

On-Shore PPE Matrix for Gulf Operations

X= Minimum Requirements

Task Number	Task Title	Task Description & Requirements	HEAD		EYES		FACE	EARS	HANDS			BODY							FEET			ADDITIONAL CONSIDERATIONS	
			Sun Hat / Sun Screen	Hard Hat	Safety Glasses (7)	Safety Goggles	Face Shield	Hearing Protection	PVC 26-40 mil Heavy Use Gloves	Nitrile 11-26 mil Light Use Gloves	Abrasion Resistant Work Gloves	Hi - Visible Garment	Barrier Apron and/or Barrier Sleeves and/or Barrier Pants	Breathable Barrier Suit for Solids	Breathable Barrier Suit for Solids and Light Splash	Impervious Suit for Extended Oil Contact	Chest Waders/Hi p Boots	USCG Approved PFD	Steel-Toe Boots	Boot Covers (Chicken Boots)	Rubber Boots		
1	Manual Removal of Solid Tar Balls (if no other oil or dispersant is present)	Solid tar balls or patties are removed using shovels, rakes and buckets, etc. No surf entry	X	(1)	X						(4)	X	(6)	(4)						(5)	X		Rubber Boots may be substituted for boot covers if unavailable.
2	Mechanical Sand Rake (Beach Cleanup)	Solid tar balls or patties are removed by mechanical device. Upgrade PPE for unloading and maintenance tasks as needed	X	(1)	X								X	(4)						X	X		PPE requirements for sand rake task force.
3	Manual Scraping (Beach Cleanup)	Oil is scraped from substrate using hand tools.	X	(1)	X						(4) (INNER)	X (OUTER)	(6)	(4)	(4)	(4)	(4)		(2)	(5),(8)	(4)	X	Rubber boots are required. Boot covers will be used if steel boots are required. Body protective apparel based on site conditions
4	Manual Removal of Oiled Materials	Oiled sediments and debris are removed by hand, shovels, rakes, wheel barrows, etc.	X	(1)	X	(4)	(4)		X			(4)	(6)	(4)	(4)	(4)		(2)			X	Suit selection based on site conditions	
5	Manual Cutting of Oiled Vegetation	Oiled vegetation is cut by hand, collected and stuffed into bags or containers for disposal. Performed using machete, shearing tools, garden tools, etc.	X	(1)	X	(4)	(4)				(4) (INNER)	X (OUTER)	(6)	(4)	(4)	(4)	(4)		(2)	(5),(8)	(4)	X	Cut resistant sleeves as required. Suit selection based on site conditions.
6	Manual sorbent application (Beach Clean Up)	Sorbents are applied manually to contaminated areas to soak up oil.	X	(1)	X	(4)						X	(6)	(4)	(4)	(4)		(2)	(5),(8)	(4)	X	Suit selection based on site conditions	
7	Manual sorbent retrieval (Beach Clean Up)	Sorbents are retrieved manually to contaminated areas to soak up oil.	X	(1)	X	(4)			X				(6)	(4)	(4)	(4)	(4)		(2)	(5),(8)	(4)	X	
8	Tide line Boom Deployment and Maintenance (Beach Clean up)	Deployment of clean boom and moving of boom at tideline.	X	(1)	X						(4) (INNER)	X (OUTER)	(6)	(4)	(4)	(4)	(4)		(2)	(5)	(4)	X	Suit selection based on site conditions
9	Snare Boom Operations	Snare boom is deployed/retrieved into the water (also tidal pools) from shore.	X	(1)	X	X	(4)				(X) (INNER)	X (OUTER)	(6)	(4)	(4)	(4)	(4)	(4)	(2)			X	Goggles and faceshield for boom retrieval only.
10	Sump and Pump/ Vacuum Truck/ Portable Skimmers	Oil collects in sumps, natural depressions or behind booms. Oil is removed by skimmers and vacuum equipment/trucks.	X	(1)	X	(4)	(4)	X			(4) (INNER)	X (OUTER)	(6)	(4)	(4)	(4)	(4)		(2)	X	(4)		
11	Manual handling of boom and boom materials	Loading, offloading and retrieval of clean & oiled boom. Bundling and folding boom, handling boom chains, buoy chains and anchors. Lifting and pulling in awkward directions.	X	(1)	X						(4) (INNER)	X (OUTER)		(4)	(4)	(4)	(4)		(2)	X	(4)		Wear cut resistant sleeves. Suit selection based on site conditions. In addition to chemical hazards, exposure risks may include marine life (barnacles, jellyfish and stingray barbs, etc.).
12	Decon - low Pressure Cleaning	< 100 psi (e.g. garden hose, hudson sprayer)	X	(1)	X	(4)					X		(6)			X	(4)		(2)			X	
13	Decon - Medium Pressure Cleaning	Medium pressure water spray flushes oil from substrate and is channeled to recovery points. For pressure washers between 100 and 3,000 psi operating range.	X	(1)			X	X	X	X			(6)			X	(4)		(2)	X	X		PPE alone is not sufficient. Detailed training required on pressure washer use. Task needs to be continually monitored to assess the need for additional PPE. For additional guidance, see the NIOSH PPE Guide.
14	Decon - High Pressure Cleaning	High pressure (> 3,000 psi), scalding water spray flushes oil from substrate and is channeled to recovery points.	X	(1)			X	X	X	X			(6)				X		(2)	X	X		Double Protection entails ear muffs and plugs. PPE alone is not sufficient. Detailed training required on safe pressure washer use. Task needs to be continually monitored to assess the need for additional PPE. For additional guidance, see the NIOSH PPE Guide.
15	Decon - Dry Ice Blasting	Dry ice pellets remove oil from substrate using a high pressure, thermal shock process.	X	(1)			X	X	X	X			(6)				X	(4)	(2)	X	(4)		Dual protection entails ear muffs and plugs. Task needs to be continually monitored to assess the need for additional PPE. For additional guidance, see the NIOSH PPE Guide.

