RPS

HRA | PLANNING
chartered town planning consultants

Shannon Foynes
PORT COMPANY

Capacity Extension at Shannon Foynes

Seveso Report

TABLE OF CONTENTS

1 INTRODUCTION 1

2 LEGAL AND PLANNING BACKGROUND 2

2.1 COMAH Regulations 2

2.2 Health and Safety Authority Planning Guidance 3

2.3 County Development Plan 3

2.4 Shannon Foynes Port Company (SFPC) MASTERPLAN - Vision 2041 4

2.5 Strategic Integrated Framework Plan (SIFP) for the Shannon Estuary 5

2.6 Limerick City and County Major Emergency Plan 6

2.7 Shannon Foynes Port Onshore Emergency Response Plan 7

3 PROJECT DESCRIPTION 9

3.1 East Jetty Extension 9

3.2 Durnish Lands Development 10

4 IDENTIFICATION OF KEY INFRASTRUCTURE 12

4.1 COMAH Establishments 12

4.1.1 Atlantic Fuel Supply Company Ltd. 12

4.1.2 Inter Terminals Shannon Ltd. 12

4.1.3 Other Notable Upper Tier COMAH Sites located on the Shannon Estuary 13

4.2 Emergency Services 13

4.2.1 Fire Service 13

4.2.2 Medical Service 14

5 RISK ASSESSMENT 15

5.1 Proximity of the COMAH Sites to the Development 15

5.2 Risk Posed by the COMAH Sites to the Development 18

5.3 Risk Posed by the Construction of the Development on the COMAH Sites 21

5.4 Risk Posed by the Operation of the Development on the COMAH Sites 21

6 CONCLUSION 22

1 INTRODUCTION

This report has been prepared to support the planning application for the Port of Foynes Capacity Extension & Harbour Development Project. The document identifies the Seveso sites located in the study area and provides an assessment of the potential impact of the development on these sites.

This report is presented in the following format:

- Section 2: Legal and Planning Background including detail on the Seveso Regulations, the Health and Safety Authority requirements, the Limerick County Development Plan 2010 to 2016, Shannon Foynes Port Company Masterplan, the Strategic Integrated Framework Plan for the Shannon Estuary and the Limerick City and County Major Emergency Plan.
- Section 3: An overview of the Port of Foynes Capacity Extension & Harbour Development Project including details of location, infrastructure and operation.
- Section 4: Identification and description of the Seveso sites located in the study area.
- Section 5: Risk assessment of the potential impact of the Port of Foynes Capacity Extension & Harbour Development Project and the Seveso sites.
- Section 6: Conclusions.

The detail is presented to facilitate a concise assessment of the impact of the development on the Seveso sites to support the planning application for the development.

2 LEGAL AND PLANNING BACKGROUND

2.1 COMAH REGULATIONS

The Seveso III Directive (2012/18/EU) was adopted on 4th July 2012 and entered into force on 13th August 2012. The Chemicals Act (Control of Major Accident Hazards Involving Dangerous Substances) Regulations 2015 (the "COMAH Regulations"), implement the Seveso III Directive in Ireland.

The purpose of the COMAH Regulations is to lay down rules for the prevention of major accidents involving dangerous substances, and to seek to limit as far as possible the consequences for human health and the environment of such accidents, with the overall objective of providing a high level of protection in a consistent and effective manner.

The COMAH Regulations apply to any establishment that presents a major accident hazard because of the presence of dangerous substances in quantities that exceed specified thresholds. The dangerous substances and threshold quantities are specified in Schedule 1 to the Regulations. The specified thresholds identify what establishments are required to comply with COMAH and which are Upper or Lower Tier establishments.

Part 1 of Schedule 1 lists the 21 categories of dangerous substance and their thresholds under the groups of:

- Health Hazards,
- Physical Hazards,
- Environmental Hazards, and
- Other Hazards.

Part 2 of of Schedule 1 contains the list of 48 named dangerous substances and their respective thresholds. The requirements under the Regulations are dependent on the classification of an establishment as upper tier or lower tier. Both lower tier and upper tier establishments are obliged to do the following under the Regulations:

- Notification to the HSA and the local planning authority;
- Discharging certain general duties;
- Preparation and implementation of a major accident prevention policy (MAPP);
- Action in the event of a major accident; and
- Maintaining a register of notifiable incidents.

Upper tier establishments are also required to carry out the following additional tasks under the Regulations:

- Production of a Safety Report;
- Preparation of an internal emergency plan;
- Provision of information to those responsible for off-site emergency plans; and

- Provision of information for the safety of the public.

The Health and Safety Authority (HSA) has been designated as the competent authority for enforcement of the Regulations in Ireland.

2.2 HEALTH AND SAFETY AUTHORITY PLANNING GUIDANCE

The HSA has published guidance entitled "*A Guide to the Chemicals Act (Control of Major Accident Hazards Involving Dangerous Substances) Regulations 2015 (S.I. No. 209 of 2015)".* One of the functions of the HSA is to advise the relevant planning authority of a consultation distance for an establishment, following the receipt of a notification from the operator. Among the other HSA functions in relation to land use planning include:

- The HSA must be consulted for technical advice as appropriate by planning authorities on the types of development covered by the Regulations.
- The HSA will provide technical advice to a planning authority in response to a request under this Regulation.

