years, we have been able to reach consensus on a number of issues. We know each other so well. Sometimes the tribal representatives break away from discussions with federal officials to caucus among themselves. Tribal representatives don't always agree, and it helps to speak with one voice to the federal government.

Sometimes there isn't enough money to go around. ROC allows us to prioritize our projects. ROC has enabled us to look at our sister tribes and say, our needs are great, but theirs are greater. We know the battles that other tribes are facing because we have been there. Through empathy, sympathy, and pity we set our personal interests aside. We decide as a group to put one tribe's project ahead of the others. Other tribes still apply for the same grant, but inform the funding agency that they would rather see another tribe funded first.

**TWJ:** Do you have advice on developing an environmental program?

**Ms. Clausen-Jensen:** Often, I see tribes try to take on too much at once. Start slow and develop your program. Obtain funding for your staff. Many tribes use GAP (General Assistance Program) funding to pay for their environmental program staff. You might start an environmental program by hiring one person and training them to tackle one issue. Don't ask them to conduct inspections during the first year. Start with a task that they can handle. Later, you can add additional staff and new components to your program. As you discover new environmental issues, bring them to EPA and try to obtain funding for additional employees.



# FEATURE STORY

## Creating a Vision for Your Transfer Station

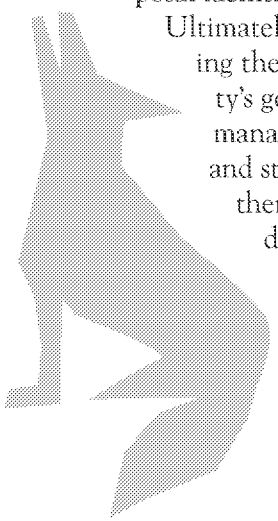
Developing a transfer station that will work in your community requires a vision, and good information. By developing solid waste management plans, performing waste assessments, conducting site visits, and directing feasibility studies, tribes can take the pulse of their communities before breaking ground for their projects.

### Develop a Solid Waste Management Plan

"Solid waste management plans serve as a road map for the future, forcing you to set goals and think about strategies for achieving them," according to Laura Weber, director of solid waste management for the St. Regis Mohawk Tribe. Specifically, she believes that tribes should develop solid waste management plans that integrate transfer station operations with the rest of their solid waste management services, such as waste collection, prevention, and recycling activities, to better evaluate the whole picture.

While the St. Regis Mohawk Tribe has used solid waste management plans primarily as a planning and design tool for transfer stations, the Eastern Band of Cherokee Indians decided to use a solid waste management plan to evaluate three alternatives: 1) building a new landfill, 2) building a transfer station, or 3) contracting with surrounding counties to use their waste disposal facilities.

Ultimately, by outlining the community's goals in the management plan and sticking to them, the tribe decided that building a transfer station would be most effective.



Tribes can continue to use solid waste management plans even after opening their transfer stations. The IHS helped the Tule River Indian Tribe develop a solid waste management plan that includes a long-term recycling strategy and financial plan for the transfer station. The St. Regis Mohawk Tribe is enhancing its solid waste management plan to include an expansion strategy for its solid waste management program, including establishing a composting operation at the transfer station. Interviews with each of these tribes indicate that solid waste management plans are excellent tools for looking at solid waste programs in a comprehensive fashion.

### Conduct a Waste Assessment

Building a transfer station that is either too large or too small can lead to higher operation and maintenance costs, inefficient operations, or overload. To properly size a transfer station, several tribes recommend conducting a waste assessment. The Eastern Band of Cherokee Indians, for example, learned from its waste assessment that it generates enough waste to warrant a large transfer station. The

> "In the beginning, there was lonely Coyote. Whatever else there was around, it was small and distant and hard to see... And then she met Silver Fox... Coyote and Silver Fox closed their eyes very tight and sang together. They sang, 'I want to see something. I want to see something. I want to see something.' While they sang, each imagined what they wanted to see."
>
> ~Miwok Creation Myth

Onondaga Nation, on the other hand, found that it generates only a few tons of waste per week, and so decided to build a much smaller transfer station.

Tribes can use either volume- or weight-based waste assessments to evaluate the waste generated by their communities. The St. Regis Mohawk Tribe, for example, measured the volume of waste collected through its curbside collection service to determine the correct size for its transfer station. To estimate commercial waste volumes, tribal members visited a representative 10 percent of the businesses on the reservation, recording the volume of the waste storage containers at each site and how often the containers required emptying.

The Eastern Band of Cherokee Indians conducted a weight-based waste assessment by soliciting approximately 200 households and several businesses to participate in a study. For a specified period of time, participants placed all of their solid waste and recyclable materials in special garbage bags. At the end of the study period, solid waste staff collected the bags and separated the waste by hand, weighing paper, food scraps, and glass separately on a set of hanging scales. The tribe then used the waste assessment data to estimate current waste generation rates, identify recycling opportunities, and plan its transfer station. Combining data about future growth in the community with the waste assessment results, the tribe was able to determine the correct size for its transfer station.

> "Know your waste stream. A waste assessment provides information about potential recycling opportunities and helps you choose a transfer station design."
>
> ~Calvin Murphy, Eastern Band of Cherokee Indians

## Conduct Site Visits

Visiting other transfer stations to determine what features work best in different communities can save money and time in the planning process. By talking with facility operators and evaluating different configurations in several communities, for example, Merlin Tafoya, Sr., executive director of the Public Works Division for the Jicarilla Apache Nation, learned that enclosed facilities are most effective in regions that experience harsh winters. Mr. Tafoya's personal research convinced the tribal council to approve an enclosed facility.

The Confederated Tribes of the Umatilla Indian Reservation also concluded that building an enclosed facility was preferable in its community after visiting three transfer stations in similar size communities. Tribal employees learned that open facilities produced greater litter and odors, even if the facilities are small. Based on this observation, the tribes chose to build an enclosed facility to minimize these problems.

If some tribes lack funding for personal site visits, phone calls can also be an effective information-gathering tool. Tribes can contact other communities as well as haulers and landfill operators. When employees of the Oglala Sioux Tribe made phone calls, for example, they discovered that transporting waste from a transfer station on the reservation to a landfill off the reservation would be too expensive and that tipping fees at the nearest landfill were very high. Consequently, the tribe decided not to build a transfer station at all, but to build its own landfill. When Onondaga Nation contacted waste haulers to gather information about small transfer stations, it obtained a variety of construction and operation cost estimates for several different designs.

> "The feasibility study was useful. We were trying out a new type of waste disposal and needed to know how to do it."
>
> ~Bonnie Burke, solid waste manager for the Confederated Tribes of the Umatilla Indian Reservation

## Perform a Feasibility Study

Performing a feasibility study is another way to assess the current and future needs and resources of the community prior to building a transfer station. Using economic analysis and current waste generation rates, combined with the stated priorities of the community, a private firm helped the Jicarilla Apache Nation determine that building a transfer station was indeed the most affordable and effective long-term solution to its solid waste needs. The firm also used the tribe's information to evaluate transfer station designs and draft a business plan for developing and operating the transfer station.

The Confederated Tribes of the Umatilla Indian Reservation also hired a private firm to complete a feasibility study for its transfer station. The study indicated that a tribal transfer station could be profitable and provided the tribes with an action plan. It also listed siting requirements, identified short and long-term goals, and highlighted potential obstacles.

# Captivating Your Council

Open dumps = problem. Transfer station or landfills = solution. While this concept might be black and white to some, tribal councils and others in positions to approve such a plan might not understand the connection.

That's why the St. Regis Mohawk Tribe, the Fort Peck Reservation, and the Oglala Sioux Tribe of the Pine Ridge Reservation have compiled their four major secrets to success in convincing tribal councils that these solutions can address a major scourge in their communities. Gaining tribal council approval for transfer stations paves the way for obtaining funding, particularly from IHS. To get IHS Sanitation Deficiency Systems (SDS) funding for transfer station construction, the tribal council must place solid waste as its top priority.

## A Picture Is Worth A Thousand Words

One of the secrets to successful persuasion is just a click away. That's what tribal environmental managers found when they used pictures to present their cases to council members. Pictures not only helped tribal council members "see" all the open dumps that scar Indian lands, but also how transfer stations can help provide a cleaner, safer environment for their community.

Laura Weber, director of solid waste management for the St. Regis Mohawk Tribe, says that showing her tribal council pictures of open dumps "was a big eye opener" and eventually led to its support of her environmental department's proposal to build a transfer station.

Deb Madison, Fort Peck's environmental program manager, also found pictures to be an effective persuasion tool. When the Fort Peck tribes applied for SDS funding, Ms, Madison had to explain to the tribal council why they should designate solid waste management the reservation's number one priority.

