

## Advantages to Starting a Collection Service in Your Community

The following benefits of a collection program apply to dumpsites with: Uncontained or burnbox burning, little to no management of dumpsite, some or frequent water pond-ing or wet conditions (e.g. mud) where people or ATV's unload garbage, and no separation method between people unloading garbage and the site trash (such as a clean, maintained trench system or other physical barrier).

### Direct Health Benefits of a collection system:

- 1. People avoid the many health risks that are associated with visiting the dump.**  
Staying away from an unmanaged, open dump has been documented to result in better health. In a 2001 scientific study in four Alaska Native Villages many ill health symptoms were found to be associated with visiting the dump:
  - ◆ **People who visited their dump were 2 to 3.7 times more likely to experience faintness, fever, vomiting, stomach pain, ear and eye irritation, headache, and/or numbness.** The more often people visited the dump, the more likely they were to experience the symptoms.
- 2. Disease risks for the community are lowered.** Diseases can be part of household trash when people are sick or in animal carcasses. Diseases can be spread by tracking the dirt and mud on ATV tires and boots into town and into homes and school. When less people come to the dump, there is less risk of bringing disease back to town. With only a waste collector who is careful about washing off their tires and changing their "dump" shoes at the town edge, **the risk of bringing diseases back to town can be almost eliminated.**
- 3. Less Dump injuries occur.** Dump injuries can include walking or falling on sharp objects that puncture clothing or skin, or simply falling and hurting yourself. In a study of 110 Alaska Villages, about 20% of Villages had at least one person hurt over a 5 year period. These folks were hurt badly enough for the Village to know about it.
- 4. Less chance of running into animals and insects that carry diseases.** Foxes who might be rabid, rodents, flies, and mosquitoes like the dump because it provides food and shelter. While these animals can travel from the dump to town, they are known to stay closer to where they breed and where a food source is. So you will reduce your chance of contact with animals and insects that carry dump diseases if you stay away from the dump.

### Health Benefits from a collection system that are related to burning waste:

- 5. People don't have to breathe concentrated toxic dump smoke** when they stay away from the dump. The further away you are from the smoke source, the safer the smoke. That is because the smoke gets mixed with air. The highest known direct

health risk from dumps is breathing smoke from un-separated garbage. This smoke is highly toxic. Depending on the wind and distance to town, people may still breathe smoke from the dump. Then it is still a significant health risk. But you reduce the risk when you stay as far away as possible.

6. **A collection program stops the need for risky home barrel burning.** Some folks use home burn barrels to reduce trash volume and dump visits. But barrel burning in town creates more health risks for the community.
  - ◆ In a scientific study in 4 Alaska villages, Home barrel burning was also associated with nausea, faintness, rash, fever, sore throat, and cough. That is because the smoke source is so close to people - both in the home and for the community. People who burned more frequently experienced these symptoms more. Don't use burn barrels in place of going to the dump. You will be exposing your family to more health risks if the smoke is near your home.

### **Health, financial, and environmental benefits of having a collection system that are related to dump management:**

**When less people come to the dump, the dumpsite is managed better.** Only the waste collector unloads the trash. And they know where to unload it so the dump is cleaner. This means:

7. **Less dump spreading/expansion** to rivers and town and berry grounds. With a single person unloading trash that is dumped in a mound from the collection cart/dumpster, trash is piled higher and closer together. The collector can unload in the intended area.
  - ◆ A greater buffer between the dump and important areas is left. This buffer of **plants and soil filters out a portion of dump contaminants** when the dump drains from melt, flooding, and waste and land degradation. **So less dump spreading means less contamination, less closure costs, more landfill space, more time to find funding to address problems.**
8. **Cleaner and safer dump road and town roads to the dump.** The collector can use a closed cart or be careful that litter does not fly out along the way to the dump. They are paid to drive all the way to the dump to unload. This helps keep children safer and the community clean.
9. **Cleaner and safer access in the dump.** When residents have to go to the dump, it is safer for them to visit, and easier to access. Tires don't get ruined and less chance to track in diseases to town.
10. **The dump is less expensive to maintain.** With just one person dumping wastes, the dump is more organized and less messy. So the maintenance of the dump - keeping it safe and confined to a small area will cost less and can be part of the collector's

duty. If it is available, occasional operation of heavy equipment to re-work the site in compacting wastes, grading or berming the site to minimize melt and flooding through the site will be more effective.

11. **Less danger of an out-of-control fire. With only an operator visiting the dump, there is less chance of an accidental fire.** There is an average of about 5 out-of control Village dump fires each year. These are fires where assistance is needed from agencies and can destroy homes and thousands of acres. The smoke is a significant health hazard to the community for the duration of the fire.
12. **Easier for a salvage area to be started and/or maintained.** With a trash collection program, the household garbage is unloaded in a single, defined area. People can bring their bulk items to a separate metals storage and vehicle salvage area, and never have to contact the garbage area. Maintenance of a separate salvage area will be easy because folks won't be dumping garbage in the area. Everyone will be using the collection system.
13. **Easier to separate out non-burnables that can cause toxic smoke.** The collector can help to ensure that hazardous items like batteries and other electronics are not burned. They can place them in a separate site area, or preferably, they can be brought to covered storage area/container for eventual backhaul. Keeping electronics out of the burnstream takes out metals like lead, cadmium, and mercury that can cause harm to people and fish. If these items are not burned they wont settle on the land and water, and people and animals won't breathe them.
14. **Easier to separate out recyclables.** The same applies to recyclable items - these might be toys in good shape, books, or other items that can be brought to a community recycle store so they stay in good shape. These might include plastics - which become very hazardous when burned. Plastics can be kept at the dump - covered or contained so they don't litter. If plastics aren't burned they do not harm the environment - but they do take up space.

For the last three benefits - **people in the community are the first and best way to see the maximum results.** If people can separate out their burnables, recyclables, and salvage-ables at home, the best health improvements and the less-costly a collection or dump management program is. But having a collection system and collector alone can make at least some difference in these health benefits.

See our general Collection page on our website for further resources:

<http://www.zendergroup.org/collection.html>