This report has been prepared to inform the HSA of the nature of the proposed development and the associated COMAH implications as part of the consultation process.

2.3 COUNTY DEVELOPMENT PLAN

The **Limerick County Development Plan (CDP as extended) 2010-2016** is the most recent plan for the county available at the time of compiling this report. This CDP cites the Seveso II Directive 96/82/EC and the European Communities COMAH Regulations S.I. no 74, 2006 with regard to the siting of new Seveso sites, modification to existing Seveso sites and controls on new developments in the vicinity of existing Seveso sites.

The CDP identifies the local land use policy in relation to the COMAH Regulations and the policy on 'Seveso' Industries; these are set out in Volume 1, Chapter 5 Economic Development and Chapter 9 Shannon Estuary.

The CDP (Vol. 4 Environment Report) states that '*in these polices the advice from the Health and Safety Authority will be taken in relation to applications that might pose a risk to human health'.*

The key objectives listed in the County Development Plan for such sites and harbour developments are presented below:

Objective ED O11 - Proposals for new establishments*: It is the Objective of the Council in assessing applications for new development or expansion of existing development involving hazardous substances, to have regard to: a) the Major Accidents Directive (Seveso II), b) potential adverse impacts on public health and safety; and b) the need to maintain appropriate safe distances between establishments covered by this directive and residential areas, areas of public use and areas of particular natural interest or sensitivity.*

Objective ED O12 - Proposed development adjacent to existing establishments: *The Health and Safety Authority has established consultation distances surrounding establishments designated as containing hazardous substances. It is the objective of the Council, in addition to normal planning criteria to ensure that new developments such as transport links, locations frequented by the public and residential areas in the vicinity of existing Seveso sites, within these specified distances, comply with the requirements of the Major Accidents Directive. The Council will consult with the Health and Safety Authority regarding any such proposals.*

Objective SE O3 - Port Facilities*: The Council will support efforts to expand and upgrade the port facilities available in the Foynes Harbour in line with the Strategic Integrated Framework Plan for the Shannon Estuary and the Vision 2041 Shannon Foynes Port Company Masterplan.*

Objective SE O5 - Harbours*: The Council will support the provision of harbours along the estuary, subject to the proper planning and sustainable development, while respecting the constraints of the Special Area of Conservation and Special Protection Area designations.*

Objective SE O6 - Seveso Sites*: The Council will require that advice be sought from the National Authority for Occupational Safety and Health on such developments, which involve modifications of existing Seveso establishments, the siting of new developments of the type, or on developments in the vicinity of these types of sites.*

In relation to the Seveso Directive, the proposed Port of Foynes Capacity Extension & Harbour Development Project development falls within Objective ED O12 and Objective SE 06, i.e. developments proposed near to existing establishments.

The CDP identifies three COMAH establishments within its jurisdiction and two of which are relevant to the Foynes Port study area. They are identified as Irish Bulk Liquid Storage, now Inter Terminals Shannon Ltd. and the Atlantic Fuels Supply Company Ltd. both located at Foynes Port. These sites are listed in **Table 2.1**. These establishments are also presented in **Figure 2.1** which maps the locations of the listed establishments which are located within the Foynes Port study area relative to the areas of development to be addressed in this application. No consultation distances are stated within the CDP document.

Table 2.1 – List of COMAH Establishments in the Study Area

Establishment Name	Establishment Address
Atlantic Fuel Supply Company Ltd.*	Foynes Harbour, Foynes, Limerick
Inter Terminals Shannon Ltd. (formerly Irish Bulk Liquid Storage Ltd).	Foynes Harbour, Foynes, Limerick

Note: * denotes Upper Tier establishment

2.4 SHANNON FOYNES PORT COMPANY (SFPC) MASTERPLAN - VISION 2041

The Shannon Foynes Port Company (SFPC) Masterplan Vision 2041, issued in 2013, is a thirty year plan developed by the SFPC which sets out the development strategy for the Shannon Estuary and covers the entire operational area of the SFPC, including Foynes Port.

With regard to the study area, the plan identifies two COMAH establishments within the Port; Inter Terminals Ltd. (formerly Irish Bulk Liquid Storage Ltd.) and the Atlantic Fuel Supply Company Ltd. The plan states that both sites have a consultation distance of 500 metres, and where new developments are proposed within this distance, the Health and Safety Authority will need to be consulted to ensure compliance with the Seveso Directive and COMAH Regulations, ensuring good practice risk minimisation.

The SFPC Masterplan cites the Strategic Integrated Framework Plan for the Shannon Estuary as the single most important document to be prepared in terms of the Shannon Estuary. Details of this plan are outlined in the following section.

2.5 STRATEGIC INTEGRATED FRAMEWORK PLAN (SIFP) FOR THE SHANNON ESTUARY

The **Strategic Integrated Framework Plan (SIFP) for the Shannon Estuary** (2013-2020) is an interjurisdictional plan that provides more detailed land use planning policy for the area and covers the entire area of the Shannon Estuary. The SIFP notes that there are a number of relevant facilities within the Shannon Estuary area that fall under the COMAH Regulations and these are listed in **Table 2.2**.

