

## **Case Studies of Successful Alternatives to Open Burning** *Prepared by Battelle 3-2-04*

### **Chisago County, MN, Burn Barrel Buyback Program**

In the mid to late 1990's, with a grant from the Minnesota Office of Environmental Assistance, Chisago County, Minnesota, conducted a "Burn Barrel Buy-Back Program". The program offered six months of half-price trash service in exchange for a burn barrel. Half of this cost was subsidized by the trash haulers, who agreed to pick up the burn barrels from new customers. Initially, there was no regulation pushing residents into the program. A resolution against trash burning in the county was passed later. Enforcement by a conservation officer played a key role in the success of the program. While some residents of the county may still burn, the number has been reduced significantly since the program was initiated.

### **Mount Vernon, Indiana**

Mount Vernon in rural southern Indiana is a small town with a population of between 7,000 and 7,500. An ordinance against burning within the city limits was passed in 1993. A fire truck is dispatched for burning violations. Violators are fined for second and subsequent violations. City trash pickup (unlimited quantities) costs \$5.60/month for curbside pickup, leaf vacuum, and metal and appliance pickup. There is no longer burning within the city limits. Trash that is picked up is disposed in a landfill (in another county). The county landfill closed in 1993. Unlimited curbside pickup and unlimited access to a nearby landfill were available before the ordinance was enacted, yet many residents burned their trash. Some residents would burn their trash and put the ashes in the curbside pickup. One motivation for the ordinance was a fire in a hauler truck caused by hot ashes from a burn barrel.

### **Evansville, Indiana**

Located in rural southern Indiana, the city of Evansville encompasses the majority of Vanderburgh County, which has a population of 172,000. A city ordinance prohibits burning within 4 miles of Evansville city limits, except for recreational purposes as allowed by inspection. Enforcement of the ordinance is reported to have deterred residents and small businesses alike. The Evansville EPA is responsible for enforcement, which is difficult with a staff of just six. Thus, the agency relies on neighbor complaints and fire run reports faxed to EPA by fire departments. The Evansville EPA will respond to open burning complaints within two days and accepts as evidence for a violation fire run reports that indicate trash burning. Penalties for burning include a letter of violation and fine, starting at \$50 and going up to \$2500 per violation per day. The Evansville EPA maintains a good relationship with suburban fire fighters, holding outreach meetings with them and encouraging them to fax reports of fires caused by trash burning. Some burning of trash in wood-burning stoves and fireplaces is thought to occur, but this is beyond the jurisdiction of the Evansville EPA. City trash pickup (curbside pickup, leaf vacuum, and heavy trash disposal) and sidewalk recycling are included in a

household utility bill. The cost to each household is \$8.01 per month for unlimited weekly trash collection (\$4.50), biweekly curbside recycling collection (\$1.85), and weekly yard waste collection for 9 months (\$1.41). The \$8.01 also includes \$.25 for administration. Evansville contracts with a private hauler for these services, and the city's trash is disposed in the county landfill.

### **Grand Traverse, Michigan: Grand Traverse Band of Ottawa & Chippewa Indians**

In upper Michigan, the Grand Traverse Band of Ottawa & Chippewa Indians bans all trash burning on tribal lands by ordinance. The ban applies to burn barrels, open pits, or any space used to burn trash. In lieu of burning, residents must dispose of trash in a regulated container and either pay for trash pickup or transport their trash to a landfill themselves. Both options require residents to pay for disposal (hauling fees or \$2.50/carload at the landfill). Only one incident of a resident burning trash illegally has been reported, and the resident was unaware of the ordinance at the time. Resident awareness of disposal options is maintained through periodic articles in a tribal newsletter.

### **Grant County, Kansas (town of Ulysses)**

In Kansas, a statewide regulation prohibits the open burning of solid waste. In Grant County, Kansas, before the state regulation, municipal solid waste was picked up and hauled to open trenches where it was burned. Farm waste was also burned in trenches, either a public, "municipal" trench or a private trench used by one or more farms. These trenches were reported to be burning or smoldering continuously, year-round.

When the statewide ban on burning was implemented, Grant County, whose major population center is the town of Ulysses, needed to find an alternative means of trash disposal. More than 20 tons/day of municipal solid waste is generated in Ulysses, which exceeds the disposal rate allowed for arid landfills. The town of Ulysses considered its options, and rather than build a permitted Subtitle D landfill, a transfer station was built in 1994 to accept municipal solid waste and transfer it by truck to regional permitted landfills.

Residents of Ulysses pay a monthly fee for trash pick up (which is included in the bill for other public utilities) and furnish their own trash cans. Farm residents may use dumpsters, which are collected by an independent sanitation company and hauled to the transfer station, or farms may haul their waste directly to the transfer station and pay a disposal fee. Disposal fees at the transfer station vary by type of waste material (e.g., metals, tires). For example, the fee for trash in general is \$44/ton with a \$7.50/ton minimum. (Fee pricing is listed at <http://www.grantcoks.org> under "Transfer Station".) Grass and tree disposals are accepted at no cost and are turned into compost to sell. A 60% to 70% reduction in burning on farms has been achieved since the transfer station was built. While not a total success, it represents a major change from the previous practice of all trash being burned in open trenches.

## **Bayfield, Wisconsin: Red Cliff Band of Lake Superior Chippewa Indians**

In 2000, the Red Cliff Band of Lake Superior Chippewa Indians in Bayfield, Wisconsin, began a voluntary *Burn Barrel Incentive Program*. The program was introduced to the public and the benefits of eliminating burn barrels were explained in a community meeting. The program asks tribal members to turn in their burn barrels and sign a pledge acknowledging the pollution concerns of open burning. As an indication of the program's success, 45 burn barrels have been collected from the public housing area since 2000, which is estimated to account for 90% of the burn barrels estimated to be present in the public housing area. A Junior Tribal Council (with elected members aged 16-25 years old) have championed the issue of banning burn barrels and have been instrumental in promoting the cause.