In her presentation, Ms. Madison showed the council members pictures of open dumps and roll-off sites and educated them about how these sites fit into the reservation's existing Integrated Solid Waste Management Plan. Ms. Madison commented, "It was helpful to show the council how roll-off sites fit into the big picture. We showed the council that roll-off sites are part of a larger plan that includes recycling and waste prevention."

A picture is worth a thousand words...

## Seeing Is Believing

If pictures aren't enough to persuade your council members, "take them to open dumps, and to open burning sites. Let them stand downwind of smoke," urges Ms. Weber. This strategy worked for her tribe.

### TIPS FOR WORKING WITH YOUR TRIBAL COUNCIL

- Use pictures; they are worth a thousand words.
- Take council members to visit open dumps and transfer stations.
- Find a federal "friend" or supportive community members.
- Educate your community.
- Be patient.
- Be persistent—don't give up!

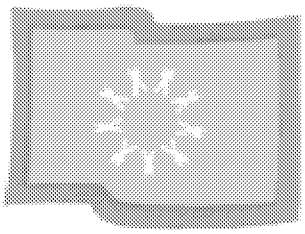
Two of her five council members joined her on trips to visit transfer stations at the Eastern Band of Cherokee Indians and the Alabama-Coushatta Tribe. "When they saw the equipment working, they really bought into it," she said.

## A Champion for Your Cause

Combined with pictures, you stand an even greater chance of success if you can win the support of at least one tribal council member to serve as your "champion." One way to

gain this support, says Kim Clausen-Jensen of the Oglala Sioux Tribe, is by "schmoozing" the council as much as possible. She does this by keeping the council informed through monthly briefings. "You get even better results when you approach the council with a new idea if you can make it seem like it's their idea," asserts Ms. Clausen-Jensen.

Taking another approach, Ms. Madison asked her IHS engineer to help her convince council members to make solid waste a priority. The engineer told the council that there was a good chance that the roll-off sites would get funded if the tribes placed solid waste at the top of their priority list. According to Ms. Madison, having an IHS engineer advise the council helped her council members feel "more comfortable in communicating their needs."



OGLALA SIOUX

Instead of using federal agency staff to support their cases, some tribes have brought in respected community members as a show of support for their solid waste projects. Some solid waste managers, for instance, have formed community advisory councils to help make their case to the council.

Representatives from several tribes at the 2002 Solid and Hazardous Waste Interactive Workshop, held at the Spirit Lake Casino and Resort, advocated this approach. They emphasized the powerful influence of having such a group support and advocate your case in front of the tribal council. Several people mentioned that before forming a community advisory council, the tribal council tended to ignore them because it was just one person pleading the case. With this group standing behind them, it became harder for the tribal council to put them off.

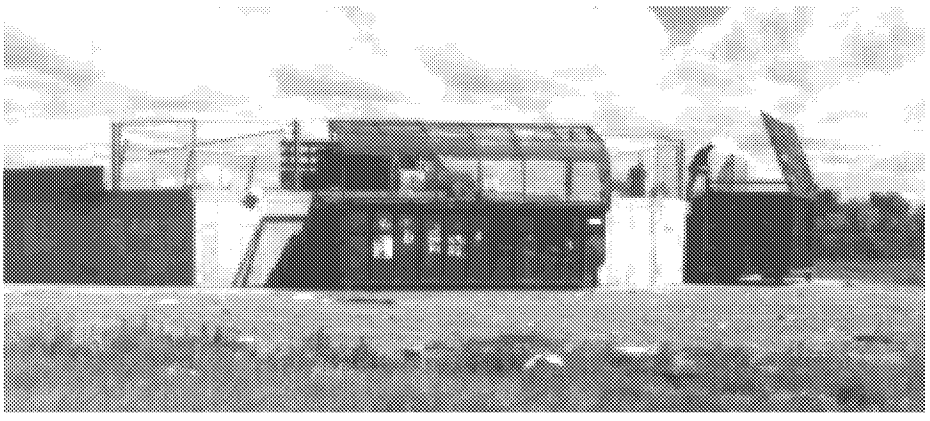
> "If pictures aren't enough to persuade your council members, take them to open dumps, and to open burning sites. Let them stand downwind of smoke."
>
> ~Laura Weber, director of solid waste management, St. Regis Mohawk Tribe

Even for those tribes where environmental staff enjoy a close relationship with their tribal council, winning them over takes time. "If they're not real encouraging, keep going back," urges Ms. Weber. She says in her case, it took a lot of "hounding and educating" to get solid waste on a level playing field with competing priorities such as water and sewer projects. Eventually, "persistence paid off," and now tribal council members trust Environmental Division staff to bring important issues before them.

## Behind-the-Scenes Education

Despite all the efforts described so far, overcoming tribal council resistance might, at some point, seem impossible. At that point, take the time to educate community members about the cause. In the case of the Oglala Sioux, this behind-the-scenes education paid off.

According to Bobby Sullivan, the public involvement coordinator for the Pine Ridge Reservation, when the tribe went to the council seeking support for a proposed landfill operation, it encountered stiff resistance over siting concerns. Instead of pressing the issue, Ms. Sullivan decided to wait for the next tribal council election. In the meantime, she and other environmental department staff used the time before the election to educate current and potential council members about the landfill. They showed these individuals blueprints and provided paperwork. They also gave presentations at public meetings and spoke with the tribe's district councils, which keep residents informed about tribal council business. After the election, the tribal council approved landfill construction.



Fort Peck Reservation's roll-off site in Poplar, Montana.

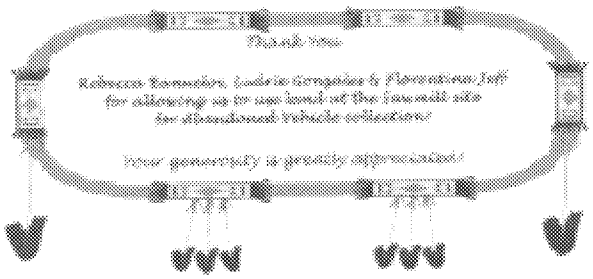
# Ways to Win Community Support

Following the old adage "the early bird catches the worm," Kerri Vera, environmental program manager for the Tule River Indian Tribe, began her community education campaign a year before the transfer station opened. "Without their support, your efforts, however well-intended, will not be successful," she asserts. With her tribal council already on board, Ms. Vera turned her attention to gaining community support for the transfer station.

## TIPS FOR CREATING COMMUNITY SUPPORT

- Start your community outreach and education program early.
- Involve your community in important decisions.
- Use your tribe or village's language and culture to increase the impact of your message.
- Keep your community involved through public meetings, newsletters, and e-mail announcements.

As a first step, the Tule River Tribal Environmental Department Program ran a series of articles in the tribal newsletter on why the community should be concerned about solid waste management, how their choices contribute to the filling of California's landfills, and how to reduce household waste.



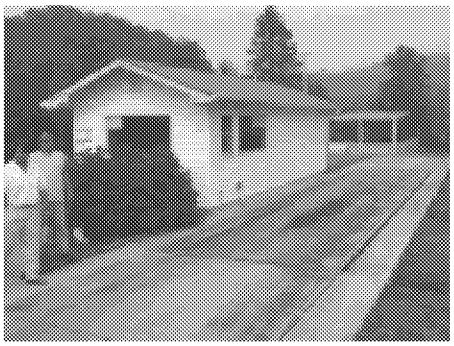
Next, the Tribal Environmental Program informed the community about various aspects of the transfer station, including when it would open and the types of waste citizens could dispose of at the facility. In addition to explaining the "whys and hows" of the transfer station project to the community, the tribe recognized outstanding community efforts to reduce and recycle solid waste. To do this, it developed a graphically appealing environmental newsletter and featured photographs and "thank you" articles on those individuals who helped with roadside and riverside cleanups or donated land for abandoned vehicle clean-up. Ms. Vera believes the outreach campaign "helped stimulate interest in the roles we can and do play in waste production and reduction."

Other tribes with solid waste community outreach programs also stressed the importance of explaining to people how their personal choices can impact the well-being of the entire community. To drive this point home, the Onondaga Nation used words from their native language and cultural symbols in some of its promotional materials and signs for the transfer station. Underlying these materials, says Jeanne Shenandoah, is the cultural mandate to "care for Mother Earth and prevent waste."

Like the Tule River Nation, the Confederated Tribes of the Umatilla Reservation found that an environmental newsletter was a wonderful way to keep residents informed about transfer station operation and waste reduction progress. Filled with "exciting graphics and tips for reusing products," one recent issue, for example, suggested reusing old milk jugs by tying them together and hanging them on barbed wire fences to scare cattle away and keep the cows from getting hurt.

The Umatilla also keep tribal employees updated about the transfer station by sending e-mails and outreach materials to all tribal departments. They plan to expand the tribes' education program to include transfer station tours and more activities for children.

