

## Unit 7: Debris Contracting Procedures



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### Unit Introduction

- The purpose of this unit is to identify applicable contract types for various debris activities.
- Contracting issues that have been identified in previous disasters are discussed in this unit.
- When communities do not comply with proper contracting procedures or enter into inappropriate contracts, severe financial consequences may result:
  - Communities may be obligated to pay a contractor for work that was not intended to be performed but that may have inadvertently become part of the contract.
  - The period of performance may become excessive such that the work is not completed in a timely manner to meet the needs of the community.
  - Lawsuits may result by the community (residents), the contractor, or both.
  - If there is a Presidential declaration:
    - The community may not be reimbursed for all costs incurred, even if payment must be made to the contractor.
    - There may be delays in funding pending the results of audits, collection of documentation, justification of costs, etc.
- Therefore, this unit provides guidance on appropriate contracting procedures and contract types for various debris activities.

### Notes:



## Introduction (Cont'd)

### Objectives

- Identify general contract requirements
- Describe basic types of contracts
- Address contracting issues in debris planning

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### Unit Objectives

- Identify general contract requirements
- Describe basic types of contracts
- Address contracting issues in debris planning

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### Notes:



## Debris Contracting Issues and Responsibilities (Cont'd)

### Eligible Contracted Activities

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<ul style="list-style-type: none"> <li><input type="checkbox"/> Clearance</li> <li><input type="checkbox"/> Removal</li> <li><input type="checkbox"/> Demolition</li> <li><input type="checkbox"/> Recycling</li> <li><input type="checkbox"/> Debris management sites</li> </ul>	<ul style="list-style-type: none"> <li><input type="checkbox"/> Final disposal</li> <li><input type="checkbox"/> Monitoring</li> <li><input type="checkbox"/> Asbestos abatement</li> <li><input type="checkbox"/> Project management</li> <li><input type="checkbox"/> Household hazardous waste</li> </ul>
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Contracting for labor and equipment may be necessary if the magnitude of the emergency debris operation is beyond the capabilities of local force account resources, State resources, mutual aid agreements, and volunteer labor and equipment.

Possible contracted activities include: *(Review briefly)*

- Clearance, removal, and hauling
  - Separate contracts may be prepared for clearance activities and removal and hauling.
- Demolition
  - Demolition activities are generally beyond the capability of most communities' forces.
- Debris Management Sites
  - Overall operations or specific activities.
- Recycling or Volume Reduction Activities
- Removal and Disposal of HHW, Asbestos, and other hazardous materials
- Final Disposal
- Monitoring
- Overall Project Management *(Note that Project Management costs are sometimes eligible for FEMA assistance, but depend on the magnitude of the event, impact on the community, reasonableness of the costs, and other factors)*

## Debris Contracting Issues and Responsibilities (Cont'd)

### Preparing the Contract

- Stand-by or sample contracts
- Contracting specialists
- Contractor prepared contracts
- FEMA Technical Assistance

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- To best respond to disaster events, a community may rely on:
  - Stand-by contracts that are pre-awarded, executed, and ready for implementation
  - Sample contracts that are pre-drafted and ready to be finalized, advertised, and awarded
- Many local governments use a contracting specialist to prepare their contracts. The specialist should:
  - Closely coordinate with the debris staff to ensure that all technical aspects are correct and the scope of work is appropriate.
  - Ensure the appropriate type of contract is used for the work to be performed—time and materials, unit price, lump sum (discussed later in this unit).
  - Ensure compliance with proper bidding and award procedures.
  - Be responsible for all contract administration and documentation.
    - A complete file of the process should be maintained, including development of the scope of work, a copy of the bid advertisement, summary of bids received, selection process and basis, invoices, memos of meetings, etc.
- Often contractors will offer use of a contract prepared by their company. Although this offer may seem attractive in the essence of time, the contract should be reviewed by legal counsel to ensure:
  - It is technically and legally correct
  - It has proper safeguards for the awarding entity
  - The work covered by the contract is eligible for reimbursement