Table 2.2 illustrates the Upper and Lower Tier COMAH Establishments covered by the SIFP and their respective consultation distances. Two of these sites, Atlantic Fuel Supply Ltd. and Inter Terminals Ltd., are located within the study area and so any development within the consultation distances set out for these would be the subject of consultation with the HSA to ensure compliance with the COMAH Regulations.

Table 2.2 –COMAH Establishments located on the Shannon Estuary Consultation Distances

Location	Establishment Name	Tier	Consultation Distance
Co. Limerick	Atlantic Fuel Supply Company Ltd.*	Upper	400m
Co. Limerick	Inter Terminals Shannon Ltd. (formerly Irish Bulk Liquid Storage Ltd.)*	Lower	300m
Co. Limerick	Goulding Chemicals Ltd*	Upper	700m
Limerick City	Grassland Fertilizers Ltd.	Lower	700m
Co. Clare	ESB Moneypoint	Upper	300m
Co. Clare	Enva Ireland Ltd.	Lower	1000m
Co. Clare	Avara Shannon Pharmaceutical Services*	Lower	1000m
Co. Clare	Roche Ireland Ltd.	Lower	600m
Co. Clare	Shannon Aviation Fuels – Aer Rianta	Upper	300m
Co. Kerry	SSE Generation Ireland Ltd., Tarbert	Upper	300m
Co. Kerry	National Oil Reserves Agency	Upper	300m

*COMAH sites identified within the study area of Foynes Port. For the purposes of this assessment, the consultation distances outlined in the SIFP for the Shannon Estuary for the for the two COMAH establishments located within the study area will be used; 400m for Atlantic Fuel Supply Company Ltd. and 300m for Inter Terminals Shannon Ltd.

The SIFP has outlined the following development objectives relating to Seveso:

SIFP SVO 1.1: *Consultation on Proposals affecting SEVESO Sites - To consult with the Health & Safely Authority on all proposals for development, including expansion of existing activities and new developments, within the consultation zone of sites designated under the EC SEVESO II Directive and associated Regulations, to allow a determination of the potential risks and consequences with regard to the objectives of the Directive.*

SIFP SVO 1.2: *Information on Development at SEVESO Sites - To ensure adequate information is provided on all proposals for development, which are likely to meet the specified thresholds for named hazardous substances under the EC (Control of Major Accident Hazards involving Dangerous Substances) Regulations, including new development or expansion of existing activities, to enable a robust assessment to be carried out by the Health & Safety Authority, to determine the levels of risk and potential consequences to the environment and surrounding sensitive receptors, to inform an evaluation on the level of compliance with the objectives of the SEVESO II Directive.*

SIFP SVO 1.3: *Consultation on Proposals at SEVESO Sites - To encourage early consultation with the Health & Safety Authority on all proposals which are likely to meet the specified thresholds for named hazardous substances under the EC (Control of Major Accident Hazards involving Dangerous Substances) Regulations, including new development or expansion of existing activities, which are proposed within the consultation zone of a site currently designated under the EC SEVESO II Directive to identify the extent of the information which will be required to enable a rigorous evaluation of the combined risks and potential consequences to the environment and surrounding sensitive receptors.*

2.6 LIMERICK CITY AND COUNTY MAJOR EMERGENCY PLAN

The Limerick City and County Major Emergency Plan identifies the following COMAH establishments in the Limerick area, two of which are located at Foynes Port:

- Atlantic Fuels Supply Company, Foynes Port (Upper Tier);
- Goulding Fertilizers, Askeaton (Upper Tier);
- Inter Terminals Shannon Ltd. (formerly Irish Liquid Bulk Storage), Foynes Port (Lower Tier);
- Grasslands Fertilisers, Dock Road (Lower Tier).

The Plan states that there are site specific External Emergency Plans for the COMAH establishments situated in Limerick. These function as sub-plans to the Major Emergency Plan. The objectives of the External Emergency Plans are:

- *Containing and controlling incidents so as to minimize the effects, and to limit damage to people, the environment and property;*
- *Implementing the measures necessary to protect people and the environment from the effects of major accidents;*
- *Communicating the necessary information to the public and to the services or authorities concerned in the area; and*
- *Providing for the restoration and clean-up of the environment following a major accident.*

The Plan states that following a risk assessment process, the Limerick City and County Council Major Emergency Management Committee identified specific plans and arrangements for responding to emergencies at existing sites or possible events; this includes Foynes Port. The Plan lists the following response plans and procedures in relation to the in the event of incidents at the Port:

- Shannon Estuary Marine Emergency Plan;
- Marine Installation Emergency Plan;
- Marine Oil Pollution Plan;
- The Limerick City and County Council Oil Pollution Plan.

The Plan also identifies some of the external emergency plans for the Upper Tier Seveso sites located in Limerick, including 'Appendix 16 - Atlantic Fuels External Emergency Plan'. However, the plans listed were not accessible.

