EMERGENCY EVACUATION ROUTES FOR THE POINT LISA INDUSTRIAL ESTATE

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EXECUTIVE SUMMARY

The Point Lisas Industrial Estate comprises a total land area of approximately 860 hectares and is considered the largest and most successful Petrochemical and Industrial Park in the Caribbean region. This world-class industrial park is home to over 103 international and national tenants, including the majority of the country’s natural gas based petrochemical plants. The range of products manufactured includes ammonia, urea, chlorine, methanol, iron and steel, a desalination plant and numerous smaller industries.

The plethora of activities introduces numerous scenarios which can lead to emergency incidents requiring quick decisive actions if the incident severity is to be minimized. This document outlines the required routes for evacuation out of the Point Lisas Industrial Estate in the event of various emergency incidents, which may arise.

Major Risk Areas on the Point Lisas Industrial Estate:

1. Spillage/leakage/fires/explosions involving hazardous chemicals from:
   - Line and/or equipment failure associated with the transportation of specialized bulk to the Savonetta Piers such as ammonia, methanol and base oil/additives for lube oil manufacture.
   - Line and/or equipment failure associated with the transportation of natural gas to industrial facilities.
   - Vehicular collision or containment failure within vessels while on roadway carrying hazardous chemicals.
   - Spillage/leakage from or loss of containment of bulk storage vessels of hazardous chemicals such as ammonia, chlorine, methanol and other industrial gases.

2. Relief valve venting or process upsets leading to emissions of hazardous chemicals.

3. Facility process failures leading to uncontrolled releases of hazardous chemicals.

4. Fires in tenant facilities

5. Bomb/terrorists threats.
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On Evacuation Map #1, Emergency Point #1 illustrates an emergency occurring on the northern part of Caspian Drive. In the event of an emergency occurring near to or within the vicinity of this area, the directional arrows highlighted in red, illustrate the various routes for evacuation off the Point Lisas Industrial Estate.

The companies located in this area are involved in various industrial processes which involve the production of ammonia, processing of grain and construction works. In this regard, both chemical releases and fire/explosion emergencies can occur in this area.

In the event of an emergency, personnel located near to or within the vicinity of Emergency Point #1 (EP #1) are advised to follow the directional arrows by proceeding in a southerly direction from EP #1 along Caspian Drive to the Brechin Castle roundabout (BC roundabout) via Atlantic Avenue to the Rivulet Road or proceed east along Carli Bay road to the Couva Main Road.

On Evacuation Map #2, Emergency Point #2 illustrates an emergency occurring on the southern part of Caspian Drive. In the event of an emergency occurring near to or within the vicinity of this area, the directional arrows highlighted in red, illustrate the various routes for evacuation off the Point Lisas Industrial Estate.

The companies located in this area are involved in power generation, the production of methanol and the production of ammonia. In this regard, both chemical releases and fire/explosion emergencies can occur in this area.

In the event of an emergency, personnel located near to or within the vicinity of Emergency Point #2 (EP #2) are advised to follow the directional arrows by proceeding in a southerly direction from EP #2 along Caspian Drive to the BC roundabout via Atlantic Avenue to the Rivulet Road. Alternatively, personnel at EP #2 can proceed in a northerly direction along Caspian Drive then east via Carli Bay road to Couva Main Road.

On Evacuation Map #3, Emergency Point #3 illustrates an emergency occurring along Atlantic Avenue. In the event of an emergency occurring near to or within the vicinity of this area, the directional arrows highlighted in red, illustrate the various routes for evacuation off the Point Lisas Industrial Estate.
The companies located in this area are involved in various industrial processes which involve the production of methanol and ammonia and construction works. In this regard, both chemical releases and fire emergencies can occur in this area.

In the event of an emergency, personnel located near or within the vicinity of Emergency Point #3 (EP #3) are advised to follow the directional arrows by proceeding in an easterly direction from EP 3 along Atlantic Avenue to the Rivulet Road or proceeding in a southerly direction on Pacific Drive and easterly on Caribbean Drive to the Southern Main Road. Alternatively, personnel can proceed in a westerly direction from EP 3 on Atlantic Avenue to the BC roundabout and then north on Caspian Drive via Carli Bay road to Couva Main Road.

On **Evacuation Map #4**, Emergency Point #4 illustrates an emergency occurring on the south western part of Atlantic Avenue. In the event of an emergency occurring near to or within the vicinity of this area, the directional arrows highlighted in red, illustrate the various routes for evacuation off the Point Lisas Industrial Estate.

The companies located in this area are involved in various industrial processes such as the production of ammonia, iron and steel and petroleum products. In this regard, both chemical releases and fire/ explosion emergencies can occur in this area.