Public hearings and meetings are another way to take the pulse of your community. For instance, the Jicarilla Apache Nation received a mandate from their community to "do whatever is necessary to manage our waste safely and effectively" during a public meeting. According to Merlin Tafoya, Sr., executive director of public works, the community not only supported the construction of a transfer station, but it provided "overwhelmingly positive" feedback once it opened. Tribal members found the transfer station cleaner and easier to use than the previous dump sites.



Scale house at entrance to Eastern Band of Cherokee Indians' transfer station site.

As for the Eastern Band of Cherokee Indians, a public hearing ruled out plans to build a landfill and, instead, backed the construction of a transfer station.

If, like many tribes, you're wondering how to pay for your educational campaign, Chief Powless of the Onondaga Nation might have a solution. Chief Powless encourages other tribes to gather outreach materials from surrounding counties and waste management companies. He said, "Many of the smaller waste management companies believe in recycling. They have already created brochures and other materials to promote recycling. Counties have also developed outreach materials on waste disposal and recycling. It's easy to start an education program if you leverage resources."

If you distribute your educational materials and find some citizens still continue to dump their waste illegally, then you might want to try one-on-one visits with the uncooperative citizens. The Onondaga Nation used this approach with the few households that refused to recycle and continued to dump illegally. These one-on-one household visits were successful in convincing these hold-outs to use the Nation's transfer station.

> "Underlying these materials is the cultural mandate to care for Mother Earth and prevent waste."
>
> ~Jeanne Shenandoah, Onondaga Nation

## TRIBES CLEAN UP AT WASTEWISE AWARDS CEREMONY

EPA recently recognized the Confederated Tribes of the Umatilla Indian Reservation, Robinson Rancheria of Pomo Indians, and Blue Lake Rancheria tribes for their outstanding waste reduction activities at the WasteWise Annual Meeting and Awards Ceremony in Washington, DC.

The three tribes' notable waste reduction activities include:

- Implementing aggressive recycling programs;
- Composting restaurant food scraps;
- Purchasing recycled content paper;
- Developing and delivering a presentation about waste prevention, recycling, and buying recycled content products to the tribal governing board.

From left to right: Julie Moran and Frank Vanegas (Robinson Rancheria of Pomo Indians); Linda Huber, EPA Deputy Administrator; Bonnie Burke (Confederated Tribes of the Umatilla Indian Reservation); Nita Rapozo and Jill Ortiz (Blue Lake Rancheria of California); Charles Bearchief (Robinson Rancheria of Pomo Indians).

WasteWise is a free and voluntary partnership program that provides technical assistance and recognition to partners that pledge to reduce waste. If you are interested in joining the more than 35 tribes and native villages that are WasteWise members, visit <www.epa.gov/wastewise> or contact the WasteWise Helpline at 800 EPA-WISE (372-9473).

EPA WASTE WISE
Preserving Resources. Preventing Waste

# Funding Your Transfer Station

Finding funding for your solid waste project can be a challenging experience—like looking for a needle in a haystack! Long, complicated applications coupled with a myriad of reporting, environmental, and financial requirements can challenge even the most experienced grant writer. Even so, federal grants and loans may be your best bet to build the solid waste facility that you need.

Through determination, perseverance, and a little help from their agency representatives, the tribes we interviewed turned a frustrating and formidable process into hard cash that is making their solid waste visions a reality. They maintain that you, too, can enjoy similar rewards if you are willing to:

- Be bold and ask questions of your agency representatives
- Follow the grant process one step at a time
- Live up to your end of the bargain—do what you said you would do!

## Finding Funding: Fellow Tribes, Internet Offer Options

Many federal agencies offer grants and loans for solid and hazardous waste projects that fall within their purview. "The challenge is finding a grant that fits your needs," explains Deb Madison, the environmental program manager of the Fort Peck Reservation Environmental Protection Office. "Creativity is the key to success. Grant writers need to find ways to make grants fit tribal needs.

At the same time, tribal leaders must realize that some needs cannot be met through grants. For example, very few grants are available for operation and maintenance activities. Because of this, Ms. Madison urges tribes to determine how their transfer station's operation and maintenance will be financed even before construction begins.

Numerous resources are available to help you identify sources of funding. Most federal agencies announce grant and loan availability in the *Federal Register* and provide information on their Web sites. Some agencies send out announcements and solicitations for their grant programs. For example, the Interagency Work Group <www.epa.gov/epaoswer/non-hw/tribal/finance.htm> mails out an annual announcement and solicitation for its open dump cleanup grants.

Another way to learn about available grants is talking with other tribes. Several tribes mentioned conversations with neighboring tribes as a primary source of grant information. Sharing information and experiences can be mutually beneficial. Some tribes even exchange successful grant applications to help improve their future grant applications.

Internet searches can also turn up information on funding opportunities. That is how Kim Clausen-Jensen, director of the Oglala Sioux Environmental Protection Program on the Pine Ridge Reservation, found out about USDA's Rural Development grants. "All of the agencies have Web sites with descriptions of their grant programs including applications, instructions for applying, and contact information for state and regional representatives," says Ms. Clausen-Jensen. (See the Resources section on page 21 for a listing.)

The Tribal Association of Solid Waste and Emergency Response (TASWER) can also help tribes and native villages locate funding by directing them to the appropriate representative for each source of

### TIPS FOR FUNDING YOUR TRANSFER STATION

- Apply for a variety of grants.
- Talk to other tribes to share information and experiences.
- Develop good relationships with your regional agency representatives.
- Seek creative solutions to obstacles.
- Be accountable—earn a positive reputation.
- Be persistent—do not give up!

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funding. During 2002, for example, TASWER helped the Native Village of Ouzinkie obtain funding from the BIA to replace several above ground storage tanks. TASWER's Web site (www.taswer.org) lists "10 Pots of Money" available to tribes and native villages.

A number of private and nonprofit foundations and organizations offer environmental grant programs. The Confederated Tribes of the Umatilla Indian Reservation, for example, received a $25,000 grant from the JELD-WEN Foundation for construction of its transfer station and recycling program. *Grant Resources for Solid Waste Activities in Indian Country* (EPA530-R-98-014) provides an extensive list of private sources of funding for tribes and native villages.

## Building Relationships Reaps Rewards

In addition to speaking with other tribes or villages, Ms. Clausen-Jensen believes speaking with your federal agency representatives is crucial to securing funds. "Educate them about your tribe's history, culture, and current situation. Explain all of your tribe's accomplishments, especially the ones dealing with solid waste. If they understand your tribe, who you are, and what you have accomplished, they are more likely to support you in future endeavors," she says.

When preparing your grant application, Ms. Clausen-Jensen adds, "Don't be afraid to ask them for help or to outline the steps to completing a grant application. That is their job. That is why they are there."

As you develop relationships, Ms. Clausen-Jensen believes it is important for tribes to "take the lead on all initiatives." She advises, "Be positive, constructive, and flexible in working with your agency representatives."

Mavis Hass, from USDA Rural Development's Rural Utility Service South Dakota Office, supports this view. "The communication has to be there. That is where the whole thing starts." When working on your loan/grant application, Ms. Hass recommends making a trip to the agency office if you are having difficulty completing the application.

Bobby Sullivan, the Pine Ridge public involvement coordinator, made several visits when she started working on the Rural Development application. According to Ms. Sullivan, "I called Mavis all the time and camped out in the Rural Development office for 2 weeks while she walked me through the application process. She showed me what to do and helped me obtain the right signatures." Ms. Sullivan offers, "The Rural Development staff is there to help you. Call your regional people and let them show you what to do. Let them help you."

Laura Weber, the director of solid waste management for the St. Regis Mohawk Reservation, is also a firm believer in the importance of relationship building. She first learned about IHS Sanitation Deficiency System (SDS) funding for solid waste from an IHS engineer she met while working on some water projects. In addition to telling Ms. Weber about SDS funding, the engineer also pointed her toward HUD's Indian Community Development Block Grant (ICDBG) program.

If you are like Ms. Weber, you may find your relationships paying off in unexpected ways. Out of the blue, she received a call from her USDA contact. He told her that his program had available grant funding and that he thought she should apply for it. She worked closely with the regional project officer during the application process, and the tribe received the grant for construction of its transfer station.

If you find that your regional representatives are not responsive, Ms. Weber suggests inviting them to your reservation to build a relationship with them. Her tribe conducts a weekend cultural sensitivity workshop designed to help individuals from outside the community understand the tribal perspective. "Partnering with a regional representative benefits both your tribe and the federal agency," says Ms. Weber.

> "If you can demonstrate to the agency representative that your tribe has been successful in the past and is responsible and accountable, he or she is more likely to support you in securing future technical assistance and funding."
>
> ~Kim Clausen-Jensen, director of the Oglala Sioux Environmental Protection Program, Pine Ridge Reservation

## Earning a Reputation: Those that Give, Get

In addition to building a relationship with your agency representatives, many tribes emphasized the importance of building trust and a positive reputation for your tribe or village. Ms. Clausen-Jensen believes that building trust is a major part of this process. "If you can demonstrate to the agency representative that your tribe has been successful

"Partnering with a regional representative benefits both your tribe and the federal agency."