FOOTNOTES

- (1) Required only when over head or bump hazards are present. Sun Hat required when hard hat is not required.
- (2) Personal Flotation Device (PFD) is required when working on docks, vessels, and if entering water/surf where water exceeds knee height.
- (3) This footnote intentionally left blank
- (4) Wear when a specific hazard associated with the given job exists and warrants wearing of this protection. This will be determined by conducting a field JHA prior to the start of the task and will be performed by either Site Safety Officers, Site Supervisors or Team leads that have been trained in the use of the field form, with input from BP Safety / Industrial Hygiene as requested.

- (5) Steel-toed boots are required based on worksite conditions
- (6) Required when working around heavy equipment or UTVs
- (7) Only clear lenses shall be used at night
- (8) Wear snake boots based on risk

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			Sun Hat / Sun Screen	Hard Hat	Safety Glasses (7)	Safety Goggles	Face Shield	Hearing Protection	Nitrile 26 40 mil Heavy Use Gloves	Nitrile 11-26 mil Light Use Gloves	Abrasion Resistant Work Gloves	Hi - Visible Garment	Barrier Apron and/or Barrier Sleeves and/or Barrier Pants	Breathable Barrier Suit for Solids	Breathable Barrier Suit for Solids and Light Splash	Impervious Suit for Extended Contact	Chest Waders/Hip Boots	USCG Approved PFD	Fire Resistant Clothing	Steel-Toe Boots	Boot Covers (Chicken Boots)	Rubber Boots	
1	Manual Cutting of Oiled Vegetation	Oiled vegetation is cut by hand, collected and stuffed into bags or containers for disposal. Performed from boat using machete, shearing tools, garden tools, etc.	X	(1)	X	(4)	(4)			(4) (INNER)	X (OUTER)	(6)	(4)	(4)	(4)	(4)	(4)	(2)		(5)	(4)	X	Cut resistant sleeves as required. Suit selection based on site conditions.
2	Manual sorbent application (Beach Clean Up)	Sorbents are applied manually to contaminated areas to soak up oil.	X	(1)	X	(4)					X	(6)	(4)	(4)	(4)			(2)		(5),(8)	(4)	X	Suit selection based on site conditions
3	Manual sorbent retrieval (Beach Clean Up)	Sorbents are retrieved manually from contaminated areas.	X	(1)	X	(4)			X			(6)	(4)	(4)	(4)	(4)		(2)		(5),(8)	(4)	X	
4	Clean Boom Deployment (Hard Boom)	Deployment of clean boom	X	(1)	X						X		(4)				X		X				Wear cut resistant sleeves.
5	Boom Retrieval (Hard boom)	Retrieval of oiled boom	X	(1)	X	(4)				(4) (INNER)	X (OUTER)		X		(4)	(4)	X		X	(4)			Wear cut resistant sleeves. Suit selection based on site conditions. In addition to chemical hazards, exposure risks may include marine life (barnacles, jellyfish and stingray barbs, etc.)
6	Snare Boom Operations	Snare boom is deployed/retrieved into the water (also tidal pools) from boats.	X	(1)	X	X	(4)			(4) (INNER)	X (OUTER)	(6)	(4)	(4)	(4)	(4)	(4)	(2)				X	Goggles and face shield for boom retrieval only.
7	Sump and Pump/ Vacuum Truck/ Portable Skimmers	Oil collects in sumps, natural depressions or behind booms. Oil is removed by skimmers and vacuum equipment/trucks.	X	(1)	X	(4)	(4)	X		(4) (INNER)	X (OUTER)	(6)	(4)	(4)	(4)	(4)		(2)		(5)	(4)		
