| Facility Information Summary | |
|---|---|
| AER Reporting Year | 2015 |
| Licence Register Number | P0643-03 |
| Name of site | AbbVie Ireland NL B.V |
| Site Location | Manorhamilton Road, Sligo, Co. Sligo |
| NACE Code | 2110 (Manufacture of basic pharmaceutical products) |
| Class/Classes of Activity | 5.16.0: Chemicals |
| National Grid Reference (6E, 6 N) | 570530E 837424N |

A description of the activities/processes at the site for the reporting year. This should include information such as production increases or decreases on site, any infrastructural changes, environmental performance which was measured during the reporting year **and an overview of compliance with your licence** listing all exceedances of licence limits (where applicable) and what they relate to e.g. air, water, noise.

AbbVie Ireland NL B.V is involved in the manufacture of pharmaceuticals at its facility in Sligo Town. AbbVie holds an Industrial Emissions Licence (P0643-02) (originally an IPPC Licence issued in November 2005), as granted by the EPA.

The following key facilities are located on the AbbVie Ireland site: administration buildings, manufacturing building, drug product building, tank farm, wastewater treatment system, security and stores. There were no new buildings/facilities added during 2015. Maintenance was undertaken on the SW-1 and SE-1 systems during 2015 however no emissions were ongoing during the maintenance procedure. Maintenance was completed on both the TO and Cryo systems with air flows switched to other abatement systems.

During 2015 a RFA was submitted to the EPA for the introduction of two new products in the API. A new thermal oxidizer was comissioned in Q4 for non chlorinated waste streams.

There were two other reported incidents during 2015 which are detailed in the Complaint/Incidents section of this AER.

**Declaration:**

All the data and information presented in this report has been checked and certified as being accurate. The quality of the information is assured to meet licence requirements.

| _____ | __31/03/2016_____ |
|---|---|
| Signature<br>Group/Facility manager<br>(or nominated, suitably qualified and experienced deputy) | Date |

| AIR-summary template | Lic No: | P0643-02 | Year | 2015 |
|---|---|---|---|---|

**Answer all questions and complete all tables where relevant**

| | | | Additional information |
|---|---|---|---|
| 1 | Does your site have licensed air emissions? If yes please complete table A1 and A2 below for the current reporting year and answer further questions. If **you do not have** licenced emissions and **do not complete a solvent management plan** (table A4 and A5) you do not need to complete the tables | Yes | There are eight emission points to atmosphere at AbbVie:<br>- A1-1 and A1-2 from boilers (A1-3 exists but is redundant)<br>- A2-1(a) from Thermal Oxidiser<br>- A2-1(b) from Cryogenic Condenser<br>- A2-2 Scrubber (not in operation in 2014)<br>- A2-3, A2-4 and A2-5 from dust extraction systems |

## Periodic/Non-Continuous Monitoring

| | | | |
|---|---|---|---|
| 2 | Are there any results in breach of licence requirements? If yes please provide brief details in the comment section of TableA1 below | No | |
| 3 | Was all monitoring carried out in accordance with EPA guidance note AG2 and using the basic air monitoring checklist? Basic air monitoring checklist AGN2 | Yes | |

### Table A1: Licensed Mass Emissions/Ambient data-periodic monitoring (non-continuous)

FRA

| Emission reference no: | Parameter/ Substance | Frequency of Monitoring | ELV in licence or any revision therof | Licence Compliance criteria | Measured value | Unit of measurement | Compliant with licence limit | Method of analysis | Annual mass load (kg) | Comments -reason for change in % mass load from previous year if applicable |
|---|---|---|---|---|---|---|---|---|---|---|
| Boiler A1-1 | Nitrogen oxides (NOx/NO2) | Annual | 180 | No 30min mean can exceed the ELV | 111.6 | mg/Nm3 | yes | Flue Gas Analyser | 12881.05 | |
| Boiler A1-1 | Sulphur oxides (SOx/SO2) | Annual | 70 | No 30min mean can exceed the ELV | 3.9 | mg/Nm3 | yes | Flue Gas Analyser | 220.36 | |
| Boiler A1-1 | Carbon monoxide (CO) | Annual | N/A | No 30min mean can exceed the ELV | 19.2 | mg/Nm3 | yes | Flue Gas Analyser | 1825.48 | |
| Boiler A1-1 | Combustion Efficiency | Annual | N/A | N/A | 81.8 | % | yes | Flue Gas Analyser | N/A | |
| Boiler A1-1 | Smoke | Bi-Annual | <1 | 100 % of values < ELV | <1 | Ringelmann Shade | yes | Ringelmann Test | N/A | |
| Boiler A1-1 | volumetric flow | Annual | 13047 | 100 % of values < ELV | 4084 | Nm3/hour | yes | Flow Meter | N/A | |
| Boiler A1-2 | Nitrogen oxides (NOx/NO2) | Annual | 180 | No 30min mean can exceed the ELV | 163.8 | mg/Nm3 | yes | Flue Gas Analyser | 12881.05 | |
| Boiler A1-2 | Sulphur oxides (SOx/SO2) | Annual | 70 | No 30min mean can exceed the ELV | 1.5 | mg/Nm3 | yes | Flue Gas Analyser | 220.36 | |
| Boiler A1-2 | Carbon monoxide (CO) | Annual | N/A | No 30min mean can exceed the ELV | 21 | mg/Nm3 | yes | Flue Gas Analyser | 1825.48 | |
| Boiler A1-2 | Combustion Efficiency | Annual | N/A | N/A | 93..2 | % | yes | Flue Gas Analyser | N/A | |