~Laura Weber, director of solid waste management, St. Regis Mohawk Tribe

in the past and is responsible and accountable, he or she is more likely to support you in securing future technical assistance and funding."

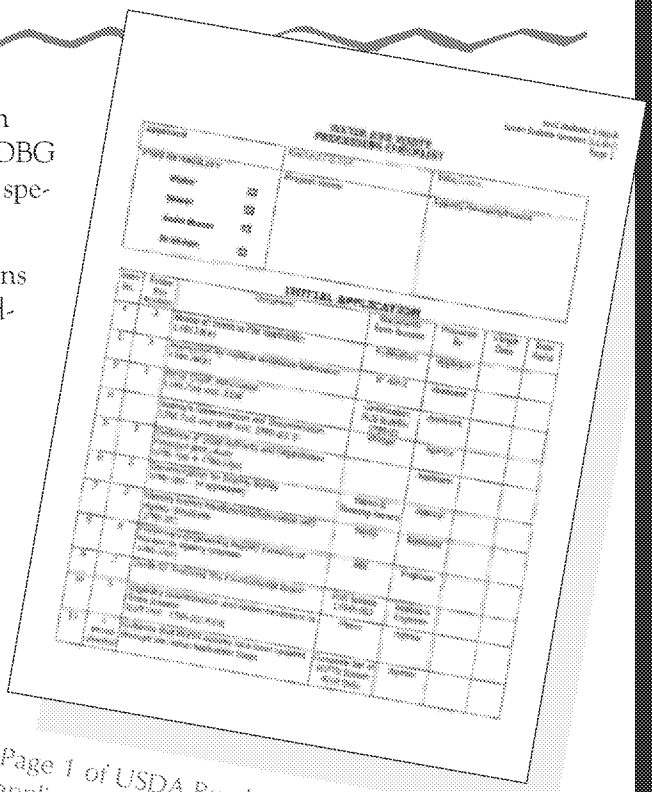
Ms. Clausen-Jensen believes that a good way to build this trust is to make sure you submit all required reports and meet all agency requirements when you do receive a grant. She adds, "This attention to detail is especially crucial with pilot projects. If agencies cannot document the success of a pilot project, it is unlikely to be continued. Submitting the required reports helps the agency justify the project to internal federal reviewers and can help ensure that the project receives continued funding. Live up to your end of the bargain—do what you said you would do."

## Running into Roadblocks

Securing federal grants and loans is a great way to pay for construction of your transfer station, but it does not come without difficulties or challenges. Frequently, the biggest roadblock to obtaining federal grants is completing the application.

Most agency applications are very long and complicated. USDA's Rural Development grant/loan application, for example, provides a checklist of required items to help applicants—and the checklist itself is six pages, double-sided! Some applications also require specific information or data that many tribes do not have immediately on hand, such as the HUD ICDBG application, which requires specific census data.

Many federal grants and loans also require contractor bonding. USDA's Rural Utilities Service, for instance, requires contractors to secure performance and payment bonds. It also requires a fidelity bond (a.k.a., a crime and dishonesty bond) for anyone with access to the grant or loan money to protect against embezzlement or misappropriation of funds.



Page 1 of USDA Rural Development's grant/loan application check list.

Another hurdle in the grant process is complying with the National Environmental Protection Act (NEPA). NEPA requires any construction by a federal agency, or any construction using federal funds, to undergo an environmental assessment (EA) or an environmental impact statement (EIS). The funding agency is required to perform the EA or EIS, but tribes must be involved in the process.

Reporting requirements are the final challenge with which tribes must contend. Many agencies require periodic progress and financial reports and a final report or assessment. These reports are not usually difficult, but can be time consuming.

## Strategies for Success

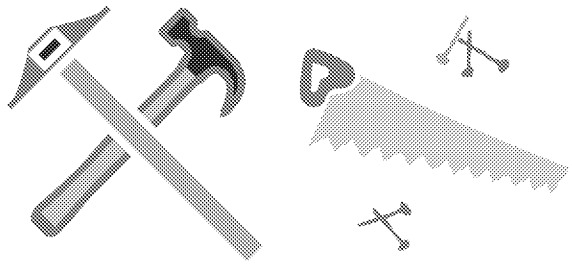
### 1. Turning Failure into Success

If you apply for a grant and do not receive it, Ms. Weber recommends calling your agency representative and asking why and how you can improve your chances in the future. The first time she applied for a HUD ICDBG, her tribe was not selected. She called the HUD office to find out why and ask for ways to improve the application. The HUD representative sent back her application with an evaluation form. She used HUD's comments to revise the application. When she resubmitted it, HUD awarded her tribe an ICDBG. Ms. Weber advises, "Don't be afraid to pick up the phone and call your regional representatives. Be bold and ask questions."

### 2. Divide and Conquer

One possible strategy for increasing your tribe or village's chance of receiving grants is to break big projects into discrete portions and seek funding for the individual parts. Ms. Clausen-Jensen points out that obtaining $75,000 from an agency for a portion of your program, such as a collection truck or compactor, might be easier than obtaining $600,000 for the entire program all at once.

# Making Your Vision a Reality: Siting, Designing, and Building Your Transfer Station



Once your vision for a transfer station has the support of the tribal council and the community, and you have secured the necessary funding, it is time to site, design, and build your facility. Some tribes select the site first and design their facility around the physical characteristics of the land. Other tribes design their transfer station first and look for land that will best accommodate it. In many instances, tribes do both simultaneously. No matter which approach you use, certain principles will apply. This section discusses how the siting of your transfer station can affect its success, the importance of designing a facility that meets your tribe's specific needs, and the benefits and drawbacks of different construction approaches.

## Choosing a Site

When siting a transfer station, tribes have learned that a few key factors can greatly influence the success of a facility. These include:

- Central location
- Access to major (paved) roads and highways
- Community's familiarity with the site
- Impacts on the surrounding community and environment
- Buffer space between the facility and the community
- Adequate space for future expansions
- Topography
- Impacts on traffic
- Access to utilities (i.e., water and electricity)

### TIPS FOR DESIGNING YOUR TRANSFER STATION

- Determine your key siting criteria before you begin your site search.
- Choose a familiar and centrally located site with easy access to major roads if possible.
- Design your transfer station to meet your tribe or village's specific needs and situation.
- Use local contractors to avoid service and repair problems.

Siting a transfer station in a central location and providing access to roads and highways are two factors that ranked highest on several tribes' lists of siting criteria. Community familiarity with the site (such as using former dump sites) is another factor that many tribes recommended to encourage transfer station use. Considering a transfer station's impact on the neighboring community is also important, as proper siting can minimize the effects of noise, odor, traffic, litter, and pests on a community. Considering how the transfer station might expand in the future, such as adding composting operations or used goods swaps, can also impact site decisions.

The Onondaga Nation found success in its siting decisions by choosing a former open dump site located on an uninhabited road. Tribal members were already familiar with this location, and it is situated away from homes and the community center, thereby providing a buffer space that helps minimize noise, odor, and traffic impacts. In addition, the site is between three highways, which allows easy access for tribal members, minimizes traffic congestion, and facilitates waste removal by the contract haulers.

Similarly, the Eastern Band of Cherokee chose a closed dump site with which the community was already familiar. The tribe already owned the land, and the site was large enough for recycling and composting operations. Overall the site is a success, but because the tribe used existing onsite roads to keep costs down, the area experiences occasional traffic bottlenecks. In retrospect, Calvin Murphy, the tribe's executive director of tribal utilities, recommends performing an engineering study of a site before beginning construction, with an emphasis on studying traffic flow patterns within the facility and on surrounding roads.

The Jicarilla Apache Nation established a list of "essential siting criteria" before beginning its site search. One of the main criteria was that

the site be accessible by a paved road. Using this list as a guide, the tribe identified a 6-acre section of land previously designated for landfill use by the tribal council.

The Confederated Tribes of the Umatilla Indian Reservation, likewise, considered relevant social, economic, and environmental factors during its site selection process. These factors helped rule out one potential site that was ideal in many ways, but was located in a flood plain. Weighing all the relevant factors, the tribes selected and purchased a private piece of land adjacent to the reservation near a major interstate.

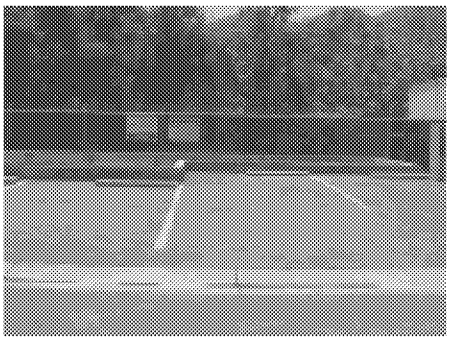
The Tule River Indian Tribe found that it had to locate its transfer station in the middle of the community and near the river due to limited land availability. To minimize the site's negative visual impact, the tribe installed fencing along the perimeter and instituted several measures to prevent runoff into the river. The tribe found that selecting a specific site sometimes requires special engineering designs or operational practices.