- The payment is not being made for technical advice available free from the State or FEMA. This includes instructions on completing project worksheets, eligibility, contracting, environmental requirements, etc.
- While communities may enter into any contracts they wish, and FEMA is not a party to those contracts, they should be strongly encouraged to work with FEMA to ensure that the costs set forth in the contracts they are considering are eligible for reimbursement.
  - To facilitate assistance to communities in this matter, FEMA staff will be available to provide technical assistance before contract execution to help ensure compliance with the provisions of the PA Program, as well as other applicable statutes and regulations.
  - If a contract is in place prior to meeting with FEMA, the terms of the contract should still be discussed to ensure compliance issues.
  - The FEMA Website also has a Fact Sheet entitled “Debris Operations Clarification, Emergency Contracting vs. Emergency Work” that is available to applicants. This document is also included as Reference D. This document will be reviewed later in this unit.
- Regardless of who prepares the contract or provides technical assistance in its preparation, the community is ultimately responsible for the terms of the contract, including:
  - The scope of work is accurate and appropriate.
  - All documentation is complete and appropriate.
  - The work performed is eligible and the costs are reasonable.
  - The work is adequately monitored.

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### Notes:



## Debris Contracting Issues and Responsibilities (Cont'd)

### Contract Requirements Procurement

- Follow legal procurement procedures
- For FEMA reimbursement, must meet or exceed Federal procurement standards
  - 44 CFR, Part 13
- Emergency procurement
- Contractor selection

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In large debris-generating events, communities often become overwhelmed with the activities to be performed and do not comply with proper procurement requirements.

- Communities, at a minimum, must comply with all State and local procurement requirements.
- Federal procurement standards must be met, or exceeded, if FEMA assistance is to be requested on Presidentially declared disasters.
  - Title 44 of the CFR, Part 13 covers grant administration, including procurement and contracting criteria.
  - Normal State and local procurement requirements must still be followed, but such regulations must be at least as stringent as the Federal procurement regulations (Part 13).
- To be eligible for FEMA assistance, competitive bidding must be used except for initial emergency situations.
  - Non-competitive (sole source) contracting is acceptable **ONLY** in rare circumstances where there can be no delay in meeting a requirement, such as for emergency road clearance.
  - Not all “emergency” work requires “emergency” contracting procedures. Competitive bidding normally can be resumed within days of the disaster.
- If the Governor waives contracting procedures because of the emergency that does not necessarily mean competition is suspended. It generally means that time can be compressed. Emergency contracting still may require, or can use, competitive bidding.

- In the past, many communities have successfully developed a scope of work, identified contractors that can do the work, and made telephone invitations to bids to expedite the process.

### Contractor Selection

- For declared disasters, a community PA applicant is not required to select the low bid in the competitive bid process. The community may use its normal bid evaluation criteria in selecting a contractor.
- 44 CFR Part 13.36(b)(8) Procurement, indicates that consideration may be given to the following factors when selecting a contractor:
  - Contractor integrity
  - Compliance with public policy
  - Record of past performance
  - Financial and technical resources
- In addition, other criteria that may be considered includes:
  - Cost—ensure costs are reasonable. Costs that appear too low may not actually be attainable by the contractor and problems may arise when the contractor is faced with modifying work procedures to cover costs and maintain profits.
  - Other current obligations/work commitments—are sufficient staff available to complete work in a timely manner?
  - Proposed work plan
  - References
  - Use of local resources

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### Notes:



## Debris Contracting Issues and Responsibilities (Cont'd)

### Contract Requirements

#### General

- Use competitive bidding
- Scope of work must be well-defined
- Specifically address each task
- Require detailed documentation
- Include a termination for convenience clause
- Specify a reasonable period of performance
- Make your own estimate of debris

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The following are general requirements to be carefully considered and included in debris-related bid documents and final contracts:

- Use competitive bidding (*discussed in previous slide*)
  - Identify criteria for the work, including
    - Criteria for responding—time, scope of response
    - How long between award and time to mobilize
- The scope of work must be well defined and each intended task specifically addressed.
  - Be comprehensive, but concise.
  - Without specific language for each task, the contractor may perform work that was not originally intended, or fail to perform work that must be redefined often at additional cost.
  - For Presidentially declared disasters, eligible work must be clearly defined.
- Documentation is a critical component in supporting contractor invoices and in supporting FEMA reimbursement.
  - Records should be auditable.
  - Lack of proper documentation can jeopardize or delay FEMA funding.
- Include a termination for convenience clause—this will provide the community the option to cancel the contract for any reason.



