




DEPARTMENT OF
Buildings, Safety Engineering &
Environmental

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MEMORANDUM

TO: Council Member Scott Benson, Chairman
Public Health and Safety Committee

THRU: Council President Brenda Jones

FROM: Raymond A. Scott, MPH, Deputy Director 
Buildings, Safety Engineering and Environmental Department

DATE: January 13, 2021

RE: **Ambassador Bridge to Request Hazardous Materials Transportation Approval**

This memorandum summarizes the request from the Detroit International Bridge Company (DIBC) - Ambassador Bridge to the Michigan Department of Transportation (MDOT) to allow transportation of certain hazardous materials across the bridge, as well as provide an opinion from the administration's applicable departments on the potential impacts.

DIBC specific request is to allow for the transport of Class 3 and Class 8 hazardous materials as permitted by the Blue Water Bridge in Sarina-Port Huron, and proposed for the newly constructed Gordie Howe Bridge. DIBC is permitted for Class 2, 4, 5, 6, and 9 hazardous materials to travel across the Ambassador Bridge. Currently, only the Detroit-Windsor truck ferry is allowed to transport Class 3 and Class 8 hazardous materials between Detroit to Canada.

Applicable City Departments Review

This request was reviewed by the applicable departments consisting of Buildings, Safety Engineering & Environmental Department – Environmental Affairs (BSEED - EA), Detroit Homeland Security & Emergency Management (DHSEM), Detroit Fire Department – Fire Marshal Division (DFD), Detroit Police Department (DPD), and Detroit Health Department (DHD). A site tour was provided by DIBC to the departments on October 22, 2020. In attendance were representatives from BSEED, DFD – Fire Marshal Division, DPD, and DHD.

The following submittals were considered as part of this review:



1. Detroit International Bridge Company Request To Lifting Restrictions - Michigan Department of Transportation, Part 1 of 2, September 28, 2020
2. Detroit International Bridge Company Request To Lifting Restrictions - Michigan Department of Transportation, Part 2 of 2, September 28, 2020
3. Detroit Fire Department – Entrances, Exits and Fire Suppression Equipment, September 3, 2020
4. Detroit Fire Department – Fire Marshal Division, Inspection Report, July 15, 2020
5. City of Windsor, Fire & Rescue Services, July 8, 2020
6. Michigan Department of Transportation Changes to Non-Radioactive Hazardous Materials Routing Designation for Wayne County, January 31, 2014
7. Michigan Department of Transportation Frequently Asked Questions Proposed Changes To Non-Radioactive Hazardous Materials Routing Designation, Wayne County, January 31, 2014
8. Hazardous Materials Routing Synopsis Report, Wayne County: Proposed Recommendations To Michigan Department of Transportation, December 2012
9. Ambassador Bridge, Local Agency Onsite Visit and Training Schedule for the Ambassador Bridge
10. Ambassador Bridge, Community/Government Relations Meetings List

Buildings, Safety Engineering & Environmental Department – Environmental Affairs (BSEED - EA)

Hazardous Material Classification - The definition of hazardous materials includes those materials designated by the Secretary of the United States Department of Transportation (USDOT) as posing an unreasonable threat to the public and the environment. The term includes all of the following: (1) Hazardous Substances, (2) Hazardous Waste, (3) Marine Pollutants, (4) Elevated Temperature Material, (5) Materials identified in 49 CFR 172.101, and (6) Materials meeting the definition contained in Part 173.