## Designing Your Facility

When designing a transfer station, tribes recommend focusing on two major considerations: size and specific needs or conditions. Arguably the most important design decision is determining the size of your transfer station. Calvin Murphy advocates designing your transfer station to meet your tribe's needs now and 10 years into the future. When the Eastern Band of Cherokee designed its facility, it knew it had to build a facility that could handle the waste from its 3,000 homes and 400 businesses, in addition to waste from its planned gaming facility.

The Confederated Tribes of Umatilla also sized its facility to meet future needs. Its 7-acre site is large enough to house a 7,200 square foot, multi-level, 200 tons-per-week capacity transfer station and still has enough space for a proposed 75 foot by 100 foot building to collect, sort, and bale recyclables and a large scale composting operation.

Mr. Murphy cautions tribes against building a transfer station with the expectation of accepting off-reservation waste for a profit. "There is no guarantee you will ever see a return of your investment," he cautions. "Build a transfer station to handle your tribe's waste. If you are able to accept others' waste and generate some revenue, then that is an added bonus. Just don't count on it."

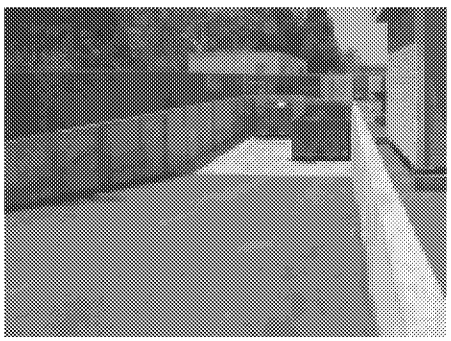


Front view of the waste unloading area at the Tule River transfer station.

It is also important to determine if your transfer station will require a special design to address specific demands or conditions. Weather and climate are two conditions that must be planned for in advance. Knowing how your hauler is going to charge you is another element to factor into decisions. Merlin Tafoya, Sr., of the Jicarilla Apache Nation, for example, knew that he wanted an enclosed and heated transfer station because of the long harsh winters on the reservation. He also knew he wanted a compactor unit to maximize outgoing waste loads, since the tribe's hauler charges by the truck load rather than per ton. "Know your tribe's situation, location, and region, and your goals," he said.

The Onondaga Nation and the St. Regis Mohawk Tribe, both located in upstate New York, are also familiar with long cold winters. To cope with freezing conditions, the Onondaga Nation built a shelter for station employees and one for the hydraulic pump that drives its compactor. The St. Regis Mohawk Tribe chose to use a modular, self-contained unit that is weather-, leak-, fire-, and animal-proof.

Preventing illegal dumping, keeping out animals such as dogs and bears, and controlling litter are several additional challenges that many transfer stations face. The Tule River Indian Tribe learned from past experience with roll-off bin sites that a fence was essential for all of these issues. Prior to building its transfer station, the tribe used a



Side view of the paved ramp providing access for vehicles removing and replacing full roll-off containers.

series of roll-off containers for waste disposal that were not fenced, and scavenging dogs and illegal dumpers quickly made the sites a mess. The tribe also learned that placing roll-offs on the ground made disposal of large and heavy items difficult. To rectify these errors, the tribe selected a transfer station design that incorporated roll-off bins set below ground level in an excavated area.

The Eastern Band of Cherokee Indians' enclosed transfer station building.

With this configuration, customers simply back up to the edge of the bins and drop their waste in.

## Building Your Transfer Station

There are several different approaches to building your transfer station. Some tribes allow a federal agency—frequently the IHS—to build the facility for them and assume operational control once construction is complete. Many tribes use federal grants or loans to build the facility themselves or pay an independent contractor. A few independent tribes, such as the Onondaga Nation, pay for and build their facilities completely on their own. You will need to decide which option is best for your tribe in terms of economic and technical feasibility and sovereignty concerns. The examples that follow highlight a few of these trade-offs.

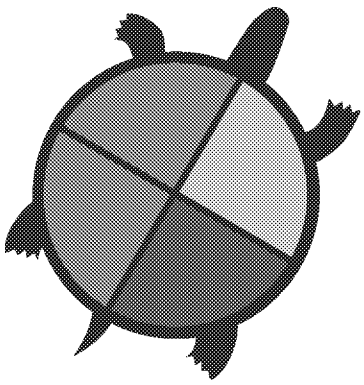
Building your transfer station yourself or hiring a private company gives you the most control over the construction process. Taking this approach also allows you to include specific requirements in the contract to satisfy tribal needs and policies. The Confederated Tribes of the Umatilla Indian Reservation, for example, used several federal grants and loans, one private grant, and $200,000 of its own money to hire a private construction company to build its transfer station. The tribes used a competitive bidding process to select a contractor. As part of the contract, the tribes required the contractor to hire local Native American workers to the greatest extent possible. If the contractor could not fill its needs locally, it was required to attempt to hire individuals from other tribes.

When hiring a contractor, Bonnie Burke, the Umatilla's solid waste manager, recommends using local contractors and subcontractors whenever possible. She had difficulty getting a few non-local subcontractors to come back and repair equipment or correct problems. Ms. Burke also recommends double-checking the warranty dates on facility equipment and structures, especially if the tribe encounters construction delays, and suggests extending warranties when possible.

Building the facility yourself gives you more control over its outcome, but accepting money from the federal government can mean following certain restrictions as well. While Ms. Burke appreciated the money her tribes received from the federal government, she commented that the agency was somewhat inflexible in terms of how the tribes could spend their funds. When delays and unexpected costs came up, as they almost inevitably do on construction projects, it was difficult to cover new costs with grant money that was designated for a specific purpose.

> "Know your tribe's situation, location, and region, and your goals."
>
> ~Merlin Tafoya, Sr., Jicarilla Apache Nation

Contractor bonding is another concern when using federal funds to hire a private construction company. Most federal grant and loan programs require contractors to secure performance and payment bonds and a fidelity bond. After the St. Regis Mohawk Tribe selected a contractor to build its transfer station, for example, the contractor was unable to meet the required bonding requirements within the allotted 10 day period. Consequently, the contract was voided, and the tribe had to initiate the bidding process again.



# TRANSFER STATION SNAPSHOTS

## Assiniboine and Sioux Nations of the Fort Peck Reservation
Northeastern Montana

**Capacity:** Four sites with single 40 yd³ roll-off bin, one site with three 40 yd³ roll-off bins
**Population served:** 10,300
**Hours of operation:** Four unfenced sites—open 24 hours, one fenced site—open during daylight hours
**User fees:** Residential customers—$15 per month, businesses and contractors—$300 per month
**Types of waste accepted:** All household and commercial waste
**Cost:** $20,000 each for two HUD CDBG-funded sites, $40,000 each for the three IHS-SDS-funded sites
**Design:** Five roll-off sites across reservation; one site has three bins, concrete pad, and headwall; three sites have one bin and a concrete headwall; one site has just a bin

## Oneida Nation
Nedrow, New York

**Capacity:** One bin for waste (emptied at least once a week), one bin for recyclables
**Population served:** 600
**Hours of operation:** 7 days a week, 24 hours a day
**User fees:** Free to tribal members
**Types of waste accepted:** Household trash, recyclables (paper, glass, plastic, cardboard), car batteries, household hazardous waste
**Cost:** Not available
**Design:** Open facility, fenced and gated; concrete surface with two roll-off bins, and waste compactor, shelter for staff and generator

## St. Regis Mohawk Tribe
Akwesasne, New York

**Capacity:** Two 53 yd³ self-contained modular units for waste, four 6 yd³ self-contained modular units for recyclables
**Population served:** 2,000
**Hours of operation:** To be determined
**User fees:** Pay-as-you-throw on a per bag basis, recycling is free
**Types of waste accepted:** Household trash, recyclables (paper, cardboard, glass, aluminum, plastic)
**Cost:** Not available
**Design:** Open facility, fenced and gated, paved road, and tipping area, scale located at entrance, building housing scale equipment, baler, and administrative operations, composting bathroom (no running water)

## Tule River Indian Tribe
Tulare County, California

**Capacity:** Two 30 yd³ roll-off boxes (emptied twice per week), three tipping bins and three storage bins for recyclables, equipment storage shed, running water
**Population served:** 800
**Hours of operation:** Monday – Saturday, during daylight hours
**User fees:** Free to tribal and community members and businesses
**Types of waste accepted:** Household trash, white goods, tires, recyclables (office paper, glass, cardboard, plastic)
**Cost:** $141,000 ($45,000 from IHS and $96,000 from HUD)
**Design:** Open facility, fenced and gated, paved surface, two waste bins set down in an excavated area

