

**Savannah River Site
Haulage and Dumping Vehicles
General Safety Requirements**

Materials Delivered from Off-Site

1. Non-Cohesive Materials (e.g.: stone, gravel, sand, etc.)

Non-cohesive materials delivered to the Savannah River Site (SRS) are restricted to dumping payloads at designated pre-approved dumping locations. The designated Subcontract Technical Representative (STR) shall be responsible for identifying and coordinating the approval of designated dumping locations.

2. Cohesive Materials (e.g.: topsoil, earthen clay, etc.)

Semi-Trailer end dump trucks (vertical tilt bodies – Figure A) are prohibited from delivering/dumping cohesive materials at SRS. The use of Semi-Trailer bottom dump, conveyor driven live bottom, or side tilt dump bodies (non-vertical tilt bodies – Figures D E, and F), and Standard Dump Trucks (Figure B) are recommended and allowed for delivering and dumping at pre-approved dumping locations. The designated Subcontract Technical Representative (STR) with site management concurrence shall be responsible for coordinating the approval of designated dumping locations.

Designated Dumping Locations

Designated dumping locations shall be approved as follows:

SRS Subcontractors & Vendors

1. Identified in the project specific subcontract Field Conditions (OSR 1-126), or
2. Documented and approved through a subcontractor Project Specific Safety and Health Plan submittal.

Designated dumping locations shall meet the following requirements:

1. A flat and level surface constructed such as an improved secondary road, parking lot, paved area (concrete, pavement, or similar solid surface)

Or,

2. An improved flat, level, earthen area adequately compacted and maintained.

The following methods can be utilized to ensure the proper compaction and stability, and surface improvement of previously disturbed or unknown soil conditions:

2a. Proof rolling for in-situ material:

Use a four-wheeled pneumatic-tired roller of not less than 25 tons, or its equivalent, making a minimum of four passes, two in each of the two directions at right angles. For any soft area discovered, excavate the top two feet. After excavation and prior to placement of fill material, proof roll soft areas with a 10 ton or greater steel drum vibratory roller making eight passes, four in each of the two directions at right angles. Fill material shall be placed in 12" thick (max) loose lifts prior to compaction

2b. Placement of fill in previously disturbed areas:

Prior to placing fill material, proof roll with a four-wheeled pneumatic-tired roller of not less than 25 tons, or its equivalent, making a minimum of four passes, two in each of the two directions at right angles. For any soft area discovered, excavate the top two feet. After excavation and prior to placement of fill material, proof roll soft areas with a 10 ton or greater steel drum vibratory roller making eight passes, four in each of the two directions at right angles. Fill material shall be placed in 12" thick (max) loose lifts prior to compaction.

On-Site Earthmoving Operations

Semi-Trailer **end dump** trucks (Figure A) are prohibited from transporting and dumping cohesive earthen materials (e.g.; topsoil, earthen spoils, earthen clays, etc.) at SRS project sites. Two-axle or Tri-axle standard full chassis dump trucks (Figure B) and articulated dump trucks (Figure C) are recommended to be utilized for all off-road earthmoving operations. Semi-Trailer bottom or side dump bodies (non-vertical tilt bodies) or conveyor driven (live bottom) offloading equipment may be used in approved off road areas that are properly maintained to ensure their safe operation in accordance with the manufactures specifications.

Sample Dump Truck Configurations

Figure A - Semi-Trailer End Dump Truck
(Note: prohibited from dumping cohesive materials)



Sample Dump Truck Configurations (contd.)

Figure B - Standard Dump Truck (Tandem & Tri-Axle)



Figure C - Articulated Dump Truck



PHOTO: JOHN DEERE

Figure D - Semi-Trailer Bottom Dump Truck



Sample Dump Truck Configurations (contd.)

Figure E - Semi-Trailer Live Bottom Dump Truck



Figure F - Semi-Trailer Side Tilt Dump Truck














Flagmen / Spotters

Flagmen/spotters shall be provided as needed to assist dump truck drivers/operators in the safe placement and unloading of equipment. A flagman/spotter shall be present at all times for any dumping operations utilizing a Semi-Trailer End Dump Truck (Figure A). Personnel assigned as flagmen/spotters shall be properly trained and familiar with proper hand signaling techniques (Figure G) and safe equipment operating instructions. As a minimum all flagmen/spotters shall be familiar with all safety checklist requirements included on the focused observation checklist titled "Dump Trucks".

Truck Drivers / Operators

Truck drivers/operators must be properly licensed in accordance with applicable State and Federal regulations. All driver/operators must be properly trained and familiar with the equipment manufacturers' safe operating procedures. Daily documented equipment inspection records must be maintained and available for review upon request.

Figure G – Sample Standard Hand Signals

 <p>COME TO ME</p>	 <p>MOVE TOWARD ME</p>	 <p>THIS FAR TO GO</p>	 <p>MOVE OUT</p>
<p>Raise the arm vertically overhead, palm to the front, and rotate in large horizontal circles.</p>	<p>Point toward person(s), vehicle(s), unit(s); beckon by holding the arm horizontally to the front, palm up, and motioning toward the body.</p>	<p>Place palms at ear level, facing head, and move laterally inward to indicate remaining distance to go</p>	<p>Face the desired direction of movement; hold the arm extended to the rear; then swing it overhead and forward in the direction of desired movement until it is horizontal palm down.</p>
	<p>LOWER EQUIPMENT Make circular motion with either hand pointing to the ground.</p>		<p>RAISE EQUIPMENT Make circular motion with either hand at head level.</p>
	<p>SLOW DOWN Extend the arm horizontally sideward, palm down, and wave arm downward 45 degree minimum several times, keeping the arm straight. Do not move arm above horizontal.</p>		<p>START ENGINE Simulate cranking of vehicles by moving arm in circular motion at waist level.</p>
	<p>STOP Raise the hand upward to the full extent of the arm, palm to the front. Hold that position until the signal is understood.</p>		<p>SPEED UP Raise the hand to the shoulder, fist closed; thrust the fist upward to the full extent of the arm and back to the shoulder rapidly several times.</p>
	<p>STOP ENGINE Draw either hand, palm down across the neck in a "throat-cutting motion."</p>	