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Standard Terminology Relating to Spill Response Barriers¹

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^{ε1} NOTE—Editorial changes were made throughout in November 1998.

1. Scope

1.1 This document defines the terminology used in the field of spill response barriers. Only those terms commonly used or peculiar to this field have been included; no attempt has been made to list all terms used. Where a second term is in common use, “aka” is used to mean “also known as.”

1.2 Design, engineering, and performance terms are listed separately: barrier design terminology (3.1), barrier engineering terminology (3.2), and barrier performance terminology (3.3).

2. Referenced Documents

2.1 *ASTM Standards:*

F 625 Practice for Classifying Water Bodies for Spill Control Systems²

3. Terminology

3.1 *Barrier Design Terminology*—Terms associated with Spill Response Barrier Design:

General

boom—floating mechanical barrier used to control the movement of substances that float.

boom section—length of boom between two end connectors.

boom segment—repetitive identical portion of the boom section.

Types

air bubble barrier—special-purpose barrier created by rising stream of air bubbles and entrained water, produced by injecting air at some depth below water surface.

bottom-tension boom—boom with tension member located along the bottom of the skirt.

calm water boom—boom intended for use in calm waters (see

Practice F 625 for environmental descriptors).

“curtain type” boom—boom consisting of a flexible skirt supported by flotation.

“fence type” boom—boom consisting of a self-supporting or stiffened membrane supported by flotation.

fire resistant boom (aka fire containment boom)—boom intended for containment of burning oil slicks.

ice boom—boom intended for use in ice-infested waters, designed to withstand effects of ice contact.

inflatable boom—boom that uses inflated gas-filled chambers as the flotation.

net boom—special purpose boom in which all or part of the membrane material is netting.

open water boom—boom intended for use in open waters (see Practice F 625 for environmental descriptors).

permanent boom—boom intended for long-term or permanent deployment.

plunging water jet barrier—special purpose barrier created by a series of coherent streams of water directed vertically downward into a body of water.

protected water boom—boom intended for use in protected waters with moderate environmental conditions (see Practice F 625 for environmental descriptors).

river boom (aka fast water boom)—boom intended for use in currents greater than 1 knot.

shore seal boom—boom that, when grounded, seals against the shoreline.

silt barrier—boom with very deep skirt used to control the movement of suspended sediments.

sorbent boom—sorbent material contained or arranged in the form of a long cylinder.

special purpose boom—boom that departs from the general characteristics of “fence type” and “curtain type” booms, either in design or intended use.

submersible boom—boom that normally resides on the seabed and is positioned by inflating with air, causing it to rise to the water surface.

water jet barrier—barrier created by stream of pressurized water spray directed across the water surface.

weir boom (aka skimming boom/barrier)—boom that has a weir skimming device(s) built into its face.

¹ This terminology is under the jurisdiction of ASTM Committee F-20 on Hazardous Substances and Oil Spill Response and is the direct responsibility of Subcommittee F20.11 on Control. Current edition approved May 15, 1993. Published July 1993. Originally published as F 818 – 84. Last previous edition F 818 – 86.

² *Annual Book of ASTM Standards*, Vol 11.04.