2.7 SHANNON FOYNES PORT ONSHORE EMERGENCY RESPONSE PLAN

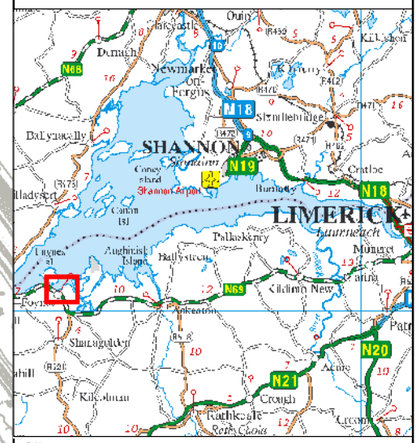
Shannon Foynes Port Onshore Emergency Response Plan provides a 'Marine Operations Card', which helps to identify the actions to be taken in the event of an emergency situation and includes Seveso sites in this. The Plan also mentions the following external emergency action plans for the two COMAH establishments located at Foynes Port; however the plans were not accessible:

- Annex 5 AFSC - Atlantic Fuel Supply Co Ltd External Emergency Plan
- Annex 6 IBLS - Irish Bulk Liquid Storage Ltd Emergency Action Plan

N

Legend

- Atlantic Fuel Supply Company Ltd. Upper Tier
- Inter Terminals Shannon Ltd. Lower Tier
- Indicative Development area for Proposed East Jetty Extension
- Indicative Development area for Proposed Works at Durnish Lands



Client

Shannon Foynes Port Company

Project

Seveso Report Maps Port of Foynes

Title

Figure 2.1 - COMAH Establishments and Proposed Development Areas

RPS

West Pier Business Campus,
Dun Laoghaire,
Co Dublin,
Ireland.

Tel: +353 (0) 1 4882900
Email: ireland@rpsgroup.com
Web Page: rpsgroup.com/ireland

Issue Details

Drawn By: [redacted]	**Project No.** MDR1329
Checked By: [redacted]	**File Ref:** MDR1329arc0001D02
Approved By: [redacted]	
Scale: 1: 7,500 @ A3	**Drawing No.** Arc0001 **Rev:** D02
Date: 09/03/2018	

NOTE: 1. This drawing is the property of RPS Group Ltd. It is a confidential document and must not be copied, used, or its contents divulged without prior written consent.
2. All levels are referred to Ordnance Datum, Malin Head.
3. Ordnance Survey Ireland Licence No. EN 0034218
© Ordnance Survey Ireland Government of Ireland.

3 PROJECT DESCRIPTION

The proposed capacity extension and harbour development at the Port of Foynes consists of two proposed works:

- East Jetty Extension Works
- Durnish Lands Development

Each of the above is described in greater detail in the following sections.

3.1 EAST JETTY EXTENSION

The proposed development is located in the near shore region of Foynes Port between the existing East Jetty and the existing West Quay (shown in green in **Figure 2.1**). It is estimated that the proposed construction works will be undertaken during a construction period of approximately 12 months.

The proposed works shall connect the existing West Quay to the existing East Jetty by continuing the berthing lines of Berth 5 and Berth 3 to an intersecting point. The proposed jetty extension works include the following:

- Removal and relocation of the existing small craft landing pontoon to an area identified at the west side of the existing West Quay;
- An open pile jetty structure with suspended concrete deck constructed between East Jetty and West Quay, tying into the existing structures; and
- A transition slab to provide access from the open pile jetty structure to the Berth 5 reclamation (permitted development under LCCC planning permission 12/212).

All existing jetty structures will be retained during the works and will continue to be used for berthing, unloading and loading of vessels. The general sequence of the construction of the jetty connection works will be as set out below:

- Removal and relocation of the existing small craft landing pontoon to an area identified at the west side of West Quay. Two locating piles will be installed at the new location to accommodate a landing pontoon;
- Driving of open pile steel tube foundations to support a suspended concrete deck, connecting the existing West Quay to the existing East jetty to create a New Berth (No. 4);
- Structural connection between new structure and existing jetty structures;
- Installation of pre-cast concrete deck elements using suitable plant;
- Pouring of in-situ concrete deck on jetty extension; and
- Installation of drainage, services, quay furniture and lighting.

Port operations on the jetty extension will be as per the existing jetties, and will generally comprise of the loading and unloading of vessels using Harbour Mobile Cranes. Materials handled will vary depending on trade requirements but the following is anticipated:

- Construction materials including timber, steel sections reinforcement etc.;
- Project cargoes such as wind turbine components, steel pipes etc.; and
- All types of dry and liquid bulk cargoes.

Shipping movements at the Foynes Port are conducted on a 24/7 basis 364 days a year. Additionally, all liquid bulk operations are also conducted on a 24/7/364 basis. Regarding general cargo operations, these are usually conducted between the hours of 06.00 and 24.00, 7 days a week, with the capacity to operate 24/7 as required for safety or operational reasons. It is intended that the hours of operation for the East Jetty Extension will be the same for the proposed development.

3.2 DURNISH LANDS DEVELOPMENT

The proposed development at Durnish Lands is located on the eastern side of the Foynes Port main entrance road (shown in pink in **Figure 2.1**). The development site is located approximately 1.5km east of the village of Foynes, and is within 0.5km of the N69 (Limerick to Tarbert Road).

The proposed works to be carried out on the Durnish Lands includes infilling of the existing greenfield site with imported fill material to raise the level of the existing above the flood plain, facilitating a mixture of warehousing, storage and port centric development. The development at Durnish Lands may take place in a single scheme or a three phased approach over a more prolonged period. For the purposes of this assessment, there is no significant variation in the risk and impact as assessed in this report so both approached are analogous.

Assuming that the development of the Durnish Lands is undertaken on a single phase basis, it is estimated that the proposed construction works will be undertaken during a period of approximately 39 months.