The classes of hazardous materials are as follows:

➤ **Class 1 Explosives**

- Division 1.1 Mass Explosive Hazard
- Division 1.2 Projection Hazard
- Division 1.3 Mass Fire Hazard
- Division 1.4 Minor Explosion Hazard
- Division 1.5 Very Insensitive Explosives
- Division 1.6 Extremely Insensitive Explosives



- **Class 2 Gases**
 - Division 2.1 Flammable Gases
 - Division 2.2 Non-Flammable Gases
 - Division 2.3 Poisonous or Toxic

- **Class 3 Flammable Liquid**
 - Includes materials whose Flash Point (FP) is not more than 141°F

- **Class 4 Flammable Solid**
 - Division 4.1 Flammable Solid
 - Division 4.2 Spontaneously Combustible Material
 - Division 4.3 Dangerous When Wet

- **Class 5 Oxidizing Substances; Organic Peroxides**
 - Division 5.1 Oxidizer
 - Division 5.2 Organic Peroxide

- **Class 6 Poisonous (Toxic) and Infectious Substances**
 - Division 6.1 Poisonous (Toxic) Materials
 - Division 6.2 Infectious Substance

- **Class 7 Radioactive Materials**

- **Class 8 Corrosives**

- **Class 9 Miscellaneous Dangerous Goods**
 - This category includes Environmental Hazardous Substances, Elevated Temperature Material, Hazardous Wastes, and Marine Pollutants.

Responsible Regulatory Agencies - Typically, the transfer of materials, hazardous or otherwise, over national borders are subject to the authority of USDOT. However, due to the Public Act 265 of 1995, the control of establishing Non-Radioactive Hazardous Materials (NRHM) routing designations are given to MDOT. Within Wayne County, and consequently Detroit, MDOT has the final say on all NRHM routing designations. The city of Detroit does not hold any regulatory power within this beyond providing community response (i.e. City Council and public comment).

To date, any hauler of hazmat must obtain a Hazardous Materials Safety Permit (HMSP) from the Federal Motor Carrier Safety Administration (FMCSA) prior to transporting certain highly hazardous materials per 49 CFR 385.400.



Given the aforementioned documents, consultation with applicable departments, and site visit BSEED-EA does not object to DIBC request, but do highly recommend continued public outreach, specifically with southwest Detroit residents. It is important for the residents to understand the transportation corridors that will be utilized, as well as the method used while safely transporting materials between Detroit and Canada.

Comments from the Detroit Fire Department – Fire Marshal Division (DFD)

From DFD, we do not have any objections to changing the hazardous transport restrictions on the Ambassador Bridge as requested. They have all of their safety precautions in place and the overall plan looks good. The life safety systems are in compliance, and I especially like the escort plan that they have in place for each vehicle crossing the bridge. The following is the information from DFD.

The annual fire inspection is current as of August 18, 2020.

The Emergency Response Plan has been received, reviewed and approved by DFD.

The Detroit Fire Department fire companies tested the fire suppression system, which is a dry standpipe system in August 2020, which included a fire engine connection to the system and pressurizing to the needed capacity. The fire boat (Curtis Randolph) is also, capable of connecting to the standpipe system and drafting its water supply from the Detroit River. Fire engines are also capable of drafting water from the Detroit River for an additional water supply during an emergency operation.

Fire department training with first responding fire companies was conducted with the Ambassador Bridge to become familiar with the Command Center location, response routes, standpipe connection locations, staging areas, bridge access and keys were issued for accessing the locked gates. The training will also include Detroit EMS for medical emergency response. This training will be conducted bi-annually.

Fire hydrants are routinely inspected, documented and reported for repairs to DWSD if needed, by the fire companies in that district from October 1 through the end of April.

The Detroit International Bridge Company has a hazardous response & clean up contract with Marine Pollution Control for a hazardous spill incident mitigation.

The Ambassador Bridge has a spill containment system, which is part of the sewer drainage system on the bridge, which is able to contain products from tanker truck rollover and spills.

Comments from Detroit Homeland Security & Emergency Management (DHSEM)

Due to the crippling impact on international commerce that crosses the Ambassador Bridge daily, DHSEM has had very few opportunities to conduct mock exercises on the bridge. However, DHSEM and Detroit Fire have maintained a relationship with the Ambassador Bridge personnel and listed below are some of the instances, in which we have worked and trained together.