In the event of an emergency, personnel located near to or within the vicinity of Emergency Point # 4 (EP #4) are advised to follow the directional arrows by proceeding in either a north-easterly direction from EP #4 on Atlantic Avenue, then north via Caspian Drive to the east of Atlantic Avenue and then to the Rivulet Road or in a south-westerly direction from EP #4 to Arcelor Mittal's South Gate and through Arcelor Mittal's compound to Mediterranean Drive. From Mediterranean Drive, personnel can then proceed either north via Pacific Avenue and east on Atlantic Avenue to Rivulet Road or south along Pacific Drive and east through Caribbean Drive to the Southern Main Road.

On **Evacuation Map #5**, Emergency Point #5 illustrates an emergency occurring on the northern part of Pacific Avenue. In the event of an emergency occurring near to or within the vicinity of this area, the directional arrows highlighted in red, illustrate the various routes for evacuation off the Point Lisas Industrial Estate.

The companies located in this area are involved in various industrial processes such as the production of ammonia, iron and steel, grain processing, construction works and warehousing. In this regard, both chemical releases and fire/explosion emergencies can occur in this area.

In the event of an emergency, personnel located near to or within the vicinity of Emergency Point # 5 (EP #5) are advised to follow the directional arrows by proceeding north along Pacific Avenue from EP #5 and then east via Atlantic Avenue to the Rivulet Road or in a southerly direction along Pacific Drive from EP #5 and then either east via Caribbean Drive or east via Phoenix Park Road to the Southern Main Road.
On Evacuation Map #6, Emergency Point #6 illustrates an emergency occurring at the intersection of Pacific Avenue and Caribbean Drive. In the event of an emergency occurring near to or within the vicinity of this area, the directional arrows highlighted in red, illustrate the various routes for evacuation off the Point Lisas Industrial Estate.

The companies located in this area are involved in various industrial processes involving the production of ammonia, iron and steel, food processing and construction works. In this regard, both chemical releases and fire/explosion emergencies can occur in this area.

In the event of an emergency, personnel located near to or within the vicinity of Emergency Point # 6 (EP #6) are advised to follow the directional arrows by proceeding either north along Pacific Avenue and then east on Atlantic Avenue to the Rivulet Road or south along Pacific Avenue and then east via Phoenix Park Road or Caribbean Drive to the Southern Main Road.

On Evacuation Map #7, Emergency Point #7 illustrates an emergency occurring on the western part of Caribbean Drive. In the event of an emergency occurring near to or within the vicinity of this area, the directional arrows highlighted in red, illustrate the various routes for evacuation off the Point Lisas Industrial Estate.

The companies located in this area are involved in various industrial processes such as the production of ammonia, iron and steel, methanol and construction activities. In this regard, both chemical releases and fire/explosion emergencies can occur in this area.

In the event of an emergency, personnel located near to or within the vicinity of Emergency Point # 7 (EP #7) are advised to follow the directional arrows by proceeding east along Caribbean Drive from EP #7 and then either north along Pacific Avenue towards Atlantic Avenue to the Rivulet Road or south along Pacific Avenue via Phoenix Park to the Southern Main Road. Alternatively, personnel can continue proceeding east from the intersection at Caribbean Drive and Pacific Avenue to the Southern Main Road.

On Evacuation Map #8, Emergency Point # 8 illustrates an emergency occurring on the eastern part of Maracaibo Drive. In the event of an emergency occurring near to or within the vicinity of this area, the directional arrows highlighted in red, illustrate the various routes for evacuation off the Point Lisas Industrial Estate.

The companies located in this area are involved in various industrial processes such as the production of ammonia, methanol, iron and steel and water treatment processes. In this regard, both chemical releases and fire/explosion emergencies can occur in this area.

In the event of an emergency, personnel located near to or within the vicinity of Emergency Point # 8 (EP #8) are advised to follow the directional arrows by proceeding in either a easterly direction along Maracaibo Drive from EP #8 and then north on Pacific Avenue towards Atlantic Avenue to the Rivulet Road or east on Caribbean Drive to the Southern Main Road. An
alternative route from EP #8 can be by proceeding east along Maracaibo Drive and then south on Pacific Avenue via Phoenix Park Road to the Southern Main Road.

On Evacuation Map #9, Emergency Point # 9 illustrates an emergency occurring on the western part of North Sea Drive. In the event of an emergency occurring near to or within the vicinity of this area, the directional arrows highlighted in red, illustrate the various routes for evacuation off the Point Lisas Industrial Estate.

The companies located in this area are involved in natural gas processing and the production of chlorine, ammonia and other various chemicals. In this regard, both chemical releases and fire/explosion emergencies can occur in this area.

In the event of an emergency, personnel located near to or within the vicinity of Emergency Point # 9 (EP #9) are advised to follow the directional arrows by proceeding in an easterly direction along North Sea Drive toward the Southern Main Road.