Alternatively, subject to the availability of funding or potential tenant requirements, the development of the Durnish Lands may be undertaken in phases. Any future developments will be subject to separate consent procedures. The anticipated timeline from the overall strategic programme for the phased development of the Durnish Lands is outlined below:

- Phase 1 Durnish Development (2019-2023): assuming 39 month construction period for environmental assessment purposes;
- Phase 2 Durnish Development (2024-2027): assuming 18 month construction period (subject to outcome of environmental assessments of Phase 1);
- Phase 3 Durnish Development (2027-2029): assuming 18 month construction period (subject to outcome of environmental assessments of Phase 1).

As noted, the only variation in the single and phased approach is temporal and the key issues for this report are spatial, the findings of this report are the same regardless of whether a single or phased approach is adopted. Overall, the proposed development works Durnish Lands will include:

- Raising of the existing lands using imported fill material;
- Roundabout construction to facilitate access to developed lands from main port access road;
- Provision of 2nr bridge structures to facilitate access across existing drainage channel which extends along the Western boundary of the lands;

- Development of internal road and footpath network;
- Appropriate surfacing for open storage and covered storage;
- Erection of warehousing for covered storage; and
- Provision of appropriate boundary treatment, drainage, fencing, lighting and services.

The general sequence of the development of the Durnish Lands, both single and phased, will include:

- Stripping of topsoil across the existing site and stockpiling for use in boundary treatment;
- Raising of existing lands using imported fill material (whilst providing 5m wayleave for OPW access to drainage channel);
- Roundabout construction on Port access road and main access road into developed lands;
- Demolition of existing lean-to shed to facilitate construction of mid-point access road into developed lands;
- Bridge crossing structures over existing OPW drainage channel along Western boundary of developed lands;
- Hardstanding construction and appropriate surfacing for open and covered storage;
- Internal road and footpath construction;
- Provision of services (power supply, water, drainage, lighting);
- Erection of warehousing for covered storage; and
- Planting of visual buffer along perimeter of developed lands.

The developed lands will be used for open storage and warehousing, and will be used primarily for the handling and storage of general cargo. In addition, the lands will also be used for port centric processing operations such as bulk raw material being graded, mixed or sorted before being bagged or put into tankers. Materials handled will vary depending on trade requirements but the following is anticipated;

- Construction materials including timber, steel sections reinforcement etc.;
- Scrap metal;
- Project cargoes such as wind turbine components, steel pipes etc.;
- All types of dry and liquid bulk cargoes;
- Storage of containers.

4 IDENTIFICATION OF KEY INFRASTRUCTURE

4.1 COMAH ESTABLISHMENTS

The name, address, nature of the operation and Seveso tier for each of the relevant establishments within the study area is presented in **Table 4.1**. The locations of the COMAH establishments are presented in **Figure 2.1**.

Table 4.1 – Details of COMAH Establishments in the Study Area

Establishment Name	Establishment Address	Seveso Tier	Site Nature
Atlantic Fuel Supply Company Ltd.	Foynes Harbour, Foynes, Limerick	Upper	Fuel Storage/handling
Inter Terminals Shannon Ltd.	Foynes Harbour, Foynes, Limerick	Lower	Fuel Storage/handling

Each of the establishments listed above are obliged to prepare a Major Accident Prevention Policy (MAPP) under the COMAH Regulations. This applies to both Lower and Upper tier establishments. Upper Tier establishments are also obliged to prepare a Safety Report and submit a copy of same to the HSA.

A summary overview of the infrastructure at each of the COMAH establishments is provided in the following sections. Other notable Upper Tier Seveso sites located on the Shannon Estuary have also been included for thoroughness.

4.1.1 Atlantic Fuel Supply Company Ltd.

The Atlantic Fuel Supply Company (AFSC) Ltd., a subsidiary of Inver Energy, opened its terminal at Foynes Port in October 2010. This terminal is the largest in Ireland with a fuel storage capacity of 82,000m^3. The terminal has the capability of handling a full range of oil products and biofuels and it is expected that by 2020, between 80 and 90% of its storage capacity will be utilised. The terminal can be accessed by two berths at Foynes Port, and has 18 fuel storage tanks on site. A range of fuel products are stored at the facility for uses including retail sales and heating. The fuel types stored include petrol, diesel, dual purpose kerosene, FAME, jet fuel, ethanol, heavy fuel oil and gasoil.

4.1.2 Inter Terminals Shannon Ltd.

The terminal is one of Ireland's major storage and distribution points for road fuels and chemical products. Formerly known as Irish Bulk Liquid Storage Ltd., the company brought all of its storage operations across Europe together under one brand, Inter Terminals, in 2015. The terminal located on the Shannon Estuary at Foynes Port, provides bulk storage facilities for Petroleum products, and has 14,000m³ of storage capacity across 13 storage tanks. Activities on site include road tanker loading and blending facilities to meet strict vapour containment requirements. The terminal also handles solvent drumming and packaging for the pharmaceutical sector, and includes blending and packaging facilities.

4.1.3 Other Notable Upper Tier COMAH Sites located on the Shannon Estuary

The following sites are noted in the report for thoroughness and are not impacted by the proposed developments at Foynes Port.

