

An tÚdarás Sláinte agus SábháilteachtaHealth and Safety Authority Solata 289 389 Solata <u>COMAH@hsa.ie</u> () www.hsa.ie

# Public Information on an upper-tier establishment as required by Regulation 25

## **Information on upper-tier establishments**

All establishments subject to the *COMAH Regulations 2015* have submitted a notification in a standard form to the Authority. This includes information on their location, the hazard categories of the dangerous substances present with an indication of their dangers, emergency action information and sources of additional relevant information.

Additional information has been provided by upper-tier establishments, including details on the possible major accidents arising in the establishment and the action to take in the event of an emergency.

### **General Duties on Operators**

Operators have a general duty to identify all the major accident hazards in their establishment, take all necessary measures to prevent major accidents and to limit the consequences of such accidents to human health and the environment.

Operators of upper-tier establishments are also specifically required to ensure that 'all persons likely to be affected' by a major accident originating at the establishment receive clear and intelligible information on safety measures and on what they should do in the event of a major accident. This information must be directly supplied to all buildings and areas of public use, including schools and hospitals and, in the case of domino groups, to all neighbouring establishments.

#### **Information on emergency plans**

Information on external emergency plans may also be available from the Local Authority, the Gardaí and the Health Services Executive.

## Public information for an upper-tier establishment

This establishment is subject to the COMAH Regulations 2015 and has submitted a notification to the Authority.

The following information, which has been extracted from the notification, fulfils the requirements of Regulation 25(3)(a).

The date of the most recent COMAH inspection (added by the Central Competent Authority) can also be found in the table below.



# **Notification History**

## Zoetis Belgium S.A. Ireland Branch

Version	Reason	Date
1.0	Change of COMAH Tier	03/03/2023
2.0	Information update	30/06/2023
3.0	Information update	29/09/2023



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## **Regulation 25 information for Zoetis Belgium S.A. Ireland Branch**

Operator Name	Registered Name	Zoetis Belgium S.A. Ireland Branch
	Trade Name	Zoetis Rathdrum
Establishment Address	Address	Laragh Road, Rathdrum
	County	Wicklow
	Eircode	A67 X704
Notification Details	Tier	Upper Tier
	Activity	Production of Pharmaceuticals
Dangerous Substance	Hazard Categories /	E1 Hazardous to the Aquatic Environment
information	Named Substances	E2 Hazardous to the Aquatic Environment
		O1 Substances or mixtures with hazard statement EUH014
		O2 Substances and mixtures which in contact with water
		emit flammable gases, Category 1
		O3 Substances or mixtures with hazard statement EUH029
		P5a Flammable Liquids
		P5b Flammable Liquids
		P5c Flammable Liquids
		P6a Self-reactive substances, mixtures, organic peroxides Methanol
		Hydrogen
		Ammonia
		Acetylene
-	Dangerous	H220
	Characteristics / Hazard	H221
	Statements	H225
	statements	H226
		H301
		H330
		H331
		H370
		H400 H410
		H411
		EUH014
		E0H029
<b>Emergency Information</b>	How the public will be	Members of the public likely to be affected will be warned
	warned	by the Gardaí or Fire Service.
		instructions or requests from the emergency services in the
		event of an accident. Information may also be available on
		request from the Local Authority, the Gardai and the Health
		Service Executive in relation to external emergency plans, subject to Regulation 26.
	Behaviour to take in	
	event of major accident	Not necessary as there are no off-site consequences.



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Inspection	Most recent COMAH Inspection (updated quarterly): Where more detailed information on inspection available	25 <sup>th</sup> April 2024 More detailed information about the inspection and the related inspection plan can be obtained upon request, subject to the requirements of Regulation 26, from: CCPS unit, Health & Safety Authority, Metropolitan Building, James Joyce Street, Dublin 1.
Information	Where further relevant information available	Further information about this establishment may be obtained, in the first instance, from the operator. Subject to Regulation 26 ('Access to information and confidentiality') information may also be available from the Health and Safety Authority, on request, under the Access to Information on the Environment Regulations.