- Define a reasonable period of performance.
  - Determine when the work needs to be complete—otherwise the work may not be performed in a timely manner to meet the needs of the community.
  - Include penalties if the work is not completed within the specified period of performance.
- Base the contract on an estimate of debris as prepared by the community staff. Do not rely on contractor estimates.

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**Notes:**

## Debris Contracting Issues and Responsibilities (Cont'd)

### Contract Considerations for Declared Disasters

If you expect FEMA cost-share:

- Ensure process is fully documented
- Ensure costs are reasonable
- Ensure operations are well-monitored
- Ensure all contracted activities are required
- Request technical assistance from the State or FEMA

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If FEMA funding is involved, or expected:

- Ensure the process is fully documented, including bid advertisement, responses, contract award, etc.
- Ensure the costs are reasonable, and include a justification of costs.
  - FEMA will only reimburse for reasonable costs.
- Ensure the activities are well-monitored and the process of monitoring is documented.
- Ensure that all activities included in the contract are required for debris removal, and are eligible for reimbursement.

If there are any questions regarding any aspects of the contracting, the community may request technical assistance from the State or FEMA.

Notes:



## Debris Contracting Issues and Responsibilities (Cont'd)

### Contract Cost Estimating

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Sources of Cost Data:

- Publications such as Means Cost Data Reports
- Area engineering/construction firms
- Historical data
- Local Departments of Public Works
- State Department of Transportation
- State Department of Forestry

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To estimate a reasonable cost for a contract, the community may consult the following sources for cost data:

- Publications such as Means Cost Data Reports
  - Depending upon what is being contracted, these documents may include costs on specific equipment.
- Local engineering and construction firms
  - These firms can be employed to develop the cost estimate, or may be willing to provide some basic data.
- Historical data
  - These data do not necessarily have to be for the same work, as long as the work is similar. It will provide a guide and some justification of costs.
- Local Department of Public Works
  - This department usually is involved in contracting for various types of work using the same types of equipment needed in debris-related activities.
- State Department of Transportation
  - Most DOTs maintain a comprehensive bid tabulation breakdown showing the average price paid for various contracted work.
- State Department of Forestry
  - May be able to provide input to the estimated cost estimate.

## Debris Contracting Issues and Responsibilities (Cont'd)

### Contract Cost Estimating

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**Factors that Influence Contract Costs:**

■ Type of debris	■ Site access
■ Method of removal	■ Truck size
■ Permitting requirements	■ Distance and route to disposal site
■ Work site limitations	■ Traffic conditions
	■ Roadway conditions

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In evaluating a reasonable cost for debris-related activities, various factors must be considered:

- Type, mix, and amount of debris
  - The type and mix of debris will have a significant impact—how much is vegetative, how much is C&D? Is there any asbestos? What about HHW? Is any demolition required? What special handling and disposal requirements must be considered due to the type and mix?
  - The amount of debris will affect the cost. Often, but not always, the larger the magnitude of debris, the less the unit cost.
- Method of removal
  - How will the debris be removed? Front-end loaders and trucks? Is special equipment required?
- Permitting requirements
  - Including permits for handling HHW, to operate Debris Management Sites, for demolition.
- Any limitations at the work site
  - Work hours may be limited, there may be competitive work going on.
  - In some areas, there is a limitation on truck size. In older cities, with narrow streets, small trucks and other equipment will be required. There will be competition for equipment and highway space, so there may be a lack of available trucks. This is a particular problem in the U.S. Territories.