## Jicarilla Apache Nation
Dulce, New Mexico

**Capacity:** 12 to 16 tons per day (three to four 42 yd³ bins/day)
**Population served:** 5,400
**Hours of operation:** Monday – Friday, 8 AM to 5 PM (to 6 PM during the summer)
**User fees:** Free to tribal residents
**Types of waste accepted:** Household trash, yard trimmings (branches < 3 in. in diameter), bulky items, white goods, tires, car batteries, household hazardous waste
**Cost:** $900,000 ($500,000 from the Jicarilla, $400,000 from IHS)
**Design:** Totally enclosed building, two-level building (56 x 75), hopper pour (fenced) above compactor which compacts waste into enclosed 42 yd³ on lower level

## Confederated Tribes of the Umatilla Indian Reservation
Pendleton, Oregon

**Capacity:** 200 tons per day
**Population served:** 2,500
**Hours of operation:** 7 days a week, 7:30 AM to 5:30 PM (5/1 through 9/11), 7:30 AM to 4:30 PM (9/1 through 4/30)
**User fees:** Pay-as-you-throw on a per pound basis
**Types of waste accepted:** Household trash, tires, car batteries, household hazardous waste
**Cost:** $1.3 million
**Design:** Totally enclosed, two-level, metal building (7,200 ft²) with four bay doors, concrete tipping floor, backhoe loads and compacts waste in transfer trailer

## Eastern Band of Cherokee Indians
Cherokee, North Carolina

**Capacity:** 300 tons per day
**Population served:** 6,300
**Hours of operation:** Sunday – Saturday during summer, closed on holidays
**User fees:** Free to tribal residents, neighboring county and businesses pay tipping fee
**Types of waste accepted:** Household waste, yard trimmings, food scraps, recyclables, white goods
**Cost:** Not available
**Design:** Totally enclosed, two-level building with tipping floor, frontend loader loads and compacts waste in transfer trailer

# Sustaining Your Vision: Operation and Maintenance

After the construction phase, focus shifts to operation and maintenance. This involves finding ways to cover equipment maintenance expenses, transportation costs, landfill tipping fees, transfer station staffing, and employee training. The tribes we interviewed quickly discovered that federal grants cannot be used for these purposes. Instead, the tribes relied on a variety of mechanisms, including:

- User fees such as a flat service fee or a pay-as-you-throw (PAYT) program
- Tribal general funds
- Revenue from the sale of recyclables
- Tipping fees from non-tribal/off-reservation waste

In addition to funding, the tribes cited educated and skilled staff and waste screening programs as keys to ensuring that their transfer stations ran smoothly. The Fort Peck tribes even established a Public Works Committee to help it make quick decisions and improve curbside collection and roll-off program management. The following examples demonstrate how tribes have sustained their transfer stations and increased operational efficiency.

## Paying for Operation and Maintenance

### User Fees

The tribes that we interviewed used several different types of user fees. Some charged a monthly service fee while others used a PAYT approach.

The Assiniboine and Sioux Nations of Fort Peck decided to charge community members $15 per month to dispose of trash, regardless of the amount generated. A financial technician, hired by the Fort Peck tribes to help make their solid waste disposal program more self-sufficient, however, advised the tribes to institute a PAYT program in place of the flat disposal fees. Now the tribes plan to charge roll-off site users $15 per load rather than per month.

Instead of a flat fee, the St. Regis Mohawk Tribe chose to charge residents based on the volume of waste generated to encourage waste prevention and recycling. The St. Regis Mohawk Tribe's PAYT system rewards residents for generating less waste. To participate in PAYT, residents purchase blue, 30-gallon trash bags from the tribe for their garbage. The tribe's curbside collection vehicle picks up the special bags once a week.

Once the tribe's transfer station is operational, residents can opt out of purchasing the blue trash bags and bring their waste directly to the transfer station. They will be assessed a disposal fee based on the weight of their trash.

### General Fund

Jicarilla Apache Nation decided to use money from the tribal general fund to subsidize collection and disposal costs to provide free, weekly residential waste collection to all tribal members. Residents also have the option of bringing their waste directly to the transfer station, where it is accepted for free. By providing free waste disposal service, the tribe increased community participation and discouraged illegal dumping.

The Confederated Tribes of the Umatilla Indian Reservation use money from the tribal general fund to supplement solid waste service user fees. The tribes operate a casino and allocate a portion of the revenue to transfer station operation and maintenance. Similarly, the St.

### TIPS FOR OPERATION AND MAINTENANCE

- Consider a variety of funding mechanisms to pay for operation and maintenance.
- Train your staff to improve operational efficiency.
- Screen all incoming waste to remove recyclables and inappropriate materials.
- Remove and manage special waste (e.g., tires, white goods, car batteries) separately.
- Properly maintain equipment to prolong life and prevent breakdown.

## WASTE WATCHING: SCREENING FOR INAPPROPRIATE MATERIALS

Tribes can factor special wastes into transfer station operation and maintenance activities. At the Eastern Band of Cherokee Indians' transfer station, trucks dump their loads onto a tipping floor and tribal employees examine the waste. They pull out items that do not belong, including tires, car batteries, and freon canisters. Jicarilla Apache Nation, Onondaga Nation, and the Confederated Tribes of the Umatilla Indian Reservation employ similar waste screening practices.

In addition to training waste "spotters," tribes can keep inappropriate items out of municipal solid waste by establishing affordable and accessible disposal alternatives for special wastes. Members of the Tule River Indian Tribe can bring white goods and old tires to a site adjacent to the tribal transfer station. To minimize the health risks associated with storing these items (e.g., refrigerators contain freon, old tires serve as a breeding ground for mosquitoes), the tribe pays for a private contractor to remove them at least once every 6 weeks. The contractor is responsible for recovering hazardous materials and freon from the white goods before hauling them away.

The Onondaga Nation decided to make household hazardous waste (HHW) disposal a priority. The tribe hosts HHW collection events twice a year to educate the community about proper disposal practices. In addition, the tribe provides public access to a HHW collection compartment at the transfer station. Tribal members can bring their HHW to the transfer station 7 days a week, 24 hours a day. The transfer station also includes a storage container for car batteries.

Regis Mohawk Tribe uses its general fund to supplement revenue from its PAYT program. Part of the tribal general fund comes from a fee on cigarette and gasoline sales on the reservation.

Bonnie Burke, the Umatilla Indian Reservation's solid waste manager, however, cautions tribal solid waste departments about relying on casino revenues and the tribal general fund. She explains, "The casino generates revenue, but much of the money is used for education and other purposes. Historically, the tribes did not place a high priority on solid waste management."

### Sale of Recyclables

A few tribes have found markets for some recyclables and use the revenue from these sales to help cover transfer station operation and maintenance costs. The Eastern Band of Cherokee Indians discovered that cardboard recycling is lucrative near the reservation. The tribe sells cardboard to support other, less profitable recycling activities. Markets for recyclable materials vary with location. Jicarilla Apache Nation, located in a remote region of New Mexico, implemented a recycling program and found that transportation costs added up quickly because the nearest recycling facility is far away from the reservation. The tribe could not justify these costs and abandoned its recycling program.

Waste loading inside the Eastern Band of Cherokees' transfer station.

Many tribes separate recyclable materials to minimize disposal costs. Although recyclers charge a processing fee for some materials, the fee is usually lower than landfill tipping fees. The Confederated Tribes of the Umatilla Indian Reservation use this strategy to reduce disposal costs.

### Tipping Fees from Non-Tribal Waste

The Eastern Band of Cherokee Indians and the Confederated Tribes of the Umatilla Indian Reservation accept waste from off the reservation for a fee. Accepting waste from surrounding communities can be a lucrative business under the right conditions. Calvin Murphy of the Eastern Band of Cherokee Indians cautions against entering this business without careful consideration and feasibility analyses. He suggests that tribes size their transfer stations to handle their own waste, not other counties' waste. His tribe solicited business from off of the reservation after building the transfer station and determining it had excess capacity, rather than counting on it during the planning phase.

### Skilled Staff Augment Success

The Eastern Band of Cherokee own and operate a large, complex transfer station that utilizes scales and a tipping floor. The tribe recognized the need for skilled staff to operate and maintain this technologically advanced facility. Several of the tribe's scale operators completed the North Carolina Department of Agriculture's certification program for weigh masters and seven transfer station employees took a class offered by the Solid Waste Association of North America (SWANA) to become certified transfer station managers.

Calvin Murphy recommends this course to employees of large transfer stations. Having state certified transfer station managers gave the Eastern Band of Cherokee Indians credibility when working with counties and private haulers.