4.1.3.1 Goulding Chemicals Ltd., Askeaton

The facility manufactures and distributes NPK fertilisers, trace element fertilisers, granulated lime and de-icing salt in Ireland. The plant located at Askeaton is one of four of their plants located in Ireland. The other plants are located in Cork, Ardee and New Ross.

4.1.3.2 Tarbert Generating Station (SSE Generation Ireland Ltd.)

Tarbert Generating station is situated at Tarbert in North County Co. Kerry on the Shannon Estuary. The station comprises two 60MW and two 250MW oil-fired turbines. Its main activities are power generation, supply and distribution.

4.1.3.3 National Oil Reserves Agency, Tarbert

The National Oil Reserves Agency Tank Farm is situated at Tarbert in North County Co. Kerry. Its main activity is fuel storage, including heating, retail sale etc.

4.1.3.4 Shannon Aviation Fuels, Aer Rianta, Shannon Airport

Shannon Aviation Fuels is located at Shannon Airport, Co. Clare. Its main activity is fuel storage and aviation fuelling operations.

4.1.3.5 ESB Moneypoint Generating Station

ESB Moneypoint is one of Ireland's largest electricity generation stations and only coal fired power plant. The plant has a total generating capacity of 915 MW, approximately 7 Million MW hours per year. Although coal is the main fuel used, the plant also has two Heavy Fuel Oil storage tanks on site.

4.2 EMERGENCY SERVICES

4.2.1 Fire Service

The Limerick City and County Fire Service is administered from Dooradoyle and consists of seven fire stations, based in Limerick City, Abbeyfeale, Cappamore, Foynes, Kilmallock, Newcastle West and Rathkeale. The nearest fire station to Foynes Port is within the study area and is located at Main Street, Foynes (N69). The next nearest station available is at Rathkeale, Co. Limerick (R523).

In the event of an emergency, any fire tender from Foynes Fire Station would likely take the N69 as the shortest route to the two establishments located at Foynes Port. Approximate journey time of 5 minutes.

Any fire tender from Rathkeale Fire Station to either of the COMAH establishments located at Foynes Port would likely take the R518 to Askeaton followed by the N69 to Foynes, with an approximate journey time of 25 minutes.

Further support may be provided by the Fire Service at Newcastle West. Tenders travelling from this location would likely take the R521 to the establishments located at Foynes Port, with an approximate journey time of 25 minutes.

4.2.2 Medical Service

Accident and Emergency Services are available at University Hospital Limerick which is located at Dooradoyle to the south-west of the city. Any ambulance travelling from this location would likely take the R526 northbound and then the R859 / N69 westbound to Foynes Port, taking an approximate journey time of 35-40 minutes.

5 RISK ASSESSMENT

5.1 PROXIMITY OF THE COMAH SITES TO THE DEVELOPMENT

The potential risk of the proposed Foynes Port Capacity Extension and Harbour Development project on the COMAH establishments or conversely the potential risk of the COMAH establishments on the Foynes Port development will be somewhat dictated by the relative proximities between each site.

Table 5.1 presents the distances from the COMAH Establishments boundaries to the Port of Foynes and the proximity of these to a development at the Port. The sites listed are located within the Port site, one Upper Tier and one Lower Tier facility.

Table 5.1 – Proximity of the COMAH sites to Foynes Port

Establishment	Proximity to Proposed Jetty Extension	Proximity to the proposed Durnish Lands Development	SIFP Consultation Distance
Atlantic Fuel Supply Company Ltd.	550m	360m	400m
Inter Terminals Shannon Ltd.	450m	500m	300m

The consultation distances for land use planning around each of the COMAH establishments located at Foynes Port as dictated by the Shannon Foynes Port Company Masterplan is 500m (refer **Section 2.4**). However, the consultation distances for land use planning around each of the COMAH establishments located at Foynes Port as dictated by the Strategic Integrated Framework Plan for the Shannon Estuary (SIFP) is 400m for Atlantic Fuel Supply Company Ltd. and 300m for Inter Terminals Shannon Ltd. (refer **Section 2.5**). For the purposes of this assessment the consultation distances outlined in the SIFP will be used. Any development within these distances requires the planning authority to consult with the HSA on the relative risk.

The consultation distance for land use planning around the Atlantic Fuel Supply Company Ltd. site as dictated by the SIFP is 400m (refer **Section 2.5**). **Figure 5.1** illustrates that the western boundary of the Durnish Lands site lies partly within this consultation distance and hence consultation with the HSA is mandatory for this development.

Regarding the location of the proposed East Jetty Extension works, this does not fall within 400m consultation distance for the Atlantic Fuel Supply Company Ltd. site (refer **Figure 5.1)** and so there is no risk posed to/by this development.

The distances of both proposed works at Foynes Port are outside of the consultation distance outlined in the SIFP (300m) for the Inter Terminals Shannon Ltd. site (refer **Figure 5.2**). Given the relative distance to both proposed developments it is considered that the risk posed to/by this Lower Tier establishment is low.