- Access to the debris, the Debris Management Sites, and the final disposal site
  - The type and width of the road may limit the size of equipment that can be used.
  - Access to the Debris Management Site may be limited by lack of access roads.
- Depending upon the type and amount of debris, the haul distance may be lengthy (or take extensive time).
  - As an example after the fire in Los Alamos, New Mexico, there was an extensive amount of asbestos that required disposal in a landfill permitted to take such debris. The closest site was almost 100 miles away. Likewise, in California, hauls of more than 100 miles have been necessary. Debris from a disaster in Seattle would have to be hauled (usually by rail) to the southern border of Washington.
  - Routes may be narrow and winding, increasing haul times.
- It may be necessary to haul the debris through areas of heavy traffic, increasing haul time.
- Roadway conditions may be bad because of the incident, rescue and emergency equipment, and heavy equipment usage.

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### Notes:



## Debris Contracting Issues and Responsibilities (Cont'd)

### Bid Solicitations

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Don't forget (as appropriate):

- Bond and insurance requirements
- Rights-of-entry and indemnification
- Equipment mobilization/demobilization
- Environmental monitoring
- Safety
- Site clearance/cleanup procedures
- FEMA eligibility determinations

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Finally, in preparing the bid solicitations include the following costs or sections:

- Bond and insurance requirements
  - This is a protection for the community; however, there are costs associated with them.
- The requirement for rights-of-entry and indemnification to enter private property
- Costs of mobilization and demobilization
  - In large disasters, these efforts can be quite costly, but are a cost to the contractor.
  - The work includes organizing the equipment, moving it to the site, then doing the reverse.
- Environmental monitoring may be required
- Safety requirements must be reviewed, and could increase costs
- Debris Management Site clearance and cleanup
  - If a good environmental baseline study is conducted, and a monitoring program is implemented, this should be relatively easy.

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### Notes:



## Types of Contracts

### Types of Contracts

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- Time and materials
- Unit price
- Lump sum

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### Types of Contracts

- It is important for a community to understand the types of contracts that may be appropriate for various types of work.
- There are three basic types of contracts:
  - Time and Materials
  - Unit Price
  - Lump Sum
- Each of these contract types are discussed in the following slides.
- Ineligible contracts will be discussed near the end of this unit.

### Notes:



## Types of Contracts (Cont'd)

### Time and Material Contracts

- Usually used for emergency clearance
- FEMA limits T&M contracts to 70 hours
- Requires comprehensive monitoring
- Idle and standby equipment is not eligible

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### Time and Materials

- A Time and Materials contract is based on hourly rates for personnel and equipment.
  - The contractor is paid an hourly rate for the actual time performing the specified work.
  - Bids should include all overhead costs.
  - Stand-by time is not an eligible cost for FEMA reimbursement.
- Time and Materials contracts may be the most appropriate method of contracting during the first 70 hours following an emergency.
- Generally, in the first 70 hours after a disaster, clearing debris from the roadways for access rather than removing debris to disposal areas is the most important activity a community is involved in with regard to disaster debris activities.
  - Communities often use a Time and Materials contract to perform this work.
- All Time and Materials contracts should clearly state:
  - The price for the equipment applies only when the equipment is operating.
  - The hourly rate includes the operator, fuel, maintenance, and repair.
  - The community reserves the right to terminate the contract at its convenience.
  - The community does not guarantee a minimum number of hours.
  - The contract has either a dollar ceiling or a not-to-exceed-number-of-hours clause.
  - The hours of operation of the contractor (to ensure monitoring is on-going when the contractor is working and to minimize disruption to the community).