> "Tribal leaders must realize that some needs cannot be met through grants."
>
> ~Deb Madison, environmental program manager for the Fort Peck Reservation

Jicarilla Apache Nation also understands the importance of employee education. The tribe pays a private contractor to haul its waste to a private landfill. Landfill employees inspect the waste for inappropriate materials and turn shipments away if they are contaminated. To avoid refused shipments, the contractor trains tribal employees to inspect waste and separate out inappropriate materials at the transfer station. To date, the landfill has never refused a shipment from the Jicarilla Apache Nation.

The Fort Peck tribes hired a financial technician to control roll-off site costs. The tribes pay two counties for use of their landfills. The financial technician reviewed the tribes' contracts with the counties and developed strict accounting procedures that save money. She also suggested that the tribes manage construction and demolition (C&D) debris separately to reduce their disposal costs. Tipping fees at C&D landfills are lower than those at municipal solid waste landfills. For a fee, Fort Peck Operations and Maintenance Department staff deliver dumpsters to construction sites. When the dumpsters are full, department staff hauls them to a C&D landfill.

The Onondaga Nation initially trusted community members to use its transfer station without supervision. Illegal dumping by residents from the surrounding counties who were trying to avoid paying tipping fees in their own towns, however, forced the nation to staff the facility 24 hours a day, 7 days a week.

In addition to monitoring incoming vehicles, the attendants help users place recyclable materials in the correct roll-off bin and household hazardous waste in the auxiliary storage cabinet. Periodically, the attendants check the roll-off bins and remove tires and other unacceptable materials to keep contamination to a minimum.

## FORT PECK'S PUBLIC WORKS COMMITTEE BOARD

Prior to creating the Public Works Committee Board, only the Fort Peck Tribal Council had the authority to change curbside collection fees and roll-off site permit rates, adjust collection procedures, and approve external funding applications. To speed up the decision-making process, Ms. Madison suggested that the tribal council establish a Public Works Committee Board to manage the Operation and Maintenance Department.

> "The board is critical because it sets curbside collection and roll-off site permit rates, applies to organizations for funding, and provides an interface between O&M and the tribal council."
>
> ~Deb Madison, Fort Peck Environmental Program Manager

The board removes the burden of solid waste management decisions from the tribal council and is able to make quick decisions. In return for being entrusted with decision-making powers, board members maintain a positive relationship with tribal council members by keeping them informed about collection and roll-off site operations.

# RESOURCES

Copies of most of the following publications can be obtained at no charge by calling the EPA RCRA/UST, Superfund, and EPCRA Hotline at 800 424-9346 or 703 412 9810 in the Washington, DC metropolitan area. You will need to provide the document number for the publication(s) you wish to order.

## TECHNICAL GUIDANCE AND TRAINING

### Publications

**Waste Transfer Stations: A Manual for Decision-Making** (EPA530-R-02-002)

**Waste Transfer Stations: Involved Citizens Make a Difference** (EPA530-K-01-003)

**Decision-Maker's Guide to Solid Waste Management**, Second Edition (EPA530-R-95-023)

**Tribal Solid Waste Management Decision-Maker's Guide** (expected from EPA in 2003)

**Sites for Our Solid Waste: A Guidebook for Effective Public Involvement** (EPA530-SW-90-019)

**Training and Technical Assistance Directory for Tribal Solid Waste Managers** (EPA530-B-99-007)

**St. Regis Mohawk Tribe Solid Waste Handbook** <www.northnet.org/earth/swhandbk.pdf>

**NEPA: A Handbook for Tribal Staff** (for a free copy contact Inter Tribal Council of Arizona at 602 258-4822)

### Links

**Institute for Tribal Environmental Professionals (ITEP) and Northern Arizona University Solid Waste Training for Alaskan Native Villages** <www4.nau.edu/itep/s_waste.html>

**Solid Waste Association of North America's (SWANA) collection and transfer training courses** <www.swana.org/Events.asp>

## FUNDING

### Publications

**Grant Resources for Solid Waste Activities in Indian Country** (EPA530-R-98-014)

**Solid Waste Funding: A Guide to Federal Assistance** (EPA530-F-97-027)

**Preparing Successful Grant Proposals tip sheet** (EPA530-F-97-020)

**St. Regis Mohawk Tribe Solid Waste Handbook** <www.northnet.org/earth/swhandbk.pdf>

### Links

**U.S. EPA Tribal MSW Funding page** <www.epa.gov/epaoswer/non-hw/tribal/finance.htm>

**U.S. EPA's Grant Writing Tutorial** <www.epa.gov/grtlakes/seahome/grants.html>

**U.S. EPA American Indian Environmental Office (AIEO) General Assistance Program (GAP) Grants** <www.epa.gov/indian/pdfs/gap2000.pdf>

**U.S. EPA Brownfields Assessment, Revolving Loan Fund, and Cleanup Grants** <www.epa.gov/brownfields>

**U.S. Department of Health and Human Services' Administration for Native Americans (ANA)** <www.acf.dhhs.gov/programs/ana/notice.htm>

**USDA Rural Development's Rural Utilities Service (RUS) Water and Environmental Programs (WEP)** <www.usda.gov/rus/index2/rusregs.htm>

**U.S. Department of Housing and Urban Development (HUD) Community Development Block Grants (CDBG)** <www.hud.gov/offices/cpd/communitydevelopment/programs/cdbg.cfm>

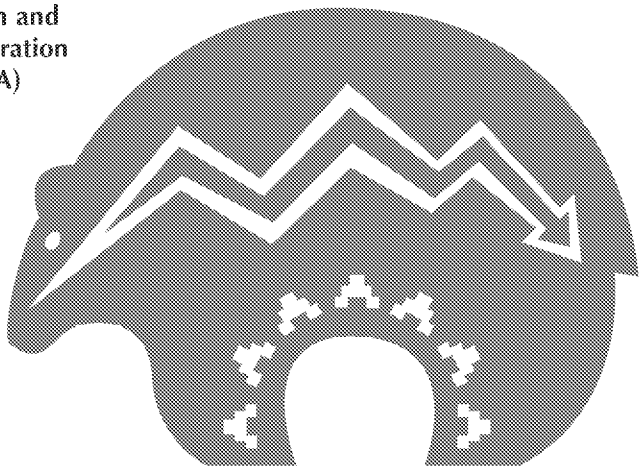
**The Catalog of Federal Domestic Assistance** <www.cfda.gov>
*This is a database of all federal assistance programs—including grant and loan programs—available to state, local, and tribal governments.*

**TASWER's 10 Pots of Money** <www.taswer.org>

**Federal Register search page** <www.access.gpo.gov/su_docs/aces/aces140.html>

**Rural Community Assistance Program (RCAP)** <www.rcap.org>

*RCAP is a national network of water, wastewater, and solid waste professionals that provide onsite managerial, technical, and financial assistance to develop rural community infrastructure. It is comprised of six regional affiliates. For more information, contact Christine McCoy, director of environmental programs at 800 321-2772 or 202 408-1273, ext.104; or via email at cmccoy@rcap.org.*



# CONTACTS

The *Tribal Waste Journal* would like to thank everyone who shared transfer station and funding information for this issue. Interviewee contact information is provided below for those who are interested in learning more about specific tribes' programs.

**Confederated Tribes of the Umatilla Indian Reservation**
Pendleton, Oregon
Bonnie Burke, Solid Waste Manager, 541 276-4040, terfmngr@uci.net *or* Teddi Bronson, Recycling Coordinator, 541 276-4040, trecycle@uci.net

**Eastern Band of Cherokee Indians**
Cherokee, North Carolina
Calvin Murphy, Tribal Utilities, 828 497-1805, cmurphy@cherokee-nc.com

**Assiniboine and Sioux Nations of the Fort Peck Reservation**
Poplar, Montana
Deb Madison, Environmental Program Manager, Environmental Protection Office, 406 768-5155 ext. 399, 2horses@nemontel.net

**Jicarilla Apache Nation**
Dulce, New Mexico
Merlin Tafoya, Sr., Executive Director of Public Works Division, Jicarilla Apache Nation, 505 759-3242 ext. 295

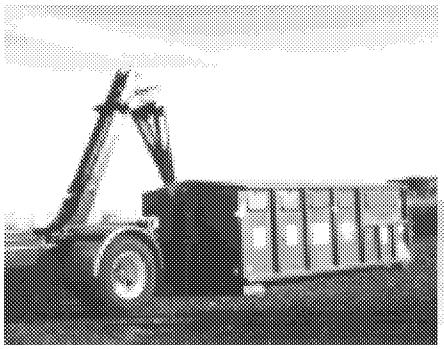
**Onondaga Nation**
Nedrow, New York
Chief Irving Powless, Jr., 315 492-4210, Nosneaks2@aol.com, *or* Jeanne Shenandoah, 315 492-1440

**Oglala Sioux Tribe of the Pine Ridge Reservation**
Pine Ridge, South Dakota
Kim Clausen-Jensen, Director, Oglala Sioux Environmental Protection Program, 605 867-5236, ostepkim@gwtc.net, *or* Bobby Sullivan, Public Involvement Coordinator, 605 867-5236, ostepbob@gwtc.net

**St. Regis Mohawk Tribe**
Akwesasne, New York
Laura Weber, Director of Solid Waste Management, 518 358-5937, earth2-lauraweb@northnet.org

**Tule River Indian Tribe**
Tulare County, California
Kerri Vera, Environmental Program Manager for Tule River Indian Tribe, 559 781-4271, tuleriverenv@govisalia.com

**USDA Rural Development**
Rapid City, South Dakota
Mavis Hass, Rural Development Specialist, 605 342-0301 ext. 4, mavis.hass@sd.usda.gov



Recycling bins at Umatilla transfer station

Scrap metal recycling pile outside Eastern Band of Cherokee Indians' transfer station

Modular units to be used at St. Regis transfer station

To be placed on our mailing list or submit ideas or success stories, send an email to Janice Johnson, U.S. EPA Tribal Solid Waste Program at <johnsonjanice@epa.gov>.

