Solid Waste Collection Program

Sustainable Landfill Equipment
Why a Collection Program?
- People can become vectors
- Uncontrolled dumpsite activities
- Separation of harmful and hazardous wastes
- A good first step to gain control of a dumpsite
Uncontrolled Dumpsite Activities
Separation of Harmful and Hazardous Waste
A Good First Step to Gain Control of Dumpsite
Which collection program fits

- Residential household collection
- Neighborhood drop points/mini-transfer stations
- One transfer station outside the dump
Residential household collection

- Hauler collects trash from households
- Can customize pickup schedule. Often one pickup per week for each household.
- Hauler may have different routes for different days.
- Local employees / private contractor serve as haulers.
Advantages

- Provides a public service
- Less traffic to the landfill
- Safer than individual hauling
- Hauler may also operate landfill
- Best control of waste and dumpsite
Containers set out at one or more locations in community and then hauled to the landfill

Should be enclosed

Signs listing prohibited wastes
Neighborhood drop points/mini-transfer stations

**Advantages**

- Less time to collect
- Less traffic to landfill
- Hauler may also operate landfill
- Safer than individual hauling
- Good control of waste and dumpsite
One Transfer Station outside the dump
One Transfer Station outside the dump

**Advantages**

- Less traffic into landfill
- Less time to collect
- Always open 24/7
- Inexpensive way to keep people out of landfill
- Minimal collection equipment / route
- May be suitable for smaller villages
- Hauler may also operate the landfill
Sustainable collection program

- Leveraging grant moneys
- Establishing a fee structure
- Estimating costs and Equipment replacement
- Solid Waste Ordinances
- Area wide fee / bundling utility fees
- Rippines / Pull Tabs/ Bingo / Sales Tax
Collection Equipment

- Trailer
- ATV
- Pick-up w/ Dump Bed
- Mini Garbage Truck
- Boat
Trailers

Tag-A-Long Tundra Trailer
Boat / Skiff
Pick-up / Dump Bed

Dump-Pro, Lightweight Dump Insert for Pickups
Mini Garbage Truck

2002 Isuzu, Wayne 6 Yd Side Load
Stellar Hook Truck
Equipment Usage in the Landfill

- Landfill Clean-up (Heavy Duty)
- Maintaining Landfill (Daily Operations)
Benefits to Using Equipment

- Keeps Operator from Contact with Waste
- Less Labor Intensive
- Safety
- Move more Material/Heavy Material
- Compaction
- Ease of Applying Cover Material
- Use Equipment for other Projects
The Costs of Using Equipment

- Substantial Investment to Purchase
- Maintenance Budget
- Trained Operator / Mechanic
- Equipment Breakdowns / Repair Costs
- Fuel Costs
Equipment Brands

- Bobcat
- CASE
- VOLVO
- KOMATSU
- DAEWOO INTERNATIONAL
- JOHN DEERE
- HYUNDAI
Clean-up Equipment (Heavy Duty)

- Dozer
- Excavator
Why not to Buy Big

- Equipment Expensive for Everyday Landfill Use
- Repairs Expensive
- Overkill
Partnerships / Rental

- Sewer and Water Projects
- Road Construction Projects
- Rental Companies
Landfill Maintenance

- Consolidate / Compact
- Cover
- Empty Burn Unit
- Staging for Backhaul
Skid Steer
Mini Excavator
Wheeled Loaders
Equipment tools

- Forks
- Bucket w/thumb
- Grapple bucket
- Solid Tires
Compact / Consolidate
Cover Material
Staging for Backhaul
THREE ELEMENTS OF EQUIPMENT SAFETY

Human

Machine

Weather
PERSONAL PROTECTIVE EQUIPMENT

- Protective Clothing
- Hearing Protection
- Foot wear
- Eye Protection
- High Visibility Vests
- Hard Hat
- Two-Way Radio
- First Aid Kits
- Fire Extinguisher
Equipment Maintenance
Grease Guns
Oil and Filter Changes
Equipment Shed
Weather

- Fog/Rain/Snow
- Freeze-up / Break-up
- Site conditions (Muddy, Frozen, Windy)
- Lighting (visibility)
- Too Cold to Operate Equipment
Operating Conditions
Poor Maintenance
Rent / Buy (New or Used)
Nor Track Bulldozer

- Approx. $16,999.99
- Shipping Weight 6600 lbs
- 30 h.p. Diesel
- 8 Fwd / 2 Rev Speed Transmission
Caterpillar 299C Compact Track Loader

- Approx. $81,000.00
- Shipping Weight 10,730 lbs
- 90 h.p. Diesel
- Automatic high/low transmission
Volvo Compact Excavator, ECR 58

- Approx. $85,000.00
- Shipping Weight 12,324 lbs
- 51 h.p. Diesel
- Automatic high/low transmission
Web sites

- [www.volvoce.com](http://www.volvoce.com) click on compact excavators
- [www.cat.com](http://www.cat.com) mini hydraulic excavators
- [www.kobelcoamereica.com](http://www.kobelcoamereica.com) compact excavators

There are other types John Deere and a lot more, try Googling - compact excavators or mini excavators and there should be dozens.

Equipment rental and sales

N.C. Machinery Co. # 786-7500 ask for new and used equipment sales
C.M.I. # 563-3822 ask for new and used sales
United Rentals #349-4425 new & used sales
Airport Equipment Rentals #522-6466 new & used sales
Craig Taylor Equipment Co. #276-5050 sales
Baileys Rent-All #344-9635 sales
DJ’S Alaska Rental &Sales Inc. #333-6561

All the above sell new and used equipment they also rent if you need a one time larger piece of equipment to get control of the dump site or close a really large difficult site.

Feel free to contact me with questions
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Questions?