- Annually, Detroit first responders collaborate with Windsor first responders to switch-off each year on leading an exercise at the Detroit-Windsor Tunnel. DHSEM directs the exercises when it is Detroit's turn to lead. The Ambassador Bridge is notified every year and they participated as observers in 2018.
- The US Coast Guard host a discussion-based exercise annually. These exercises involve responders in the Detroit and Metro-Detroit areas and in 2017 and 2018, Ambassador Bridge personnel participated in the exercises.
- Annually, the Ambassador Bridge is engaged in the planning for the Free Press Marathon and in 2015, they participated in the Marathon tabletop exercise, co-conducted by DHSEM and a team from the Free Press Marathon.
- In 2010, DHSEM partnered with Detroit Fire to conduct a fire suppression exercise on the bridge, involving a vehicle fire. The exercise was limited to Fire and did not require shutting down the bridge.
- In 2011, DHSEM partnered with the US Coast Guard to conduct a Complex Coordinated Terrorist Attack, involving the Princess Boat and the Ambassador Bridge personnel participated in this exercise.
- Annually, the Ambassador Bridge is present for the planning of the North American International Auto Show and Ford Fire Works.
- The Ambassador Bridge is engaged with the planning of the Ports of Entry exercises conducted by US Customs and Border Protection and Canada Border Services Agency.
- In 2017, the Ambassador Bridge had a role in the Canadian Navy full-scale exercise.
- The Detroit Fire Department has a Response Plan specifically for the Ambassador Bridge. Detroit Fire performs an annual exercise to test the standpipes that service the bridge.
- Annual exercises do not include Hazardous Materials (HazMat) incidents. The HazMat Team of the department is guided by federal and State regulations. Their standard protocols are consistent whether it is a response to an incident on the bridge or elsewhere. The last real-world fire that occurred on the bridge was 12/25/2017. It was a freightliner transport vehicle that caught fire and was extinguished without incident.
- A summary report of each exercise, including any citations/recommendations. In 2019, the annual exercise identified some issues with a standpipe, which has since been corrected.
- DHSEM will direct a tabletop exercise with the Ambassador Bridge in September 2021.

Comments from the Detroit Police Department (DPD)

Based on the observations made during a recent on-site tour and information reviewed concerning the request, there were no obvious concerns that would lead to any objection to the requested changes. If the request is approved, an increase in semi-truck traffic on the bridge is anticipated but poses no significant impact on the surrounding areas, surface or residential streets. Based on my observation while assigned to the Fourth Precinct, the majority of all Ambassador Bridge traffic directs onto I-75 once cleared, not into Southwest Detroit. No information provided has indicated that changing the restrictions would increase traffic in Southwest Detroit by any substantial amount. Currently, class 3 and 8 materials are not prohibited on area roads therefore; any change in restriction will not introduce new materials to the area. Approval of the request will have no apparent impact on the day-to-day operations of the Fourth Precinct.



Comments from the Detroit Health Department (DHD)

Based on the information presented, my opinion is that the permit that the ambassador bridge would have, at worst a neutral effect on public health.

- The trucks that would be using the Ambassador bridge, are currently travelling through the city on I-94 to get to the Blue Water bridge, would instead only travel to the ambassador bridge, so it would mean fewer miles driven in Detroit for the majority of trucks.
- The main items that are involved are fuel trucks and some corrosive products. The Detroit and Windsor Fire Marshals are satisfied with their fire and spill control plans and the Bridge has agreed to increase joint drills.

The applicable departments have carefully reviewed all aspects pertaining to each department's technical requirements of DIBC request to MDOT to allow for the transport of Class 3 and Class 8 hazardous materials. The departments have met on multiple occasions to discuss all open issues, and held meetings with DIBC to resolve those matters. After careful consideration, we do not object to this request to move forward for MDOT's approval.

cc: Avery Peeples, Mayor Office
Hakim Berry, Chief Operating Officer
Beth Niblock, Chief Information Officer
Eric Jones, Executive Fire Commissioner
James Craig, Chief of Police
David Bell, Director – BSEED
Denise Fair, Chief Public Health Officer - DHD