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Nature of major hazards (1)	Nature of major accident	Fire. Release of dangerous substances with potential for adverse health effects. Release of dangerous substances with potential for adverse environmental effects.
	Potential human health effects	Potential for burns to body. Temporary exposure to smoke from a fire from which generally fit and well people are unlikely to experience long-term health problems.
	Potential environmental effects	Deposition of dangerous substances on widespread habitats and agricultural land preventing growing crops or grazing animals or rendering the area inaccessible to the public. Dangerous substances entering freshwater or estuarine waters and causing harm to the aquatic environment.
	Scenario details	This scenario involves a fire following a loss of containment of flammable solvent (Heptane )at the tank farm. There are two levels of impact identified (1) where the spill is retained within the bund, and (2) where the scenario involving catastrophic mechanical failure of the tank and bund overtopping.
	Control measures	All of the establishments storage tanks, process vessels, pipework and control systems are designed and maintained to an appropriate standard to prevent major accidents. Suitable arrangements are in place to prevent or minimise loss of containment of dangerous substances. Buildings on site are designed and arranged to prevent or minimise knock-on effects of an incident. Detectors are in place to alert staff to any loss of containment. Preventative maintenance of tanks and associated pipelines to ensure fitness for purpose. Permit to work system with lock out / tag out - including Method Statement and Risk Assessment. Hot work permitting, with fire watch monitoring of area after hot works are complete. Material selection – tanks, fittings and associated infrastructure are appropriate for the materials stored within. Regular housekeeping inspection check for leaks (weekly basis). Level transmitter - readings to SCADA system. Daily check of tank levels. Ullage check prior to tanker delivery. Supervision of tanker delivery by Zoetis operator. Hi-level switches on some tanks. Hi and hi-hi level alarms at tank farm. Earthing / bonding grounding of tanks. When a tanker arrives on site it is assessed using Earthrite system and any charge present is allowed to dissipate before unloading to the tank farm is allowed to take place. Nitrogen purge to tanker when offloading. Nitrogen inertion of solvent bulk tanks and waste tanks. Conservation vents on tanks to minimise vapour emissions to atmosphere / flammable zones. Local and remote bunding to prevent material escaping off site. Pipeline from local bund to remote bund is in concrete channel - in the event of a leak from pipeline, the concrete channel will direct to dilute tanks at WWTP. Drainage system to collect spills - pH and



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	TOC meter on line with automatic diversion to retention facility.
Onsite response	This establishment has prepared an internal emergency plan for major accidents which is tested at least every 3 years, has liaised with the emergency services and agreed on the actions and arrangements to deal with major accidents and minimise their effects.
Offsite effects/action	A publicly available external emergency plan is being drawn up by the local authority, Gardaí and HSE to respond to any consequences outside this establishment as a result of a major accident and the public will be consulted as part of this process. You should cooperate with the instructions of the emergency services.

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Nature of major hazards (2)	Nature of major accident	Release of dangerous substances with potential for adverse environmental effects. Release of dangerous substances with potential for adverse health effects. Release of dangerous substances with potential for adverse environmental effects.
	Potential human health effects	Breathing air with high concentrations of dangerous substances that could lead to asphyxiation and/or poisoning, which could result in unconsciousness. Single exposure by inhalation could lead to damage of certain internal organs.
	Potential environmental effects	Dangerous substances entering freshwater or estuarine waters and causing harm to the aquatic environment. Dangerous substances contaminating groundwater if containment fails.
	Scenario details	This scenario involves a loss of containment of dangerous substances classed as acutely toxic to human health. There is a wide range of materials that are stored and transported about the site in packaged containers and so there may also be a variety of hazards. The representative worst case example of this type of scenario involves a release of Phosphorus oxichloride. A release of up to 280 kg in 3.5 minutes is a conservative estimate however the catch tank on the reactor overhead would mitigate the impacts of this scenario .This material is hazardous, but the impacts following a release may be more severe if the released material comes into contact, whereupon it can react to give rise to a release of HCl to atmosphere.
	Control measures	Suitable arrangements are in place to prevent or minimise loss of containment of dangerous substances. Chemical spillage prevention systems are in place. Emergency response systems & procedures are in place. Incompatible materials are segregated and stored separately. Containers are sealed. Liners in drums used in liquid service and double bagged in fibre board drums for powder. Periodic inspection of containers in storage, to check for any evidence of leakage or damage. The contractor that is engaged in carrying out housekeeping at Drum Compound no.2 provides reports to Zoetis to demonstrate that the



