



# Temporary Debris Storage Sites



## Temporary Debris Management Site

A temporary Debris Management Site (TDMS) is designed to receive incoming disaster generated debris from point of origin debris loading operations. These areas serve as a more localized interim use holding area for disaster generated debris.

Debris dumped at a debris management site is sorted to remove recyclable materials and materials not suitable for reuse. The materials not suitable for reuse are taken to a landfill. Ideally, all concrete rubble would be processed at the TDMS into reusable aggregate. This option may be considered if space, site characteristics, and available resources allow.

### Size

The size of the site is dependent on the quantity of debris that needs to be stored and processed. The site should be large enough to safely accommodate processing of various debris materials, storing heavy equipment, and maneuvering trucks and large processing equipment. Historic disasters have shown that it takes 100 acres of land to process one million cubic yards of debris. The U.S. Army Corps of Engineers has found that approximately 60 percent of the area will be used for roads, buffers, burn pits, household hazardous waste disposal areas, etc.

### Location

TDMS should be established in an area that does not impede the flow of traffic along major transportation corridors, disrupt local business operations, or cause dangerous conditions in residential neighborhoods or schools. Whenever possible, avoid locating a TDMS near residential areas, schools, churches, hospitals, and other such sensitive areas.

TDMS requires good ingress/egress to accommodate heavy truck traffic. The planning staff should consider adjusting traffic signals to accommodate projected truck traffic on critical haul routes. TDMS selection criteria should consider access to major routes to allow for trucks to transport material to final disposition locations.

The planning staff needs to consider public acceptability when selecting a potential TDMS. It is largely dependent upon the activities planned for the site. Smoke from burning, around-the-clock light and noise from equipment operation, dust, and traffic are generally tolerated early in a disaster recovery operation, but may have to be curtailed later. The planning staff is strongly encouraged to notify citizens early about planned site activities and possible ramifications.



## Point of Origin Debris Processing Crew

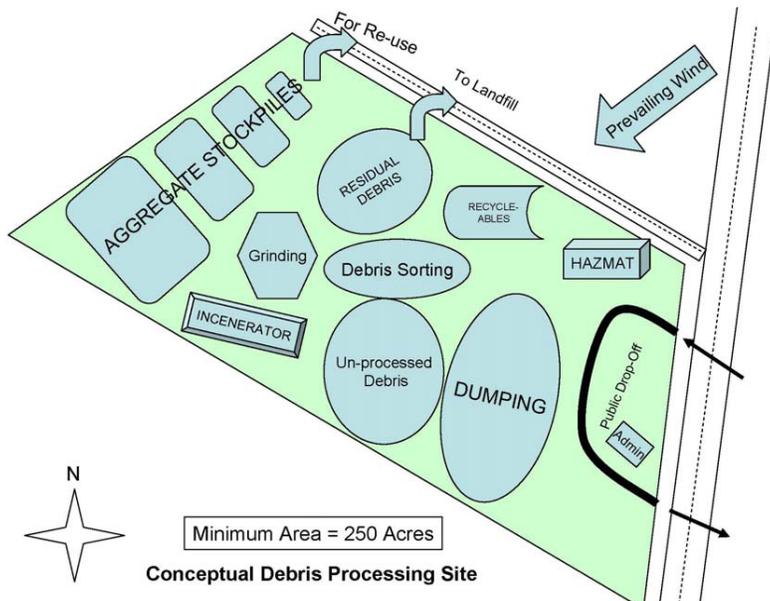
A Point of Origin Debris Processing (DPC) crew is composed of equipment and a labor crew that is structured to provide portable collection, sorting, and processing of disaster generated debris at the original location of disaster debris. Taking advantage of the available labor resources in the affected area, this method of managing the disaster debris from a large event provides excellent opportunity to employ many locals in the disaster recovery operation.

Consider the density of structures, narrow streets, heavy traffic, and other limiting factors; the concept of processing disaster debris at the point of origin facilitates a faster, safer, and more efficient recovery operation. Important to the effectiveness of this methodology for debris processing is being able to use the crushed concrete rubble on site or at a nearby site. Recyclable materials, if not already removed, may be transported to a debris processing site for ultimate sale or beneficial reuse. Residual debris and trash may be transported to the debris processing site for incineration or transported directly to a landfill.

In addition, a DPC can be used as an emergency strike team or "hot spot crew" that can be dispatched quickly to deal with debris trouble spots requiring prompt attention.

Example of a TDMS layout:

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Site requirements for establishing a complete debris staging site should provide for:

1. A minimum of 10 acres of usable land.
2. A well drained site with soils suitable for supporting vehicles and equipment.
3. Easy access to transportation routes.
4. Strategic placement to facilitate minimizing debris transportation requirements and travel time to and from loading points. The debris staging sites should be located as close as possible to the concentrations of disaster debris.
5. Access to, or provisions for, utilities for site operation (electrical, water, etc.)
6. Minimum potential for conflicting uses such as adjacent residential land use, nearby schools, hospitals, etc.

## Permits

Environmental permits and land-use variances may be required to establish a temporary DMS. Several agencies may be involved in issuing permits and granting land-use approvals. The planning process should identify the potential permits that will be required to establish a facility. A listing of the permits should be part of the debris management plan and may include:

- Waste processing and recycling operations permit
- Temporary land-use permits
- Land-use variances
- Traffic circulation strategies
- Air quality permits
- Water quality permits
- Coastal commission land-use permits
- HHW permits
- Fire department permits



## Additional Resources

- [CalOES Concept of Operations](#)
- [Debris Removal Flyer](#)
- [Private Property Debris Removal](#)
- [Debris Contracting Flyer](#)
- [Debris Estimating Flyer](#)
- [Debris Forecasting Flyer](#)
- [Debris Management Plan Flyer](#)
- [Debris Training Flyer](#)
- [CalEMA Debris Training Manual](#)

## Web Sites

- [www.caloes.ca.gov](http://www.caloes.ca.gov)
- [www.calrecycle.ca.gov](http://www.calrecycle.ca.gov)
- [www.fema.gov](http://www.fema.gov)



## Got Questions?

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