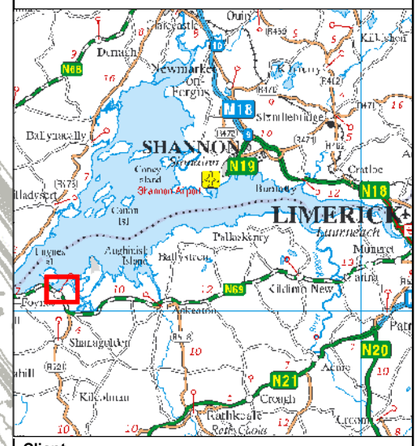
N

Legend

- Atlantic Fuel Supply Company Ltd. Upper Tier
- Inter Terminals Shannon Ltd. Lower Tier

Atlantic Fuel Supply Company Ltd.

- 100m Buffer
- 200m Buffer
- 300m Buffer
- 400m Buffer
- Indicative Development area for Proposed East Jetty Extension
- Indicative Development area for Proposed Works at Durnish Lands



Client

Shannon Foynes Port Company

Project

Seveso Report Maps Port of Foynes

Title

Figure 5.1 - Consultation Distance for Upper Tier COMAH Establishment

RPS

West Pier Business Campus,
Dun Laoghaire,
Co Dublin,
Ireland.

Tel: +353 (0) 1 4882900
Email: ireland@rpsgroup.com
Web Page: rpsgroup.com/ireland

Issue Details

Drawn By:	[redacted]	Project No.	MDR1329
Checked By:		File Ref:	MDR1329arc0003D02
Approved By:			
Scale:	1: 7,500 @ A3	Drawing No.	Rev: Arc0003 D02
Date:	09/03/2018		

NOTE:
1. This drawing is the property of RPS Group Ltd. It is a confidential document and must not be copied, used, or its contents divulged without prior written consent.
2. All levels are referred to Ordnance Datum, Malin Head.
3. Ordnance Survey Ireland Licence No. EN 0034218
© Ordnance Survey Ireland Government of Ireland.

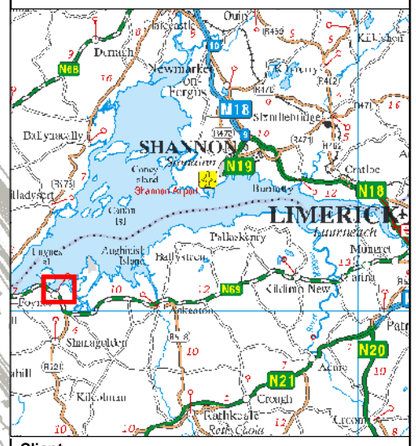
N

Legend

- Atlantic Fuel Supply Company Ltd. Upper Tier
- Inter Terminals Shannon Ltd. Lower Tier

Inter Terminals Shannon Ltd.

- 100m Buffer
- 200m Buffer
- 300m Buffer
- Indicative Development area for Proposed East Jetty Extension
- Indicative Development area for Proposed Works at Durnish Lands



Client

Shannon Foynes Port Company

Project

Seveso Report Maps Port of Foynes

Title

Figure 5.2 - Consultation Distance for Lower Tier COMAH Establishment

RPS

West Pier Business Campus,
Dun Laoghaire,
Co Dublin,
Ireland.

Tel: +353 (0) 1 4882900
Email: ireland@rpsgroup.com
Web Page: rpsgroup.com/ireland

Issue Details

Drawn By:	**Project No.** MDR1329
Checked By:	**File Ref:** MDR1329arc0002D02
Approved By	
Scale: 1: 7,500 @ A3	**Drawing No.** Arc0002 **Rev:** D02
Date: 09/03/2018	

NOTE: 1. This drawing is the property of RPS Group Ltd. It is a confidential document and must not be copied, used, or its contents divulged without prior written consent.
2. All levels are referred to Ordnance Datum, Malin Head.
3. Ordnance Survey Ireland Licence No. EN 0034218
© Ordnance Survey Ireland Government of Ireland.

5.2 RISK POSED BY THE COMAH SITES TO THE DEVELOPMENT

This section of the report summarises the risks posed by the COMAH sites identified within the study area and the potential for impact on the proposed development. Under Regulation 25 of the COMAH Regulations establishments are required to provide information to the public on the level of risk.

The following information has been collated from the Public Information on establishments published in the HSA website[1]. **Table 5.2** identifies the hazard categories and dangerous characteristics applicable to the sites. Given the close proximity of the Lower Tier site and the similarity in nature with the Upper Tier site also located at the Port, the Lower Tier site has also been included in **Table 5.2**. The substances are varied but include a large number of hazardous and flammable substances. Fires, explosions and releases of dangerous substances are hazards posed by both establishments. However, impact distances for these hazards are not presented in the publically available data.

Table 5.2 – Key Hazard Categories for the Seveso Establishments

Establishment	Tier	Hazard Categories / Named Substances	Dangerous Characteristics / H Phrases
Atlantic Fuel Supply Company Ltd.	Upper	E1 Hazardous to the Aquatic Environment, E2 Hazardous to the Aquatic Environment, P5c Flammable Liquids, Petroleum Products (Petrol, Diesel, Dual Purpose Kerosene, Heavy Fuel Oil, Gas Oil)	H225, H410, H411
Inter Terminals Shannon Ltd.	Lower	E1 Hazardous to the Aquatic Environment, P5c Flammable Liquids, Petroleum Products (Dual Purpose Kerosene)	H225, H400, H410

It is anticipated that the human occupancy of the Port area will increase by approximately 48 people/employees through Phase 1 and ultimately 120 people/employees through the completion of Phases 1 to 3 in addition to the existing workforce within the port. This will include both employees working typical day and night time shifts as well as visitors who will be present for much shorter durations.

