Environmental Protection Agency
An Ghníomhaireacht um Chaomhnú Comhshaoil

Industrial Emissions Activities Licence

Application Form

EPA Reg. Nº: *(Office use only)*	

*ELECTRONIC COPIES OF THE APPLICATION **MUST** BE SUBMITTED IN ACCORDANCE WITH THE "INSTRUCTIONS FOR LICENCE APPLICANTS" DOCUMENT AT THE LINK BELOW.*

FAILURE TO DO SO MAY RESULT IN A DELAY IN PROCESSING YOUR APPLICATION.

http://www.epa.ie/pubs/forms/lic/industrial%20emissions/instructionsforapplicantsreapplicationform.html

Environmental Protection Agency

P.O. Box 3000, Johnstown Castle Estate, Co. Wexford

Lo Call: 1890 335599 Telephone: 053-9160600 Fax: 053-9160699

Web: www.epa.ie Email: Industrial_Emissions_Licensing_Queries@epa.ie

Tracking Amendments to Application Form

Version No.	Date	Amendment since previous version	Reason
V.1.0	June 2013	N/A	Introduction of IE (Licensing) Regulations 2013
V.2.0	March 2014	Amendments to Section A, B and I.	Further clarification of IE (Licensing) Regulations 2013
V.3.0	January 2015	Amendments to Section G.1 Amendments to Section I.8	REACH Environmental Considerations, Main Alternatives and BAT
V.4.0	June 2015	Amendments to Section A Amendment to Section B.1 New Section B.3B Amendments to Section B.6 Amendment of Section B.10 New Section D.2.2 Amendments to Section L	To require summary table of impacts in Non-Technical summary Change from "Owner/Operator" to "Applicant" In relation to Fees Additional requirements in relation to planning history and the submission of EISs. Addition of Yes/No tick box Additional information required in relation to waste storage and closure costs. To reflect BAT & IED requirements

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ABOUT THIS APPLICATION FORM

This form is for the purpose of making an application for an Industrial Emissions Activity Licence under the Environmental Protection Agency Act, 1992, as amended. There is a separate application form for applicants who wish to apply for Classes 6.1 or 6.2 Intensive Agriculture.

The Application Form **must** be completed in accordance with the instructions included in this form and available on the EPA website. A valid application for an Industrial Emissions Activity (IEA) licence must contain the information prescribed in the Environmental Protection Agency (Industrial Emissions)(Licensing) Regulations, 2013. Regulation 9 of the Regulations sets out the statutory requirements for information to accompany a licence application. The application form is designed in such a way as to set out these questions in a structured manner and not necessarily in the order presented in Regulation 9. In order to ensure a legally valid application in respect of Regulation 9 requirements, please complete the Regulation 9 Checklist provided in Annex 2.

This Application Form does not purport to be and should not be considered a legal interpretation of the provisions and requirements of the Environmental Protection Agency Act, 1992, as amended, and the Environmental Protection Agency (Industrial Emissions)(Licensing) Regulations 2013. While every effort has been made to ensure the accuracy of the material contained in the Application Form, the EPA assumes no responsibility and gives no guarantees, undertakings and warranties concerning the accuracy, completeness or up-to-date nature of the information provided herein and does not accept any liability whatsoever arising from any errors or omissions.

Should there be any contradiction between the information requirements set out in the Application Form and any clarifying explanation on the EPA website then the requirements in this Application Form shall take precedence. The requirements of the 2013 Regulations, referenced above, shall take precedence over any considerations mentioned in this Application Form or on the website.

SECTION A: NON-TECHNICAL SUMMARY

A non-technical summary of the application is to be included here. The summary should identify all environmental impacts of significance associated with the carrying on of the activity/activities and describe mitigation measures proposed or existing to address these impacts. This description should also indicate the normal operating hours and days per week of the activity.

The following information must be included in the non-technical summary:

- The relevant class or classes of activity in the First Schedule of the EPA Act 1992 as amended,
- Indication of whether EIS and planning permission documents are included,
- Indicate relevant BAT guidance documents or BAT Conclusions decisions,
- The title of the relevant BREF document
- Information on how the emission levels have been determined,
- Indication if EC (Control of Major Accident Hazards involving Dangerous Substances) Regulations 2006 apply,
- If a derogation under Section 86A(6) is being sought and the specific reasons for such derogation,
- A description of:

– the installation (plant, methods, processes, abatement, recovery and treatment systems and operating procedures for the activity), with emphasis on the main measures to avoid , reduce and, if possible offset the major adverse effects on the environment

– the raw and auxiliary materials, substances, preparations, fuels and energy which will be produced by or utilized in the activity,

– the sources of emissions from the installation,

– the environmental conditions of the site of the installation (e.g. soil and groundwater, air, noise, surface water) including reference to a Baseline Report where applicable,

– the nature and quantities of existing and proposed emissions from the installation into each medium as well as a summary of the assessment of the effects of the emissions on the environment as a whole,

– the proposed technology and other techniques to prevent or eliminate, or where this is not practicable, limit, reduce or abate emissions from the installation,

– summary of the quantity and nature of wastes which may be produced or accepted at the installation,

– measures to ensure that waste production is avoided in accordance with the waste hierarchy in Council Directive 98/2008/EC on waste and section 21A of the Waste Management Act 1996, as amended; where waste is generated, it is prepared for re-use, recycled or recovered or, where that is technically and economically impossible, it is disposed of while avoiding or reducing any impact on the environment (applicants should provide this information in the context of the Waste Management Act 1996, as amended);

– all the appropriate preventive measures are taken against pollution, in particular through application of the Best Available Techniques (BAT) or BAT Conclusions Decision;

– the necessary measures are to be taken under abnormal operating conditions, including start up, shutdown, leaks, malfunctions, breakdowns and momentary stoppages;

– the necessary measures to be taken on and following permanent cessation of activities to avoid any risk of environmental pollution and return the site of the activity to a satisfactory state or the state established in the baseline report if required;

– measures planned to monitor emissions into the environment,

– measures to comply with an environmental quality standard,

– measures to comply with Council Directive 80/68/EEC and 2006/118/EC in relation to the protection of groundwater,

– measures to be taken for minimizing pollution over long distances or outside the territory of Ireland,

– the main alternatives to the proposed technology, techniques and measures studied by the applicant.

Where an EIS is submitted as part of the licence application, summarise the likely significant effects of the activity in the following format:

Environmental Factor	**Likely effects identified**	**Brief description of effect**	**Mitigation measures proposed to control effect**
Human Beings			
Flora and fauna			
Soil			
Water			
Air			
Climate			
Landscape			
Material Assets			
Cultural Heritage			

Supporting information should form **Attachment Nº A.1**

Applicant Response:

An updated non-technical summary is provided in Attachment A.

SECTION B: GENERAL

B.1. Applicant

Name*:	Saint-Gobain Building Distribution (ROI) Limited
Address:	Oldmilltown
	Kill
	Col. Kildare
Tel:	045 877 165
Fax:	045 877 165
e-mail:	john.mcgettigan@pdm.ie

* This should be the name of the applicant which is current on the date this Licence Application is lodged with the Agency. It should be the name of the legal entity (which can be a limited company or a sole trader). A trading/business name is **not** **acceptable**.

Name and Address for Correspondence
Only application documentation submitted by the applicant and by the nominated person will be deemed to have come from the applicant.

Name:	John McGettigan, Environmental Manager
Address:	Saint-Gobain Building Distribution (ROI) Limited
	Oldmilltown
	Kill
	Co. Kildare
Tel:	045 877 165
Fax:	045 877 165
e-mail:	john.mcgettigan@pdm.ie

CRO No. and address of registered or principal office of Body Corporate

CRO No.	313869
Address:	Saint-Gobain Building Distribution (ROI) Limited
	Oldmilltown
	Kill
	Co. Kildare
Tel:	045 877 165
Fax:	045 877 165
e-mail:	john.mcgettigan@pdm.ie

If the applicant is a body corporate, the following information must be attached as **Attachment B1**:

a) a Certified Copy of the Certificate of Incorporation under the Companies Act.
b) the Company's Registration Number from the Companies Registration Office.
c) Particulars of Registered Office of the Company.

Applicant Response:
Attachment B1 contains the relevant information.

Name and address of the proprietor(s) of the land on which the activity is situated (if different from applicant named above):

Proprietor's Name:	**Same as above**
Address:	
Tel:	
Fax:	
e-mail:	

Name and address of the owner(s) of the building and ancillary plant in which the activity is situated (if different from applicant named above):

Name:	**Same as above**
Address:	
Tel:	
Fax:	
e-mail:	

Primary Contact details for <u>enforcement purposes</u> where licence is granted. PLEASE NOTE THIS CONTACT <u>CANNOT</u> BE A CONSULTANT. ALSO IT MUST <u>NOT</u> BE A PERSON WHO IS ALREADY A REGISTERED EDEN CONTACT FOR ANY OTHER LICENCE ISSUED BY THE AGENCY.
***mandatory fields**

***Name:**	**John McGettigan**
Position in organisation:	**Environmental Manager**
Tel:	**045 877 165**
***e-mail:**	**john.mcgettigan@pdm.ie**

B.2. Location of Activity

Name:	**Saint-Gobain Building Distribution (Ireland) Limited t/a PDM**
Address*:	**Oldmilltown**
	Kill
	Co Kildare
Tel:	**045 877 165**
Fax:	**045 877 165**
Contact Name:	**John McGettigan**
Position:	**Environmental Manager**
e-mail:	**john.mcgettigan@pdm.ie**

* Include any townland.

National Grid Reference (12 digit 6E,6N)	**297899.31E, 222663.87N**

Location maps (≤A3), appropriately scaled, with legible grid references should be enclosed in **Attachment B.2.** The site boundary must be outlined on the map in colour.

Applicant Response:

Attachment B2 contains two maps showing the site location (1:50,000 scale) and also appropriately scaled showing the grid references.

Geo-referenced digital drawing files (e.g. AutoCAD files) in Irish Grid projection of the site boundary and overall site plan, including labelled emission, monitoring and sampling points, are also required. This data should be provided to the Agency on a separate CD-Rom containing sections B.2, E.6 and F.3.

Name of geo-referenced digital drawing files	**Figure 47092933/IED/00001** **Figure 47092933/IED/00002** **Figure 47092933/IED/00003** **Figure 47092933/IED/00004** **Figure 47092933/IED/00006**
Name of CD-Rom with digital drawing files	**B.2, E.6 and F.3 data**

B.3. Class of Activity

Identify the relevant activities in the First Schedule of the EPA Act 1992, as amended, to which the activity relates:

Class	Description	Identify Main IED Activity
8.3	**The preservation of wood and wood products with chemicals with a production capacity exceeding 75m^3 per day other than exclusively treating against sapstain.**	**Annex VII** **15. Wood Impregnation**

B.3A Industrial Emissions Directive

Specify which category/categories of industrial activity referred to in Annex I of the Industrial Emissions Directive (2010/75/EU) is/are to be carried out at the installation.

Category	Description	Identify Main IED Activity
6.10	**Preservation of wood and wood products with chemicals with a production capacity exceeding 75m^3 per day other than exclusively treating against sapstain**	**Annex VII** **15. Wood Impregnation**

State whether the installation falls under the scope of Chapters III, IV, V and/or VI of the Industrial Emissions Directive (2010/75/EU) and if yes specify the relevant sections and Annex.

IED Chapter(s) and relevant Annex(es)
Does not fall under the Scope of Chapters III, IV or VI

Falls under the scope of Chapter V – special provisions for installations and activities using organic solvents. Relevant sections: -

- **Article 56**
- **Annex VII, Part 1, No.15**
- **Annex VII, Part 2, 12 insofar as it refers to wood impregnation with >25 tonnes of solvent consumption per annum. Fugitive emission limit values for existing installations apply, being 45% of solvent input. ELV for waste gases does not apply to creosote impregnation.**
- **Article 58**
- **Article 62 and Part 7 of Annex VII regarding Solvent Management Plans.**

Supporting information should be included in **Attachment Nº B.3A**.

Applicant Response:
No supporting information required therefore there is no Attachment B.3A.

B.3B Application Fee
State each class of activity (per the First Schedule of the EPA Act) for which a fee is being submitted. Application fees are set out in the following regulations:

- EPA (Licensing Fees) Regulations 1994, for all First Schedule activities except classes 11.2 to 11.7; and
- EPA (Licensing Fees) Regulations 2013, for First Schedule activity classes 11.2 to 11.7.

First Schedule Activity	Fee (in €)
8. Wood, Paper, Textiles and Leather	**€6,983**
Total fee paid	**€13,833.92 was the fee paid by PDM in 2014**

* add rows to the table as necessary

B.4 Classes of Waste Activity

Applicant Response:
Not Applicable.

If a waste activity is proposed, i.e. if any First Schedule of the EPA Act 1992, as amended class 11 activity is specified in section B.3 above, identify below the relevant activities as listed in Annex I and Annex II of the Waste Framework Directive (2008/98/EC).

TABLE B.4 Classes of Waste Activity

Waste Framework Directive 2008/98/EC

Annex I **Disposal Operations**		**Y/N**
D 1	Deposit into or on to land (e.g. including landfill, etc.).	**N**
D 2	Land treatment (e.g. biodegradation of liquid or sludgy discards in soils, etc.).	**N**
D 3	Deep injection (e.g. injection of pumpable discards into wells, salt domes or naturally occurring repositories, etc.).	**N**

Annex I Disposal Operations		Y/N
D 4	Surface impoundment (e.g. placement of liquid or sludgy discards into pits, ponds or lagoons, etc.).	N
D 5	Specially engineered landfill (e.g. placement into lined discrete cells which are capped and isolated from one another and the environment, etc.).	N
D 6	Release into a water body except seas/oceans.	N
D 7	Release to seas/oceans including sea-bed insertion.	N
D 8	Biological treatment not specified elsewhere in this Annex which results in final compounds or mixtures which are discarded by means of any of the operations numbered D 1 to D 12.	N
D 9	Physico-chemical treatment not specified elsewhere in this Annex which results in final compounds or mixtures which are discarded by means of any of the operations numbered D 1 to D 12 (e.g. evaporation, drying, calcinations, etc.).	N
D 10	Incineration on land.	N
D 11	Incineration at sea.[1]	N
D 12	Permanent storage (e.g. emplacement of containers in a mine, etc).	N
D 13	Blending or mixing prior to submission to any of the operations numbered D 1 to D 12.[2]	N
D 14	Repackaging prior to submission to any of the operations numbered D 1 to D 13.	N
D 15	Storage pending any of the operations numbered D 1 to D 14 (excluding temporary storage, pending collection, on the site where the waste is produced).[7]	N

Annex II Recovery Operations		Y/N
R 1	Use principally as a fuel or other means to generate energy.[3]	N

[1] This operation is prohibited by EU legislation and international conventions.

[2] If there is no other D code appropriate, this can include preliminary operations prior to disposal including pre-processing such as, inter alia, sorting, crushing, compacting, pelletising, drying, shredding, conditioning or separating prior to submission to any of the operations numbered D1 to D12.

[3] This includes incineration facilities dedicated to the processing of municipal solid waste only where their energy efficiency is equal to or above:

- 0.60 for installations in operation and permitted in accordance with applicable Community legislation before 1 January 2009,
- 0.65 for installations permitted after 31 December 2008,

using the following formula:

Energy efficiency = (Ep - (Ef + Ei)/ (0.97x(Ew+Ef)

In which:

'Ep' means annual energy produced as heat or electricity and is calculated with energy in the form of electricity being multiplied by 2.6 and heat produced for commercial use multiplied by 1.1(GJ/year),

'Ef' means annual energy input to the system from fuels contributing to the production of steam (GJ/year),

Annex II Recovery Operations		Y/N
R 2	Solvent reclamation/regeneration.	N
R 3	Recycling /reclamation of organic substances which are not used as solvents (including composting and other biological transformation processes).[4]	N
R 4	Recycling/reclamation of metals and metal compounds.	N
R 5	Recycling/reclamation of other inorganic materials.[5]	N
R 6	Regeneration of acids or bases.	N
R 7	Recovery of components used for pollution abatement.	N
R 8	Recovery of components from catalysts.	N
R 9	Oil re-refining or other reuses of oil.	N
R 10	Land treatment resulting in benefit to agriculture or ecological improvement.	N
R 11	Use of waste obtained from any of the operations numbered R 1 to R 10.	N
R 12	Exchange of waste for submission to any of the operations numbered R 1 to R 11.[6]	N
R 13	Storage of waste pending any of the operations numbered R 1 to R 12 (excluding temporary storage, pending collection, on the site where the waste is produced).[7]	N

'Ew' means annual energy contained in the treated waste calculated using the net calorific value of the waste (GJ/year),
'Ei' means annual energy imported excluding Ew and Ef(GJ/year),
'0.97' is a factor accounting for energy losses due to bottom ash and radiation.
This formula shall be applied in accordance with the reference document on Best Available Techniques for waste incineration.

[4] This includes gasification and pyrolisis using the components as chemicals.

[5] This includes soil cleaning resulting in recovery of the soil and recycling of inorganic construction materials.

[6] If there is no other R code appropriate, this can include preliminary operations prior to recovery including pre-processing such as, inter alia, dismantling, sorting, crushing, compacting, pelletising, drying, shredding, conditioning, repackaging, separating, blending or mixing prior to submission to any of the operations numbered R1 to R11.

[7] Temporary storage means preliminary storage according to point (1) of Article 3 [of the Waste Framework Directive 2008/98/EC].

B.5. Employees/ Capital Cost

Give-

(i) In the case of an established activity, the number of employees and other persons working or engaged in connection with the activity on the date after which a licence is required and during normal levels of operation, or

(ii) In any other case, the gross capital cost of the activity to which the application relates.

Number of Employees (existing facilities):	**36**
Gross Capital Cost (new proposals) €	**Not Applicable – existing activity**

B.6. Relevant Planning Authority and/or Public Authority

Give the name of the planning authority in whose functional area the activity is or will be carried out.