# Kid's Page

OF THE EPA TRIBAL WASTE JOURNAL

## Microbe Adventure

Laura Weber shares her enthusiasm about the science behind waste decomposition through stories and experiments. She tells a story about microbes to teach students about decomposition. Microbes are living organisms, and some of them break down waste. As Ms. Weber explains the decomposition process, she asks her audience to identify which statements are true and which are false. For example, when she says, "Garbage contains microbes," the children agree, but when she says, "Microbes leap out of the garbage at night," they disagree. This interactive format entertains students and keeps them engaged.

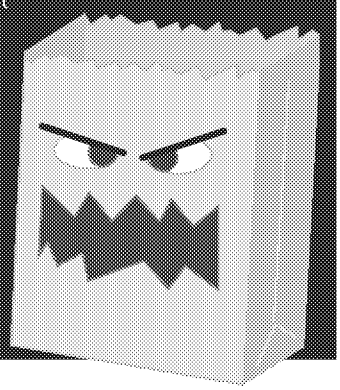
Ms. Weber uses experiments to reinforce the decomposition message. According to Ms. Weber, "One of the exciting things about trash is that there is so much science involved in decomposition. It is fun to conduct experiments to show students that different objects degrade at different rates." At the beginning of the school year, teachers can place soil in an aquarium, add water, and bury items in the soil to simulate a landfill. During the school year, students can watch the items decompose and use their observations to draw conclusions about how biodegradable different materials are.

> "Garbage is fun because it is always changing. You can tell a lot about someone's behavior and lifestyle from their trash. When people leave bags of trash by the side of the road, their trash tells a story."
>
> ~Laura Weber, director of solid waste management for the St. Regis Mohawk Tribe

### GARBAGE MONSTERS

Teddi Bronson, recycling coordinator for the Confederated Tribes of the Umatilla Indian Reservation, believes that environmental education should be fun. When the tribes opened a recycling depot and transfer station, she expanded the environmental education program to promote recycling and proper solid waste disposal.

Ms. Bronson visits the tribal Head Start facility and daycare center to familiarize children with the new recycling and waste disposal options. She tells stories about the time when tribal members used to dump their waste in a landfill on the reservation and explains how waste management practices have changed over the years. Then, she distributes recycling coloring books, nature stickers, and frisbees with the phone number and address of the recycling depot. The presentation culminates with an illegal dumping and litter prevention activity. The children create "garbage monsters" out of paper shopping bags. They draw a monster's face on each bag and then use the bags to pick up litter outside. The monsters literally eat garbage!



Ms. Bronson plans to integrate her solid waste management message into curricula across the school system. She would also like to provide transfer station tours to older students.



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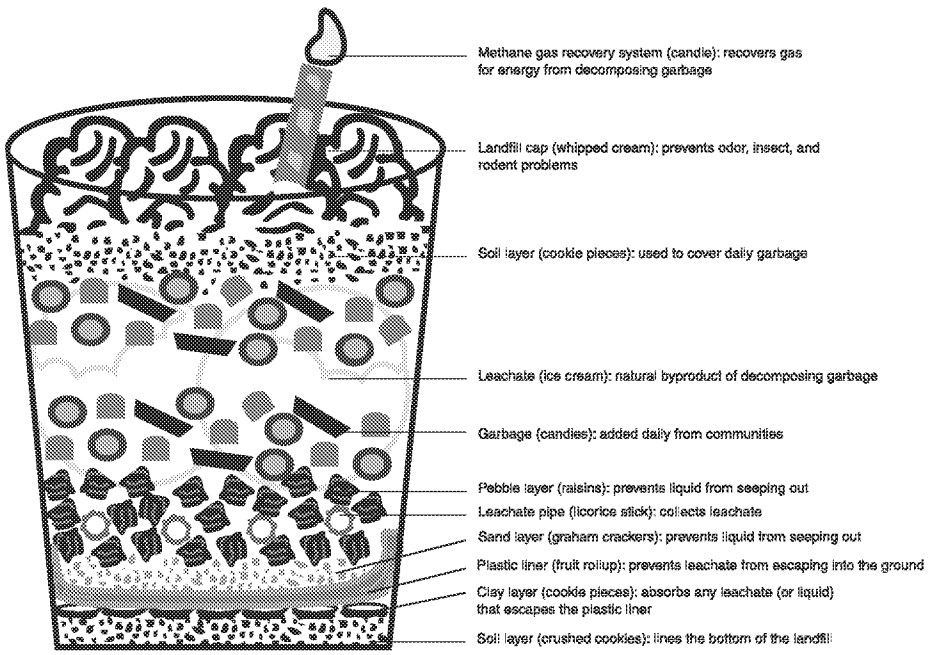
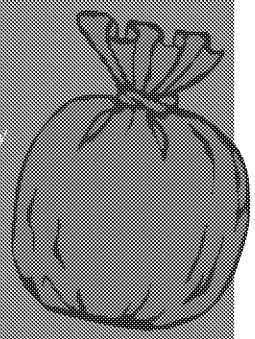
# Luscious Layered Landfill

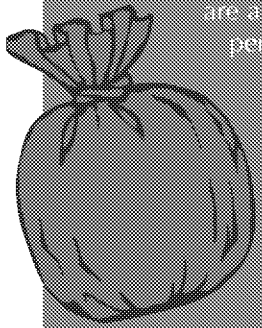
A landfill lesson is brain food for young minds when teachers use cookies and ice cream to symbolize clay liners and leachate. During the "luscious layered landfill" lesson, students place different treats in clear, plastic cups to learn how to build landfills. Each treat represents a different landfill layer—near the bottom, crushed cookies symbolize the soil underneath the landfill, and cookie pieces symbolize the clay liner that absorbs leachate escaping from the plastic liner. A fruit roll-up represents the plastic liner, crushed graham crackers the sand layer, and raisins the pebble layer. Licorice sticks, or leachate pipes, complete the leachate containment and collection system. Teachers can explain that this system prevents waste from contaminating water supplies.

Ice-cream and hard candies rest on top of the raisins, symbolizing leachate and garbage. Students then place crushed cookies (soil) on top. Teachers can explain that, at the end of each day, landfill operators cover waste with soil to minimize problems with vermin. Finally, students cap their tasty landfills with whip cream. They can insert a small candle to symbolize a methane gas recovery system. For additional information about this activity, visit <www.epa.gov/epaoswer/osw/kids/quest/pdf/49layer.pdf>, or order a free copy of *The Quest for Less: Activities and Resources for Teaching K-6* (EPA530-R-00-008) from EPA's RCRA/UST, Superfund and EPCRA Hotline at 800 424-9346 or 703 412-9810.




## 24 HOURS WITH A TRASH BAG



Thanks to Bobby Sullivan, public involvement coordinator for the Oglala Sioux Tribe, children living on Pine Ridge Reservation are excited about waste prevention. Ms. Sullivan delivers interactive presentations to educate 4th through 9th graders about proper solid waste management and involves them in finding solutions to problems. She shows pictures of open dumps on the reservation, describes the tribe's new landfill and asks the children to think of creative ways to promote the landfill and prevent illegal dumping. Student suggestions have included creating trash police, enforcing existing litter laws in housing projects, and developing awards for clean communities.

After a lively discussion about illegal dumping prevention, Ms. Sullivan captivates the students with a new question, "Are you interested in learning how much trash a single person can generate in one day?" She asks each child to carry a trash bag for 24 hours. During the study period, the students bring their trash bags everywhere and collect all of the solid waste that they produce (excluding food and liquid wastes). The next day, the children bring their trash bags back to class. They are amazed that one person can produce so much waste! Ms. Sullivan concludes the activity with a waste prevention brainstorming session.