In terms of the Lower Tier facility, Inter Terminals Ltd., the sites of both proposed developments at Foynes Port sit outside the consultation distance of this establishment. Therefore, the proximity of this establishment (refer **Table 5.1**) to both of the proposed developments at Foynes Port will not increase the risk profile of this facility.

In terms of the Upper Tier facility, Atlantic Fuel Supply Company Ltd., the western boundary of the Durnish Lands site does fall within the consultation distance of this establishment. Therefore, the proximity of the proposed development at Durnish Lands to this establishment (refer **Table 5.1**) may increase the risk profile of this facility. For example, key sources at the site, such as the tank farm, which pose a potential fire/explosion/spillage/vapour risk (refer **Table 5.3**), will be less than 400

[1] Available at: http://www.hsa.ie/eng/Chemicals/COMAH/

metres from the proposed development at the Durnish Lands at certain points of its western boundary. Depending on the impact distance for these hazards, the proposed development may increase the number of persons potentially affected by such an event. In this regard, the proximity of the Atlantic Fuels Supply Company facility poses a potential slight increase in risk on the proposed development.

The planned Phase 1 development along the western boundary of the Durnish lands that lies within the 400 metre consultation distance of the Atlantic Fuels Supply Company facility includes the following:

- A section of the internal and access roads;
- A section of the rockfill bund and security fencing; and
- A section of the area planned for Container Storage and Open Storage.

These are low risk operations with an anticipated low human occupancy and hence the risk of the proximity of the Atlantic Fuels Supply Company facility to this section of the proposed development is considered low.

Table 5.3 – Key Hazards from the Upper Tier Establishment

Establishment	Nature of major accident	Scenario details	Potential human health effects
Atlantic Fuel Supply Company Ltd.	Fire/Vapour Cloud Explosion/Spillage.	Overfilling of a petrol storage tank creating a vapour cloud and a spillage into the bund.	Fatalities, severe injury/Temporary exposure to smoke, unlikely to have long term effects on fit and healthy people.
	Spillage and fire at a road tanker loading gantry/Fire and potential for an explosion.	Overfilling of a road tanker with petrol.	Serious injury, burns and toxic fumes.
	Release of dangerous substances with potential for adverse environmental effects.	Release of petroleum products from storage entering a nearby river.	No effect.

5.3 RISK POSED BY THE CONSTRUCTION OF THE DEVELOPMENT ON THE COMAH SITES

The construction of the proposed East Jetty Extension is outside of the consultation distances of both COMAH establishments located at Foynes Port. The activities (refer **Section 3.1**) carried out at the construction stage of the proposed East Jetty Extension should have no direct impact on the two COMAH establishments in the area.

Similarly it is anticipated that, although the western boundary of Durnish Lands does fall in part within the consultation distance set out for the Upper Tier establishment, the risk posed by construction activities (refer **Section 3.2**) relating to the proposed Durnish Lands development is low.

Overall, at construction stage, the proposed new developments at Foynes Port will have no direct impact on the two COMAH establishments located and will not alter the risk profile of these establishments.

5.4 RISK POSED BY THE OPERATION OF THE DEVELOPMENT ON THE COMAH SITES

It is expected that at operational stage the activity at the proposed East Jetty Extension will have no direct impact on the two COMAH establishments in the area.

Similarly, it is anticipated that the risk posed by the activities at the proposed Durnish Lands development is low. The development will consist of warehouses for the storage of varying materials (refer **Section 3.2**) and so it is understood that the risk posed by operations that will take place at there is minimal.

Overall, at the operational stage, the proposed new developments at Foynes Port will have no direct impact on the two COMAH establishments located and will not alter the risk profile of these operations.

6 CONCLUSION

This report has been prepared to support the planning application for the Port of Foynes Capacity Extension & Harbour Development Project. The document identifies the COMAH establishments located in study area and provides an assessment of the potential impact of the development on these sites. The report considers the relative proximities between each of the proposed developments locations to these COMAH establishments and notes any potential change in risk.

Neither of the two development areas proposed for this development is within the consultation distance of the Lower Tier Inter Terminals Shannon Ltd. site. As such, there is negligible change in risk predicted for this site.

In terms of the Atlantic Fuel Supply Company Ltd., the western boundary of the Durnish Lands site does fall within the consultation distance of this establishment. The planned Phase 1 development along the western boundary of the Durnish lands includes a section of the internal and access roads, the rockfill bund and security fencing and a section of the area planned for Container Storage and Open Storage. These are low risk operations with an anticipated low human occupancy and hence the risk of the proximity of the Atlantic Fuels Supply Company facility to this section of the proposed development is considered low.

At the operational stage, it is anticipated that the proposed new developments will have no direct impact on the two COMAH establishments in the area and will not alter the risk profile of these operations.

In summary, an assessment of the likely significant effect of the proposed development on the COMAH network has been undertaken for both the construction and operation phases. Where sites are identified as posing a plausible risk, (i.e. within the consultation distances supplied by local planning policy) a more detailed review has been undertaken. In all cases the nature of the proposed development, coupled with the distances to the COMAH establishments has resulted in a low risk of impact.