

ADC Options

Tarps or panels, sprays, solids, aggregates



Solid Waste Program

Landfill Alternative Daily Cover (ADC)



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ADC GUIDELINES

What?

- Montana rules require Class II landfill operators to apply at least six inches of earthen material as **standard daily cover** unless a substitute is allowed or approved.
- **Alternative daily cover (ADC)** material replaces soil as the cover placed on the surface over the active face of a municipal solid waste (Class II) landfill at the end of each operating day.
- Controls vectors, fires, odors, blowing litter, and scavenging.

Why?

- ADC increases the landfill life by increasing the Waste-to-Cover Ratio relative to soil.
- Non-waste ADC always increases landfill capacity by utilizing less space than soil.
- Waste derived ADC provides a parallel beneficial use after handling and placement.
- *Net cost* varies relative to soil availability.^{\$}

How?

- A justified pilot program and demonstration period is required to obtain approval for a specific type of ADC.
- Simple O&M Plan updates and a brief trial period is allowed for some types of ADC already approved for use in Montana.
- Several ADC types may be approved for your facility, because no single ADC is ideal for any site under all possible conditions.

Remember...

Any ADC proposal must be reviewed for approval by SWP prior to its utilization. Standard daily cover must be applied to all uncovered waste that remains after ADC placement.

COMMON TYPES OF ADC MATERIALS

>Non-Waste Options

I. TARP OR SHEET SYSTEMS

- Re-useable anchored tarp systems
- Continuous geosynthetic fabrics
- Various panel or film products

II. SPRAY SLURRY SYSTEMS

- Various cements, binding agents, or products
- Recycled paper mixed with polymers
- Foam or viscous products
- Liquid latex paint waste mixtures

>Waste Derived Options

III. GREEN WASTES¹

- Yard waste, straw, or plant debris
- Compost, chipped wood, or mulch

IV. STANDARD AND SPECIAL WASTES²

- Construction and demolition debris
- Contaminated sediment
- Oilfield drill cuttings, sand, or proppants
- Coal ash or cement kiln dust
- Sludges (e.g. wastewater treatment)

V. PROCESSED WASTES

- Chipped or shredded tires
- Auto shredder wastes (fluff)

NOTE: Each of these ADC options provides good controls, but some are exceptional overall (see Table rating the various aspects of ADC performance). Leachate may be approved fluid component of spray.

¹ Use of green material as ADC does not constitute offsite diversion through recycling, thus the quantity increases SWP disposal tonnage and fees for the facility.

² Use of special or processed wastes may require testing and SWP approval for each new source to meet screening standards for hazardous contaminants, RBCA standards for petroleum constituents, or other standards as necessary.

These are some but not all requirements



Comparison of ADC Performance versus Site-Specific Variations

Aspect	I	II	III	IV	V
Potential Use# (% total)	5	8	50	23	14
Number of Class II Montana landfills	5	2	1	2	1
Fire control	N	+	~	Y	N
Vector control	+	~	Y	Y	+
Absorbs or repels moisture	Y	+	Y	Y	Y
Litter	Y	Y	Y	Y	+
Odors	~	+	+	Y	+
Scavenging	~	+	Y	Y	Y
Easy removal	Y [^]	N	~	N	N
Low up-front cost [®]	N	N	Y	Y [*]	Y [*]

Y yes, + good, ~ fair, N no
 # California statistics, ^Films are fixed,
 *Special fees further offset handling cost.

References:

- <http://www.calrecycle.ca.gov/lgcentral/basics/adcbasic.htm#Approved>
- <https://www.pca.state.mn.us/sites/default/files/w-sw5-11.pdf>
- <http://www.calrecycle.ca.gov/lea/training/ADC/2003AprJun/Photos.htm>
- http://www.waste360.com/Landfill_Management/landfill-alternative-daily-covers-201101