## Maine Port Authority International Marine Terminal

#### FIRE SAFETY PLAN

(Rev. 01, 24 March, 2014)

#### Fire Safety Program

As part of the overall objective to ensure that adequate fire and life safety protection are provided at the Portland International Marine Terminal (IMT), a Fire Safety Program has been implemented. This Fire Safety Plan outlines not only the fire protection and life safety systems that are installed throughout the IMT, but also provides specific operational requirements that are designed to minimize any potential fire risks to personnel or property, resulting from flammable or combustible materials that are being used, handled, and/or stored at the IMT site. In general, the IMT Fire Safety Program consists of:

- Installed fire protection and life safety systems that are distributed throughout the IMT site to support both early notification of a fire emergency and provide ready access to firefighting water,
- Operational and administrative procedures that provide guidance for ensuring that day-to-day operations at the IMT are conducted in a fire-safe manner, and
- The assignment of personnel responsible for the oversight of the fire safety measures implemented at the IMT.

All three facets of the program must be maintained and administered on a day-to-day basis to ensure that operations within the IMT are conducted in the most fire safe manner possible and that if a fire emergency does occur, that emergency responders have ready access to all portions of the site, including the installed fire protection systems.

### **Fire Protection Systems**

The fire protection systems installed at the Portland IMT consist of both a fire alarm/notification system and a fire water supply system to support manual firefighting operations. The fire alarm/notification system consists of six (6) manual fire alarm pull stations that are installed at locations throughout the IMT site. These pull stations provide a means for rapid notification of emergency responders to a fire or other emergency at the site. The general locations of these pull stations are included on Attachment 1; the site's Fire Safety Plan (Dwg. C17). These pull stations are to be connected to the main fire alarm control panel (FACP) for the main Terminal Building. Upon activation, these will alert the Fire Department via the wireless Master Box system that is connected to the FACP.

In addition to the five (5) Municipal fire hydrants installed along the north side of Commercial Street, adjacent to the IMT site, the private fire water supply system on the IMT site has been updated such that nine (9) fire hydrants and three (3) standpipe connections, which are supplied from the Municipal system, are dispersed throughout the IMT. The three standpipe connections are located along the length of the railroad loading area. Due to space constraints associated with large equipment used to load containers on the rail cars, along with ensuring adequate protection from damage, it was not possible to site hydrants within this area. The standpipes are connected to the remainder of the fire water supply system via a post indicator valve (PIV) that is located adjacent to the west access road from Commercial St. The location of the hydrants and standpipes is intended to maximize the ease of access to firefighting water from all points within the IMT site. Equally, the specified clear space that is to be maintained between all container storage areas has been designed to facilitate the ease of movement and operation of firefighting vehicles within the IMT. The locations for all fire hydrants and standpipes, including the standpipe's PIV, throughout the IMT are indicated on Attachment 1. Although Attachment 1

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also shows the locations of several existing hydrants that are located on adjacent properties, these are not IMT control and were not considered when evaluating the fire water supply requirements for IMT.

An associated aspect of providing adequate site fire protection capabilities is the need to ensure that the responding Fire Department will have ready access to the site itself. The IMT is a "secure" site, with access from Commercial St. provided by two automatic-opening gates at the eastern end of the IMT, along with the access road at the western end of the site. Additionally, the IMT site includes a secure storage area for the wheeled containers that are awaiting loading on rail cars. This secure storage area is accessed from the eastern end by an automatic-opening gate from within the IMT site, along with another automatic-opening gate on the western side; which is accessed by the (unsecured) roadway on the western end of the site. Each gate is operated by use of a key card. To ensure that the Fire Department will have ready access to all areas of the site, including during non-working hours when the site is unmanned, a "knox" box will be located adjacent to each gate; with each containing the necessary key card that will open the respective gate.

#### Control of Flammable/Combustible Materials

Inherent in the site Fire Protection Plan is a requirement to control the locations of both potential ignition sources and all flammable and combustible materials; with the emphasis being to maintain separation between the two.