8	Skimming Operations (outside 5 mile radius from source)	Use of skimming resources to remove oil from the water. Activities include retrieval and skimmer operations including recovered oil transfer.	X	(1)	X	(4)	(4)	(4)	(4)	(4) (INNER)	X (OUTER)		X		(4)	(4)	X					X	If using heavy nitrile gloves, abrasion resistant work gloves are not required.
9	Skimming Operations (inside 5 mile radius from source)	Use of skimming resources to remove oil from the water. Activities include retrieval and skimmer operations including recovered oil transfer.	X	(1)	X	(4)	(4)	(4)	(4)	(4) (INNER)	X (OUTER)		X		(4)	(4)	X					X	Workers must be respiratory program qualified. If using heavy nitrile gloves, abrasion resistant work gloves are not required.
10	Decon - low Pressure Cleaning	< 100 psi (e.g. garden hose, hudson sprayer)	X	(1)	X	(4)				X		(6)			X	(4)		(2)				X	
11	Decon - Medium Pressure Cleaning	Medium pressure water spray flushes oil from substrate and is channeled to recovery points. For pressure washers between 100 and 3,000 psi operating range.	X	(1)		X	X	X	X			(6)			X	(4)		(2)		X	X		PPE alone is not sufficient protection. Detailed training required on safe pressure washer use. Task needs to be continually monitored to assess the need for additional PPE. For additional guidance, see the NIOSH PPE Guide.
12	Decon - High Pressure Cleaning	High pressure (> 3,000 psi), scalding water spray flushes oil from substrate and is channeled to recovery points.	X	(1)		X	X	X	X			(6)			X		(2)		X	X			Double Protection entails ear muffs and plugs. PPE alone is not sufficient protection. Detailed training required on safe pressure washer use. Task needs to be continually monitored to assess the need for additional PPE. For additional guidance, see the NIOSH PPE Guide.
13	Decon - Dry Ice Blasting	Dry ice pellets remove oil from substrate using a high pressure, thermal shock process.	X	(1)		X	X	X	X			(6)			X	(4)		(2)		X	(4)		Double Protection entails ear muffs and plugs. Task needs to be continually monitored to assess the need for additional PPE. For additional guidance, see the NIOSH PPE Guide.
14	In-Situ Burning	Upwind end of contaminated area is ignited to burn down-wind. Respiratory protection may be required if identified in a site-specific task hazard analysis.	X	(1)	X						X						X	X	(5)				Emergency escape breathing device is required for each person on board. Devices are provided by vessel.
15	Cargo Inspections on Marine Vessels	Opening tanks and storage compartments holding collected oil and vegetation for visual inspection (H2S exposure potential).	X	(1)	X	(4)		(4)			X						X		(5)				Task needs to be continually monitored to assess the need for additional PPE.
16	Marsh / Near-Shore Clean-up Operations	SCAT-Pollution Investigation. Workers on foot and aboard small boats and patrol marshes and bayous to search for oil impact. Workers will not be physically cleaning.	X	(1)	X			(4)		(4)	(4)					(4)	(2)		(5),(8)				

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