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	works are being carried in accordance with requirements. Speed limit on site. Periodic inspection of racking in warehouse areas by external contractor – service reports provided to Zoetis. Safe working loads posted on racking; limit to the amount of material stored on each racking space based on pallet dimensions. Impact protection on racking with kick-bars at ground level, with 6-montlhy inspections of same. Catch tank to contain release from burst disc and contain material. Drainage system to collect spills - pH and TOC meter on the line with automatic diversion to retention facility. Manual activation of diverter valve - can be activated at the WWTP or at Security, or locally at valve. Process drains are routed automatically to WWTP. Can be diverted to strong waste tanks. Emergency response. First aid training for on-site personnel. Fire Brigade tenders to apply water / foam for larger fire event
Onsite response	This establishment has prepared an internal emergency plan for major accidents which is tested at least every 3 years, has liaised with the emergency services and agreed on the actions and arrangements to deal with major accidents and minimise their effects.
Offsite effects/action	A publicly available external emergency plan is being drawn up by the local authority, Gardaí and HSE to respond to any consequences outside this establishment as a result of a major accident and the public will be consulted as part of this process. You should cooperate with the instructions of the emergency services.

Nature of major hazards (3)	Nature of major accident	Fire. Release of dangerous substances with potential for adverse health effects. Release of dangerous substances with potential for adverse environmental effects.
	Potential human health effects	Potential for burns to body. Very dense smoke may cause irritation of the lining of the air passages (nose, throat and lungs) the skin and the eyes.
	Potential environmental effects	Deposition of dangerous substances on widespread habitats and agricultural land preventing growing crops or grazing animals or rendering the area inaccessible to the public. Dangerous substances entering freshwater or estuarine waters and causing harm to the aquatic environment.
	Scenario details	This scenario involves a major fire in a warehouse building at the Rathdrum site. For a fire in a mixed inventory building such as this, there is more than one potential impact to consider (1) thermal radiation effects, and (2) generation of smoke plume with potentially hazardous products of combustion. There may also be the potential for contaminated fire fighting water runoff - the risks of this event are described in a separate Major Hazard in this Notification. The consequences will depend on the mix of materials present in the warehouse at the time - this scenario has



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	been modelled on the assumption that it would be filled to capacity at the time.
Control measures	filled to capacity at the time. Access to the site is strictly controlled. All relevant warehouses and storage facilities are fitted with fire detection systems. Suitable arrangements are in place to prevent or minimise loss of containment of dangerous substances. Emergency response systems & procedures are in place. Material acceptance - checks of containers on arrival on site, prior to offloading. Containers are UN approved containers and drums. Containers are transported about on pallets, with drums banded together. Pallets are also designed to accommodate forklift forks to further secure loads. Trained operators to carry out movements of containers are sealed. Liners in drums used in liquid service and double bagged in fibre board drums for powder. Periodic inspection of containers in storage, to check for any evidence of leakage or damage. The contractor that is engaged in carrying out housekeeping at Drum Compound no.2 provides reports to Zoetis to demonstrate that the works are being carried in accordance with requirements. Speed limit on site. Periodic inspection of racking in warehouse areas by external contractor – service reports provided to Zoetis. Safe working loads posted on racking; limit to the amount of material stored on each racking space based on pallet dimensions. Impact protection on racking with kick-bars at ground level, with 6-montlhy inspections of same. The controls to protect against an escape of
	are described in a separate Major Hazard in this Notification. ATEX zoning of storage areas.
Onsite response	This establishment has prepared an internal emergency plan for major accidents which is tested at least every 3 years, has liaised with the emergency services and agreed on the actions and arrangements to deal with major accidents and minimise their effects.
Offsite effects/action	A publicly available external emergency plan is being drawn up by the local authority, Gardaí and HSE to respond to any consequences outside this establishment as a result of a major accident and the public will be consulted as part of this process. You should cooperate with the instructions of the emergency services.

