

Debris Management Plan



Medina County Emergency Management Agency 2018

Record of Changes

Version	Date	Descriptions/Changes
1.0	May 2010	A hardcopy draft of the plan was created by the Medina County Emergency Management Agency.
2.0	April 2012	The plan was finalized and a hardcopy was created.
3.0	January 2018	A comprehensive review of the plan was conducted, all sections of the plan and appendices were revised and updated by MCEMA.
3.1	December 2018	Ohio EPA Approved Facilities for Debris Disposal list was updated. HAZUS-MH estimates for flooding and earthquake generated debris were added into the plan.



Table of Contents

I.	Purpose	6
II.	Situation and Assumptions	6
III.	Concept of Operations	7
IV.	<u>Contracts and Cooperative Agreements</u>	12
V.	<u>Debris Removal Priorities</u>	14
VI.	<u>Debris Removal on Private Property</u>	16
VII.	Methods for Volume Reduction	17
VIII.	Typical Responsibilities	18
IX.	Public Information	19
X.	Safety	20
XI.	Volunteers	20
XII.	Pre and Post-Disaster Actions	21
XIII.	Applicable Laws	22

Appendices – TABS

Appendix A-

- Mutual Aid Agreement EXAMPLE
- Right of Entry Agreement EXAMPLE
- Community Partner Agreement
- EXAMPLE Time and Materials Contract (Article 1-10)
- EXAMPLE Lump Sum Contract for Debris Removal (Article 1-11)
- EXAMPLE Unit Price Contract for Debris Removal (Article 1-10)

Appendix B- Note: These forms are not mandatory to use if the same information is recorded by individual jurisdictions. However, they are helpful in ensuring that records and accountability are properly tracked by jurisdictions after a disaster.

- Request for Public Assistance (FEMA form 90-49)
- Photo Sheet (PW)



- Site Sheet Summary (PW)
- Site Sheet/Additional Site Costs (PW)
- Cost Summary Roll-Up (PW)
- Applicant's Benefits Calculation Worksheet (PW)
- Force Account Labor Record (PW)
- Force Account Equipment Record (PW)
- Force Account Materials Summary Record (PW)
- Rented Equipment Record (PW)
- Contract Summary Record (PW)
- 9901- Direct Administrative Costs (Subgrantee) (PW)
- Summary of Work to be Completed (PW)
- Estimator Sheet (PW)
- Validation Worksheet (FEMA form 90-118)
- Project Validation Form (FEMA form 90-119)
- Special Considerations Questions (FEMA form 90-120)
- Historic Review Assessment for Determination of Effect (FEMA form 90-122)
- Scope of Work EXAMPLES

Appendix C-

- Matrix of Disaster and Debris Types
- Debris Types and Where It's Disposed
- Debris Management Information

Appendix D-

- Sample Thank You Letter to Donor
- Sample Thank You Letter to Volunteer
- Sample Public Announcements

Appendix E-

- FEMA Right-of-Entry Agreement EXAMPLE
- SAMPLE Right-of-Entry Permit: Includes Hold-harmless and Insurance clauses
- Community Partner Agreement

Appendix F- Ohio EPA Resources



- Medina County OEPA Contacts

Appendix G-

- Opinion 94-021

Appendix H-

- Acronyms

Resource References

FEMA's Schedule of Equipment Rates

- FEMA Schedule of Equipment Rates (01/09/2017), FEMA Labor Costs Policy

Ohio Emergency Management Agency Reference Documents

- OEMA's Debris Estimating Formulas
- OEMA's Sample Debris Removal and Disposal Monitoring Plan
- OEMA's Temporary Debris Staging and Reduction Site Checklists

Ohio EPA Approved Facilities for Debris Disposal

- Licensed Scrap Tire Facilities Report
- Registered Scrap Tire Transporter Report
- Licensed Mobile Scrap Tire Recovery Facilities
- Licensed Municipal Solid Waste Transfer Facilities
- Licensed Municipal Solid Waste Landfill Facilities
- Licensed Industrial and Residual Solid Waste Landfill Facilities
- Licensed Construction and Demolition Debris Landfill Facilities
- Licensed Class I and Class II Composting Facilities
- Registered Class II, III, and Class IV Composting Facilities
- Landfills that Accept Animal Carcasses
- Landfills that Accept Asbestos
- Infectious Waste Treatment Facility List

Ohio EPA's Debris Fact Sheet for Local Officials

- OEPA Debris Fact Sheet for Local Officials



I. PURPOSE

1.1 To provide policies and guidance to the agencies of Medina County for the removal and disposition of debris caused by natural, technological, or anthropogenic hazards.

1.2 To facilitate and coordinate the management of debris following a disaster in order to mitigate against any potential threat to health, safety, and welfare of the impacted citizens, expedite recovery efforts in the impacted area, address any threat of significant damage to improve public or private property, and to aid in a timely recovery in the affected area in an environmentally safe manner.

II. SITUATION AND ASSUMPTIONS

2.1 SITUATION

1. Natural and manmade disasters precipitate a variety of debris types that may include, but are not limited to, trees, sand, gravel, building construction material, vehicles, personal property, and hazardous materials. Please see the Matrix of Disasters and their Debris Types in [Appendix C](#).
2. The quantity and type of debris generated will depend on the type of disaster, where it occurred, its magnitude, duration, and intensity. These factors will also determine the type of collection and disposal methods, costs incurred, and how quickly the clean-up process can be addressed.
3. In a major or catastrophic disaster, many state and local governments will have difficulty in locating staff, equipment, and funds to devote to debris removal, in both short and long term. There is a list of contractors, livestock and heavy equipment haulers located in the Medina County Resource Book.

2.2 ASSUMPTIONS

1. A natural or technological disaster that requires debris removal from public or private lands and waters can occur at any time. The amount of debris can exceed the local government's ability to temporarily store or dispose of it.
2. If the magnitude of the natural disaster exceeds the ability of local jurisdictions to respond to the disaster, the local jurisdiction or county would make a disaster declaration. If requested, the Governor would declare a state of emergency that authorizes the use of State resources to assist in the removal and disposal of debris. In the event that Federal resources are required, the Governor would request a Presidential Disaster Declaration through FEMA.



3. Private contractors will play a significant role in the debris removal, collection, reduction, and disposal process.
4. The debris management program implemented by the local government should be based on the waste management approach of reduction, reuse, reclamation, resource recovery, incineration, and filling land.

III. CONCEPT OF OPERATIONS

3.1 Emergency Operations Center (EOC) Activation

1. In the event that the Debris Management Plan would need to be referenced, the Medina County EMA EOC may open for the purpose of allowing those officials and department heads involved to come together to discuss possible actions, and to review the plan and its resources.
2. In the event of a disaster, the Medina County EOC will be open. Please refer to the Medina County Emergency Operations Plan and Standard Operating Guidelines.

3.2 Initial Actions

The operations element of the debris management plan will focus on the following:

1. Clearing the main routes, starting with those which are the most necessary for:
 - Emergency Vehicles
 - Law Enforcement
 - Resumption of Critical Services
 - Damage Assessment of Public Facilities and Utilities
2. Clearing Debris from waterways
3. Separate out all hazardous materials and take the remaining non-hazardous materials to the Medina County Solid Waste Facility, (Central Processing Facility) 8700 Lake Rd in Seville, for disposal. This facility handles approximately 600-700 tons on a daily basis.
4. Taking all non-hazardous materials debris to a site where they can be sorted, stored, processed, and recycled. Again, this may be the Central Processing Facility.
5. Informing public of what to do with the debris on personal property
 - A PIO will be assigned to ensure that the public stays informed and will coordinate information through the EOC.
6. Personal property debris may be brought to the curb, but it must be separated (woody, hazmat, etc.)
 - May be reimbursable through homeowner's insurance, if a contractor picks it up



- FEMA may reimburse if the debris deemed to be a threat to the community’s safety and if its removal is in the “public interest.”

3.3 Estimating the Amount and Type of Debris

1. The estimation of the amount of debris and the type of debris generated after a disaster will come from applicable County departments or local jurisdictions and be coordinated by the authority having jurisdiction.
2. A HAZUS-MH: Earthquake Global Risk Report was conducted to estimate the amount of debris that will be generated by a magnitude 5.0 earthquake that is 5 km in depth, as well as the corresponding cost of incurred damages. **Note: This report utilizes 2010 Census data and some information may be outdated.**
 - Hazus estimates that about 11,541 buildings will be at least moderately damaged. This is over 17.00 % of the buildings in the region. There are an estimated 686 buildings that will be damaged beyond repair.

Table 1: Expected Building Damage by Occupancy

	None		Slight		Moderate		Extensive		Complete	
	Count	(%)	Count	(%)	Count	(%)	Count	(%)	Count	(%)
Agriculture	145.85	0.36	69.26	0.45	86.20	1.04	46.14	1.82	11.55	1.68
Commercial	1335.80	3.34	711.61	4.57	782.11	9.39	367.61	14.54	99.86	14.54
Education	40.30	0.10	19.90	0.13	22.36	0.27	9.56	0.38	2.88	0.42
Government	37.25	0.09	18.76	0.12	22.72	0.27	9.38	0.37	2.89	0.42
Industrial	549.83	1.37	271.31	1.74	323.74	3.89	164.78	6.52	42.34	6.17
Other Residential	1346.42	3.37	567.65	3.65	413.36	4.96	143.82	5.69	33.75	4.91
Religion	136.91	0.34	60.27	0.39	54.32	0.65	26.12	1.03	7.38	1.07
Single Family	36415.19	91.02	13835.78	88.95	6621.31	79.52	1761.60	69.66	486.12	70.78
Total	40,008		15,555		8,326		2,529		687	

Table 2: Expected Building Damage by Building Type (All Design Levels)



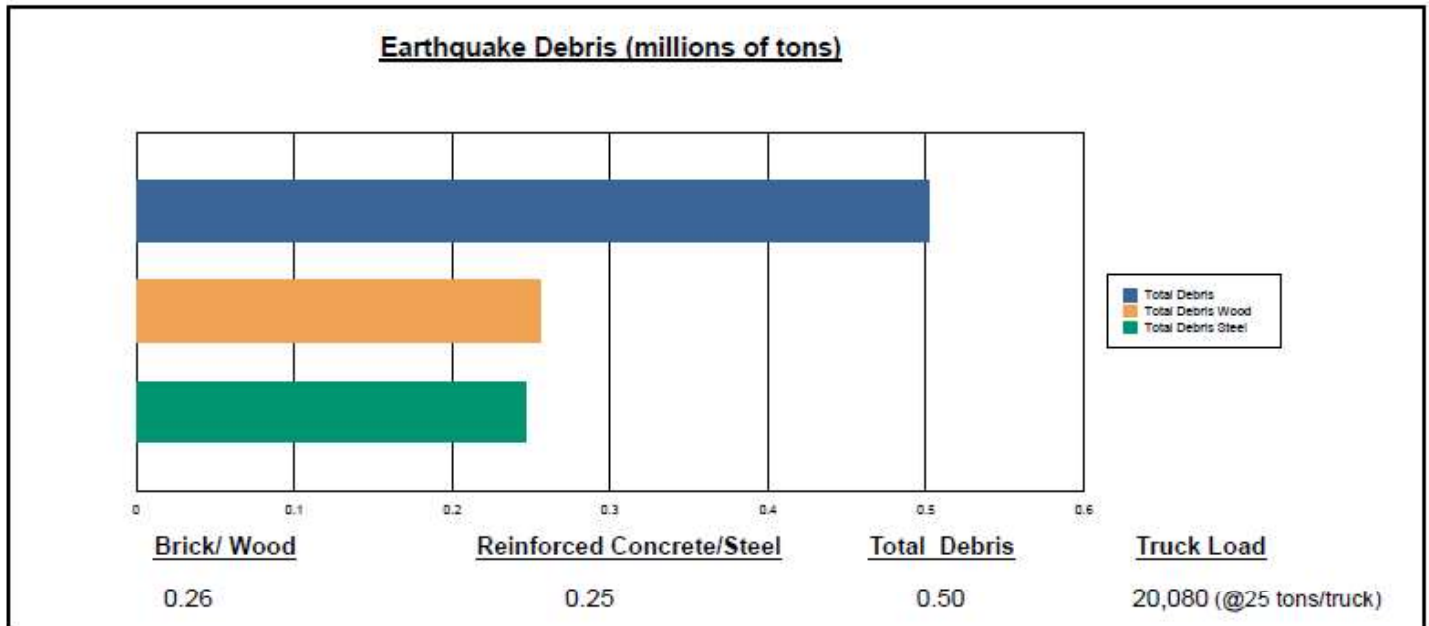
	None		Slight		Moderate		Extensive		Complete	
	Count	(%)	Count	(%)	Count	(%)	Count	(%)	Count	(%)
Wood	31738.13	79.33	11278.51	72.51	3930.63	47.21	464.97	18.39	32.34	4.71
Steel	579.52	1.45	273.32	1.76	477.19	5.73	302.50	11.96	81.33	11.84
Concrete	193.03	0.48	83.82	0.54	100.64	1.21	47.22	1.87	8.93	1.30
Precast	186.26	0.47	67.24	0.43	109.47	1.31	73.98	2.93	12.73	1.85
RM	75.97	0.19	21.52	0.14	35.03	0.42	21.95	0.87	2.54	0.37
URM	6908.81	17.27	3666.49	23.57	3469.61	41.67	1537.23	60.78	532.10	77.48
MH	325.83	0.81	163.65	1.05	203.56	2.44	81.15	3.21	16.81	2.45
Total	40,008		15,555		8,326		2,529		687	

*Note:

RM Reinforced Masonry
 URM Unreinforced Masonry
 MH Manufactured Housing

- HAZUS-MH estimates that a 5.0 magnitude earthquake in Medina County will generate a total of 502,000 tons of debris. Of the total amount, Brick/Wood comprises 51.00% of the total, with the remainder being Reinforced Concrete/Steel. If the debris tonnage is converted to an estimated number of truckloads, it will require 20,080 truckloads (@25 tons/truck) to remove the debris generated by the earthquake.

Figure 1: Earthquake Debris Estimation for Medina County



- The total economic loss estimated for the earthquake is 2,189.90 (millions of dollars), which includes building and lifeline related losses based on the region's available inventory. The total building-related losses were 1,994.97 (millions of dollars); 15 % of

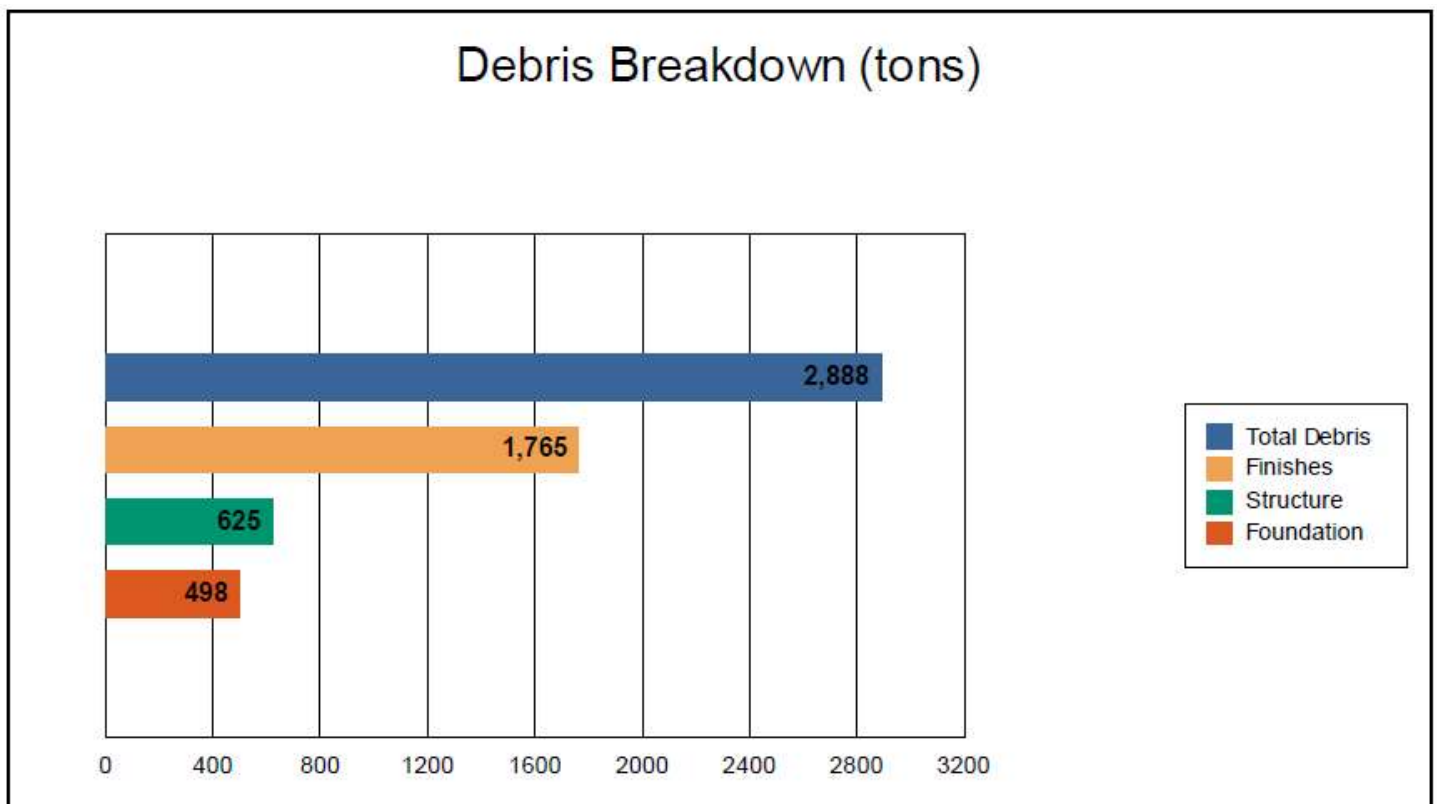


the estimated losses were related to the business interruption of the region. By far, the largest loss was sustained by the residential occupancies which made up over 59 % of the total loss.

3. A HAZUS-MH: Flood Global Risk Report was conducted to estimate the amount of debris that will be generated by flooding in Medina County, as well as the corresponding cost of incurred damages. **Note: This report utilizes 2010 Census data and some information may be outdated.**

- Hazus estimates that about 145 buildings will be at least moderately damaged. This is over 85% of the total number of buildings in the scenario. There are an estimated 3 buildings that will be completely destroyed.
- The model estimates that a total of 2,888 tons of debris will be generated. Of the total amount, Finishes comprises 61% of the total, Structure comprises 22% of the total, and Foundation comprises 17%. If the debris tonnage is converted into an estimated number of truckloads, it will require 116 truckloads (@25 tons/truck) to remove the debris generated by the flood.

Figure 2: Flooding Debris Estimation for Medina County



- The total economic loss estimated for the flood is 130.54 million dollars, which represents 4.11 % of the total replacement value of the scenario buildings. The total building-related losses were 81.39 million dollars. 38% of the estimated losses were



related to the business interruption of the region. The residential occupancies made up 42.84% of the total loss.

3.3A Formulas to be used to calculate debris estimates:

(L = length, W = width, H =height, cy = cubic yard, (x) = multiply, / = divide)

- ONE STORY BUILDING - $L'W'H'/27 = \underline{\hspace{1cm}} \text{ cy (x) } 0.33 = \underline{\hspace{1cm}} \text{ cy}$
- DEBRIS PILE - $L'W'H'/27 = \underline{\hspace{1cm}} \text{ cy}$
- TONS TO cy FOR WOODY DEBRIS - Tons (x) 4 = $\underline{\hspace{1cm}} \text{ cy}$
- cy TO TONS FOR CONSTRUCTION AND DEMOLITION DEBRIS
 $\text{cy}/2 = \underline{\hspace{1cm}} \text{ Tons}$
- cy TO TONS FOR WOODS DEBRIS - $\text{cy}/4 = \underline{\hspace{1cm}} \text{ Tons}$

<u>TABLE OF PRE-CALCULATED VOLUMES</u>			
<u>LENGTH</u>	<u>WIDTH</u>	<u>HEIGHT</u>	<u>VOLUME</u>
10'	10'	4'	15cy
20'	10'	4'	30cy
30'	10'	4'	45cy
40'	10'	4'	60cy
50'	10'	4'	75cy

SAMPLE VOLUMES:

- 27 cubic feet = 1cy (This is why the number 27 is used in the above formulas)
- Average pace = 2'6"
- Average mobile home = 80cy
- House 1800-2000 square feet = approximately 300cy
- Fifteen trees that are eight-inch diameter = 40cy
 - root systems 8-10' in diameter require one flat-bed truck to move

3.4 Site Selection Criteria

Criteria will include the following to select the best available sites:

- There should be an agreement in place for site restoration and remediation.
- Public land will be used if possible.
- An OEPA representative should be consulted with in regard to the selection of Temporary Debris Storage and Reduction Sites to ensure that any potential negative impacts to flora and fauna will be minimized.
- Paved areas, preferably level where drains can be blocked off, and with little runoff (parking lots, etc.)



- Largest available areas will be used first.
- If possible, those areas in close proximity to the solid waste treatment plant
- By a road that will be easily accessible to large trucks
- Avoid sites which are near residential areas.
- Avoid sites which are home to rare plant or animal species.
- Avoid sites where water contamination is a possibility.
- Avoid sites at or near any historic sites in Medina County.
- Avoid permeable bases or cover them with plastic before use.

3.5 Site Selection for specific debris types

1. Medina County Central Processing Facility-non-hazardous
2. Smith Bros., 3087 Marks Rd.-trees, yard waste
3. Treemasters,1035 W. Smith Rd.-trees, yard waste
4. Liberty Tire Service-tires only
5. Medina County Animal Shelter
6. Vexor Technology, Inc.-paint
7. Zollinger's Sand and Gravel - Landfill
8. Wadsworth Transfer Station Facility – Wadsworth ONLY
9. Stone Container – Paper Products in Coshocton

Site selection will be prioritized based on the amount and types of debris; however, first priority will be the pre-selected sites above, second will be public property within the damaged area, and the third priority will be private property. Appendix C lists the above facilities, their locations, and the type of debris accepted.

3.6 Site Selection for Temporary Debris

1. 8730 Lake Rd – next to CPF, 150'W X 1000'L – Household hazardous waste

3.7 Site Selection for Hazardous Debris potential

1. Chemtron Corporation 35850 Schneider Ct, Avon, OH 44011
2. Clean Harbors 2900 Rockefeller Avenue, Cleveland, OH 44115

3.8 Haulers – See Resource Book

IV. CONTRACTS AND COOPERATIVE AGREEMENTS (Appendix A)



The Medina County Highway Engineer or the authority having jurisdiction, along with several support agencies, will coordinate activities for debris removal following a disaster, and they may assign a project manager to act as the Contract Administrator for disaster operations. The project manager will develop contracts to haul waste, demolish public and private buildings that have been condemned, and transport and handle hazardous waste.

Responsibilities of the Contract Administrator:

- a. Determine the type and method of contracting needed to satisfy specific debris removal and disposal requirements
- b. Solicit bids, evaluate offers, award contracts, and issue notices to proceed for all contract assignments.
- c. Assign an individual or a group of individuals to monitor the activities of contractors during debris pickup, at the disaster site(s)

When awarding contracts, the Contract Administrator should consider:

- a. Composition and volume of debris
- b. Size of the area of debris concentration
- c. Location of temporary storage sites, 3.6 above
- d. Private property debris removal (FEMA’s Schedule of Equipment Rates – NOTE: these rates ONLY apply to equipment owned and operated by an entity, not private sector.)

Types of Debris Removal Contracts

1. Unit Price Contracts

- Based on weights (tons), or volume (cubic yards) of debris hauled
- Should be used when scope of work is not well defined
- Requires close monitoring of pick-up, hauling, and dumping to ensure that quantities are accurate
- Unit Price Contracts may be complicated by the need to segregate debris for disposal

2. Lump Sum Contracts

- Establish the total contract price using a one-item bid from a contractor
- Should only be used when the scope of work is clearly defined
- Two Types:
 - a) Area Method- scope of work based on a one-time clearance of a specified area
 - b) Pass Method- scope of work based on a certain number of passes through a specified area (example: three trips through a given distance along a right-of-way)



3. Time and Materials Contracts - The contractor is paid on the basis of time spent and resources utilized in accomplishing debris management tasks. FEMA recommends, for reimbursement purposes, this type of contract be limited to the first 70 work hours following a disaster event.

- Used for short periods of time immediately after disaster to mobilize contractors

- Must have: *a, b, c, or all:*

- a) Dollar ceiling

- b) Not-to-exceed limit for hours

- c) Performance time frames (from-to)

- Should state that:

- a) Equipment price only applies when equipment is operating

- b) Hourly rate includes operator, fuel, maintenance and repair

- c) Community reserves the right to terminate the contract at its convenience

- d) Community does not guarantee a minimum number of hours

Contract Monitoring: If the contracts are in place for debris removal, the monitoring of contractors is very important. Designate individuals to monitor debris contractors and verify that the following actions are taking place:

- Only the various debris that resulted from the disaster are being picked up

- Trucks hauling debris are fully loaded with debris

- Contractors are not attempting to increase the weight of the debris load by watering down debris or using any other methods to weigh down debris

- Debris pick-up areas are properly staffed and managed

- Trucks are sticking to designated debris routes

- Inspection of temporary storage site to ensure operations are being carried out

- Verification of security and control for temporary debris storage and reduction sites

4.1 PRELIMINARY DAMAGE ASSESSMENT/DEBRIS ESTIMATING

The Medina County Highway Engineer or authority having jurisdiction will assign PDA/DE for disaster operations. This person, along with members of the finance and administrative section, will be responsible for keeping a record of all costs associated with the debris removal operation to ensure that appropriate cost recovery activities will occur. (See **Appendix B** for Cost and Damage Estimation Sheet)

V. DEBRIS REMOVAL PRIORITIES



5.1 Clear major routes for emergency response and recovery vehicles

MAJOR ROUTES INCLUDE:

Interstates in Medina County

71	Interstate 71	271	Interstate 271
76	Interstate 76, intersects with U.S. Route 224		

State Routes and U.S. Routes in Medina County

SR 3	Weymouth Rd., Wooster Pike, and Ridge Rd.	SR 18	Norwalk Rd. and Medina Rd.
US 42	Pearl Rd. and Lafayette Rd.	SR 57	Elyria Rd., Norwalk Rd., and Wadsworth Rd.
SR 83	Avon Lake Rd.	SR 94	Center Rd., Ridge Rd., and Mt. Eaton Rd.
SR 162	Wedgewood Rd. and Sharon Copley Rd.	US 224	Greenwich Rd.
SR 252	Columbia Rd.	SR 261	Akron Rd.
SR 301	Spencer Rd.	SR 303	Center Rd.
SR 421	Greenwich Rd. and Lafayette Rd.	SR 606	Weymouth Rd. and Hinkley Hills Rd.

Principal County Routes

4	Smith Rd.	15	Westfield Rd.
17	W130th St.	19	Lake Rd.
21	Granger Rd.	22	Marks Rd.
26	Firestone Rd	29	Congress Rd.
31	Vandemark Rd.	35	Friendsville Rd
37	Remsen Rd	38	Substation Rd
40	Ryan Rd.	41	Guilford Rd.
42	Grafton Rd	44	State Rd.
50	Chippewa Rd	70	Fenn Rd.
76	Hamilton Rd.	83	Black River School Rd.
97	Greenwich Rd.	136	Sleepy Hollow Rd.

5.2 Manage debris that threatens the health and safety of individuals in the area- Refer to the hazmat and temporary facilities identified. (Section III, 3.6, 3.7)



5.3 Clear debris from waterways

5.4 Manage debris that threatens the environment

5.5 Separate debris into: (See OEPA Debris Fact Sheet for Local Officials)

a) General Solid Waste/Recyclables: food, packaging, clothing, appliances, furniture, machinery, electronic equipment, garbage, plastic, paper, bottles, cans, loose carpeting, scrap tires, street dirt, dead animals

*As much debris as possible should be recycled as long as it is cost and time effective.

b) Agricultural/Organic Waste: vegetative or woody waste, tree limbs, brush, shrubs may be stored and chipped prior to moving to a location for composting in the county.

c) Construction materials: brick, stone, mortar, asphalt, lumber, wallboard, glass, roofing, metal, piping, fixtures, electrical wiring, heating equipment, insulation, carpeting attached to structures, railroad ties, utility poles, mobile homes

- clean, hard fill: reinforced or non-reinforced concrete, asphalt, concrete, brick, block, tile, and/or stone can be reused as construction or fill material

- recycle as much as possible

- use landfill for construction materials

d) Infectious Waste: sharps (needles, medical related glass, etc.), syringes, blood containing items such as tubing, clothing, bandages, etc.

e) Hazardous Materials: flammable materials (fuels, gasoline, kerosene, propane tanks, oxygen bottles, etc.), explosives, batteries, common household chemicals, industrial and agricultural chemicals, cleaners, solvents, fertilizers, etc.

- Keep separate from other debris

VI. DEBRIS REMOVAL ON PRIVATE PROPERTY

The following actions must be performed when removing debris from demolished buildings on private property, and be aware that the owner's private insurance may cover some of the costs:

- All costs must be documented, as under FEMA's Public Assistance (PA) or Individual Assistance (IA) Programs, there may be assistance available

- Ensure that buildings have been properly condemned according to local ordinances



- Ensure that right-of-entry and hold-harmless clauses and community partner agreements are properly executed (See **Appendix E**).
- Ensure that local officials remove any legal residents or squatters from the building before demolition or debris removal take place.
- Ensure that building(s) identified have been properly inspected to verify that they are unsafe, cannot be repaired, and present a hazard to the community. It is recommended to have proper documentation, including photo records, of the building.
- Local code enforcement officers should accompany the contractor to identify the correct house(s) for demolition.
- Any demolition work must be coordinated with utility companies to ensure that all services are turned off.
- Volunteers should be used to move debris from private property to the side of the roadway when possible.

VII. METHODS FOR VOLUME REDUCTION

BURNING- Currently is permitted in the State of Ohio with the appropriate permits, however all other options must have been exhausted first.

- Consult the EPA before burning any debris
- Reduces volume by approximately 95%

Open burning- Permit needed

- See Ohio’s Open Burning Regulations and Open Burning Request forms from the Ohio EPA for more information.
- Least desirable method of volume reduction
- Should be closely monitored
- Only use clean, woody debris (this is ONLY permitted in unrestricted areas)
- Advantages: ash can be used as soil additive, cost-effective
- Be aware of factors that may irritate individuals who live or work near the site such as smoke, dust, noise, and traffic

Refractor Lined Pit Incineration – Permit required

- Use portable, pre-manufactured incinerators
- Combustion rates of 25 tons per hour while meeting emission standards
- Advantages: most efficient burning system, requires little or no maintenance

Air Curtain Pit Burner– Permit required

- Consists of a blower unit and a digging pit



- Engineered to hold smoke in and still feed air into the fire
- Advantage: more environmentally safe than open burning
- Disadvantage: many contractors do not have knowledge to properly construct blower and pit used in this method

Grinding and Chipping and Mulching

- Reduces volume by 75%
- Used for woody debris only (trees, branches), not construction material
- Can turn woody debris into usable mulch

Recycling

- Should be used as much as possible
- Most desirable method for volume reduction
- Metal, wood, and soil can all be recycled
- Advantage: can be used to reduce overall cost of the debris removal operation

VIII. TYPICAL RESPONSIBILITIES

Media- Inform members of the public about what to do with debris on private property, how to recognize hazardous materials that need to be separated from other debris, road closures, school and business closures or delays, debris removal status updates, and deliver any other important messages.

USACE- Remove and dispose of debris threatening public facilities, give technical assistance to county officials for debris removal in streams, and some individuals may be able to help write Project Worksheets (PW). Note that there will be a delay for this assistance.

OEPA- Provide technical assistance and guidance to ensure that all debris management operations from pickup to final disposal are in accordance with federal, as well as state, environmental laws and regulations.

ODNR- Watershed protection, clearing streams, and stabilizing public infrastructure, such as dams.

U.S. Public Health Service / Ohio DEPARTMENT OF HEALTH – Deploy Rapid Needs Assessment Team to assess victims’ health needs.

MEDINA COUNTY EMA- Staff EOC, help monitor contractor performance, and coordinate resources.

PUBLIC UTILITIES- Restore power, repair any damaged power lines, gas lines, water pipes, and telephone poles.

ODOT- Clear roadways and close roads that cannot be used until debris can be cleared.

OHIO NATIONAL GUARD- Debris removal assistance and water purification.

LOCAL LAW ENFORCEMENT AGENCIES- Traffic control and security.



VOLUNTEER ORGANIZATIONS (CHURCHES, ETC.)- Assist in debris removal efforts and sorting, especially on private land.

MEDINA COUNTY HIGHWAY ENGINEER- Coordinate activities for debris removal, assign a project manager to act as the Contract Administrator, and assist the Contract Administrator.

MEDINA COUNTY SOIL & WATER – Debris removal in streams and at public facilities, stream corridor restoration, and provide technical assistance.

USDA – Assist with stream clean-up and repairs.

IX. PUBLIC INFORMATION

Public Information Officer (PIO) may be assigned by the EOC, and will be responsible for:

- Communicating with the media regularly to keep citizens informed
- Creating and dispersing information bulletins
- Providing emergency alerts and updates through Medina County Emergency Alerts
- Responding to hotlines
- Making radio, television, social media, Medina County EMA website announcements
- Providing newspaper notices
- Raising community awareness
- Systematically coordinating information with representatives from other agencies
- Dispelling any rumors or misinformation in regards to debris pick-up schedules, impacted areas, financial assistance qualifications, or any other aspects of the debris management process

The PIO should emphasize the following to the public:

- Separate flammable and combustible debris from other debris
- Segregate household hazardous waste
- Separate natural vegetation from household debris
- Place debris at the curbside
- Keep debris piles away from fire hydrants and valves
- Report locations of illegal dump sites and illegal dumping
- Segregate recyclable materials

Important public announcements

- Debris pick-up schedules
- Disposal methods and ongoing actions to comply with OEPA regulations
- Disposal procedures for self-help and independent contractors
- Restrictions and penalties for creating illegal dumps
- Road closures/ roads that have been recently opened



The PIO should be prepared for several questions including but not limited to:

- What is the pick-up system?
- When will the contractor be in my area?
- Should I separate the debris and how?
- How do I handle household hazardous waste, and what types of debris could be included in that category?
- What if I am unable to pay for debris removal?
- What if I am physically unable to take debris to the curbside?

X. SAFETY

All hazardous materials should be kept separate from other debris. Lead paint and asbestos from demolished houses needs to be handled separately by a contractor when demolishing buildings. All personnel should have the means to contact emergency services. Hazards to address include:

1. The massive piles of debris: unstable work surfaces, cuts or punctures from sharp jagged pieces of debris, such as metal or glass, hidden within debris piles
2. Noise: operating heavy equipment and power tools, rain and wind, etc.
3. Breathing air that may contain hazardous particles: CO, volatile organic compounds, etc.
4. Heat stress, cold stress, high humidity
5. Traffic hazards
6. Poor Visibility
7. Injuries from flying debris
8. Heavy equipment hazards, Lifts
9. Chemical Hazards
10. Sanitation: garbage that was scattered throughout, contaminated flood water, etc.
11. Hazardous vegetation: downed trees, tree branches, and contact with plants that contain skin irritants, such as poison oak, poison ivy, and poison sumac.
12. Insects: wasps, hornets, yellow jackets, mosquitos, etc.
13. Animals: animal carcasses, wild and domesticated animals trapped by debris
14. Downed or low hanging power lines and underground lines (power, gas)
15. Severe weather

A comprehensive site-specific hazard analysis is the responsibility of the entity that chooses to perform and/or manage disaster debris. Anyone who wishes to help remove debris removal must use personal protective equipment that is appropriate for the environmental conditions and hazards present in the area. Additionally, it



is recommended that each individual has some type of communication device, such as a cell phone, two-way radio, etc.

XI. VOLUNTEERS

Volunteers can be a very integral part of debris removal activities. Local volunteer organizations can be used to help sort debris:

- When properly vetted and provided just-in-time training
- Volunteers may remove debris from private and public property
- Volunteers should always work in pairs and never work alone when sorting debris, conducting damage assessments, etc.
- Volunteer reception and management will be conducted based on the Medina County Volunteer Reception Center Plan.