### Regarding Presidentially declared disasters:



- To be eligible for FEMA reimbursement, Time and Materials contracts should be limited to a maximum of 70 hours of **actual emergency debris clearance work** and should be used only after all available local, Tribal, and State government equipment has been committed.
  - The 70 hours provides time for
    - (1) moving the debris from the roadway to the curbsides or rights-of-way to allow passage of emergency vehicles, and
    - (2) negotiating unit price and/or lump sum contracts
  - If a PA applicant awards multiple Time and Materials contracts, those contracts should run concurrently, not consecutively.
    - The 70 hours begins when the first contract is awarded.
- The PA applicant may not exceed 70 hours of actual time for all contracts without a waiver from FEMA, in writing, which can be only for a short period and only if absolutely necessary.
- Relative to emergency contracting issues, FEMA has prepared a Fact Sheet entitled “Debris Operations—Clarification, Emergency Contracting Vs. Emergency Work”. This document is also available on FEMA’s Website.
- Advantages
  - Extremely flexible, not scope-dependent.
  - Has a wide range of uses—clear major access routes or access to critical facilities.
  - Available for immediate response activities—is suitable for emergency “hot spots” and early debris rights-of-way clearance.
- Disadvantages:
  - Requires close contractor oversight and direction as to what work to perform.
  - Requires documentation of actual hours worked by equipment and operators.
  - Requires competitive bids or negotiated reasonable hourly rates for equipment and operators.
  - Specifies equipment as generically as possible to encourage competition.
  - Requires **full-time** (on-site at all times with the contractor) and trained contract monitors to document actual equipment usage.

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## Notes:



## Types of Contracts (Cont'd)

### Unit Price Contracts

- Used when tasks are known but quantities of debris is unknown
- Units of measure can be quantified in weight or volume
- Requires comprehensive monitoring

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### Unit Price Contract

- A unit price contract uses construction units (Cubic Yards, Tons, Each) and prices to develop line item costs and total contract costs.
- The unit price contract should be used when the scope of work is difficult to define. The contract will be based on estimated quantities.
- There must, however, be specific documentation compiled during performance of the work to support the actual quantity of work completed.
- Therefore, to be properly administered, unit price contracts should have full-time, trained monitors to ensure compliance with contract requirements.
- Advantages:
  - Is flexible—don't need to get an exact determination of the amount of debris (but a good estimate will provide assurance that total quantities are reasonable—estimate should be determined by the PA applicant, not the contractor).
  - Requires accurate account of actual quantities removed in either cubic yards or tons.
  - Ensures a wide range of competition because of simplicity of contract.
  - Has a low risk for the contractor (and great advantages if quantities can be maximized).

- Disadvantages:
  - Proper administration requires dedicated contract monitors at the pickup site and at the disposal site.
    - Collected debris must meet terms of contract and FEMA eligibility criteria.
    - Trucks must be sufficiently loaded.
  - Has possibility of contractor fraud if loading and dumping operations are not closely monitored.
  - Is complicated if segregation of debris is required.
  - Requires all trucks to be accurately measured (for cy payment) or weighed (for ton payment), and numbered—and periodically verified.
  - Requires all truckloads to be documented. For most accurate accounting, a pre-numbered load ticket should be used. Load tickets are the verification of the estimated quantity of debris in cubic yards or tons deposited at the dumping site.
- On FEMA projects, unit price contracts will require the PA applicant to have a verification process in place to help him/her in the documentation for his/her claim.
- When using volume (cubic yards) measurements, an inspection station at the entrance **and** exit of the disposal site is critical in verifying the contractor's loads and to ensure that the load has been fully dumped.
- When using weight (ton) measurements, certified scales must be used.
  - Scales must be certified by a person licensed by the State.
- A systematic method of recording load and measurement data must be in place. Load tickets are normally used as the basis for verifying quantities.