Nature of major hazards (4)	Nature of major accident	Release of dangerous substances with potential for adverse health effects. Release of dangerous substances with potential for adverse health effects.
	Potential human health effects	Substantial exposure to toxic chemicals (potentially fatal). Single exposure by inhalation could lead to damage of certain internal organs.



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Potential environmental effects	Inhalation, ingestion or direct contact with dangerous substances causing fatality to specific species of animals. Dangerous substances entering freshwater or estuarine waters and causing harm to the aquatic environment.
Scenario details	This scenario involves a loss of containment from an ammonia chiller at the Rathdrum site. Ammonia is a gas under normal atmospheric conditions and so the primary exposure to the surroundings will be from inhalation of ammonia gas released to atmosphere. However, the fact that ammonia is liquefied at certain stages in the chiller system and the fact that it is environmentally hazardous, means that there may also be a smaller risk of some ammonia finding its way to the drainage system.
Control measures	Access to the site is strictly controlled. A manual surface water isolation valve is present on site. Air quality monitoring systems are in place. Key operating units and storage facilities are fitted with automatic shutdown and isolation systems. Service contract with external service provider, periodic maintenance inspections of ammonia plant; documentation provided to Zoetis. Ammonia distribution through hard-pipes system - flange at chiller connection at housing - periodically pressure tested. Welded pipework. Installed to EN 378 standard to ensure that plant and equipment is fit for purpose. Chillers located away from main traffic routes on site, with housing to protect against impact. Pressure relief valves on systems routed to high level externally. Duty and standby relief valving on both the P3 and P5 ammonia system. Extract fans would ramp up on detection of release. Warning beacon and sounder at chiller room. Break glass units s at chillers – activation would sound alarm. Ammonia alarm activation will shunt trip the chillers, shutting off chiller systems - ammonia detectors on 30-minute back up supply. P5 chillers are shunt tripped in the event of an alarm activation, cutting power supply to both units. Shunt trip / shut off the P3 chillers on activation of an alarm. Chillers are in housing and/or indoor area to reduce the potential release to atmosphere in the event of a loss of containment. Bund to retain liquid releases.
Onsite response	This establishment has prepared an internal emergency plan for major accidents which is tested at least every 3 years, has liaised with the emergency services and agreed on the actions and arrangements to deal with major accidents and minimise their effects.
Offsite effects/action	A publicly available external emergency plan is being drawn up by the local authority, Gardaí and HSE to respond to any consequences outside this establishment as a result of a major accident and the public will be consulted as part of this process. You



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emergency services.		emergency services.

Nature of major hazards (5)	Nature of major accident	Release of dangerous substances with potential for adverse health effects. Release of dangerous substances with potential for adverse environmental effects.
	Potential human health effects	Breathing air with high concentrations of dangerous substances that could lead to asphyxiation and/or poisoning, which could result in unconsciousness. There are no potential consequences on human health from the major accident hazards identified.
	Potential environmental effects	There are no potential consequences on the environment from the major accident hazards identified.
	Scenario details	Dust explosions
	Control measures	Key operating units and storage facilities are fitted with automatic shutdown and isolation systems. Potential ignition sources are eliminated in accordance with the ATEX Directive to protect against the ignition of flammable material. Emergency response systems & procedures are in place. Incompatible materials are segregated and stored separately. Dedicated equipment for charging to reactors. Automated valve sequence when charging powders to reactors. Nitrogen inertion of all equipment as a basis of safety. Detailed risk assessments are completed on the processes to ensure risks are as low as reasonably practicable
	Onsite response	This establishment has prepared an internal emergency plan for major accidents which is tested at least every 3 years, has liaised with the emergency services and agreed on the actions and arrangements to deal with major accidents and minimise their effects. There are no off-site consequences from a major accident at this establishment.
	Offsite effects/action	A publicly available external emergency plan is being drawn up by the local authority, Gardaí and HSE to respond to any consequences outside this establishment as a result of a major accident and the public will be consulted as part of this process. You should cooperate with the instructions of the emergency services.