| AIR-summary template | | | | | Lic No: | P0643-02 | | Year | 2015 | |
|---|---|---|---|---|---|---|---|---|---|---|
| Boiler A1-2 | volumetric flow | Annual | 13047 | 100 % of values < ELV | 6244 | Nm3/hour | yes | Flow Meter | N/A | |
| A2-1a | 2-methyoxyethanol | Bi-Annual | 2 | No 30min mean can exceed the ELV | 1.8 | mg/Nm3 | yes | Adsorption/GC-MS | 41.12 | |
| A2-1a | Dimethylformamide | Bi-Annual | 2 | No 30min mean can exceed the ELV | 1.8 | mg/Nm3 | yes | Adsorption/GC-MS | 41.12 | |
| A2-1a | TA Luft organic substances class 1 | Bi-Annual | 20 | No 30min mean can exceed the ELV | 1.875 | mg/Nm3 | yes | Adsorption/GC-MS | 40.60 | |
| A2-1a | TA Luft organic substances class 2 | Bi-Annual | 100 | No 30min mean can exceed the ELV | 1.875 | mg/Nm3 | yes | Adsorption/GC-MS | 40.60 | |
| A2-1a | Temperature | Bi-Annual | N/A | N/A | 273 | deg.c | yes | Pitot Tube | N/A | |
| A2-1a | Total Organic Carbon (as C) | Bi-Annual | 20 | No 30min mean can exceed the ELV | 0.2075 | mg/Nm3 | yes | Flue Gas Analyser | 4.48 | |
| A2-1a | volumetric flow | Bi-Annual | 13047 | 100 % of values < ELV | 2206 | Nm3/hour | yes | Flow Meter | N/A | |
| A2-1b | 2-methyoxyethanol | Bi-Annual | 2 | No 30min mean can exceed the ELV | 2.65 | mg/Nm3 | yes | Adsorption/GC-MS | 41.12 | |
| A2-1b | Dimethylformamide | Bi-Annual | 2 | No 30min mean can exceed the ELV | 2.65 | mg/Nm3 | yes | Adsorption/GC-MS | 41.12 | |
| A2-1b | TA Luft organic substances class 1 | Bi-Annual | 20 | No 30min mean can exceed the ELV | 1.85 | mg/Nm3 | yes | Adsorption/GC-MS | 40.60 | |
| A2-1b | TA Luft organic substances class 2 | Bi-Annual | 100 | No 30min mean can exceed the ELV | 1.85 | mg/Nm3 | yes | Adsorption/GC-MS | 40.60 | |
| A2-1b | Temperature | Bi-Annual | N/A | N/A | 273 | deg.c | yes | Pitot Tube | N/A | |
| A2-1b | Total Organic Carbon (as C) | Bi-Annual | 20 | No 30min mean can exceed the ELV | 0.2 | mg/Nm3 | yes | Flue Gas Analyser | 4.48 | |
| A2-1b | volumetric flow | Bi-Annual | 13047 | 100 % of values < ELV | 283 | Nm3/hour | yes | Flow Meter | N/A | |
| A2-2 | Formic acid | Annual | N/A | N/A | 0.1 | mg/Nm3 | yes | Non-isokinetic/charcoal tube | 0.02 | |

| AIR-summary template | | | | | Lic No: | P0643-02 | | Year | 2015 | |
|---|---|---|---|---|---|---|---|---|---|---|
| A2-2 | hydrochloric acid | Annual | N/A | N/A | 0.3 | mg/Nm3 | yes | Non-isokinetic/isokinetic/charcoal tube | 0.06 | |
| A2-2 | Temperature | Annual | N/A | N/A | 273 | deg.c | yes | Pitot Tube | N/A | |
| A2-2 | volumetric flow | Annual | 13047 | 100 % of values < ELV | 23 | Nm3/hour | yes | Flow Meter | N/A | |
| A2-3 | Total Particulates | Annual | 1 | No 30min mean can exceed the ELV | 0.7 | mg/Nm3 | yes | Isokinetic/Gravimetric | 12.91 | |
| A2-3 | API | Annual | 0.15 | No 30min mean can exceed the ELV | <0.003 | mg/Nm3 | yes | Isokinetic/Gravimetric | 0.05 | |
| A2-3 | volumetric flow | Annual | 13047 | 100 % of values < ELV | 926 | Nm3/hour | yes | Flow Meter | N/A | |
| A2-4 | Total Particulates | Annual | 1 | No 30min mean can exceed the ELV | 0.9 | mg/Nm3 | yes | Isokinetic/Gravimetric | 12.91 | |
| A2-4 | API | Annual | 0.15 | No 30min mean can exceed the ELV | <0.003 | mg/Nm3 | yes | Isokinetic/Gravimetric | 0.05 | |
| A2-4 | volumetric flow | Annual | 13047 | 100 % of values < ELV | 926 | Nm3/hour | yes | Flow Meter | N/A | |

