

Galway Harbour Company



Galway Harbour Extension

Response to An Bord Pleanála Sept. 2024

EIS Addendum Chapter 13.6

Risk Assessment



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13.6.1. Introduction

Chapter 13.6 of the Environmental Impact Statement (“EIS”) sets out the Risk Assessment elements of the proposed Galway Harbour Extension.

The main potential hazard to the new development is from Circle K Galway Terminal (formerly Topaz) Upper Tier COMAH establishment.

The conclusions of the Risk Assessment, relevant to Land Use Planning, were as follows:

1. The risks to the land-based developments such as occupied buildings are tolerable when compared to the criteria used by the Health and Safety Authority to assess the level of risk to people.
2. The societal risks at the jetty are considered to be tolerable. The separation distances between the jetties and occupied buildings and passenger terminal comply with recognised good practice.

This chapter has been prepared by Matthew Michie, a Senior Risk Consultant with AWN. Matthew has over 4 years’ experience in providing consultancy services to the operators of Lower and Upper tier Seveso III establishments, including the preparation of Land Use Planning assessments, Significant Modifications assessments, Safety Reports.

13.6.2. Report Format

The EIS Chapter 13.6 identifies the Risk Assessment consideration for the proposal. The matters considered as outlined in the points above remain relevant. There are no changes to the project design; however, there has been new guidance since the original submission.

13.6.3. Review of Any Material Changes to Relevant Chapter in Original EIS

This report contains updated Risk Assessment conclusions taken from the Land Use Planning assessment, completed following the methodology outlined in the *Guidance on Technical Land Use Planning Advice* (HSA, 2023). The Land Use Planning assessment is attached as Appendix 13.6.1 to this Chapter.

13.6.4. Summary of previous conclusions of chapter in original EIS

The conclusions of the originally submitted Risk Assessment were as follows:

1. The overall conclusion is that the risks to the land-based developments such as occupied buildings are tolerable when compared to the criteria used by the HSA to assess the level of risk to people.
2. The societal risks at the jetty are considered to be tolerable. The separation distances between the jetties and occupied building and passenger terminal comply with recognised good practice.

13.6.5. Any additional surveys, data or policy developments of relevance

A Land Use Planning assessment was completed following the *Guidance on Technical Land Use Planning Advice (HSA, 2023)*. The conclusions of the Land Use Planning assessment are as follows:

The individual risk contours, to persons outdoors and persons indoors (CIA Category 3, representative category for buildings at proposed development), for the Circle K upper tier COMAH establishment corresponding to the boundaries of the Inner, Middle and Outer risk-based land use planning zones are illustrated on the following Figures. See Appendix 13.6.1 for Land Use Planning assessment and information regarding the calculation of the risk-based zones.



Figure 13.6-1: Individual Risk of Fatality Contours, to Persons Outdoors, for Circle K Galway Terminal



Figure 13.6-2 Individual Risk of Fatality Contours, to Persons Indoors (CIA 3), for Circle K Galway Terminal

The following is concluded for proposed development:

- The individual risk contours, to persons outdoors corresponding to the Outer Land Use Planning zone extends to the proposed development. The contour extends to a small section of the Marina Promenade, the Renmore Promenade and the Rail Link, where it is possible that persons will be present outdoors.
- The individual risk contours, to persons indoors corresponding to the Outer Land Use Planning zone extends to the proposed development. The contour extends to the Harbour Stores building. This building could be occupied 24 hours per day; therefore, persons are present indoors.

The Table below details the matrix that is used by the HSA to advise on suitable development for technical LUP purposes:

Level of Sensitivity	Inner Zone (Zone 1)	Middle Zone (Zone 2)	Outer Zone (Zone 3)
Level 1	✓	✓	✓
Level 2	✗	✓	✓
Level 3	✗	✗	✓
Level 4	✗	✗	✗

Table 13.6-1 LUP Sensitivity Matrix

Cruise Passengers will only be facilitated by way of shuttle buses from the Cruise Terminal to the City. Each bus has the capacity for up to 50 passengers, and there could be up to 10 No. shuttles per hour. Therefore, no passengers will be walking through the existing and new Galway Port Areas.

The Harbour Stores building is a work place that will have fewer than 100 occupants and fewer than three occupied storeys. Therefore, it is classified as a Sensitivity Level 1 establishment and is permitted within the inner, middle and outer zones.

The Marina Promenade and Renmore Promenade is for outdoor use by the public where the general public could be present. These areas could have up to 200 No. persons present; therefore, they are classified as *'Outdoor use by the Public – predominantly open-air developments likely to attract the general public in numbers greater than 100 people, but up to 1,000 people at any one time'* and is a Sensitivity Level 3 development. Therefore, it is permitted within the outer zone.

The Rail Link is a Sensitivity Level 1 development; therefore, it is permitted within the inner, middle and outer zones.

It is concluded that the proposed development is permitted within the Land Use Planning zones at the Circle K establishment.

Societal Risk

A societal risk analysis was completed and the expectation value (EV) at the proposed development was calculated as **48.4**.

The Guidance on Technical Land Use Planning (HSA, 2023) states:

'for new developments near an establishment, where the calculated off-site EV at the development greater than 2,000, further assessment of societal risk will be required.'

The total Expectation Value (EV) at the proposed development is **48.4**. This is <2,000; therefore, no further risk calculation is required.

It is concluded that there are no constraints posed by the Circle K Galway Terminal Upper Tier COMAH establishment to the development of the Galway Harbour Extension.

13.6.6. Assessment of validity of earlier conclusions or any necessary amendments to same

The originally submitted Risk Assessment concluded that the risks to the land-based developments such as occupied buildings are tolerable and the societal risks at the jetty are considered to be tolerable.

The Land Use Planning assessment concluded the following:

- The individual risk contours, to persons outdoors corresponding to the Outer Land Use Planning zone extends to the proposed development. The contour extends to a small section of the Marina Promenade, the Renmore Promenade and the Rail Link, where it is possible that persons will be present outdoors.
- The individual risk contours, to persons indoors corresponding to the Outer Land Use Planning zone extends to the proposed development. The contour extends to the Harbour Stores building. This building could be occupied 24 hours per day; therefore, persons are present indoors.
- The total Expectation Value (EV) at the proposed development is **48.4**. This is <2,000; therefore, this is acceptable in accordance with H&SA guidance and no further risk calculation is required.
- It is concluded that there are no constraints posed by the Circle K Galway Terminal Upper Tier COMAH establishment to the development of the Galway Harbour Extension as proposed.

It is concluded that the conclusions of the Risk Assessment presented in the submitted in the EIS remain valid.

13.6.7. Conclusion

In conclusion, the Risk Assessment conclusions presented in Chapter 13.6 of the EIS remain valid. The Land Use Planning assessment concludes that there are no constraints posed by the Circle K Galway Terminal Upper Tier COMAH establishment to the development of the Galway Harbour Extension.

13.6.8. References

Health and Safety Authority (HSA) (2023), Guidance on Technical Land-use Planning Advice for planning authorities and operators of COMAH establishments