Name:	**Kildare County Council**
Address:	**Áras Chill Dara**
	Devoy Park
	Naas
	Co. Kildare
Tel:	**045 980 200**
Fax:	**045 980 240**

Considering the entire site to which the activity relates, has planning permission ever been required for the site? (Tick No or Yes in the table)

No		See Section **B.6(a)** below **NOTE:** For **Agency initiated reviews**, you can disregard the instructions in B.6(a) and progress to Section B.7.
Yes	√	See **all** of Sections **B.6(b) to (f)** below. Please note that **all** structures comprising or for the purposes of the activity must be accounted for in the tables in sections below B.6(c) to B.6(f) below. **NOTE:** For **Agency initiated reviews**, you only need to complete the tables in Sections B.6(c), B.6(d) and B.6(e) below. You **DO NOT** need to submit an EIS or the letters on confirmation referred to below.

If this is a licence review application, was planning permission required for the changes proposed as part of this review application? (Tick No or Yes in the table)

No	√	Provide confirmation in writing from the planning authority or An Bord Pleanála that this is the case.	
Yes		Planning Ref No:	

B.6 (a) Where planning has never been required

Where the activity which is the subject of this licence/review application has never required a grant of planning permission previously, **Attachment Nº B.6** must include a confirmation in writing from the planning authority or An Bord Pleanála, as the case may be, that the activity does not involve development or that the activity constitutes development but is exempted development. The letter of confirmation from the planning authority and/or An Bord Pleanála, as the case may be, must also confirm whether EIA has been carried out by the planning authority or An Bord Pleanála for any part of the site of the activity.

Applicant Response:
Not Applicable.

B.6 (b) Environmental Impact Statements

In the following table, indicate the option which applies to your application and provide the information requested accordingly.

Option	Applicable? (Yes/No)
For new licence applications OR review applications where the last licence (excluding reviews initiated by the EPA) was determined **before** 30th September 2012 • Where planning permission has been/is required for the site of the activity, **you must submit the most recent EIS associated with a planning application or planning permission for the site of the activity.** • Where planning is granted, the planning decision and planners report associated with the EIS should also be submitted.	**No**
For review applications where the last licence (excluding reviews initiated by the EPA) was determined **after** 30th September 2012 • If this is an application for a licence review, and the last licence review (not including reviews initiated by the EPA) **was determined after 30th September 2012**, you are only required to submit the most recent EIS which has arisen through the planning process **since the last licence review**. The planning decision and planners report associated with the EIS should also be submitted.	**No**
Where an EIS has never been required at planning stage Where an EIS has never been required for any planning permission then you must provide confirmation in writing from the planning authority or An Bord Pleanála that an environmental impact assessment was not required by or under the Planning and Development Act 2000, as amended for **each** of the planning permissions associated with the site of the activity. This information should be included in **Attachment Nº B.6**.	**Yes**

Applicant Response:
PDM requested confirmation from Kildare County Council on the 04th September 2015 that an EIS was never required for their site as PDM does not undertake an activity as specified in Schedule 5 of the Planning and Development Regulations

2001 as amended. PDM are awaiting this written confirmation and will forward it to the EPA upon receipt.

B.6 (c) Planning under Consideration

Where there is currently a planning application under consideration with a Planning Authority or An Bord Pleanala for any aspect of the site to which this licence application relates:

1. Provide confirmation in writing from a planning authority or An Bord Pleanála, as the case may be, that an application for permission comprising or for the purposes of the activity to which the application for a licence relates is currently under consideration.
2. Complete the Planning under Consideration Table below, indicating whether an Environmental Impact Statement (EIS) is required by the Planning Authority/An Bord Pleanala as part of that application.
3. Where an EIS is not required by the Planning Authority/An Bord Pleanala for a planning application, you must provide confirmation in writing from the planning authority or An Bord Pleanála that an environmental impact assessment is not required by or under the Planning and Development Act 2000 in **each** case. This information should be included in **Attachment Nº B.6**.

Planning under Consideration Table:

Planning or Appeal Reference Number	Planning Authority (PA)/An Bord Pleanala (ABP)	Date of application	Brief description	Letter of confirmation from PA/ABP that application is under consideration?	EIS required with Planning Application? (Yes/No)	If "no", letter of confirmation from PA/ABP that EIA is not required?
15/986	**Kildare County Council**	**03rd November 2015**	**Planning permission sought for the construction of a Sustainable Urban Drainage (SUDs) system proposed for Monitoring Point A.**	**Yes provided in Attachment B.6**	**No**	**Requested from Kildare County Council, will be submitted to the EPA on receipt**

Note: Please be advised that in accordance with Section 87(1D)(d) of the EPA Act 1992, as amended, a Proposed Determination **cannot** issue on a licence application while a planning application (for a development comprising or for the purposes of an activity to which the licence application relates and for which EIA is required) is under consideration with a planning authority or An Bord Pleanala.

B.6 (d) Planning Granted

Where planning permissions have been granted for the site of the activity:

1. List all of the permissions relating to the site in the Planning Granted Table below and indicate whether an EIS was required by the Planning Authority/An Bord Pleanala as part of that permission. Submit the planners report and final decision for each permission granted.
2. Where an EIS was not required by the Planning Authority/An Bord Pleanala for a planning permission, you must provide confirmation in writing from the planning authority or An Bord Pleanála that an environmental impact assessment was not

required by or under the Planning and Development Act 2000 for **each** planning permission granted. This information should be included in **Attachment Nº B.6**.

Planning Granted Table:

Planning or Appeal Reference Number	Planning Authority/ An Bord Pleanala	Date of Planning Decision (Final)	Brief description	EIS required with Planning Application? (Yes/No)	If "no", Letter of confirmation from planning authority/An Bord Pleanala that EIA was not required?
7679	Kildare County Council	8th November 1968	Construction of a creosote plant, dressing plant, salt impregnation plant and drying kilns, as well as a 25' wide road network.	No	Application pre dates the Planning and Development Act 2000 and therefore there was no requirement for an EIS to accompany this planning application
71/555	Kildare County Council	20th October 1971	Construction of an extension to Timber processing and storage plant, consisting of a single storey building for a reception, office and canteen, a store and a septic tank.	No	Application pre dates the Planning and Development Act 2000 and therefore there was no requirement for an EIS to accompany this planning application
76/273	Kildare County Council	No information	According to Kildare County Council records, planning permission was sought for the erection of a two-storey office. However, no planning application submitted for this planning could be found. However permission was granted for this development.	No	Application pre dates the Planning and Development Act 2000 and therefore there was no requirement for an EIS to accompany this planning application
94/47	Kildare County Council	20th April 1994	Extension of the plant comprising of an additional cresoting cylinder with associated tanks and pumps and an extension to sheds to provide additional cover to works.	No	Application pre dates the Planning and Development Act 2000 and therefore there was no requirement

					for an EIS to accompany this planning application
2409/03	**Kildare County Council**	**28th November 2003**	**"Somhera" type single storey prefabricated office building, floor area 230m^2 and septic tank.**	**No**	**Requested from Kildare County Council, will be submitted to the EPA on receipt**
2102/05	**Kildare County Council**	**5th Septembe r 2005**	**Single storey prefabricated building for staff amenity use including canteen, toilets, changing room etc.**	**No**	**Requested from Kildare County Council, will be submitted to the EPA on receipt**

Note: Please be advised that where planning permission has been granted or a planning application is under consideration, and in accordance with Section 87(1C) of the EPA Act 1992, as amended, the Agency shall ***refuse to consider*** the licence application if the applicant does not comply with the requirements of Section 87(1B) of the EPA Act.

Applicant Response:
PDM requested confirmation from Kildare County Council on the 04th September 2015 that an EIS was never required for their site as PDM does not undertake an activity as specified in Schedule 5 of the Planning and Development Regulations 2001 as amended. PDM are awaiting this written confirmation and will forward it to the EPA upon receipt.

Attachment B6 contains the Planning Permissions granted for the PDM site and the most recent Planning Application i.e. 15/986.

B.6 (e) Exempted Developments and structures/modifications not regarded as "development".

Applicant Response:
Not Applicable.

Where any structure or modification on site has been determined by the planning authority or An Bord Pleanála to be "exempted development" or is considered not to be development, provide confirmation in writing from the relevant authority. List all of the structures/modifications considered to be "exempted development" or to not involve development in the table below.

Exempted Development/No Development:

Planning Authority/ An Bord Pleanala	Date of letter from PA/ABP confirming their determination	Brief description of structure/modification	Tick if exempted development	Tick if considered not to be development

B.6 (f) Other Consents Granted

Applicant Response:
Not Applicable.

List all consents (**other than planning permissions**) issued by any relevant competent authority (other than the planning authority/An Bord Pleanala) for the development relating to this application which required EIA to be carried out as part of the consent process e.g. a foreshore licence. These EISs are **not** required to be submitted with the licence application at this point.

Consent Reference Number	Competent Authority	Date of Grant of Consent	Brief description	EIS required with Consent Application?

Appropriate Assessment

Where applicable, provide a copy of any screening for Appropriate Assessment report and Natura Impact Statement (NIS) that was prepared for consideration by any planning/public authority as defined in Regulation 2(1) of the European Communities (Birds and Natural Habitats) Regulations 2011 (S.I. No. 477 of 2011) in relation to the activity. Where a determination that an Appropriate Assessment is required has been made by any planning/public authority in relation to the activity, a copy of that determination and any screening report and Natura Impact Statement (NIS), and any supplemental information furnished in relation to any such report or statement, which has been provided to the planning/public authority for the purposes of the Appropriate Assessment shall be included in **Attachment Nº B.6.**

Applicant Response:
Not Applicable.

Licences and permits

For existing activities, **Attachment Nº B.6** should also contain a table of references to all licences and permits past and present, including those in force at the time of submission of this application. This should include, but is not limited to, any permits/licenses or registration under GHG Emissions Trading Regulations and GMO Regulations.

Applicant Response:
The table below contains the only relevant licence for the site:

Licence/Permit reference number	Brief Description	Date granted	Currently in force? (Yes/No)
P0325-01	**Integrated Pollution Control Licence for the treatment or protection of wood involving the use of preservatives with a capacity exceeding 10 tonnes per day, as stated under**	**23rd December 1998**	**Yes**

	Section 83(1) of the EPA Act, 1992.		

B.7. Relevant Water Services Authority

In the case of a discharge of any trade effluent or other matter to a sewer of a Water Services Authority, give the name of the Water Services Authority in which the sewer is vested or by which it is controlled.

Name:	**N/A no discharge to sewer**
Address:	
Tel:	
Fax:	

In the case of a discharge of any trade effluent or other matter to a sewer not vested by a Water Services Authority, the applicant must supply as **Attachment Nº B.7**;
(a) the name and address of the owner(s) of the sewer and the waste water treatment plant to which the sewer discharges (e.g. IDA, SFADCo or private undertaker) and who are responsible for the quality of the treated effluent discharging to waters and
(b) a copy of the effluent regulations and the agreement between the applicant and the aforementioned.

Details of owner(s) of a sewer and waste water treatment plant not vested in a Water Services Authority

Name:	**N/A**
Address:	
Tel:	
Fax:	

B.8. Relevant Regional Health Service Executive

The applicant should indicate the Regional Health Service Executive where the activity is or will be located.

Name:	**HSE Dublin Mid Leinster Region**
Address:	**Oak House**
	Millennium Park
	Naas
	Co. Kildare
Tel:	**045 880400**
Fax:	**1890 200 857**

B.9 Site Notice, Newspaper Advertisement and Planning Authority Notice.

Attachment Nº B.9 should contain a copy of the text of the site notice, a map (no larger than A3) showing its location on site (in accordance with Article 6 of the Regulations) and a

copy of the newspaper advertisement. A copy of the notice given to the Planning Authority should also be included.

Applicant Response:
Not Applicable.

B.10 Seveso II Regulations

State whether the activity is an establishment to which the EC (Control of Major Accident Hazards involving Dangerous Substances) Regulations (S.I. No. 74 of 2006) apply.

☐ Yes ☒ No

Seveso III Regulations (COMAH) does not apply to this site.

If yes, outline how the process comes under these regulations.

Supporting information should be included in **Attachment Nº B.10**.

B.11 Mercury Regulation

State whether the activity is one to which the following apply:

- European Communities Mercury (Export Ban and Safe Storage) Regulations (S.I. No. 27 of 2012),

- Regulation (EC) No 1102/2008 of the European Parliament and of the Council of 22 October 2008 on the banning of exports of metallic mercury and certain mercury compounds and mixtures and the safe storage of metallic mercury.

☐ Yes ☒ No

If yes, outline in **Attachment Nº B.11** how the activity comes under these Regulations.

B.12 Regulations Controlling Fluorinated Greenhouse Gases and Ozone Depleting Substances

State whether the installation is one to which the following apply:

– Operator of equipment and systems containing ozone depleting substances, in accordance with Regulation (EC) No. 1005/2009 on substances that deplete the ozone layer.

☐ Yes ☒ No

– Operator of equipment and systems containing fluorinated greenhouse gases, in accordance with Regulation (EC) No. 842/2006 on certain fluorinated greenhouse gases.

☒ Yes ☐ No

If yes, outline in **Attachment Nº B.12** how the activity comes under these regulations.

Applicant Response:
The following F-gases are used at the PDM facility R407c and R410a. These F-gases are used in 2 Air Conditioning Units associated with the on-site office and yard canteen. The amount of R407c in air conditioning unit No. 1 in the on-site office is 2.600 kg and the amount of R410a in air conditioning unit No. 2 in the yard canteen is 1.000 kg The these amounts are <5 t CO2 eq. Therefore there are no leak check requirements as per the F-gas Regulations (EU No. 517/2014).

More information and guidance is available on the EPA website:

http://www.epa.ie/air/airenforcement/ozone/guidanceanddownloads/

PDM were also asked to review the EU Regulation No. 528/2012 'concerning the making available on the market and use of biocidal products' ("Biocidal Regulations").

In the EU, the trade and use of wood preserving biocides is authorised under EU Regulation No. 528/2012 'concerning the making available on the market and use of biocidal products' ("Biocidal Regulations"). Creosote was granted EU approval under the Biocidal Regulations on 1st May 2013, for an initial period of 5 years until which time it will be resubmitted for approval or the use of creosote is no longer permitted.

B.13 Review of a licence

State the grounds on which an application for a review of a licence is being made and give the reference number to the relevant licence in the register.

Provide, where appropriate, a copy of the Office of Environmental Enforcement (OEE) correspondence that indicates that the reason for the review cannot be accommodated within the scope of the existing licence.

Include results of emission monitoring and other data, that enables a comparison of the operation of the installation with the best available techniques described in the applicable BAT conclusions and with the emission levels associated with the best available techniques in accordance with Section 86A(9) of the Act of 1992 as amended.

Where the OEE has agreed any variations or adjustments to the conditions or schedules of the existing licence, the licensee must provide details of these agreed variations and adjustments to the existing licence conditions. An updated, scaled drawing of the site layout (no larger than A3) providing visual information on such adjustments or variations where appropriate should be included.

In the case of once-off assessments/ reports required under conditions/ schedules of the existing licence the licensee must provide details of those assessments/ reports that have been completed and agreed with the OEE or as otherwise agreed.

Attachment Nº B.13 shall include the schedule of variations and/or adjustments together with the updated drawing.

Condition/ Schedule No.	Existing Condition	OEE Agreement Reference	Description

Supporting information should be included in **Attachment Nº B.13**

Applicant Response:

PDM has operated under an Industrial Pollution Control Licence (Reg. No. P0325-01), as issued by the Environmental Protection Agency (EPA), since 1998. A review of this licence was initiated by the EPA in 2011 for the purpose of fulfilling the requirements of the EC Environmental Objectives (Surface Waters) Regulations, 2009. PDM prepared and submitted a licence review application pack to the EPA in 2012. The rules surrounding this review process changed due to the transposition into Irish national law on 23rd April 2013 of the European Union (Industrial Emissions) Regulations 2013 (S.I. No. 138 of 2013).

The EPA informed PDM in a notice issued on 12th November 2014 that their licence review application was subject to the EPA (Industrial Emission) (Licensing) Regulations 2013. The notice required PDM to furnish such information as is necessary for the application to comply with Regulation 13(2)(a) of the Regulations and in particular to provide information as set out in the schedule attached to the notice. PDM submitted this information to the EPA on 1st May 2015. The EPA subsequently requested further information pursuant to Section 90 of the EPA Acts is required in order to progress the licence review. By completing relevant sections of this application form PDM are responding to the additional information request.

Attachment B.13 contains a review of Industrial Pollution Control Licence (Reg. No. P0325-01) conditions and outlines which are still relevant to the current site activities.

SECTION C: MANAGEMENT OF THE INSTALLATION

C.1 Site Management & Control

Details should be provided on the management structures for the activity. Organisational charts and all relevant environmental management policy statements, including provisions for on-going assessment of environmental performance, are required.

C.2 Environmental Management System (EMS)

Indicate whether an Environmental Management System has been developed for the installation. If yes, specify which standard and include a copy of the accreditation certificate.

C.3 Hours of Operation

Provide details of the hours of operation for the installation, including:
(a) Proposed hours of operation.
(b) Proposed hours of construction and development works and timeframes.
(c) For waste activities, the proposed hours of waste acceptance.
(d) Any other relevant hours of operation expected.

C.4 Fit and Proper Person

The EPA Act in Section 83(5)(xi) specifies that the Agency shall not grant a licence unless it is satisfied that the applicant or licensee or transferee as the case may be is a fit and proper person. Section 84(4) of the EPA Act specifies the information required to enable a determination to be made by the Agency.

- Indicate whether the applicant or other relevant person has been convicted under the Environmental Protection Agency Act 1992, as amended, the Waste Management Act 1996, as amended, the Local Government (Water Pollution) Acts 1997 and 1990, the Air Pollution Act 1987 and the Air Pollution Act 1987 (Environmental Specifications for Petrol and Diesel Fuels)(Amendment) Regulations 2004.
- Provide details of the applicant's technical knowledge and/or qualifications, along with that of other relevant employees.
- Provide information to show that the person is likely to be in a position to meet any financial commitments or liabilities that may have been or will be entered into or incurred in carrying on the activity to which the application relates or in consequence of ceasing to carry out that activity.

This information should form **Attachment Nº C**.
Applicant Response:
Please refer to Attachment C for information on this section.

SECTION D: INFRASTRUCTURE & OPERATION

D.1. Operational Information Requirements

Describe the plant, methods, processes, ancillary processes, abatement, recovery and treatment systems, and operating procedures for the activity, to include a copy of such plans, drawings or maps, (site plans and location maps, process flow diagrams), and such

other particulars, reports and supporting documentation as are necessary to describe all aspects of the activity. Maps and drawings must be no larger than A3 size.

A development and operational history of the site should be included here.

Attachment Nº D should contain a list of all unit operations (processes) to be carried out, including flow diagrams of each with any relevant additional information.
Applicant Response:
Please refer to Attachment D for information on this section.

D.2 Additional requirements for waste Activities (not covered above or elsewhere) (All Class 11 of the First Schedule of the EPA Act 1992, as amended)
Applicant Response:
Not Applicable.

This section D.2 of the application form should be completed only by applicants applying for classes 11.1, 11.2, 11.3, 11.4, 11.5, 11.6 and 11.7 (i.e. waste activities) of the First Schedule to the EPA Act 1992, as amended.

D.2.1 Wastes to be accepted

State what wastes will be accepted at the installation for recovery or disposal. Complete table Table D.2(i) and include in **Attachment No. D.2** of the application. The following general guidelines may assist in containing the size of Table D.2(i) where there is a long list of EWC codes proposed.

- For any individual waste stream, described by EWC code or main waste description (e.g. municipal solid waste, mixed recyclables, C&D waste), comprising more than 5% of total intake, complete a single row in table D.2(i).
- For every hazardous waste stream, describe by EWC code, complete a single row in table D.2(i).
- Other waste streams, where the list of waste is long, may be aggregated, according to a waste category, with each relevant EWC code provided.

An EWC code should be provided for every waste proposed for acceptance at the installation.

State whether any wastes to be accepted are classified as animal by-products in accordance with Regulation 1069/2009 and identify the relevant wastes.

The maximum annual tonnage of waste to be handled at the site should be indicated and the year to which the quantity relates indicated.

Maximum Annual Tonnage (tonnes)	
Year	

It should be noted that an applicant may be issued with a licence which restricts the type and quantity of wastes which may be accepted.

D.2.2 Waste Storage and Closure Costs

State the maximum amount of waste that will be held or stored at the installation at any one time. This should include waste in:

- reception, inspection and quarantine areas,
- storage pending treatment,
- storage after treatment, and

- vessels, chambers or tanks during treatment or processing.

State the cost of disposing of waste (including treated waste) held, in storage or in process at the installation. Do not provide the recovery/recycling cost and do not assume that the waste will have a positive monetary value (it may have degraded in the period before removal from the closed installation).

Complete the following table (consistently using either tonnes or cubic metres as your unit of measurement for all entries):

Location of waste	**Tonnes**	**Cubic metres**	**Unit cost (per tonne or m^3) for** - **removal AND** - **disposal in case of sudden closure**	**Disposal route and/or technique**	**Notes, rationale, clarifications**
Holding areas					
Quarantine areas					
Inspection areas					
Storage areas (untreated waste)					
Storage areas (treated waste)					
Treatment chambers, vessels and tanks					
Other (add rows as necessary)					
Total					

* add rows to the table as necessary

D.2.3 Waste Acceptance Procedures

Provide a copy of the waste acceptance procedures employed or to be employed. Describe procedures for checking waste loads as they arrive at the installation. Describe procedures to be implemented in the event of a load of waste arriving at the installation that does not conform to waste acceptance procedures. The location of a quarantine area for handling suspect or non-compliant loads should be described and illustrated on a suitable site drawing.

For landfills and relevant incineration activities, describe how the requirements of *Municipal Solid Waste – Pre-treatment and Residuals Management: An EPA Technical Guidance Document* (EPA, 2009) will be implemented.

For landfills, the applicant should ensure that the requirements of Council Decision 2003/33/EC are addressed in waste acceptance procedures.

D.2.4 Waste and material outputs from waste activities

Describe the waste and material outputs from the installation resulting from the treatment of waste. If no treatment is carried out on the waste, the waste outputs will be the same as the inputs.

If waste is treated, describe the nature and quantity of the treated waste and its onward fate/destination, and in particular whether it is sent for onward recovery or disposal operations.

If waste is treated and a material is produced that is no longer a waste, provide the rationale for such classification. The requirements of article 28 of the European Communities (Waste Directive) Regulations 2011 should be addressed in any such rationale.

D.2.5 Principles of self-sufficiency and proximity

Describe how the proposed waste activities will contribute to the State's obligation to establish an integrated and adequate network of waste disposal installations and of installations for the recovery of mixed municipal waste collected from private households, including where such collection also covers such waste from other producers. Describe how the proposed waste activities will enable the State to move towards being more self-sufficient in the management of these wastes.

Supporting information should form **Attachment Nº D.**

D.3 Additional Requirements for landfills (not covered above or elsewhere) (Class 11.5 of the First Schedule of the EPA Act 1992, as amended)

Applicant Response:
Not Applicable.

This section D.3 of the application form should be completed only by applicants applying for classes 11.5 and 11.7 (landfills and underground storage facilities) of the First Schedule to the EPA Act 1992, as amended. This includes landfills that are associated with other industrial activities.

All landfills must comply with the requirements of the Landfill Directive (1999/31/EC). It is the applicant's responsibility to ensure that all relevant requirements of the Directive are addressed and information provided in **Attachment D.3** of the application.

For wastes to be disposed of by landfilling on-site at industrial installations, full details of the disposal site should be submitted (to include *inter alia,* site selection procedures, location maps, (no larger than A3) geology, hydrogeology, operational plan, containment, gas and leachate management, post-closure care).

Applicants should have regard to the requirements of the Landfill Manuals published by the Environmental Protection Agency.

D.3.1 Class of landfill

Complete Table D.3(i) and include in Attachment D.3 of the application. State which of the categories in Table D.3(i) is relevant to the current application.

Table D.3(i) Class of landfill

(a) landfill for hazardous waste	☐
(b) landfill for non-hazardous waste	☐
(c) landfill for inert waste	☐

D.3.2 Scale of waste deposition

Complete Table D.3(ii) and include in Attachment D.3 of the application. State the total quantity of waste for which authorisation is sought to be deposited in the landfill.

Table D.3(ii) Scale of waste deposition at the landfill

Total quantity of waste to be deposited at the landfill	Tonnes*	Void in cubic metres (m^3)
(a) Waste deposited to date		
(b) Total waste to be deposited over the lifetime of the development (including deposited to date)		

* Explain any conversion/density factors used in calculating the tonnage from the void, or vice versa.

D.3.3 Liner System

Complete Table D.3(iii) and include in Attachment D.3 of the application. Table D.3(iii) provides a checklist of items that should be described in greater detail in Attachment D.3.

D.3.4 Leachate Management

Complete Table D.3(iv) and include in Attachment D.3 of the application. Table D.3(iv) provides a checklist of items that should be described in greater detail in Attachment D.3. Provide a list and illustrate on a site drawing the location of all leachate monitoring, extraction and lead detection boreholes or installations.

D.3.5 Landfill Gas Management

Complete Tables D.3(v)a to D.3(v)d and include in Attachment D.3 of the application. The tables provide a checklist of items that should be described in greater detail in Attachment D.3. Provide an estimate of the volume of landfill gas which will be produced by the waste for the next 20 years.

D.3.6 Capping System

Complete Table D.3(vi) and include in Attachment D.3 of the application. Table D.3(vi) provides a checklist of items that should be described in greater detail in Attachment D.3.

D.3.7 Meteorological Data

State in Attachment D.3 what arrangements are proposed for the measurement of meteorological data at the landfill installation, or for the collation of relevant meteorological information from nearby facilities.

D.3.8 Cost of the landfill of waste

Describe in Attachment D.3 how all of the costs involved in the setting up and operation of the landfill, including the cost of financial provision, and the estimated cost of the closure and aftercare of the site for a period of at least 30 years will be covered by the gate fee to be charged for the disposal of waste.

SECTION E: EMISSIONS

E.1. Emissions to Atmosphere

E.1.A. Details of all point emissions to atmosphere

Details of all point emissions to atmosphere should be supplied. Complete Table E.1(i) for Boiler Emissions and Table E.1(ii) and E.1(iii) for all other main emission points. Complete Table E.1(iv) for minor emission points and provide results of emission monitoring where available.

A summary list of the emission points, together with maps and/or drawings (no larger than A3), and supporting documentation should be included as **Attachment Nº E.1**. Plans of emission elevations, relevant roof heights, etc., should also be included, as should detailed descriptions and schematics of all abatement systems.

The applicant should address in particular any emission point where the substances listed in the Schedule of EPA (Industrial Emissions)(Licensing) Regulations 2013, S.I. No. 137 of 2013, are emitted.

For emissions outside the BAT guidance limit or BAT Conclusions levels, a full evaluation of the existing abatement/treatment system must be provided. A planned programme of improvement towards meeting upgraded standards is required. This should highlight specific goals and a time scale, together with options for modification, upgrading or replacement as required to bring the emissions within the limits as set out in the BAT guidance note(s). These notes can be found on the EPA website at www.epa.ie.

Applicant Response:
The sources of emissions to atmosphere from the PDM site are the combustion emissions from the on-site boiler, minor emissions from A3-1, A3-2 and A3-3 and fugitive emission from operations around the facility.

The PDM boiler is a direct fired open bottom steam boiler which is predominantly fed by wood chip but which can also use diesel oil. The boiler capacity is 1.3 MW.

An air emissions monitoring event took place at the PDM facility on the 01st December 2015. The results of this monitoring event are provided in Attachment E.1. The purpose of this monitoring was to obtain concentration data for target contaminants of concern (COC) and, where feasible, emissions flow rate data, to facilitate the completion of Table E.1 (iv) for minor emission points. Three minor emission points were identified as follows:

- **A3-1 – Horizontal condensate receiving tank associated with Plants 1 and 2**
- **A3-2 – Vertical storage tank associated with Plants 1 and 2**
- **A3-3 – Vertical external vapour receiving tank associated with Plants 3 and 4**

The results of the monitoring indicate that these emissions are short term episodic emissions which are minor in nature.

As PDM understand it theirs is the only facility in the Republic of Ireland which uses Creosote for the purposes of wood impregnation as described

in the Industrial Emissions Directive (IED). In order to assess the practical application of the IED PDM has looked to the nearest jurisdiction where the IED has also been transposed for this type of operation, that being the UK. In the UK DEFRA published a Guidance Note in September 2013 entitled *Sector Guidance Note SG11 (draft) Guidance for Wood Products Preservation with Chemical*. The main conclusion of this guidance note with respect to VOC monitoring is that:

***There are no monitoring requirements for releases to air from this sector*. PDM understand that Permits issued in the UK for the timber treatment sector contain no designated atmospheric main emission points.**

Details of substances listed in the Schedule of EPA (Industrial Emissions) (Licensing) Regulations 2013 S.I. No. 137 of 2013 are outlined in Section L below.

E.1.B. Fugitive and Potential emissions

Give summary details of fugitive and potential emissions in Table E.1(v).

In relation to activities listed in the Schedule of Council Directive 2010/75/EU (on Industrial Emissions) S.I. No.565 of 2012 on installations and activities using organic solvents;

- specify the relevant category of activity in the Schedule
- specify how the requirements in relation to fugitive emissions will be met.

For waste activities, dust and odour emissions should be described under the headings in this section.

Full details and any supporting information should form **Attachment E.1.**

Applicant Response:

Fugitive Emission Studies carried out in 2002, 2005, 2008 and 2012 which were submitted to the EPA show that the sites fugitive emission limit value is well below 45% of solvent input as stipulated in the Industrials Emission Directive (IED). The 2012 report indicated fugitive emissions of 0.008%.

E.2 Emissions to Surface Waters

Tables E.2(i) and E.2(ii) should be completed and provide results of emission monitoring where available.

A summary list of the emission points, together with maps/drawings (no larger than A3) and supporting documentation should be included as **Attachment Nº E.2**.

The applicant should address in particular any emission point where the substances listed in the Schedule of EPA (Industrial Emissions) (Licensing) Regulations 2013 S.I. No. 137 of 2013, are emitted.

Details of all substances listed in the European Communities Environmental Objectives (Surface Waters) Regulations 2009, contained in any emission must be presented. All surface water runoff and storm water drains discharging to surface water bodies must be included. A National Grid Reference (12 digit, 6E, 6N) must be given for all discharge points the identity and type of receiving water (river, ditch, estuary, lake, etc.) must be stated.

Where relevant, describe proposed measures or controls that have been identified in a pollution reduction plan for the river basin district prepared in accordance with Part V of the EC Environmental Objectives (Surface Waters) Regulations 2009 for the reduction of pollution by priority substances or the ceasing or phasing out of emissions, discharges and losses of priority hazardous substances.

For emissions outside the BAT guidance limit or BAT Conclusions levels, a full evaluation of the existing abatement/treatment system must be provided. A planned programme of improvement towards meeting upgraded standards is required. This should highlight specific goals and a time scale, together with options for modification, upgrading or replacement as required to bring the emissions within the limits as set out in the BAT guidance note(s).

Applicant Response:
There is one emission to surface water from the site which is Emission Point E. Attachment D contains details of this emission point. Details of substances listed in the Schedule of EPA (Industrial Emissions) (Licensing) Regulations 2013 S.I. No. 137 of 2013 are outlined in Section L below. Attached reports in Attachment E.2 entitled *Surface Water Impact Assessment (47092796)* and *PDM Q4 Surface Water Monitoring 2015 (47092976)* address specific EPA requests for surface waters.

Please refer to tables E.2(i) and E.2(ii) for Emission Point E data.

E.3 Emissions to Sewer

Applicant Response:
Not Applicable.

Tables E.3(i) and E.3(ii) should be completed and provide results of emission monitoring where available.

A summary list of the emission points, together with maps and/or drawings (no larger than A3) and supporting documentation should be included as **Attachment Nº E.3**. Details of all List I and List II substances listed in the Annex to EU Directive 2006/11/EC (as amended), contained in any emission must be presented. All relevant information on the receiving sewer**,** including any effluent treatment/abatement systems, not already described, with schematics as appropriate should also be included in **Attachment Nº E.3**.

For emissions outside BAT guidance limit (where given), a full evaluation of the existing abatement/treatment system must be provided. A planned programme of improvement towards meeting upgraded standards is required. This should highlight specific goals and a time scale, together with options for modification, upgrading or replacement as required to bring the emissions within any limits set out in the BAT guidance note(s).

E.4 Emissions to Ground

Applicant Response:
Not Applicable.

Describe in **Attachment Nº E.4** the existing or proposed arrangements necessary to give effect to Council Directive 2006/118/EC on the protection of groundwater against pollution and deterioration and Council Directive 80/68/EEC on the protection of groundwater against pollution by certain dangerous substances.

The applicant should supply details of the nature and quality of any substance (agricultural and non-agricultural waste) to be landspread (slurry, effluent, sludges etc)

as well as the proposed application rates, periods of application and mode of application (e.g., pipe discharge, tanker) having regard to the European Communities (Good Agricultural Practice for Protection of Waters) Regulations 2010, S.I. No 610 of 2010.

For emissions outside the BAT guidance limit, a full evaluation of the existing abatement/treatment system must be provided. A planned programme of improvement towards meeting upgraded standards is required. This should highlight specific goals and a time scale, together with options for modification, upgrading or replacement as required to bring the emissions within the limits as set out in the BAT guidance note(s).

E.5 Noise Emissions

Applicant Response:

On the 14/02/03 PDM received a letter from the EPA stating that EPA were suspending the annual noise survey requirements. Therefore no noise data is being submitted.

Give particulars of the source, location, nature, level, and the period or periods during which the noise emissions are made or are to be made.

Table E.5 (i) should be completed, as relevant, for each source.

Supporting information should form **Attachment Nº E.5**.

The Agency's *Guidance Note for Noise: Licence Applications, Surveys and Assessments in Relation to Scheduled Activities (NG4)* (2012) should be consulted (available on www.epa.ie) where a noise impact assessment is required. A planned programme of improvement towards meeting upgraded standards is required and should have due regard to the noise control and mitigation measures outlined in section 8 and appendix (IX) of the *Guidance Note.* This programme should highlight specific goals and a time scale, together with options for modification, upgrading or replacement, as required, to bring the emissions within the limits as set out in the *Guidance Note*.

E.6 Tabular Data on Emission Points

Applicants should submit the following information for each emission point:

Point Code	Point Type	Easting	Northing	Verified	Emission
Provide label ID's assigned in section E	A=Atmospheric SW=Surface Water SE = Sewer GW=Groundwater N = Noise SL=Soil/Ground WS=Waste	6E-digit GPS Irish National Grid Reference	6N-digit GPS Irish National Grid Reference	Y = GPS used N = GPS not used	e.g. SO_2, HCl, NH_3

An individual record (i.e. row) is required for each emission point. Acceptable file formats include Excel, Access or other upon agreement with the Agency. A standard Excel template can be downloaded from the EPA website at www.epa.ie. This data should be submitted to the Agency on a separate CD-Rom containing sections B.2, E.6 and F.3.

Applicant Response:

Tabular Data as required is provided in Attachment B.2.

SECTION F: CONTROL & MONITORING

Describe the proposed technology and other techniques for preventing or, where this is not possible, reducing emissions from the installation.

Describe the measures to be taken under abnormal operating conditions, including start-up, shutdown, leaks, malfunctions, breakdowns and momentary stoppages.

Describe the measures to be taken to prevent or eliminate emissions and/or avoid pollution.

Describe what appropriate measures are to be taken where an Environmental Quality Standard requires stricter conditions than would be determined with reference to BAT

F.1: Treatment, Abatement and Control Systems

Details of treatment/abatement systems (air and effluent emissions) should be included, together with schematics as appropriate.

For each Emission Point identified complete Table F.1(i) and include detailed descriptions and schematics of all abatement systems.

Attachment Nº F.1 should contain any supporting information.

Applicant Response:

Details of the WwTP including a schematic are included in Attachment D. Furthermore Attachment 1.8 comprises a BAT review and includes further information on the WwTP.

Table F.1(i) has been completed for Emission Point E.

F.2: Emissions Monitoring and Sampling Points

Identify monitoring and sampling points and outline proposals for monitoring **emissions**. Table F.2(i) should be completed (where relevant) for air emissions, emissions to surface waters, emissions to sewer, emissions to ground and waste emissions. Where **ambient** environment monitoring is carried out or proposed, Table F.2 (ii) should be completed as relevant for each environmental medium.

Include details of monitoring/sampling locations and methods.

Attachment Nº F.2 should contain any supporting information.

Applicant Response:

Table F.2.(i) has been completed for Emission Point E. Table F.2(i) has also been completed for surface water Monitoring Points A and B.
Groundwater Monitoring is discussed in the attached Hydrogeological Review Report (47092882) in Attachment I.5.

All locations are available in the drawings in Attachment A.

F.3: Tabular Data on Monitoring and Sampling Points

Applicants should submit the following information for each monitoring and sampling point:

Point Code	Point Type	Easting	Northing	Verified	Pollutant
Provide label ID's assigned in section F3	M=Monitoring S=Sampling	6E-digit GPS Irish National Grid Reference	6N-digit GPS Irish National Grid Reference	Y = GPS used N = GPS not used	e.g. SO_2, HCl, NH_3

An individual record (i.e. row) is required for each monitoring and sampling point. Acceptable file formats include Excel, Access or other upon agreement with the Agency. A standard Excel template can be downloaded from the EPA website at www.epa.ie. This data should be submitted to the Agency on a separate CD-Rom containing sections B.2, E.6 and F.3.

Point source monitoring/sampling refers to monitoring from specific emission points (e.g. from a boiler stack or outlet from a wastewater treatment plant). Examples of ambient monitoring includes monitoring of ambient air quality (e.g. boundary or off-site) or monitoring of river quality upstream/downstream of an effluent discharge.

Applicant Response:
Attachment B.2.contains the relevant information
Tabular Data for Emission Point E, Monitoring Points A and B, Monitoring Points A1-1, A3-1, A3-2 and A3-3 and groundwater wells are provided below:

Point Code	Point Type	Easting	Northing	Verified	Pollutant
Emission Point E	S	297573	222442	No	Refer to TABLE E.2(ii)
Monitoring Point A	M	297970	222946	No	Refer to TABLE F.2(i)
Monitoring Point B	M	297817	222911	No	Refer to TABLE F.2(i)
Monitoring Point A1-1	M	297758	222500	No	Not Monitored
Monitoring Point A3-1	M	297748	222497	No	TABLE E.1(iv)
Monitoring Point A3-2	M	297747	222482	No	TABLE E.1(iv)
Monitoring Point A3-3	M	297816	222493	No	TABLE E.1(iv)
Groundwater Well MW01	M	293060	222820	No	Speciated PAHs (16) TPH BTEX Compounds Speciated Phenols
Groundwater Well MW02	M	297790	222600	No	
Groundwater Well MW03	M	297866	222460	No	
Groundwater Well MW04	M	297660	222380	No	
Groundwater Well MW06	M	297873	222815	No	
Groundwater Well MW018	M	297827	222615	No	
Groundwater Well MW05	M	297728	222479	No	
Groundwater	M	297744	222527	No	

Point Code	Point Type	Easting	Northing	Verified	Pollutant
Well MW08					
Groundwater Well MW09	M	297725	222505	No	
Groundwater Well MW10	M	297710	222484	No	
Groundwater Well MW11	M	297753	222538	No	
Groundwater Well MW13s	M	297696	222443	No	
Groundwater Well MW13d	M	297696	222443	No	
Groundwater Well MW15s	M	297801	222441	No	
Groundwater Well MW15d	M	297801	222441	No	
Groundwater Well MW16s	M	297770	222487	No	
Groundwater Well MW16d	M	297770	222487	No	
Groundwater Well MW17s	M	297799	222568	No	
Groundwater Well MW17d	M	297799	222568	No	
Groundwater Well MW19s	M	297574	222448	No	
Groundwater Well MW19d	M	297574	222447	No	
Groundwater Well MW20s	M	297638	222402	No	
Groundwater Well MW20d	M	297638	222402	No	
Groundwater Well MW21	M	297716	222462	No	
Groundwater Well MW23	M	297664	222391	No	
Groundwater Well MW28	M	297630	222433	No	
Groundwater Well MW30	M	297580	222378	No	
Groundwater Well MW31	M	297569	222411	No	
Groundwater Well ESB_BH10	M	297723	222530	No	
Groundwater Well ESB_BH11	M	297694	222499	No	
Groundwater Well ESB_BH12	M	297651	222516	No	
Groundwater Well ESB_BH13	M	297691	222551	No	

SECTION G: RESOURCE USE AND ENERGY EFFICIENCY

G.1 Give a list of the raw and ancillary materials, substances, preparations, fuels and energy which will be produced by or utilised in the activity.

The list(s) given should be very comprehensive, all materials used, fuels, intermediates, laboratory chemicals and product should be included.

Particular attention should be paid to materials and product consisting of, or containing, dangerous substances as described in the EU (Classification, Packaging, Labelling and Notification of Dangerous Substances) Regulations 2003 [SI 116/2003] as amended and Regulation (EC) No. 1272/2008. The list must classify these materials in accordance with both of these Regulations, and must specify the designated Risk Phrases (R-Phrases) and Hazard Statements. Hazard statements for each substance should be in accordance with Article 21 of the EC Regulation 1272/2008.

The list must identify any **Substances of Very High Concern (SVHC)** listed in Annex XIV of the REACH Regulations (Regulation (EC) No 1907/2006) as amended and indicate whether the use has been authorised or is exempted in accordance with the Regulation. In the case(s) of exempted use(s) the list must state the basis for each intended exempted use concerned.

Tables G.1 (i) and G.1(ii) must be completed. Copy as required.

Supporting information should be given in **Attachment Nº G.**

Applicant Response:

Please refer to Tables G.1(i) and G.1(ii) for information on this section.

For waste activities (class 11 of the First Schedule to the EPA Act 1992, as amended), do not include here the list of wastes to be accepted for recovery and disposal. This should be described in section D.2 of the application.

Applicant Response:
Not Applicable.

G.2 Energy Efficiency

A description of the energy used in or generated by the activity must be provided in **Attachment Nº G**. Outline the measures taken to ensure that energy is used efficiently having regard to the relevant decision on BAT conclusions and/or BAT guidance and where appropriate, an energy audit with reference to the EPA Guidance document on Energy Audits should be carried out.

Applicant Response:
Please refer to Attachment G for relevant information. Also Attachment I.8 contains a review of BREF Document on Best Available Techniques on Energy Efficiency 2008

SECTION H: MATERIALS HANDLING

H.1 Raw Materials, Intermediates and Product Handling
All materials will have been listed in Tables G.1 (i) and G.(ii) of **Section G**.

Details of the storage conditions, location within the site, segregation system used and transport systems within the site should be outlined here in **Attachment Nº H.1**. In

addition, information relating to the integrity, impermeability and recent testing of pipes, tanks and bund areas should be outlined.

Applicant Response:

Attachment A contains drawing number: 47092933/IED/00002 which highlights storage locations for materials used on site.

H.2 Waste Prevention

Describe in **Attachment Nº H.2** the arrangements for the prevention of waste in accordance with Part III of the Waste Management Act 1996, as amended. Describe what measures will be taken to prevent the generation of waste to the extent possible. State whether the installation has participated in any projects under the National Waste Prevention Programme.

Applicant Response:

Attachment H contains details on waste prevention for the site.

H.3 Describe the arrangements for the recovery or disposal of solid and liquid wastes generated at the installation.

Applicants should ensure that information is provided for each waste generated at the installation under each of the following headings:

(a) Description & nature of waste
(b) Source
(c) European Waste Catalogue Code (Commission Decision 2000/532/EC, as amended)
(d) Animal by-product category per EC Reg. 1069/2009 where relevant
(e) Amount in tonnes per month
(f) Location and method of disposal or recovery (on-site or off-site)

The following information should also be provided where appropriate:
(g) Analysis of the waste (include test methods and Q.C.)
(h) Its location of storage and the manner by which the integrity/impermeability of storage areas is maintained
(i) Period or periods of generation of the waste

Where any waste would be classified as Hazardous Waste as defined in the Waste Management Act, 1996, as amended, this should be made clear in the information provided.

The Table H.3(i) should be completed with a single row for each waste generated at the installation. The table should be provided as part of **Attachment Nº H.3.**

For waste activities (class 11 of the First Schedule to the EPA Act 1992, as amended), do not repeat the information already sought in section D.2.3 of the application form and presented in Attachment D.2 of the application.

Applicant Response:

Table H.3.(i) has been completed. Waste arrangements are described in detail in Attachment H

H.4 Waste hierarchy

Where waste is generated by the installation, describe in **Attachment Nº H.4** how it will be in order of priority in accordance with section 21A of the Waste Management Act 1996, as amended, prepared for re-use, recycling, recovery or where that is not technically or economically possible, disposed of in a manner which will prevent or minimise any impact on the environment.

Section 29(2A) of the Waste Management Act 1996, as amended states that it shall be the duty of waste producers and holders to ensure that waste undergoes recovery operations in accordance with sections 21A and 32(1) of the Acts.

Describe how the waste hierarchy specified in article 21A of the Waste Management Act 1996, as amended, will be implemented at the installation. Describe how the waste generated at the installation will be managed in accordance with the waste hierarchy.

For waste whose generation cannot be prevented, describe what measures will be in place to ensure that waste is collected separately (if technically, environmentally and economically practicable) and will not be mixed with other waste or other material with different properties.

Applicant Response:

Details on how waste is treated with respect to the waste hierarchy principal is provided in Attachment H

H.5 Waste recycling and recovery

Describe how the activities at the installation contribute to national targets for the recycling and recovery of waste, not least:

- the preparing for reuse and the recycling of paper, metal, plastic and glass; and
- the preparing for reuse, recycling and other material recovery, including backfilling operations using waste to substitute other materials, of non-hazardous construction and demolition waste excluding naturally occurring material defined in category 17 05 04 in the list of waste.

State whether and describe how food waste will be managed in accordance with the requirements, as may be relevant, of the Waste Management (Food Waste) Regulations 2009.

Supporting information should form **Attachment Nº H.5**.

Applicant Response:

Details on how waste is recycled and recovered is provided in Attachment H

SECTION I: EXISTING ENVIRONMENT & IMPACT OF THE ACTIVITY

Describe the conditions of the site of the installation.

Provide an assessment of the effects of any emissions on the environment, including on an environmental medium other than that into which the emissions are made.

Describe, where appropriate, measures for minimising pollution over long distances or in the territory of other states.

I.1.Assessment of atmospheric emissions

Describe the existing environment in terms of air quality with particular reference to ambient air quality standards.

Provide a statement as to whether or not emissions of main polluting substances (as defined in the Schedule of EPA (Industrial Emissions)(Licensing) Regulations 2013, S.I. No. 137 of 2013) to the atmosphere are likely to impair the environment.

Give summary details and an assessment of the impacts of any existing or proposed emissions on the environment, including environmental media other than those into which the emissions are to be made.

Attachment N^{o} I.1 should also contain full details of any dispersion modelling of atmospheric emissions from the activity, where required. When carrying out dispersion modelling, regard should be had to the EPA "Air Dispersion Modelling from Industrial installations Guidance Note (AG4)" or similar guidelines from a recognised authority.

Describe, where appropriate, measures for minimising pollution over long distances or in the territory of other states.

Applicant Response:

The sources of emissions to atmosphere, from the PDM site are the combustion emissions from the on-site boiler, minor emissions from A3-1, A3-2 and A3-3 and fugitive emission from operations around the facility.

The PDM boiler is a direct fired open bottom steam boiler which is predominantly fed by wood chip but which can also use diesel oil. The boiler capacity is 1.3 MW.

An air emissions monitoring event took place at the PDM facility on the 01st December 2015. The results of this monitoring event are provided in Attachment E.1. The purpose of this monitoring was to obtain concentration data for target contaminants of concern (COC) and, where feasible, emissions flow rate data, to facilitate the completion of Table E.1 (iv) for minor emission points. Three minor emission points were identified as follows:

- **A3-1 – Horizontal condensate receiving tank associated with Plants 1 and 2**
- **A3-2 – Vertical storage tank associated with Plants 1 and 2**
- **A3-3 – Vertical external vapour receiving tank associated with Plants 3 and 4**

The results of the monitoring indicate that these emissions are short term episodic emissions which are minor in nature. Under the terms of the current IPC Licence for the site and current site conditions there is no abatement equipment required for air emissions.

Details of substances listed in the Schedule of EPA (Industrial Emissions) (Licensing) Regulations 2013 S.I. No. 137 of 2013 are outlined in Section L below.

I.2. Assessment of Impact on Receiving Surface Water

Describe the existing environment in terms of water quality with particular reference to environmental quality objectives and standards and any objectives and standards laid down for protected areas. Table I.2(i) should be completed.

Provide a statement whether or not emissions of main polluting substances (as defined in the Schedule of EPA (Licensing)(Amendment) Regulations 2004, S.I. No. 394 of 2004) to water are likely to impair the environment.

Indicate whether or not the activity complies with the requirements of the EC Environmental Objectives (Surface Waters) Regulations 2009, S.I. No. 272 of 2009.

If the discharge is to water body that is already achieving high status, or if the discharge is to waters draining to the surface water bodies identified under the First Schedule of the *EC Environmental Objectives (Freshwater Pearl Mussel) Regulations 2009*, compliance must be with the 95%ile **high** status limits.

Give summary details and an assessment of the impacts of any existing or proposed emissions on the environment, including environmental media other than those into which the emissions are to be made.

Full details of the assessment and any other relevant information on the receiving environment should be submitted as **Attachment Nº I.2.**

For emissions outside emission limit established according to the combined approach, a full evaluation of the existing abatement/treatment system must be provided. A planned programme of improvement towards meeting the upgraded standards is required. This should highlight specific goals and a time scale, together with options for modification, upgrading or replacement as required to bring the emissions within the limits established in accordance with the combined approach.

Applicant Response:

Reports in Attachment E.2 Surface Water Impact Assessment (47092796) and PDM Q4 Surface Water Monitoring 2015 (47092976) address specific EPA requests for surface waters.

I.3. Assessment of Impact of Sewage Discharge.

Give summary details and an assessment of the impacts of any existing or proposed emissions on the environment, including environmental media other than those into which the emissions are to be made.

With regard to Article 15 of the Industrial Emissions Directive (or Section 86A(8) of the EPA Act 1992, as amended), describe how the environment as a whole is provided an equivalent level of protection and will not lead to higher levels of pollution in the environment.

Full details of the assessment and any other supporting information should form **Attachment Nº I.3.**

Applicant Response:
Not Applicable

I.4 Assessment of Impact of Ground/Groundwater Emissions

Baseline Report

In the case of an activity that involves the use, production or release of relevant hazardous substances (as defined in section 3 of the EPA Act 1992 as amended), and having regard to the possibility of soil and groundwater contamination at the site of the installation, provide a baseline report in accordance with section 86B of the EPA Act 1992 as amended. Has the Agency indicated in pre-application discussions that a baseline report is required?

A baseline report shall contain the information necessary to determine the state of contamination of soil and groundwater at the time the report is drawn up in order that a quantified comparison may be made to the state of the site upon the permanent cessation of the industrial emissions directive activity.

Guidance in relation to baseline reports is available on the EPA website at www.epa.ie.

The Baseline Report should be included in **Attachment I.4** and clearly labelled as such.

Describe the existing groundwater quality. Tables I.4 (i) should be completed.

Give summary details and an assessment of the impacts of any existing or proposed emissions on the ground (aquifers, soils, sub-soils and rock environment), including any impact on environmental media other than those into which the emissions are to be made. This includes landspreading, land injection etc.

Land on which material may be landspread shall be identified on a suitable scaled map (1:10,560 and 1:50,000) and submitted as no greater than A3 size. All vulnerable (as a result of ground emissions) surface water bodies must be identified on these maps. Additional information should be included in **Attachment Nº I.4**.

Attachment Nº I.4 should also contain full details of any modelling carried out of the potential impact of emissions from the activity on groundwater.

Applicant Response:

A Baseline report was submitted to the EPA on 01st May 2015 and contains the information requested

Landspreading of Agricultural/Non Agricultural Wastes

Tables I.4(ii) and I.4.(iii) should be complete where applicable. Further information is available in the Application Guidance Document.

Applicant Response:
Not Applicable

I.5 Ground and/or Groundwater Contamination

Summary details of known ground and/or groundwater contamination, historical or current, on or under the site must be given.

Indicate whether or not compliance with the requirements of the EC Environmental Objectives (Groundwater) Regulations 2010, S.I. No. 9 of 2010 can be achieved.

Full details including all relevant investigative studies, assessments, or reports, monitoring results, location and design of monitoring installations, plans, drawings, documentation, including containment engineering, remedial works, and any other supporting information should be included in **Attachment Nº I.5**.

Applicant Response:
A Hydrogeological Assessment Report (47092882) addressing these requirements is attached to the application as Attachment I.5

I.6 Assessment of the Environmental Impact of On-site Waste Recovery and/or Disposal.

Describe the arrangements for any on-site recovery and disposal of waste generated by the activity.

Give details and an assessment of the impact of any existing or proposed on-site waste recovery or disposal activities on the environment, including environmental media other than those into which the emissions are to be made.

This information should form **Attachment Nº I.6.**
Applicant Response:
Not Applicable

I.7 Noise Impact

Give details and an assessment of the impacts of any existing or proposed noise emissions on the environment, including environmental media other than those into which the emissions are to be made.

Ambient noise measurements

Complete Table I.7 (i) in relation to the information required below:

(i) State the maximum Sound Pressure Levels which will be experienced at typical points on the boundary of the operation. (State sampling interval and duration)
(ii) State the maximum Sound Pressure Levels which will be experienced at typical noise sensitive locations, outside the boundary of the operation.
(iii) Give details of the background (or residual) noise levels experienced at the site in the absence of noise from this operation.

Prediction models, maps (no larger than A3), diagrams and supporting documents, including details of noise attenuation and noise proposed control measures to be employed, should form **Attachment Nº I.7.**

Applicant Response:
Not Applicable

I.8 Environmental Considerations, Main alternatives and BAT

I.8a Describe in outline the main alternatives to the proposed technology, techniques and measures which were studied having regard to the reference document on Economic and Cross-media Effects.

I.8b Identify in the table below all relevant decisions on BAT Conclusions (Commission Implementing Decision (CID)), BAT reference document(s) (BREFs) and EPA BAT guidance document(s) having regard to the activities and processes proposed or carried out at the installation.

These documents are available on the European IPPC bureau website at http://eippcb.jrc.ec.europa.eu/reference/ and the EPA website www.epa.ie.

Title of Document

Irish EPA Draft BAT Guidance Note (Sept 2011) on Best Available Techniques for the Treatment or Protection of Wood, Involving the Use of Preservatives
BREF Document on Best Available Techniques on Emissions from Storage, July 2006
BREF Document on Best Available Techniques on Energy Efficiency 2008
BREF Document on Best Available Techniques on Surface Treatment using Organic Solvents (August 2007)
BREF Document on Best Available Techniques on Common Waste Water and Waste Gas Treatment/Management Systems in the Chemical Sector (2003

1.8c In order to determine BAT for the installation, tabulate using table I.8(i) below, all of the BAT conclusions from the relevant decision on BAT Conclusions (CID) or where this has not been adopted by the Commission of the European Union, the conclusions on BAT from the relevant BAT reference documents (BREF). To assist you with this, some pre-populated template documents are available for download on the EPA website http://www.epa.ie/pubs/forms/lic/industrial%20emissions/

For each BAT, in Table I.8(i), state whether it is applicable to your installation and describe how each BAT applies or not to your installation and provide information on your compliance with the requirement.

It may be useful to first identify all the 'Not Applicable' BATs and provide your reasoning in the 'Applicability Assessment' box as to why you consider this particular BAT is not applicable at/to your entire installation having regard to the scope/ definitions, general considerations and the information on applicability. (You may need to make reference to relevant processes/activities or individual emission points to provide a comprehensive response).

For each applicable BAT, state the status; 'Yes', 'Will be' or 'No' as appropriate, the use of each of these terms is described below. Information on compliance in the 'Applicability Assessment' box should include, where applicable, the following:

(i) Identification of the relevant process/ activity or individual emission points that the BAT requirement applies to at your installation;
(ii) Where BAT is to use one or a combination of listed techniques, specify the technique(s) implemented/proposed at your installation to achieve the BAT;
(iii) In relation to emissions the emission level achieved at the installation under normal conditions as compared with the BAT associated Emission Levels (only applicable to decisions on BAT conclusions); and
(iv) A comment on how the requirements are being met or will be met, e.g., a description of the technology/operational controls/management proposed to meet the requirements.

Use of terms:

(a) 'Yes' – To be selected where the installation is currently compliant with this BAT requirement.

(b) 'Will be' – To be selected where a further technique is required to be installed to achieve compliance with the BAT requirement. In this case you must also specify the date by which the installation will comply with the BAT Conclusion requirement.

(c) 'No' – (only applicable to decisions on BAT Conclusions) To be selected where the achievement of emission level associated with BAT as described in a decision on BAT conclusions would lead to disproportionately higher costs compared to the environmental benefits due to –

(i) the geographical location or the local environmental conditions of the installation concerned, or

(ii) the technical characteristics of the installation concerned.

Note: By selecting 'No' to an applicable emission level associated with a BAT requirement you are required to provide a detailed assessment that includes the reason and justification, in accordance with the requirements of Section 86A(6) of the EPA Act 1992 as amended.

Please note the following:

I. Refer to the EPA BAT Guidance Note relevant to the sector for BAT associated emission levels in the circumstances where a relevant decision on BAT Conclusions has not been adopted by the European Commission i.e. no CID in place.

II. Where a decision on BAT conclusion or conclusion on BAT from a BAT reference document does not apply to activities/ processes or certain aspects of an installation, refer to the relevant EPA BAT Guidance Note(s) for the determination of BAT.

Applicant Response:

Attachment I.8 contains a BAT assessment as requested in correspondence from the EPA in December 2014 and June 2015.

I.8d Emerging Techniques

State whether you propose to test and use an 'emerging technique' in particular those identified in the BAT reference documents relevant to the activity:

☐ Yes ☐ No

If yes, describe your proposal and include in **Attachment N°. I.8d.**

I.8e Other relevant conclusions on BAT

Please note that other reference documents may be relevant such as:

(a) BREF on Common waste water and waste gas treatment/management systems in the Chemical Sector;
(b) BREF on Emissions from Storage;
(c) BREF on Energy Efficiency;
(d) BREF on Industrial Cooling Systems;

Other documents that may be relevant:

(a) REF on Economic and Cross-media Effects;
(b) REF on Monitoring of Emissions from IED installations;
(c) Landfill Directive 1999/31/EC etc.

In this case tabulate using table I.8(i) below all the relevant BAT conclusions. Complete a separate table for each BREF and follow the instructions given above. To assist you with this, some pre-populated template documents are available for download on the EPA website http://www.epa.ie/pubs/forms/lic/industrial%20emissions/

I.8f Describe any environmental considerations which have been made with respect to the use of cleaner technologies, waste minimisation and raw material substitution.

I.8g Describe the measures proposed or in place to ensure that:

(a) The best available techniques are or will be used to prevent or eliminate or, where that is not practicable, generally reduce an emission from the activity;
(b) no significant pollution is caused;
(c) waste production is avoided in accordance with the waste hierarchy in Council Directive 98/2008/EC on waste and section 21A of the Waste Management Act 1996, as amended; where waste is produced, it is prepared for re-use, recycled or recovered or, where that is technically and economically impossible, it is disposed of while avoiding or reducing any impact on the environment (applicants should provide this information in the context of sections 29(2A), 32 and 38(5A) of the Waste Management Act 1996, as amended);
(d) energy and other resources are used efficiently;
(e) the necessary measures are taken to prevent accidents and limit their consequences;
(f) the necessary measures are taken upon definitive cessation of activities to avoid any pollution risk and return the site of operation to a satisfactory state.

Supporting information should form **Attachment Nº I.8a to g.**

Table I.8 (i) CONCLUSIONS ON BAT (One table for each relevant BAT reference document)

Title of Document			
BAT reference Number	**BAT Statement**	**Applicability Assessment**	**State technique and whether it is in place or state schedule for implementation**
e.g. BAT 1	*BAT is to implement and adhere to an environmental management system (EMS) that incorporates all of the following features:*	*Applicable*	*Standardised EMS in place*
Title of Document *e.g Emissions from storage BREF*			
5.1.1.2	*BAT is to cover open top tank by applying a floating cover, flexible or tent cover or a rigid cover*	*One open top tank on-site*	*Proposed to cover with floating cover in 2015*

Applicant Response:

Attachment 1.8 contains a BAT assessment as requested in correspondence from the EPA between December 2014 and June 2015.

SECTION J: ACCIDENT PREVENTION & EMERGENCY RESPONSE

Describe the existing or proposed measures, including emergency procedures, to minimise the impact on the environment of an accidental emission or spillage.

Also outline what provisions have been made for response to emergency situations outside of normal working hours, i.e., during night-time, weekends and holiday periods.

Supporting information should form **Attachment Nº J.**

Applicant Response:

Please refer to Attachment J for information on this section.

SECTION K: REMEDIATION, DECOMMISSIONING, RESTORATION & AFTERCARE

Describe the existing or proposed measures to minimise the impact on the environment after the activity or part of the activity ceases operation, including provision for post-closure care of any potentially polluting residuals.

There is an explicit requirement in EU and Irish law for financial provision for landfills and extractive waste facilities. For new activities subject to the requirements of the Landfill Directive (1999/31/EC) and the Extractive Waste Directive (2006/21/EC) that are not already licensed by the Agency, state whether the following have been prepared:

- an Environmental Liabilities Risk Assessment (ELRA);
- a Closure, Restoration and Aftercare Management Plan (CRAMP); and
- a proposal for Financial Provision that covers all liabilities identified in the ELRA and CRAMP.

Regard should be had by applicants to relevant Agency guidance on these matters.

Copies of any relevant documents and any supporting information should be included as Attachment No. K.

The Agency may prioritise other sectors (e.g. contaminated land, risk of waste facility closure liabilities, risk based on Seveso classification) and require the preparation of a proposal for financial provision before making a decision on a licence application. Applicants are advised to discuss the requirement for financial provision with the Agency prior to making an application.

Supporting information should be included as **Attachment No. K.**

Applicant Response:

Please refer to Attachment K for the most up to date Residuals Management Plan for the site.

SECTION L: STATUTORY REQUIREMENTS

Indicate how the requirements of section 83(5)(*a*)(i) to (v) and (vii) to (xa) of the Act of 1992 shall be met, having regard, where appropriate, to any relevant specification issued by the Agency under section 5(3)(*b*) of that Act or any applicable best available

techniques (BAT) conclusions adopted in accordance with Article 13(5) of the Industrial Emissions Directive and the reasons for the selection of the arrangements proposed.

Section 83(5)(a)(i) states that the Agency shall not grant a licence or revised licence for an activity unless it is satisfied that any emissions from the activity will not result in the contravention of any relevant air quality standard specified under section 50 of the Air Pollution Act 1987, and will comply with any specified relevant emission limit valve specified under section 51 of the Air Pollution Act 1987.

Air Quality Standards (AQSs) as specified under Section 50 of the Air Pollution Act 1987 are set out in the following Regulations:

- **S.I. No. 271 of 2002 – Air Quality Standards Regulations 2002, which apply to nitrogen oxides, sulphur dioxide, suspended particulates, lead, carbon monoxide and benzene;**
- **S.I. No. 53 of 2004 – Ozone in Ambient Air Regulations, 2004;**
- **S.I. No. 58 of 2009 – Arsenic, Cadmium, Mercury, Nickel and Polycyclic Aromatic Hydrocarbons in Ambient Air Regulations 2009; and**
- **S.I. No. 180 of 2011 – Air Quality Standards Regulations 2011 (revoking S.I. No. 271 of 2002 and S.I. No. 53 of 2004).**

The sources of emissions to atmosphere, from the PDM site are the combustion emissions from the on-site boiler, 3 minor emission points and fugitive emission from operations around the facility. Fugitive Emission Studies carried out in 2002, 2005, 2008 and 2012 show that the sites fugitive emission limit value is well below 45% of solvent input as stipulated in the Industrials Emission Directive (IED).

The PDM boiler is a direct fired open bottom steam boiler which is predominantly fed by wood chip but which can also use diesel oil. The boiler capacity is 1.3 MW.

An air emissions monitoring event took place at the PDM facility on the 01st December 2015. The results of this monitoring event are provided in Attachment E.1. The purpose of this monitoring was to obtain concentration data for target contaminants of concern (COC) and, where feasible, emissions flow rate data, to facilitate the completion of Table E.1 (iv) for minor emission points. Three minor emission points were identified as follows:

- **A3-1 – Horizontal condensate receiving tank associated with Plants 1 and 2**
- **A3-2 – Vertical storage tank associated with Plants 1 and 2**
- **A3-3 – Vertical external vapour receiving tank associated with Plants 3 and 4**

The results of the monitoring indicate that these emissions are short term episodic emissions which are minor in nature. Under the terms of the current IPC Licence for the site and current site conditions there is no abatement equipment required for air emissions.

Section 83(5)(a)(ii) states that the Agency shall not grant a licence or revised licence for an activity unless it is satisfied that any emissions from the activity will comply with, or will not result in the contravention of, any relevant quality standard for waters, trade effluents and sewage effluents and standards in relation to treatment of such effluents prescribed under section 26 of the Local Government (Water Pollution) Act 1977.

Regulations established under Section 26 of the Local Government (Water Pollution) Acts 1977 and 1990 which introduce quality standards are listed in the table:

Regulations	Relevant
S.I. No. 294 of 1985 – Local Government (Water Pollution) Act, 1977 (Control of Cadmium Discharges) Regulations, 1985.	No
S.I. No. 55 of 1986 – Local Government (Water Pollution) Act, 1977 (Control of Hexachlorocyclohexane and Mercury Discharges) Regulations, 1986.	No
S.I. No. 348 of 1993 - Local Government (Water Pollution) Acts, 1977 and 1990 (Control of Aldrin, Dieldrin, Endrin, Isodrin, Hcb, Hcbd and Chc13 Discharges) Regulations, 1993.	No
S.I. No. 43 of 1994 - Local Government (Water Pollution) Acts, 1977 and 1990 (Control of Carbon Tetrachloride, DDT and Pentachlorophenol Discharges) Regulations, 1994.	No
S.I. No. 271 of 1992 - Local Government (Water Pollution) Regulations, 1992.	Yes
S.I. No. 258 of 1998 - Local Government (Water Pollution) Act, 1977 (Water Quality Standards For Phosphorus) Regulations, 1998	No
S.I. No. 12 of 2001 - Water Quality (Dangerous Substances) Regulations, 2001*	Yes

Note: * The Dangerous Substances Regulations have been revoked by the European Communities Environmental Objectives (Surface Waters) Regulations, 2009 (S.I. No. 272 of 2009; and S.I. No. 327 of 2015 (Amendment)). These regulations were made to give effect to measures needed to achieve the surface water environmental objectives established under the Water Framework Directive (including the environmental quality standards in the Environmental Quality Standards Directive), and to give further effect to the requirements of the Dangerous Substances Directive.

The PDM facility does not generate process wastewater. Potentially contaminated surface water runoff/rainwater in the vicinity of the treatment plants and from treated timber storage is discharged to a separator or sump from where it is pumped to an above-ground balancing tank situated in the southern area of the site. Water discharges from the balancing tank to the wastewater treatment plant (WwTP). The WwTP comprises two biological aerated lagoons in series, followed by two reed beds operating in parallel followed by a trial Sand Filter unit with a final treatment stage of two parallel sets of Granular Activated Carbon (GAC) units. The final effluent from the GAC units discharges at Emission Point E.

PDM engaged AECOM Infrastructure and Environment Ireland Ltd to assess the impact of site operations on surrounding surface water. This report is included as Attachment E.2. Furthermore PDM engaged AECOM Infrastructure and Environment Ireland Ltd to prepare a Hydrogeological Review report in November 2015. This report is included as Attachment I.5. Both these reports

conclude that the PDM facility is not having an impact on surrounding surface water.

Section 83(5)(a)(iii) states that the Agency shall not grant a licence or revised licence for an activity unless it is satisfied that any emissions from the activity or any premises, plant, methods, processes, operating procedures or other factors which affect such emissions will comply with, or will not result in the contravention of, any relevant standard including any standard for an environmental medium prescribed under regulation made under the European Communities Act 1972, or under any other enactment.

The regulations reviewed in relation to the operations at PDM and comments on compliance are presented in the table below:

Ref	Legislation	Compliance
1	European Communities Environmental Objectives (Surface Waters) Regulations 2009, S.I. No. 272/2009	PDM commit to the achievement of BAT wherever possible to minimise discharge to surface water.
2	European Communities (Quality of Salmonid Waters) Regulations, S.I. No. 293 of 1988	There are no direct discharges to salmonid waters from the PDM facility.
3	European Communities (Quality of Shellfish Water) Regulations and Amendments, 1994 – 2001	There is no direct discharge to shellfish waters from PDM.
4	European Communities (Quality of Bathing Waters) Regulations and Amendments, 1988 – 1992	No direct discharge to bathing waters from PDM.
5	European Communities Environmental Objectives (Groundwater) Regulations, 2010, S.I. No. 9/2010	No discharges to groundwater from the PDM facility.
6	European Communities (Drinking Water) Regulations 2007, S.I. No. 106/2007	There are no direct discharges to drinking water abstraction points from the PDM facility.
7	Urban Waste Water Treatment Regulations and Amendments, 1994 – 2010	No direct discharge to Urban Waste Water Treatment Plants
8	European Communities (Dangerous Substances and Preparations) Regulations and Amendments 1979 – 2010	The PDM facility monitors emissions as per the conditions of P0325-01.
9	European Communities (Environmental Liability) Regulations, S.I. No. 547/2008	The PDM facility operates under an Environmental Management System and undertakes an Environmental Liability Risk Assessment on a 3-year basis to identify and mitigate potential risks to the environment from site operations.
10	European Communities (Natural Habitats) Regulations and Amendments, 1997 – 2005	According to the NPWS website, the nearest Proposed Natural Heritage Site to PDM is Kilteel Wood (Site code 001394), approximately 850m south-east of

		the site. There are no other designated environmentally sensitive areas within 1.5km of the site.
11	**European Communities (Conservation of Wild Birds) Regulations and Amendments 1985 – 2010**	**NPWS mapping does not indicate any Annex I Birds Directive Species in the vicinity of the facility. Therefore there does not appear to be any threat to protected birds from the PDM site.**
12	**European Communities Environmental Objectives (Freshwater Pearl Mussel) Regulations, S.I. No. 296/2009**	**No discharges to any known pearl mussel habitat streams.**
13	**European Communities (Control of Water Pollution by Asbestos) Regulations, S.I. No. 31 of 1990**	**No discharge of asbestos from the PDM facility.**

Section 83(5)(a)(iv) states that the Agency shall not grant a licence or revised licence for an activity unless it is satisfied that any noise from the activity will comply with, or will not result in the contravention of, any regulations under section 106.

The EPA sent a letter to PDM dated 14th February 2003 which states that the EPA were suspending the annual noise survey requirement given the lack of noise complaints and the consistency of the noise monitoring up to that point. The PDM site is in a rural location with no nearby noise sensitive receptors.

Section 83(5)(a)(v) states that the Agency shall not grant a licence or revised licence for an activity unless it is satisfied that any emissions from the activity will not cause significant environmental pollution.

Activities at PDM are carried out in accordance with the existing IPC Licence (Register No. P0325-01). The main environmental emissions from the site are considered to be surface water emissions. Impact assessments relating to surface water emissions are discussed in Section I.2 of this application. The conclusion of Section I.2 is that the facility is not having an impact on surrounding surface water

Site operations are carried out to ensure that there is no significant risk to the environment and that emission limit values are adhered to. Standard Operating Procedures are implemented and update to improve effectiveness and reduce the impact of operations on environmental media. PDM is also ISO 14001 accredited and is significantly investing in site infrastructure as outlined in the Attachment I.8 to improve site infrastructure with the aim of reducing potential environmental impacts.

Section 83(5)(a)(vii) states that the Agency shall not grant a licence or revised licence for an activity unless it is satisfied that having regard to Part III of the Act of 1996, production of waste in the carrying on of the activity will be prevented or minimised or, where waste is produced, it will be recovered or, where that is not technically or economically possible, disposed of in a manner which will prevent or minimise any impact on the environment.

PDM strives to prevent and minimise waste and in particular hazardous waste. All waste is collected by licenced waste contractors for disposal in accordance with the Waste Management Act 1996 and 2003 and the conditions of P0325-01.

Waste management procedures are detailed in Attachment H of this application.

Section 83(5)(a)(viii) states that the Agency shall not grant a licence or revised licence for an activity unless it is satisfied that energy will be used efficiently in the carrying on of the activity.

PDM will continue to monitor its energy usage and will compile and submit its energy usage as part of any future requirements for annual environmental reporting as required by the EPA. PDM .

Examples of energy consumption minimisations on-site include:

- **Installation of 5m passive Infra Red motion detection sensors in the offices, canteen, and fabrication shed;**
- **Heating set points are set to appropriate temperatures;**
- **Use of solid fuel for the boiler instead of Oil.**
- **Installation of energy meters at 15 locations across the site (completion target December 2015)**
- **Steam and creosote lines insulated and heated with trace heating**

Section 83(5)(a)(ix) states that the Agency shall not grant a licence or revised licence for an activity unless it is satisfied that necessary measures will be taken to prevent accidents in the carrying on of the activity and, where an accident occurs, to limit its consequences for the environment and, in so far as it does have such consequences, to remedy those consequences.

Accident prevention and emergency response procedures are detailed in Attachment J of this application.

Section 83(5)(a)(x) states that the Agency shall not grant a licence or revised licence for an activity unless it is satisfied that necessary measures will be taken upon the permanent cessation of the activity (including such a cessation resulting from the abandonment of the activity) to avoid any risk of environmental pollution and return the site of the activity to a satisfactory state

In the event of cessation of activity at the site, PDM will take all necessary measures and provide sufficient resources to ensure that the site is returned to a satisfactory state. A revised and updated closure plan is submitted to the EPA for approval every 3 years. The most recent RMP submitted to the EPA are detailed in Attachment K of this application.

Indicate whether or not the activity is carried out, or may be carried out, or is located such that it is liable to have an adverse effect on -
(a) a site placed on a list in accordance with Part 3 of S.I. 477 of 2011, or
(b) a site where consultation has been initiated in accordance with Article 5 of the EU Habitats Directive (92/43/EEC).

The PDM site does not currently adversely impact any such sites designated in accordance with S.I. 477 of 2011 – European Communities (Birds and Natural Habitats) Regulations, 2011.

Undertake a screening for Appropriate Assessment and state whether the activity, individually or in combination with other plans or projects, is likely to have a

significant effect on a European Site(s), in view of best scientific knowledge and the conservation objectives of the site(s). Where it cannot be excluded, on the basis of objective scientific information, following screening for Appropriate Assessment, that an activity, either individually or in combination with other plans or projects, will have a significant effect on a European Site, provide a Natura Impact Statement, as defined in Regulation 2(1) of the European Communities (Birds and Natural Habitats) Regulations (S.I. No. 477 of 2011). Where based on the screening it is considered that an Appropriate Assessment is not required, provide a reasoned response.

The PDM facility has not been requested to undertake a screening for Appropriate Assessment. The PDM facility has been in operation for over 45 years, and has operated under an Industrial Pollution Control Licence (Reg. No. P0325-01), as issued by the EPA, since 1998. This IPC Licence was issued prior to the implementation of the European Communities (Birds and Natural Habitats) Regulations (S.I. No. 477 of 2011) on the conservation of natural habitats and of wild fauna and flora, which requires, under Part 5 of the Regulations, that an appropriate assessment be carried out where a project or plan may give rise to significant effects upon a Natura 2000 site. Therefore a screening for Appropriate Assessment was not required under the site's original construction or licence application.

Indicate whether or not the activity is liable to have an adverse effect on water quality in light of the European Communities Environmental Objectives (Surface Water) Regulations 2009 (S.I. No. 272 of 2009).

Impact assessments relating to surface water emissions are discussed in Section I.2 of this application. The conclusion of Section I.2 is that the facility is not having an impact on surrounding surface water

Indicate whether or not the activity is liable to have an adverse effect on water quality in light of the European Communities Environmental Objectives (Ground Water) Regulations 2010 (S.I. No. 9 of 2010).

There are no direct discharges to groundwater from the facility. A Hydrogeological Review report prepared for PDM in November 2015 is included as Attachment I.5.

Indicate whether any of the substances specified in the Schedule of the EPA (Industrial Emissions)(Licensing) 2013, S.I. No. 137 of 2013, are discharged by the activity to the relevant medium.

Medium	Principal Polluting Substance	Emission Status Present/Not Present
Air	Sulphur dioxide and other sulphur compounds.	Present
	Oxides of nitrogen and other nitrogen compounds	Present
	Carbon monoxide	Present
	Volatile organic compounds	Present
	Metals and their compounds	Not present
	Dust including fine particulate matter	Present
	Asbestos (suspended particulates, fibres).	Not present
	Chlorine and its compounds	Not present
	Fluorine and its compounds	Not present
	Arsenic and its compounds	Not present
	Cyanides.	Not present
	Substances and mixtures which have been proved to possess carcinogenic or mutagenic properties or properties which may affect reproduction via the air	Present
	Polychlorinated dibenzodioxins and polychlorinated dibenzofurans	Not present
Water	Organohalogen compounds and substances which may form such compounds in the aquatic environment.	Not present
	Organophosphorus compounds	Not present
	Organotin compounds	Not present
	Substances and mixtures which have been proved to possess carcinogenic or mutagenic properties or properties which may affect reproduction in or via the aquatic environment	Present (monitored and below ELV)
	Persistent hydrocarbons and persistent and bioaccumulable organic toxic substances	Present (monitored and below ELV)
	Cyanides.	Not present
	Metals and their compounds	Present (monitored and below ELV)
	Arsenic and its compounds	Not present
	Biocides and plant protection products	Not present
	Materials in suspension	Present (monitored and below ELV)
	Substances which contribute to eutrophication (in particular, nitrates and phosphates).	Present (monitored and below ELV)
	Substances which have an unfavourable influence on the oxygen balance (and can be measured using parameters such as BOD, COD, etc.).	Present (monitored and below ELV)
	Substances listed in Annex X to Directive 2000/60/EC	Present (monitored and below ELV)

Indicate if the best environmental practices are in place for control of diffuse emissions from the installation as set out in the following legislation:

(a) a BAT Conclusions Implementing Decision published by the EC.

In assessing the consideration of BAT at the site, PDM has referred to the appropriate BAT guidance provided by the EPA. The assessment of BAT is found in Attachment I.8.

(b) a specification prepared by the Agency in accordance with Section 5 of the Environmental Protection Agency Act 1992 as amended;

Section 5 of the EPA Act 1992, as amended by Section 7 of the Protection of the Environment Act 2003, relates to the use of Best Available Techniques (BAT) for the purpose of preventing or eliminating or, where that is not practicable, generally to reduce an emission and its impact on the environment as a whole.

In assessing the consideration of BAT at the site, PDM has referred to the appropriate BAT guidance provided by the EPA. The assessment of BAT is found in Attachment I.8.

(c) the Urban Waste Water Treatment Regulations 2001 (S.I. No. 254 of 2001) as amended by the Urban Waste Water Treatment (Amendment) Regulations 2004 (S.I. No. 440 of 2004) or any future amendment thereof;

The Urban Waste Water Treatment Regulations (S.I. 254 of 2001 and S.I 440 of 2004) do not apply to the PDM facility.

(d) the European Communities (Good Agricultural Practice for Protection of Waters) Regulations 20 (S.I. No. 610 of 2010) or any future amendment thereof;

The European Communities (Good Agricultural Practice for Protection of Waters) Regulations 2009 (S.I. No. 101 of 2009) do not apply to the PDM facility.

(e) the Local Government (Water Pollution) Act, 1977 (Control of Cadmium Discharges) Regulations 1985 (S.I. No. 294 of 1985);

The Local Government (Water Pollution) Act, 1977 (Control of Cadmium Discharges) Regulations 1985 (S.I. No. 294 of 1985) do not apply to the PDM facility as cadmium is not contained in any discharges from the facility.

(f) the Local Government (Water Pollution) Act, 1977 (Control of Hexachlorocyclohexane and Mercury Discharges) Regulations 1986 (S.I. No. 55 of 1986);

The Local Government (Water Pollution) Act, 1977 (Control of Hexachlorocyclohexane and Mercury Discharges) Regulations 1986 (S.I. No. 55 of 1986) do not apply to the PDM facility as Hexachlorocyclohexane and Mercury are not contained in any discharges from the site.

(g) the Local Government (Water Pollution) Acts, 1977 and 1990 (Control of Carbon Tetrachloride, DDT and Pentachlorophenol Discharges) Regulations 1994 (S.I. No. 43 of 1994); and,

The Local Government (Water Pollution) Act, 1977 and 1990 (Control of Carbon Tetrachloride, DDT and Pentachlorophenol Discharges) Regulations 1986 (S.I. No. 55 of 1986) do not apply to the PDM facility as carbon tetrachloride, DDT and Pentachlorophenols are not contained in any discharges from the site.

(h) measures or controls identified in a pollution reduction plan for the river basin district prepared in accordance with Part V of the EC Environmental Objectives (Surface Waters) Regulations 2009 S.I. No. 272 of 2009 for the reduction of pollution by priority substances or the ceasing or phasing out of emissions, discharges and losses of priority hazardous substances.

Part V of the EC Environmental Objectives (Surface Waters) Regulations (S.I. 272 of 2009) requires the EPA, in consultation with the co-ordinating local authority for the relevant river basin district, to establish an inventory of emissions, discharges and losses of priority and priority hazardous substances and other pollutants listed in Tables 11 and 12 of Schedule 6 of the Regulations.

This is addressed in the Surface Water Assessment Report included in this application.

Supporting information should be included as **Attachment Nº L** with reference to where the information can be found in the application.

Applicant Response:
Information is provided above there is no Attachment L.

SECTION M: DECLARATION

Declaration

I hereby make application for a licence / revised licence, pursuant to the provisions of the Environmental Protection Agency Act, 1992, as amended, and Regulations made thereunder.

I certify that the information given in this application is truthful, accurate and complete.

I give consent to the EPA to copy this application for its own use and to make it available for public inspection via the EPA's website. This consent relates to this application itself and to any further information, submission, objection, or submission to an objection whether provided by me as Applicant or any person acting on the Applicant's behalf.

Signed by: Richard O'Connor **Date:** 29/1/16
(on behalf of the organisation)

Print signature name: RICHARD O'CONNOR

Position in organisation: GENERAL MANAGER

Company stamp or seal:

Saint-Gobain Building Distribution (ROI) Ltd. T/A PDM
Registered Office: Oldmilltown, Kill, Co. Kildare, Ireland.
Tel: 00 353 45 877165
Fax: 00 353 45 877467
e-mail: enquiries@pdm.ie Website: www.pdm.ie
Registered in Ireland: Reg. No. 313869

ANNEX 1: TABLES/ATTACHMENTS

TABLE D.2(i) Waste Acceptance (type and quantities) **Not Applicable**

Rows should be added to the table as necessary.

EWC Code	Waste description (the actual description of the waste, not the text accompanying the EWC code)	Tonnes per annum (existing)	Tonnes per annum (proposed)

TABLE D.3(III) LINER SYSTEM

Not Applicable	y/n
Provide information in Attachment D.3 to fulfil Annex 1 of the Landfill Directive	
Is the type of liner system specified?	
Has a Quality Control Plan been specified?	
Has a Quality Assurance Plan been specified?	
Has independent, third-party supervision, testing and controls been specified?	
Have basal gradients for all cells and access ramps to the cells been designed?	
Has a leak detection system been specified?	

TABLE D.3(IV) LEACHATE MANAGEMENT ARRANGEMENTS

Not Applicable	y/n
Is there a Leachate Management Plan?	
Have annual quantities of leachate been calculated?	
Has the total quantity of leachate been calculated?	
Has the size of the cells been specified taking account of the water balance calculations?	
Has a leachate collection system been specified?	
Has a leachate storage system been specified?	
Has a system for monitoring the level of leachate in the waste been designed?	
Is leachate recirculation proposed/practised?	
Has leachate treatment on-site been specified?	
Has leachate removal been specified?	

Table D.3(v)a. Landfill Gas Management

Not Applicable	y/n
Is there a Landfill Gas Management Plan?	
Is there a passive venting system?	
Does the passive system cover all of the filled area?	
Have gas alarm systems been installed in the site buildings?	
Have measures been installed to prevent landfill gas migration (e.g. barriers)?	
Has a time-scale been proposed for the installation of landfill gas infrastructure?	
Is gas flaring undertaken at the site?	
Is there an active (i.e., pumped) landfill gas extraction system?	
Does the active system cover all of the filled area?	
Is landfill gas used to generate energy at the site?	
Have emissions from the flarestack and utilisation plant been assessed for source, composition, quantity and level and rate? See section F of the application form for requirements.	
Has a maintenance programme for the control system been specified?	
Has a condensate removal system been designed?	

Table D.3(v)b Landfill Gas Monitoring for existing landfill gas flares and utilisation plants

Not Applicable

Parameter	Concentration (mg/Nm^3)	Frequency of Analysis	Method of Analysis
Inlet			
Methane (CH_4) % v/v			
Carbon dioxide (CO_2) %v/v			
Oxygen (O_2) % v/v			
Outlet			
Volumetric Flow Rate			
SO_2			
Nox			
CO			
Particulates			
TA Luft Class I, II, III organics			
Hydrochloric acid			
Hydrogen Fluoride			

Table D.3(v)c Landfill Gas Monitoring

Not Applicable

Parameter	Proposed Frequency of Analysis		Method of Analysis
	Gas boreholes, vents, wells and perimeter locations	Installation Office	
Methane (CH_4) % v/v			
Carbon Dioxide (CO_2) % v/v			
Oxygen (O_2) % v/v			
Atmospheric Pressure			
Temperature			

Table D.3(v)d Landfill Gas Infrastructure

Not Applicable

Equipment	Monitoring Frequency	Monitoring Action
Gas Collection System		
Gas Control System		

Table D.3(vi) Capping System

Not Applicable	y/n
Has the daily cover been specified?	
Has the intermediate cover been specified?	
Has the temporary capping been specified?	
Has the Capping System been designed and does it meet the requirements of the Landfill Directive Annex 1 (3.3)?	
Does the Capping System include a flexible membrane liner?	
Have all capping materials been specified?	
Has a Method Statement for construction been produced?	
Has a Quality Control Plan been produced?	
Has a Quality Assurance Plan been produced?	
Has a programme for monitoring landfill stability been developed?	
Has a programme for monitoring landfill settlement been developed?	

Table E.1 (i) BOILER EMISSIONS TO ATMOSPHERE (1 Page for each emission point)

Emission Point:

Emission Point Ref. Nº:	A1-1	
Location:	Boiler House	
Grid Ref. (12 digit, 6E,6N):	297758 222500	
Vent Details **Please note this vent is not currently safely accesible**	Diameter:	Height above Ground(m):
Date of commencement of emission:	Approximately 1998	

Characteristics of Emission:

Boiler rating Steam Output: Thermal Input:			2000 kg/hr 1.320MW
Boiler fuel Type: Maximum rate at which fuel is burned % sulphur content:			kg/hr
NOx			mg/Nm^3 0°C. 3% O_2(Liquid or Gas), 6% O_2(Solid Fuel)
Maximum volume* of emission			m^3/hr 0°C, 3 % O_2 (liquid or gas), 6 % O_2 (solid fuel)
Minimum efflux velocity			m.sec^{-1}
Temperature	198°C(max)	°C(min)	°C(avg)

* Volume flow limits for emissions to atmosphere shall be based on Normal conditions of temperature and pressure, (i.e. 0°C,101.3kPa), dry gas; 3% oxygen for liquid and gas fuels; 6% oxygen for solid fuels.

(i) Period or periods during which emissions are made, or are to be made, including daily or seasonal variations (*start-up/shutdown to be included):*

Periods of Emission (avg)	60 min/hr 10 hr/day _____ day/yr

TABLE E.1(ii) MAIN EMISSIONS TO ATMOSPHERE (1 Page for each emission point) **Not Applicable**

Emission Point Ref. Nº:	
Source of Emission:	
Location:	
Grid Ref. (12 digit, 6E,6N):	
Vent Details Diameter: Height above Ground(m):	
Date of commencement:	

Characteristics of Emission:

(i) Volume to be emitted:			
Average/day	Nm^3/d	Maximum/day	Nm^3/d
Maximum rate/hour	Nm^3/h	Min efflux velocity	$m.sec^{-1}$
(ii) Other factors			
Temperature	ºC(max)	ºC(min)	ºC(avg)
For Combustion Sources: Volume terms expressed as : ☐ wet. ☐ dry. _____$\%O_2$			

(iii) Period or periods during which emissions are made, or are to be made, including daily or seasonal variations (*start-up /shutdown to be included):*

Periods of Emission (avg)	_____min/hr _____hr/day _____day/yr

TABLE E.1(iii): MAIN EMISSIONS TO ATMOSPHERE - Chemical characteristics of the emission (1 table per emission point)

Not Applicable

Emission Point Reference Number: _____

Parameter	Prior to treatment(1)				Brief description of treatment	As discharged(1)					
	mg/Nm^3		kg/h			mg/Nm^3		kg/h.		kg/year	
	Avg	Max	Avg	Max		Avg	Max	Avg	Max	Avg	Max

1. Concentrations should be based on Normal conditions of temperature and pressure, (i.e. 0°C,101.3kPa). Wet/dry should be the same as given in Table E.1(ii) unless clearly stated otherwise.

TABLE E.1(iv): EMISSIONS TO ATMOSPHERE - Minor atmospheric emissions

Emission point Reference Numbers	Description	Emission details[1]				Abatement system employed
		material	mg/Nm$^{3(2)}$	kg/h.	kg/year	
A3-1 (A3-1 is actually only 1 of 3 locations on the tank from which vapour discharges. The other two locations are not accessible and so could not be monitored)	**Plant 1/2 Vapour Receiver**	**PAHs**				None
		Naphthalene	1.28	0.000059	0.079	
		Acenaphthylene	<0.33	<0.000019	<0.023	
		Acenaphthene	3.33	0.000052	0.072	
		Fluorene	2.31	0.000036	0.056	
		Phenanthrene	2.31	0.000078	0.114	
		Anthracene	<0.33	<0.000019	<0.023	
		Pyrene	<0.33	<0.000019	<0.023	
		Benzo[a]anthracene	<0.33	<0.000019	<0.023	
		Benzo[a]pyrene	<0.33	<0.000019	<0.023	
		Benzo[a]fluoranthene	<0.33	<0.000019	<0.023	
		Benzo[ghi]perylene	<0.33	<0.000019	<0.023	
		Benzo[k]fluoranthene	<0.33	<0.000019	<0.023	
		Chrysene	<0.33	<0.000019	<0.023	
		Dibenz[ah]anthracene	<0.33	<0.000019	<0.023	
		Indenol[123cd]pyrene	<0.33	<0.000019	<0.023	
		VOCs				
		Benzene	42.86	0.002520	2.561	
		Ethylbenzene	<5.13	<0.000280	<0.360	
		Toluene	9.52	0.000560	0.680	
		Xylene	<5.13	<0.000280	<0.360	
		Other VOC's	<12.82	<0.000700	<0.901	
		Phenols				
		o-Xylenol	<13.89	<0.000817	<1.035	
		m,p-Cresol	<13.89	<0.000817	<1.035	
		m,p-Xylenol	<13.89	<0.000817	<1.035	
		o-Cresol	<13.89	<0.000817	<1.035	
		Phenol	<13.89	<0.000817	<1.035	

Emission point Reference Numbers	Description	Emission details[1]				Abatement system employed
		material	mg/Nm$^{3(2)}$	kg/h.	kg/year	
A3-2	**Plant 1/2 18' Vertical Storage Tank**	**PAHs**				None
		Naphthalene	1.05	0.000339	0.502	
		Acenaphthylene	<0.33	<0.000080	<0.138	
		Acenaphthene	0.53	0.000171	0.251	
		Fluorene	0.53	0.000171	0.251	
		Phenanthrene	<0.33	<0.000080	<0.138	
		Anthracene	<0.33	<0.000080	<0.138	
		Pyrene	<0.33	<0.000080	<0.138	
		Benzo[a]anthracene	<0.33	<0.000080	<0.138	
		Benzo[a]pyrene	<0.33	<0.000080	<0.138	
		Benzo[a]fluoranthene	<0.33	<0.000080	<0.138	
		Benzo[ghi]perylene	<0.33	<0.000080	<0.138	
		Benzo[k]fluoranthene	<0.33	<0.000080	<0.138	
		Chrysene	<0.33	<0.000080	<0.138	
		Dibenz[ah]anthracene	<0.33	<0.000080	<0.138	
		Indenol[123cd]pyrene	<0.33	<0.000080	<0.138	
		VOCs				
		Benzene	9.09	0.002937	3.672	
		Ethylbenzene	<6.06	<0.001958	<3.427	
		Toluene	<9.09	<0.002937	<5.140	
		Xylene	<6.06	<0.001958	<3.427	
		Other VOC's	<15.15	<0.004896	<8.567	
		Phenols				
		o-Xylenol	<16.67	<0.005387	<9.058	
		m,p-Cresol	<16.67	<0.005387	<9.058	
		m,p-Xylenol	<16.67	<0.005387	<9.058	
		o-Cresol	<16.67	<0.005387	<9.058	
		Phenol	<16.67	<0.005387	<9.058	

Emission point Reference Numbers	Description	Emission details[1]				Abatement system employed
		material	mg/Nm$^{3(2)}$	kg/h.	kg/year	
A3-3	**Plant 3/4 Vapour Receiver**	**PAHs**				None
		Naphthalene	11.07	0.001223	3.056	
		Acenaphthylene	<0.23	<0.000020	<0.025	
		Acenaphthene	3.21	0.000355	0.701	
		Fluorene	1.88	0.000208	0.379	
		Phenanthrene	1.07	0.000118	0.359	
		Anthracene	<0.23	<0.000020	<0.025	
		Pyrene	<0.23	<0.000020	<0.025	
		Benzo[a]anthracene	<0.23	<0.000020	<0.025	
		Benzo[a]pyrene	<0.23	<0.000020	<0.025	
		Benzo[a]fluoranthene	<0.23	<0.000020	<0.025	
		Benzo[ghi]perylene	<0.23	<0.000020	<0.025	
		Benzo[k]fluoranthene	<0.23	<0.000020	<0.025	
		Chrysene	<0.23	<0.000020	<0.025	
		Dibenz[ah]anthracene	<0.23	<0.000020	<0.025	
		Indenol[123cd]pyrene	<0.23	<0.000020	<0.025	
		VOCs				
		Benzene	35.00	0.003865	6.921	
		Ethylbenzene	5.00	0.000552	2.839	
		Toluene	7.50	0.000932	5.377	
		Xylene	5.00	0.000967	5.231	
		Other VOC's	<12.50	<0.001380	<1.667	
		Phenols				
		o-Xylenol	<12.50	<0.001380	<1.667	
		m,p-Cresol	<12.50	<0.001380	<1.667	
		m,p-Xylenol	<12.50	<0.001380	<1.667	
		o-Cresol	<12.50	<0.001380	<1.667	
		Phenol	<12.50	<0.001380	<1.667	

Emission point Reference Numbers	Description	Emission details[1]				Abatement system employed
		material	mg/Nm$^{3(2)}$	kg/h.	kg/year	

1 The maximum emission should be stated for each material emitted, the concentration should be based on the maximum 30 minute mean.

2 Concentrations should be based on Normal conditions of temperature and pressure, (i.e. 0^{o}C101.3kPa). Wet/dry should be clearly stated. Include reference oxygen conditions for combustion sources.

Notes mg/Nm3 = maximum process stage values obtained from 2015 monitoring

kg/h = maximum of process stage calculated values

kg/a = total kg/a based on summation of kg/h for each process stage and knowing stage durations and number of days per annum operation

TABLE E.1(v): EMISSIONS TO ATMOSPHERE – Fugitive and Potential atmospheric emissions

Not Applicable

Emission point ref. no. (as per flow diagram)	Description	Malfunction which could cause an emission	Emission details (Potential max. emissions)[1]		
			Material	mg/Nm^3	kg/hour

[1] Estimate the potential maximum emission for each malfunction identified.

TABLE E.2(i): EMISSIONS TO SURFACE WATERS (One page for each emission)

Emission Point:

Emission Point Ref. Nº:	**Emission Point E**
Source of Emission:	**Potentially contaminated surface water run-off from the treatment area and from areas storing treated timber**
Location of discharge :	**Outfall from Waste Water Treatment Lagoon to tributary drain to Kill River**
Grid Ref. (12 digit, 6E,6N):	**297583, 222442**
Name of receiving waters and water body code:	**Kill River**
Flow rate in receiving waters:	**Not available** $m^3.sec^{-1}$ Dry Weather Flow $m^3.sec^{-1}$ 95%ile flow
Available assimilative capacity:	**Not available** kg/day

Emission Details:

(i) Volume to be emitted			
Normal/day	**79m3**	Maximum/day	**2,500m3**
Maximum rate/hour	**125m3**		

(ii) Period or periods during which emissions are made, or are to be made, including daily or seasonal variations (*start-up /shutdown to be included):*

Periods of Emission (avg)	**60** min/hr **24** hr/day **365** day/yr

TABLE E.2(ii): EMISSIONS TO SURFACE WATERS - Characteristics of the emission (1 table per emission point)

Emission point reference number: **Emission Point E - WwTP**

Parameter	Prior to treatment				As discharged				% Efficiency
	Max. hourly average (mg/l)	Max. daily average (mg/l)	kg/day	kg/year	Max. hourly average (mg/l)	Max. daily average (mg/l)	kg/day	kg/year	
BOD	Not measured	-	-	-	Not detected	-	-	-	n/a
COD	-	155	54.25	19801.25	-	23	8.05	2938.25	85.1612903
Suspended Solids	-	149	52.15	19034.75	-	27	9.45	3449.25	81.8791946
Phenols	Not detected	-	-	-	Not detected	-	-	-	n/a
pH	-	-	-	-	-	-	-		n/a
PAH (speciated 16)	-	4.27933	1.497766	546.6844	-	0.00546	0.001911	0.697515	99.8724099
Chromium (total)	-	3.4	1.19	434.35	Not detected	-	-	-	100
Arsenic	-	9.4	3.29	1200.85	-	0.0047	0.001645	0.600425	99.95
Copper	-	8	2.8	1022	Not detected	-	-	-	100
Temperature	-	-	-	-	-	-	-	-	n/a
Ethanolamine	Not measured	-	-	-	Not detected	-	-	-	n/a
Benzalkonium									
Permethrin									
Propiconazole									
Tebuconazole									
Pentachlorophenol	Not measured	-	-	-	Not detected	-	-	-	n/a

TABLE E.3(i): EMISSIONS TO SEWER (One page for each emission) **Not Applicable**

Emission Point:

Emission Point Ref. Nº:	
Location of connection to sewer:	
Grid Ref. (12 digit, 6E,6N):	
Name of sewage undertaker:	

Emission Details:

(i) Volume to be emitted			
Normal/day	m^3	Maximum/day	m^3
Maximum rate/hour	m^3		

(ii) Period or periods during which emissions are made, or are to be made, including daily or seasonal variations (*start-up /shutdown to be included):*

Periods of Emission (avg)	_____min/hr _____hr/day _____day/yr

TABLE E.3(ii): EMISSIONS TO SEWER - Characteristics of the emission (1 table per emission point)
Not Applicable

Emission point reference number: _____

Parameter	Prior to treatment				As discharged				% Efficiency
	Max. hourly average (mg/l)	Max. daily average (mg/l)	kg/day	kg/year	Max. hourly average (mg/l)	Max. daily average (mg/l)	kg/day	kg/year	

TABLE E.4(i): EMISSIONS TO GROUND (1 Page for each emission point) **Not Applicable**

Emission Point or Area:

Emission Point/Area Ref. Nº:	
Emission Pathway: (borehole, well, percolation area, soakaway, landspreading, etc.)	
Location :	
Grid Ref. (12 digit, 6E,6N):	
Elevation of discharge: (relative to Ordnance Datum)	
Aquifer classification for receiving groundwater body:	
Groundwater vulnerability assessment (including vulnerability rating):	
Identity and proximity of groundwater sources at risk (wells, springs, etc):	
Identity and proximity of surface water bodies at risk:	

Emission Details:

(i) Volume to be emitted			
Normal/day	m^3	Maximum/day	m^3
Maximum rate/hour	m^3		

(ii) Period or periods during which emissions are made, or are to be made, including daily or seasonal variations (*start-up /shutdown to be included):*

Periods of Emission (avg)	_____min/hr _____hr/day _____day/yr

TABLE E.4(ii): EMISSIONS TO GROUND - Characteristics of the emission (1 table per emission point)
Not Applicable

Emission point/area reference number: _____

Parameter	Prior to treatment				As discharged				% Efficiency
	Max. hourly average (mg/l)	Max. daily average (mg/l)	kg/day	kg/year	Max. hourly average (mg/l)	Max. daily average (mg/l)	kg/day	kg/year	

Table E.5(i): NOISE EMISSIONS - Noise sources summary sheet

Not Applicable

Source	Emission point Ref. No	Equipment Ref. No	Sound Pressure[1] dBA at reference distance	Octave bands (Hz) Sound Pressure[1] Levels dB(unweighted) per band									Impulsive or tonal qualities	Periods of Emission[2]
				31.5	63	125	250	500	1K	2K	4K	8K		

1. For items of plant, sound power levels may be used.
2. Periods of emission should state if the plant item in question operates on a continuous or intermittent basis. If intermittent then further details of the hours of operation and any potential impulsive components associated with the source should be clearly identified.

TABLE F.1(i): ABATEMENT / TREATMENT CONTROL

***Emission point reference number*:** **Emission Point E - WwTP**

Control[1] parameter	Monitoring to be carried out[2]	Equipment [3]	Equipment back-up
Visual Inspection	**Daily**	**-**	**-**
Temperature	**Continuous**	**On-line temperature probe**	**Maintenance Spares**
Flow Control	**Controlled Balanced Flow (Inlet to Lagoon 1 only)**	**Flow meters**	**Maintenance Spares**
Influent COD	**Weekly composite**	**Standard Methods**	**Maintenance Spares**
pH	**Daily composite**	**pH meter**	**Maintenance Spares**
Effluent Transfer	**High level alarm, duty/standby and alarm for power failure**	**Lift Pumps**	**Standby Pumps and Spares held on site**
Suspended Solids	**Weekly**	**Separator, Lagoons Reed beds**	**Standby Pumps and spares held on site and spares held on site**
Dissolved Oxygen	**Hand held probe daily**	**Surface Aerators**	**Spares held on site**
Lagoon Management	**Daily Management (visual checks on mechanical aerators)**	**Two biological aerated lagoons in series**	**Aerator spares on site**
Biological Treatment	**Visual check**	**Lagoons & Gravel and Soil Reed beds**	**Periodic maintenance**
GAC Units Final effluent	**Monthly/Weekly (input/output)**	**Standard Methods**	**Spare pre-filter unit**

[1] List the operating parameters of the treatment / abatement system which control its function.
[2] List the monitoring of the control parameter to be carried out.
[3] List the equipment necessary for the proper function of the abatement / treatment system.

TABLE F.2(i) : EMISSIONS MONITORING AND SAMPLING POINTS (1 table per monitoring point)

Emission Point Reference No. : **Emission Point E - WwTP**

Parameter	Monitoring frequency	Accessibility of Sampling Points	Sampling method	Analysis method/ technique
BOD	**Monthly**	**Sampling point is accessible**	**Composite sample**	**Standard Method**
COD	**Monthly**		**Composite sample**	**Standard Method**
Suspended Solids	**Monthly**		**Composite sample**	**Gravimetric**
Phenols	**Monthly**		**Composite sample**	**Standard Method**
Pentachlorophenol	**Annually**		**Composite sample**	**Standard Method**
Chromium	**Bi Annually**		**Composite sample**	**Atomic Absorption/ICP**
pH	**Daily**		**Composite sample**	**pH electrode/meter and recorder**
Visual inspection	**Daily**		**-**	**-**
Arsenic	**Bi Annually**		**Composite sample**	**Atomic absorption/ICP**
PAHs (speciated 16)	**Weekly**		**Composite sample**	**Standard Method**
Copper	**Bi Annually**		**Composite sample**	**Standard Method**
Ethanolamine	**Annually**		**Composite sample**	**Standard Method**
Benzalkonium	**Annually**		**Composite sample**	**Standard Method**
Permethrin	**Annually**		**Composite sample**	**Standard Method**
Propiconazole	**Annually**		**Composite sample**	**Standard Method**
Tebucinazole	**Annually**		**Composite sample**	**Standard Method**

TABLE F.2(i) : EMISSIONS MONITORING AND SAMPLING POINTS

Emission Point Reference No. : **Surface Water Monitoring Point A**

Parameter	Monitoring frequency	Accessibility of Sampling Points	Sampling method	Analysis method/ technique
Visual Inspection	**Daily**	**Access to weir via metal stairs with handrail from bank.**	**-**	**-**
COD	**Monthly**		**Grab sample**	**Standard method**
Suspended Solids	**Monthly/Fortnightly**		**Grab sample**	**Gravimetric**
Phenols	**Bi-Annually**		**Grab sample**	**Standard Method**
Pentachlorophenol	**Quarterly**		**Grab sample**	**Standard Method**
PAH (speciated 16)	**Weekly**		**Grab sample**	**Standard Method**
Chromium (Total)	**Annually**		**Grab sample**	**Atomic Absorption/ICP**
Arsenic (Total)	**Annually**		**Grab sample**	**Atomic Absorption/ICP**
BOD	**Monthly**		**Grab sample**	**Standard method**

TABLE F.2(i) : EMISSIONS MONITORING AND SAMPLING POINTS

Emission Point Reference No. : **Surface Water Monitoring Point B**

Parameter	Monitoring frequency	Accessibility of Sampling Points	Sampling method	Analysis method/ technique
Visual Inspection	**Daily**	**Accessible from main access road**	**-**	**-**
COD	**Monthly**		**Grab sample**	**Standard method**
Suspended Solids	**Monthly/Fortnightly**		**Grab sample**	**Gravimetric**
Phenols	**Bi-Annually**		**Grab sample**	**Standard Method**
Pentachlorophenol	**Quarterly**		**Grab sample**	**Standard Method**
PAH (speciated 16)	**Weekly**		**Grab sample**	**Standard Method**
Chromium (Total)	**Annually**		**Grab sample**	**Atomic Absorption/ICP**
Arsenic (Total)	**Annually**		**Grab sample**	**Atomic Absorption/ICP**
BOD	**Monthly**		**Grab sample**	**Standard method**

TABLE F.2(ii): AMBIENT ENVIRONMENT MONITORING AND SAMPLING POINTS (1 table per monitoring point)

Monitoring Point Reference No: **Refer Section 8 of Hydrogeological Report (47092882) for 33 wells**

Parameter	Monitoring frequency	Accessibility of Sampling point	Sampling method	Analysis method / technique
Speciated PAHs (16) **TPH** **BTEX** **Speciated Phenols**	**Bi-annually** **Quarterly**	**All monitoring wells are accessible**	**Grab sample**	**GC-MS** **GC-FID** **GC-FID** **HPLC**

Table G.1(i) Details of Process related Raw Materials, Intermediates, Products, etc., used or generated on the site

Ref. Nº or Code	Material/ Substance[1]	CAS Number	Danger[2] Category	Amount Stored (tonnes)	Annual Usage (tonnes)	Nature of Use	R[3] - Phrase	S[3] - Phrase	Hazard Statement [4]
1	Creosote Oil (Koppers)	8001-58-9	Xi, N, Xn,	500	6000	Treatment	22, 36, 37, 38, 40, 43, 45, 50, 51, 53, 62, 63	**	302, 315, 317, 319, 335, 350, 351, 361fd, 400, 410, 411, 413
2	Creosote Oil (Rutgers)	8001-58-9	T, Carc. Cat. 2, Xn, Xi, N	500	6000	Treatment	36/38, 43, 45, 51/53, 62, 63	**	315, 317, 319, 350, 361fd, 411
3	Celcure AC500	none	Xn, C, N	2T	9T	Treatment	20/21/22, 34, 50/53	23, 24/25, 26, 28, 36/37/39, 38, 45, 60, 61	302, 314, 335, 400, 411
4	Diesel Oil	68334-30-5	Xn, Xi, Carc Cat. 1, Xn, Xn, N	15,000L	220,000L	Trucks and Boiler	20, 38, 45, 48/21, 65, 51/53	**	226, 351, 332, 304, 315, 373, 411
5	Petrol	86290-81-5	F+, Xi, Carc Cat. 1, Muta.Cat 2, Repr. Cat 3, Xn, N	45L	200L	Chain Saw and Fire Pump	12, 23, 24, 25, 36/38, 45/46, 48, 62/63, 67, 51/53	**	224, 304, 315, 336, 340, 350, 361, 411
6	Engine Oil	84605-29-8	Xi, N	1,000L	1,000L	Engine Maintenance	41, 38, 51/53	**	304, 315, 318, 411
7	Hydraulic Oil	None	**	1,000L	1,000L	Volvo Loaders	**	**	**
8	Aircol PD 100	None	**	40L	200L	Compressor Lubricant	**	**	**
9	Gear Oil	64742-54-7	T	100L	200L	Engine Maintenance	45	53, 35, 36/37	**

10	Mini Portafeed Acid	7631-90-5	Xn	200L	2,000L	Boiler Water Treatment	22, 31	**	302
11	Oilgon	10213-79-3	Xi	100L	1,000L	Cleaning Agent	11, 22, 34, 35, 36, 37, 38, 41	2, 26	225, 302, 314, 318, 319, 335, 336
12	Fast Bond	7085-85-0	C	0.5L	2L	Glue	14-34	**	**
13	Cutting and Tapping Fluid	67472-82-1	N, Xn, F+	5L	20L	Maintenance Work	10, 51/53, 65, 12	38, 61, 2, 23, 16	**
14	Penmax Maintenance Fluid	67-63-0	T, F, Xi, Xn, N, F+	5L	20L	Maintenance Work	12, 51/53	16, 23, 38, 51, 61	**
15	Copper Grease	64741-84-0	F, Xi, N, Xn, F+	5L	20L	Maintenance Work	12, 38, 52/53, 67	16, 23, 38, 51, 60	**
16	White Grease	64741-84-0	F, Xi, N, Xn, F+	5L	20L	Maintenance Work	12, 38, 51/53, 67	16, 23, 38, 51, 61	**
17	Moly Grease	None	**	-	-	Maintenance Work	**	**	**
18	Total Liquid Gasketing	17689-77-9	**	5L	20L	Maintenance Work	**	**	**
19	White Spirits	64742-82-1	Xn, N	5L	20L	Maintenance Work	10, 51/53, 65, 66, 67	**	226, 304, 336, 411
20	Heavy Duty Hand Cleaner	None	**	2L	10L	Hand Cleaner	**	2, 25	**
21	Essential Pine Disinfectant	68391-01-5	Xn, C, N	20L	100L	Toilet Cleaning	21/22, 34, 50		290, 312, 314, 318, 400, 410
22	Strong Toilet Cleaner	Enics 231-595-7	Xi	20L	100L	Toilet Cleaning	21/22, 22, 34, 36/37/38, 37, 50		290, 302, 312, 314, 315, 318, 334, 335, 400, 410, 412
23	Traffic Film Remover	10213-79-3	C, Xi, , N, Xi	40L	200L	Cleaning Agent	36/38	2, 26, 36/37/39, 45	**
24	Lemon Floor Gel	800209-3	Xi	20L	200L	Floor Cleaner	10, 35, 38, 41, 43, 50/53, 52/53	**	226, 302, 312, 315, 317, 318, 335, 400, 410, 412

25	Dreumex Special	None	**	5L	40L	Hand Cleaner	**	25,26	**
26	Acetone	67-64-1	F, Xi	2L	10L	Creosote Testing	11, 36, 66, 67	**	225, 319, 336
27	Toulene	108-88-3	F, Xn, Xi	4L	20L	Creosote Testing	11, 20/21/22, 36, 42	23, 36/37, 45, 63	225, 302, 312, 332, 319, 334
28	Roadmarker	1305-78-8	**	5L	100L	Line Marking			301,311, 314, 332
29	Aqua Clean ACF-32	7732-18-5	**	80L	100L	Added to Wastewater Treatment	**	**	**
30	Sodium Chloride	7647-14-5	**	2	8	Boiler Water	**	**	**
31	Thread Lock	923-26-2	Xi, O, T, Xn, N, Xn	2.5ml	7.5ml	Maintenance Work	41, 37/38, 43	24/25, 26, 37/39	**
32	Bond Seal	None	**	2.5ml	7.5ml	Maintenance Work	**	**	**
33	Conseal Touch-up Paint	None	**	10L	40L	Maintenance Work	**	**	**

Notes: 1. In cases where a material comprises a number of distinct and available dangerous substances, please give details for each component substance.
2. Article 2(2) of S.I. No. 116/2003.
3. Schedules 9 and 10 of S.I. No. 62/2004 (as amended by S.I. No. 271/2008)
4. EC Regulation 1272/2008 (Chemicals Act 2008 (13 of 2008) and 2010)

**** Does not apply/Data not available**

Table G.1(ii) Details of Process related Raw Materials, Intermediates, Products, etc., used or generated on the site

Ref. N° or Code	Material/ Substance	Odour			Pollutants (Tick and specify Group/Family Number)				Controlled Substances	Relevant hazardous substance [3]
		Odourous Yes/No	Description	Threshold µg/m³	EC EO (Surface Waters) Regulations 2015		EC EO Groundwater) Regulations 2010		REACH SVHC[2]	y/n
					Priority substances	Priority (hazardous) substances	Hazardous[1]	Non-hazardous[1]		
1	Creosote Oil (Koppers)	Yes	Coal Tar	No data available		✓	✓ Previously List I		Yes, Annex XVII	Yes, hazardous
2	Creosote Oil (Rutgers)	Yes	Aromatic	No data available		✓	✓ Previously List I		Yes, Annex XVII	Yes, hazardous
3	Celcure AC500	Yes	Characteristic odour	No data available					**	**
4	Diesel Oil	Yes	Diesel Fuel	Not detected	✓				**	Yes, hazardous
5	Petrol	Yes	Mild gasoline	Not detected					**	Yes, hazardous
6	Engine Oil	**	**	**					**	No
7	Hydraulic Oil	Yes	Oily	No data available					**	**
8	Aircol PD 100	Yes	Oily	No data available					**	**
9	Gear Oil	**	**	**					**	Yes, hazardous
10	Mini Portafeed Acid	Yes	Pungent	No data available			Undetermined	Undetermined	**	Yes, hazardous
11	Oilgon	Yes	Characteristic	No data available					**	No
12	Fast Bond	Yes	Pungent	No data available					**	Yes, hazardous
13	Cutting & Tapping Fluid	Yes	Characteristic odour	No data available					**	No
14	Penmax Maintenance Fluid	**	**	**			Undetermined	Undetermined	**	Yes, hazardous
15	Copper Grease	Yes	Characteristic odour	No data available					**	Yes, hazardous
16	White Grease	Yes	Characteristic odour	No data available					**	Yes, hazardous

17	Moly Grease	Yes	Characteristic odour	No data available					**	**
18	Total Liquid Gasketing	Yes	Acetic acid	No data available					**	No
19	White Spirits	Yes	Aromatic	No data available					**	Yes, hazardous
20	Heavy Duty Hand Cleaner	Yes	Perfumed	No data available					**	**
21	Essential Pine Disinfectant	Yes	Characteristic	No data available				✓ Previously List II	**	No
22	Strong Toilet Cleaner	Yes	Pungent	No data available					**	Yes, hazardous
23	Traffic Film Remover	No	Odourless	Not applicable					**	No
24	Lemon Floor Gel	Yes	Characteristic	No data available					**	No
25	Dreumex Special	**	**	**					**	**
26	Acetone	Yes	Fruity odour	No data available			Undetermined	Undetermined	**	Yes, hazardous
27	Toulene	**	**	**			✓ Previously List I		Yes, Annex XVII	Yes, hazardous
28	Roadmarker	No	Odourless	Not applicable			Undetermined	Undetermined	**	No
29	Aqua Clean ACF-32	**	**	**					**	No
30	Sodium Chloride	No	Odourless	Not applicable			Undetermined	Undetermined	**	No
31	Thread Lock	Yes	Slightly sweet, characteristic	No data available					**	Yes, hazardous
32	Bond Seal	Yes	Light, not unpleasant	No data available					**	**
33	Conseal Touch-up Paint	**	**	**					**	**

**** Not applicable/Data not available**

Note 1: The EPA Classification of Hazardous and Non-Hazardous Substances in Groundwater, December 2010.

Note 2: Where relevant, specify whether the substance is on the Authorisation List (Annex XIV Regulation (EC) No 1907/2006 as amended) or Restriction List (Annex XVII Regulation (EC) No 1907/2006 as amended). Also, indicate whether the use has been authorised or exempted in accordance with Regulation (EC) No 1907/2006 as amended.

Note 3: Relevant hazardous substances are those substances or mixtures defined within Article 3 of Regulation (EC) No 1272/2008 on the classification, labelling and packaging of substances and mixtures which, as a result of their hazardousness, mobility, persistence and biodegradability (as well as other characteristics), are capable of contaminating soil or groundwater.

TABLE H.3(i): Generation of waste at the installation and its management

Waste description	EWC Code (use asterisk to indicate whether hazardous waste or not)	Category per Animal By-products Regulation 1069/2009	Source of waste	Quantity generated (tonnes per month **based on quantities over the last four years**)	Location of recovery of disposal (on-site, off-site, exported)	Method of recovery or disposal (e.g. recycling, energy recovery, other incineration, landfill)
Creosote Waste	03 02 05	n/a	Production	0.21	Off-site	R1
Diesel	13 02 08	n/a	Production	0.1	Off-site	D10
Sludge	13 05 03	n/a	Separator	9.8*	Off-site	D9
PCB Contaminated Waste	16 02 09	n/a	Production	0.01*	Off-site	D10
Absorbents	15 02 02	n/a	Production	0.6	Exported	R1
Light fittings	20 01 35	n/a	Offices	0.001*	Off-site	D10
Metal	20 01 40	n/a	Metal waste	0.5	Off-site	R4
Mixed Municipal Waste	20 03 01	n/a	Canteen, offices etc.	1.3	Off-site	D1
Tyres	16 01 03	n/a	Vehicles in use on site	0.1	Off-site	R1
Septic Tank Sludge	20 03 04	n/a	Septic tanks (x3)	0.6	Off-site	D8
Soil containing dangerous substances	17 05 03	n/a	Maintenance	17.8*	Exported	R5
Biodegradable Canteen waste	20 01 08	n/a	Canteen	0.08	Off-site	R3
Aqueous liquids containing dangerous substances	16 10 01	n/a	Production	0.18	Exported	D8
Waste paint or varnishes	08 01 11	n/a	Maintenance	0.7	Exported	R1
Contaminated Packaging Waste	15 01 10	n/a	Production	0.04	Exported	R1
Boiler dust	10 01 01	n/a	Maintenance	0.95	Off site	D1
Iron and steel	17 04 05	n/a	Maintenance	1.9	Off site	R4

Table I.2(i) SURFACE WATER QUALITY

(Sheet 1 of 2) Monitoring Point/ Grid Reference: **Emission Point E and Monitoring Point A and B - Refer to Attachment E.2 - PDM Q4 Surface Water Monitoring 2015 (47092976) and Surface Water Impact Assessment (47092796)**

Parameter	Results (mg/l)				Sampling method[2] (grab, drift etc.)	Normal Analytical Range[2]	Analysis method / technique
	Date	Date	Date	Date			
pH							
Temperature							
Electrical conductivity EC							
Total Ammonia as N							
Chemical oxygen demand							
Biochemical oxygen demand							
Dissolved oxygen DO							
Orthophosphate as P							
Nitrate as N							
Nitrite as N							
Calcium Ca							
Cadmium Cd							
Chromium Cr							
Chloride Cl							
Copper Cu							
Iron Fe							
Lead Pb							
Magnesium Mg							
Manganese Mn							
Mercury Hg							

Surface Water Quality (Sheet 2 of 2)

Parameter	Results (mg/l)				Sampling method (grab, drift etc.)	Normal Analytical Range	Analysis method / technique
	Date	Date	Date	Date			
Nickel Ni							
Potassium K							
Sodium Na							
Sulphate SO_4							
Zinc Zn							
Total alkalinity (as $CaCO_3$)							
Total organic carbon TOC							
Total oxidised nitrogen TON							
Nitrite NO_2							
Nitrate NO_3							
Faecal coliforms (/100mls)							
Total coliforms (/100mls)							
Phosphate PO_4							

Table I.4(i) GROUNDWATER QUALITY
(Sheet 1 of 2): Refer to Hydrogeological Review Report (47092882) for data

Parameter	Results (mg/l)				Sampling method (composite etc.)	Normal Analytical Range	Analysis method / technique
	Date	Date	Date	Date			
pH							
Temperature							
Electrical conductivity EC							
Total Ammonium as N							
Nitrite as N							
Nitrate as N							
Orthphosphate as P							
Dissolved oxygen DO							
Residue on evaporation (180°C)							
Aluminium Al							
Arsenic As							
Boron B							
Calcium Ca							
Cadmium Cd							
Chromium Cr							
Chloride Cl							
Copper Cu							
Cyanide Cn, total							
Iron Fe							
Lead Pb							
Magnesium Mg							
Manganese Mn							
Mercury Hg							
Nickel Ni							
Potassium K							
Sodium Na							
Sulphate SO_4							

Groundwater Quality (sheet 2 of 2)

Parameter	Results (mg/l)				Sampling method (composite, dipper etc.)	Normal Analytical Range	Analysis method / technique
	Date	Date	Date	Date			
Phosphate PO_4							
Sulphate SO_4							
Zinc Zn							
Total alkalinity (as $CaCO_3$)							
Total organic carbon TOC							
Total oxidised nitrogen TON							
Arsenic As							
Barium Ba							
Boron B							
Fluoride F							
Phenol							
Phosphorus P							
Selenium Se							
Silver Ag							
Nitrite NO_2							
Nitrate NO_3							
Faecal coliforms (/100mls)							
Total coliforms (/100mls)							
Water level (m OD)							

TABLE I.4(ii): LIST OF OWNERS/FARMERS OF LAND
Not Applicable

Land Owner	Townlands where landspreading	Map Reference	Fertiliser P requirement for each farm
			*NMP must take account of on-farm slurry

Total P requirement of the client List _____

TABLE I.4(ii): LANDSPREADING
Not Applicable

Land Owner/Farmer_____

Map Reference_____

Field ID	Total Area (ha)	(a) Usable Area (ha)	Soil P Test Mg/l	Date of P test	Crop	P Required (kg P/ha)	Volume of On-Farm Slurry Returned (m^3/ha)	Estimated P in On-Farm Slurry (kg P/ha)	(b) Volume to be Applied (m^3/ha)	P Applied (kg P/ha)	Total Volume of imported slurry per plot (m^3)

TOTAL VOLUME THAT CAN BE IMPORTED ON TO THE FARM:

Concentration of P in landspread material	- kg P/m^3
Concentration of N in landspread material	- kg N/m^3

Table I.7(i): AMBIENT & BACKGROUND NOISE ASSESSMENT

Need to carry out an assessment for tonal and impulsive noise[1]

Not Applicable

	National Grid Reference (6N, 6E)	Sound Pressure Levels (dB)					
		L_{Aeq}		L_{A10}		L_{A90}	
		Ambient	Background[2]	Ambient	Background[2]	Ambient	Background[2]
1. SITE BOUNDARY[3]							
Location 1:							
Location 2:							
Location 3:							
Location 4:							
2. NOISE SENSITIVE LOCATIONS[3]							
Location 1:							
Location 2:							
Location 3:							
Location 4:							

1. Refer to section 5 of the Agency's *Guidance Note for Noise: Licence Applications, Surveys and Assessments in Relation to Scheduled Activities (NG4)* (2012).
2. Background noise levels should be determined in the absence of site specific noise. Where an installation is operational on a 24hr basis, estimates may be given for background noise levels, but this should be noted.
3. All locations should be identified on accompanying drawings.