Areas within the IMT site where the potential exists for open flame or other ignition sources to be present are specifically designated. These areas include the IMT Maintenance Shop, the DoT Bridge Maintenance Building, and any designated smoking areas. No flammable or combustible materials are to be stored within 100 feet of the "shop" areas associated with the Maintenance Buildings. Any storage areas within this distance must be designated for non-flammable/combustible materials only, including any bulk containers that may contain flammable or combustible materials. Smoking areas may be designated at locations throughout the IMT site, but these may be no closer than 50 feet from any areas where flammable/combustible materials are used, handled, or stored. All areas designated as either flammable/combustible storage "exclusion" areas or smoking areas must be clearly marked.

The IMT is certified for the handling of bulk containers of ethanol; a flammable liquid. Due to the specific hazards associated with the (temporary) storage of large quantities of flammable liquids, a specific area of the IMT storage yard has been designated for the storage of the bulk ethanol containers. To alleviate the potential for errors, the size of the designated flammable liquid storage area is sufficient to accommodate both the incoming "full" containers and those that are empty and awaiting return shipping. The location for the storage of the bulk flammable liquids containers is highlighted on Attachment 1. Should the site be recertified to handle other types of flammable liquids, the proposed specific location to be designated for storing these additional containers will be reviewed and approved by the Authority(ies) Having Jurisdiction.

### **Site Fire Safety Coordinator**

Although all IMT site personnel will receive basic instruction regarding the fire safety requirements at the IMT, a full-time employee of the Maine Port Authority will be assigned as the site's Fire Safety Coordinator. This individual will receive specific orientation training that

# Maine Port Authority International Marine Terminal

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will provide a more in-depth understanding of all facets of the site's Fire Safety Plan. He/She will be responsible for ensuring the day-to-day implementation of, and adherence to, the Fire Safety Plan by all site personnel. Equally, this individual will be responsible for coordinating the IMT fire safety requirements with the site's two adjacent tenants whose personnel must transit portions of the IMT site to reach their respective facilities; the DoT Bridge Maintenance Building and the Canal Landing Boatyard. Each will be instructed as to the specific fire safety requirements to which they must adhere to ensure the safety of all personnel operating at, or immediately adjacent to, the IMT site. At a minimum, this individual's responsibilities will include;

- Ensuring all IMT personnel receive an initial briefing regarding all facets of the site's Fire Safety Program, including the location and use of all fire protection and life safety equipment,
- Acting as the site's primary liaison with the local Fire Department; both for coordinating any
  maintenance and testing of the fire water supply system and scheduling routine familiarization
  and training exercises at the IMT,
- Acting as the site's primary liaison with representatives of the DoT Bridge Maintenance facility and Canal Landing Boatyard to ensure they are fully knowledgeable of the fire safety requirements associated with the IMT's operation and their responsibilities when operating within the IMT site.
- Conducting routine site inspections to verify that all fire protection systems remain undamaged and in good working condition and that access to all fire hydrants, standpipes (and controlling PIV), and manual pull stations remains unobstructed, and
- Verifying that all hot work activities are performed only in designated areas, including smoking, and that all flammable and combustible materials are stored within their proper areas.

The Maine Port Authority management will ensure that this individual has the necessary authority to carry out and enforce the assigned responsibilities. Equally, an alternate Fire Safety Coordinator will be designated as/if needed to support periods when the primary designee is unavailable to perform these functions.

### Fire Protection and Life Safety Systems Inspection, Testing, and Maintenance

To ensure that all fire protection and life safety systems are operational and ready for use when/if needed, the site's Fire Safety Coordinator will maintain records that demonstrate all installed systems are being properly maintained and tested in accordance with applicable industry codes and standards. The Maine Port Authority will ensure that the site's fire alarm/notification system is being properly inspected, tested, and maintained by an authorized fire alarm contractor. Equally, the Fire Safety Coordinator will work with the Municipal Authorities to ensure that authorized personnel have the necessary access to the site to properly inspect, test, and maintain all components associated with the fire water supply system, including performing the routine hydrant flow tests, along with performing the necessary inspections and testing of the standpipe system, including its controlling PIV.