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### Notes:



## Types of Contracts (Cont'd)

### Lump Sum Contracts

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- Two types **Area** and **Pass**
- Used when the scope of work is easily well defined
- Contractor assumes most of the risk

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### Lump Sum

- A lump sum contract establishes a fixed contract price by a one-item bid from the contractor.
- The lump sum contract should be used only when the scope of work is clearly defined by the community (not the contractor), including quantity, type, and location of debris.
  - This information will be used to judge the reasonableness of the cost for reimbursement.
  - Change orders must clearly state the reason for the change; why the debris was not considered in the original contract, the exact quantity, mix and location, etc.
- It is understood in a lump sum contract that the price for the work is fixed unless the scope of work changes; therefore, the bottom line of the contract is not in question, as it is with the unit price contract.
- There are two methods of measurement :
  - Area method
  - Pass method
- The area method of a lump sum contract is used when a defined area is provided.
  - For example, once all the debris within a well-defined area has been placed at the curbside, a scope of work can be written that requires the contractor to conduct a one-time pass to remove all identified material from the curbside and place at a specified location (landfill).

- Area Method Advantages:
  - Provides an easy means of establishing the cost of the work at the time of bid opening
  - Requires minimum labor for monitoring
  - Is easy to monitor as the scope of work is well defined
  - Is easy to determine when the contractor has completed the work
  - The contractor assumes most of the risk
- Area Method Disadvantages:
  - Scope of work must be definable to minimize change orders for additional work.
  - May result in difficulty to quantify the amount of debris that will be brought to the right-of-way for removal.
  - Has a high probability of claims if debris estimates are difficult to estimate and require speculation.
- The Pass Method is used when the scope defines how many passes down a particular street or in a given section of the town will be completed.
  - For example, if homeowners are provided a schedule for placing certain materials at curbside over a specific period of time (3-week duration), a scope of work can be prepared to require the contractor to conduct a minimum number of passes (say three) throughout the community during the 3-week period (say one pass per week) and place the material at a specified location (landfill).
- Pass Method Advantages:
  - Minimum labor required for monitoring and management.
  - Defines the scope of work better than the Area Method and decreases the risk of claims caused by quantity speculation.
  - Quantities do not need to be documented as they do in a unit price contract.
- Pass Method Disadvantages:
  - Must have accurate, up-to-date plans and information on all roads that will be included in the “pass” scope of work.
  - Public must cooperate in the removal process—placing debris on a schedule, segregating materials, placing only eligible debris.
  - Contracting agency must be successful in communicating with the public in removal area.

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## Notes:



## Types of Contracts (Cont'd)

### Ineligible Contracts

**DO NOT:**

- ❑ Award a debris removal contract on a sole-source basis.
- ❑ Sign a contract (including one provided by a contractor) until it has been thoroughly reviewed by your legal representative.
- ❑ Allow any contractor to make eligibility determinations, since only FEMA has that authority.

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The following conditions may result in terms of contracts, and associated work, being ineligible for Federal reimbursement.

- Cost-plus percentage of cost
  - 44 CFR Part 13.36(f)(4) specifically precludes use of this contract type.
  - This type of contract encourages the contractor to exceed the initial cost estimates by basing his/her fee on a percentage of the costs.
- Conditional upon FEMA reimbursement
  - Contracts which indicate a contractor will be paid only upon receiving funds from FEMA are ineligible.
- Contracts with debarred contractors
  - 44 CFR Part 13.35 specifically precludes use of debarred contractors.
  - Communities should check with the State for a current list of debarred contractors.

### Notes:



## Types of Contracts (Cont'd)

### Ineligible Contracts

#### (DO NOT, Cont'd)

- ❑ Accept any contractor's claim that they are "FEMA certified."
- ❑ Assume that Debris Management Sites will be required
- ❑ Use a debarred Contractor
- ❑ Use a cost plus percentage of cost contract

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### Ineligible Contracts

#### (DO NOT, Cont'd)

- ❑ Include line item unit costs for stumps that are smaller than 24 inches
- ❑ "Piggyback" or utilize a contract awarded by another entity
- ❑ Award pre-disaster/stand-by contracts with mobilization costs or unit costs that are significantly higher than what they would be if the contract were awarded post-disaster.

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### Notes:



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## Activity 7.1

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### Activity 7.1: Debris Contract Evaluation

- Turn to Activity 7.1 in Student Manual, Volume II (Group Activity Materials).

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Notes:

