### COMMERCIAL AND INDUSTRIAL FLOOD DAMAGE SURVEY

(Survey Instrument)

OMB Control Number: 0704-0553

Expires: April 30, 2019

#### AGENCY DISCLOSURE NOTICE

The public reporting burden for this collection of information is estimated to average 60 minutes per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing the burden, to the Department of Defense, Washington Headquarters Services, Executive Services Directorate, Directives Division, 4800 Mark Center Drive, East Tower, Suite 02G09, Alexandria, VA 22350-3100 [0704-0553]. Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to any penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number.

### PLEASE DO NOT RETURN YOUR RESPONSE TO THE ABOVE ADDRESS.

Responses should be sent to: Sharon Tirpak, US Army Corps of Engineers, Galveston District, 2000 Port Point Road, Galveston TX, 75500.

\*Be sure to notify each person to be interviewed that responding to questions is voluntary.

### **Statement of Purpose**

The U.S. Army Corps of Engineers (USACE) Galveston District is currently conducting a survey of businesses and industries in the coastal portions of Texas as part of the Coastal Texas Feasibility Study. The purpose of this survey is to collect information that will help determine the potential losses to the structures, contents, and vehicles in the area that could result from the storm surge of future tropical events. The information

derived from the survey will be used to quantify the potential benefits of flood risk management alternatives being considered for the area.

While your participation in this survey is completely voluntary, your assistance will be greatly appreciated. Your responses will be kept strictly confidential and will remain totally anonymous. Should you choose to provide your name, title, and e-mail address, this information will only be used to contact you if further clarification is needed. Comments provided will only be shared with the planning staff at the USACE during the evaluation of the overall study. Reports generated with these evaluations will show impacts only as aggregated by broad categories (such as commercial, industrial, public, and residential), and no information will be released that can be used to identify you or your facility. The information collected will be managed in accordance with AR 25-400-2 records retention requirements. The points of contact for the survey are Ms. Sharon M Tirpak, Program Manager, USACE, Galveston District (409-766-3136\_sharon.tirpak@usace.army.mil).

If you decide not participate in the survey, please check one of the boxes below. We have found that in studies of this type that people have a lot of different reasons for electing not to participate. Understanding the reasons for non-participation will help us to improve future survey approaches. Which of the following statements best describes your reason for electing not to participate?

- 1. I do not have time to answer the questions.
- 2. I am not interested in the Study or its outcome.
- 3. I am not authorized to discuss Company Business.
- 4. Objected to the way a question (or questions) was asked.

<b>5.</b>	Other.

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PRIMARY SURVEY FORM	Expires: 4-30-19

_	Attach Business
Firm Name:	 Card Here

This survey is focused on damages that could occur to the structures and contents of buildings at your facility in the event of future flooding. Structure is defined as the components associated with a basic structure (shell), plus any improvements (tenant build-out) made to the basic shell to make it usable for a certain type of business. Contents are defined as items that would be relocated in the event that the facility moves to another location, such as furniture, equipment, products, and raw materials. For this survey contents were divided in three categories:

- Equipment: Physical items that are used for the production process or the operation of the facility (e.g., generators, machinery, production tables, paint booths, robotics, racks, conveyors, floor scrubbers, computers/servers, etc.). These items would most likely be removed if the business relocates to another facility.
- **Furniture**: Physical items necessary for the conduct of business or delivery of a product (e.g., desks, chairs, bookcases, artwork, etc.). As with equipment, this category is focused on freestanding and attached furniture that would be removed in the event of relocation.
- Inventory/Products: Items that are used in the production process or result from the production process, or consumables used as part of the business activities. Items include raw materials, finished products, replacement parts, medical consumables, cleaning products, food, pharmaceuticals, software, building materials, office supplies, etc.

#### **Business Information**

Address		
Contact Name		
		Telephone #
Date		
Type of business		
1. Total number of buildings		
2. Number of years business	s has been at this location	

# Flood History and Mitigation

3. Thas your facility be	3. Has your facility been nooded in the past? Tes No				
If "Yes," please compl	If "Yes," please complete Questions 4 and 5. If "No," skip to Question 6.				
<ol> <li>Please estimate the damages to your business from past flooding events. Please give a single set of combined damages for all floors in all buildings.</li> </ol>					
Date of the flooding event:		Date of the flooding event:			
Water depth above first floor:		Water depth above first floor:			
Contents damage estimate (\$):		Contents damage estimate (\$):			
Structure damage estimate (\$):		Structure damage estimate (\$):			
Cost of cleanup (\$):		Cost of cleanup (\$):			

5. -	After the previous flood event, briefly describe any permanent flood mitigation measures that have been implemented to reduce potential flood damage.

## **Building Information**

(Questions 6-16 are to be answered for your **primary building only**. If there are multiple buildings at the facility, a supplemental sheet is provided that asks for similar information.)

6.	Building #:
7.	Brief description of function of the building and its contents:
8.	Year building was constructed:
9.	Building Construction Type (e.g. brick, metal):
10	. What is the height of the main floor of the building above the ground:ft
11	. Number of floors (including basement, if any):
12	. Building footprint: feet by feet =square feet
13	. What is the estimated value of the building (not including contents): \$
14	. What is the estimated value of the contents in the building? \$
15	. Is there a seasonal variation in the value of inventory in this building? Yes No
	If yes, what is the total value of your inventory during the following time periods?
	January – March <u>\$</u> April – June <u>\$</u>
	July Sontombor \$ Octobor Docombor \$

16. Relative to the 1<sup>st</sup> floor elevation of the building, what is the value of the contents and where are they located vertically? Complete table below.

	Height (ft)	Equipment (\$)	Furniture (\$)	Inventory/ products (\$)
		Location o	f Ground	
udes st floor	-3 ft below first floor			
Building includes areas below first floor	-2 ft below first floor			
Build areas b	-1 ft below first floor			
		Fi	rst Floor	
	1 ft above first floor			
	3 ft above first floor			
	5 ft above first floor			
	10 ft above first floor or higher			

### Notes to responder:

- Shaded areas are for elevations above the ground, but lower than the first floor of the building.
- Please fill in appropriate **cumulative** values for the depth (e.g., -1.0 ft, -2.0 ft, -3.0 ft). Leave shaded areas blank if first floor is on the ground.
- The values in the columns should be a cumulative total, starting from the lowest level of the structure, for all contents located at or below the specified height.

17. At what elevation, relative t	o the 1 <sup>st</sup> floor of the	building, does flood o	damage to
contents begin? (+ or - ; w	vill only be negative	if below the first floor	elevation)
feet			

18. Please estimate damage to contents corresponding with water depths above/below the building's 1<sup>st</sup> floor elevation. (Express damage in either **\$ or % of total value**.)

		Equipment	Furniture	Inventory/products
	Flood	Damage in \$ of	Damage in \$ of	Damage in \$ of
	Depth	values listed under	values listed under	values listed under
		Question 16.	Question 16.	Question 16.
		Location	of Ground	
s areas oor	-3 ft below first floor			
Building includes areas below first floor	-2 ft below first floor			
Building	-1 ft below first floor			
	First Floor			
	1 ft above first floor			
	3 ft above first floor			
	5 ft above first floor			
	10 ft above first floor or higher			

Notes to interviewer/responder:

- Shaded areas are for elevations below the first floor of the buildings. Please fill in appropriate cumulative values for the depth (e.g., -1.0 ft, -2.0 ft, -3.0 ft). Leave shaded areas blank if first floor elevation is on the ground.
- The values in the columns should be a cumulative total, starting from the lowest level of the structure, for all contents located at or below the specified height.

### **Other Information**

- 19. Other than the principal structures, are there any other valuable items on your property that flood waters could damage?
  - Movable (cars, trucks, trailers, etc.)

Туре	Current Value (\$)

- Not readily movable (landscaping, electrical equipment, pipes, trailers on blocks, etc.)

Туре	Current Value (\$)	Height Above Ground (ft.)

20. Emergency Measures/Plans:

a. What emergency measures/plans, if any, would you take to reduce damage if flooding was imminent?
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b. What is the estimated cost to implement these emergency measures? \$
<u> </u>
c. How much time is required to implement these emergency measures?hours
d. What would be the estimated cost (in dollars) to clean up hazardous material following a flood event? For example, chemicals, batteries, paint etc.
\$

# COMMERCIAL AND INDUSTRIAL FLOOD DAMAGE SURVEY SUPPLIMENTAL SURVEY FORM

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ΗII	-irm name:					
Inf	This supplemental survey form is to be used for each additional building at your facility. nformation for each building is needed to estimate damages that could occur to the contents of all structures at your facility in the event of future flooding.					
1.	Building #:					
2.	Brief description of function of the building and its contents:					
3.	Year building was constructed:					
4.	Building Construction Type (e.g. brick, metal):					
5.	What is the height of the main floor of the building above the ground:ft					
6.	6. Number of floors (including basement, if any):					
7.	Building footprint: feet by feet =square feet					
8.	3. What is the estimated value of the building (not including contents): \$					
9.	9. What is the estimated value of the contents in the building? \$					
10	O. Is there a seasonal variation in the value of inventory in this building? Yes No If yes, what is the total value of your inventory during the following time periods?					
	January – March <u>\$</u> April – June <u>\$</u>					
	July – September <u>\$</u> October – December <u>\$</u>					

11. Relative to the 1<sup>st</sup> floor elevation of the building, what is the value of the contents and where are they located vertically?

	Height (ft)	Equipment (\$)	Furniture (\$)	Inventory/ products (\$)		
Location of Ground						
ides st floor	-3 ft below first floor	100				
Building includes areas below first floor	-2 ft below first floor	100				
Builc areas b	-1 ft below first floor	100				
	First Floor					
	1 ft above first floor	100+300=400				
	3 ft above first floor	400+1000 = 1400				
	5 ft above first floor	1400				
	10 ft above first floor or higher	1400+5000 = 6400				

### Notes to responder:

- Shaded areas are for elevations above the ground, but lower than the first floor of the building.
- Please fill in appropriate values for the depth (e.g., -1.0 ft, -3.0 ft, -6.0 ft). Leave shaded areas blank if first floor is on the ground.
- The values in the columns should be a cumulative total, starting from the lowest level of the structure, for all contents located at or below the specified height.

12.	At what elevation,	relative to the 1st	floor of the I	building, d	oes flood	damage to
conte	nts begin? (+ or –	; will only be nega	ative if below	the first f	loor elevat	tion)
	feet					

13. Please estimate damage to contents corresponding with water depths above/below the building's 1<sup>st</sup> floor elevation. (Express damage in either **\$ or % of total value**.)

		Equipment	Furniture	Inventory/products	
	Flood	Damage in \$ of	Damage in \$ of	Damage in \$ of	
	Depth	values listed under	values listed under	values listed under	
		Question 16.	Question 16.	Question 16.	
		of Ground			
s areas oor	-3 ft below first floor	\$50			
Building includes areas below first floor	-2 ft below first floor	\$100			
Building	-1 ft below first floor	\$100			
	First Floor				
	1 ft above first floor	\$350			
	3 ft above first floor	\$1400			
	5 ft above first floor	1400			
	10 ft above first floor or higher	\$1400+\$3000 = \$4400			

Notes to interviewer/responder:

- Shaded areas are for elevations below the first floor of the buildings. Please fill in appropriate values for the depth (e.g., -1.0 ft, -3.0 ft, -6.0 ft). Leave shaded areas blank if first floor elevation is on the ground.
- The values in the columns should be a cumulative total, starting from the lowest level of the structure, for all contents located at or below the specified height.