Medina County EMA Volunteer Organizations:

Medina County Community Emergency Response Team: conduct damage assessments in residential areas, assist in the sorting of debris on private and public property, cleanup, direct traffic, spontaneous volunteer management

Communications Unit: receive status updates from individuals who are removing or sorting debris, help disseminate information to volunteers and contractors at the disaster site or sites regarding: the tasks have been accomplished and by whom, tasks that still need to be accomplished, any changes in environmental conditions, the locations of recently discovered areas that have been impacted by natural, technological, or anthropogenic hazards.

Some major volunteer organizations and what they typically provide:

Salvation Army: clothing, appliances, food

Mennonite Services: home building, cleanup, furniture, food

Civil Air Patrol: disaster damage surveys

American Red Cross: shelters, emergency mass care assistance, emergency assistance on an individual family basis, aid for additional assistance to families for whom government programs are not available

Team Rubicon: repair homes, clear and remove vegetative, soil, mud, and sand debris, conduct residential damage assessments, operate heavy equipment, help coordinate and monitor spontaneous volunteers

Ohio Special Response Team: search and rescue, volunteer management, conduct damage assessments, direct traffic, provide first aid



XII. PRE AND POST-DISASTER ACTIONS (See Temporary Debris Staging and Reduction Site Checklists from OEMA)

- Furthermore, an environmental audit or assessment of the Temporary Debris Staging and Reduction Sites should be conducted during the site closeout.

The Following Additional Steps May Be Necessary Based on the Circumstances:

*** Soil Testing**

- Soil samples should be taken immediately below the surface.
- Soils should be tested for the presence of volatile hydrocarbon contamination.
- Soil testing should not take place until stockpiles have been removed from the site.
- Area should be inspected for any areas with discoloration, odor or obvious problems.

*** Groundwater Testing**

- Groundwater should be tested on selected sites to determine the probable effects of rainfall leaching through either the ash areas or the stockpile areas.
- Runoff from the burn sites or other stockpiled debris within storage areas has the potential to contaminate the aquifer.
- Wells should be placed around the walls of the perimeter of the burn sites and at places of possible contamination within sites to determine if there is any type of contamination.
- Testing should occur at selected sites after all debris is removed and the results should be compared to acceptable water quality standards.

*** Restoration**

- Develop a restoration plan
- Execute the restoration plan
- Get acceptance from the landowner (if using private land)
- Terminate lease payments
- Perform necessary audits of operation
- Submit claim for Federal Assistance

XIII APPLICABLE LAWS

Ohio Revised Code Chapter 3734: Solid Waste and Hazardous Waste

Ohio Revised Code Chapter 125: Department of Administrative Services – Office Services

125.061 Suspension of purchasing and contracting requirements in case of an emergency.

Ohio Revised Code Chapter 153: Public Improvements

153.15 Assessment of asbestos hazard.



- 153.50 Separate bids for work and materials.
- 153.54 Bid guarantee to be filed with bid.
- 153.57 Form of bond.
- 153.571 Form of bond.
- 153.62 Issuing charge order for additional work.

Ohio Revised Code Chapter 343: Solid Waste Management Districts

- 343.02 Contracts for solid waste collection, storage, transfer, disposal, recycling, processing, or resource recovery services.
- 343.022 Contracts to establish and collect on behalf of the district generation or disposal fees.
- 343.04 Preparation of general facilities plan.
- 343.08 Fixing reasonable rates or charges.

Ohio Revised Code Chapter 3750: Emergency Planning

Ohio Revised Code Chapter 5502: Department of Public Safety

Sections 5502.21 through 5502.41

Ohio Administrative Code Chapter 3714: Construction and Demolition Debris

Ohio Administrative Code Chapter 3704: Air Pollution Control

Ohio Administrative Code Chapter 3745-19: Open Burning Standards

Ohio Administrative Code Chapter 3745-27: Solid Waste and Infectious Waste Regulations

Ohio Administrative Code Chapter 3745-29: Industrial Solid Waste Landfill Facilities

Ohio Administrative Code Chapter 3745-30: Residual Solid Waste Disposal

Ohio Administrative Code Chapter 3745-37: Licenses for Solid Waste, Infectious Waste Treatment, or Construction and Demolition Debris Facilities

Ohio Administrative Code Chapter 3745-51: Identification and Listing of Hazardous Waste

Ohio Administrative Code Chapter 3745-270: Hazardous Wastes Restricted from Land Disposal

Ohio Administrative Code Chapter 3745-400: Disposal Methods for Construction and Demolition Debris; Licensed Facilities

Opinion, Attorney General Lee Fisher (Appendix G)

94-021 joint solid waste management district/ competitive bidding requirements/ contracting authority
Conclusion: Competitive bidding does not apply to contracts made on behalf of a joint SWM district by the district's board of directors.

Federal Regulations- 44 CFR, Part:

- 206.222 Applicant Eligibility
- 206.223 General Work Eligibility
- 206.224 Debris Removal



206.225 Emergency Work

206.226 Restoration of damaged facilities

206.228 Allowable Costs

The Robert T. Stafford Disaster Relief and Emergency Assistance Act, Public Law 93-288, as amended, 42 U.S.C. 5121