Note 1: Volumetric flow shall be included as a reportable parameter

| AIR-summary template | Lic No: | P0643-02 | Year | 2015 |
|---|---|---|---|---|

## Continuous Monitoring

| | | | |
|---|---|---|---|
| 4 | Does your site carry out continuous air emissions monitoring? | Yes | Continuous monitoring is carried out at emission point references A2-1(a) and A2-1(b) |

If yes please review your continuous monitoring data and report the required fields below in Table A2 and compare it to its relevant Emission Limit Value (ELV)

| | | | |
|---|---|---|---|
| 5 | Did continuous monitoring equipment experience downtime? If yes please record downtime in table A2 below | No | |
| 6 | Do you have a proactive service agreement for each piece of continuous monitoring equipment? | Yes | Service level agreements in place with Vendors (IES) and associated PMs |
| 7 | Did your site experience any abatement system bypasses? If yes please detail them in table A3 below | No | |

### Table A2: Summary of average emissions -continuous monitoring

| Emission reference no: | Parameter/ Substance | ELV in licence or any revision therof | Averaging Period | Compliance Criteria | Units of measurement | Annual Emission (Average) | Annual maximum | Monitoring Equipment downtime (hours) | Number of ELV exceedences in current reporting year | Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| A2-1(a) | Sulphur oxides (SOx/SO2) | 70 | 24-hour | No 24hr mean > ELV | mg/Nm3 | 4.57 | 43.94 | 0 | 0 | |
| A2-1(a) | Nitrogen oxides (NOx/NO2) | 200 | 24-hour | No 24hr mean > ELV | mg/Nm3 | 30.22 | 139.63 | 0 | 0 | |
| A2-1(a) | Carbon monoxide (CO) | 300 | 24-hour | No 24hr mean > ELV | mg/Nm3 | 1.97 | 30.18 | 0 | 0 | |
| A2-1(a) | Total Organic Carbon (as C) | 20 | 24-hour | No 24hr mean > ELV | mg/Nm3 | 0.43 | 4.41 | 0 | 0 | |
| A2-1(a) | Oxygen | n/a | 24-hour | n/a | % | | | 0 | 0 | |
| A2-1(a) | Temperature | n/a | 24-hour | n/a | degrees C | 83.25 | 280.56 | 0 | 0 | |
| A2-1(a) | Flow | 3962 | 24-hour | No 24hr mean > ELV | Nm3/hour | 666.3 | 2205.91 | 0 | 0 | |
| A2-1(b) | Total Organic Carbon (as C) | 20 | 24-hour | No 24hr mean > ELV | mg/Nm3 | 0.01 | 1.78 | 0 | 0 | |
| A2-1(b) | Flow | 900 | 24-hour | No 24hr mean > ELV | Nm3/hour | 122.17 | 1012.46 | 0 | 0 | |

note 1: Volumetric flow shall be included as a reportable parameter.

### Table A3: Abatement system bypass reporting table

Bypass protocol

| Date* | Duration** (hours) | Location | Reason for bypass | Impact magnitude | Corrective action |
|---|---|---|---|---|---|
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |

* this should include all dates that an abatement system bypass occurred

** an accurate record of time bypass beginning and end should be logged on site and maintained for future Agency inspections please refer to bypass protocol link

**AIR-summary template** Lic No: P0643-02 Year 2015

## Solvent use and management on site

8 Do you have a total Emission Limit Value of direct and fugitive emissions on site? if yes please fill out tables A4 and A5

| SELECT | Licence condition 6.10:<br>- fugitive emissions to atmosphere shall not exceed 5% of solvent input on an annual basis |
|---|---|

**Table A4: Solvent Management Plan Summary**
**Total VOC Emission limit value**

Solvent regulations — Please refer to linked solvent regulations to complete table 5 and 6

| Reporting year | Total solvent input on site (kg) | Total VOC emissions to Air from entire site (direct and fugitive) | Total VOC emissions as %of solvent input | Total Emission Limit Value (ELV) in licence or any revision therof | Compliance |
|---|---|---|---|---|---|
| 2013 | 26,650.54 | 43.1 | 0.0038% | 5% | Yes |
| 2014 | 696,154.0 | 520 | 0.77% | 5% | Yes |
| 2015 | 594,210 | 2,160 | 0.36 | 5% | Yes |

**Table A5: Solvent Mass Balance summary**

| | (I) Inputs (kg) | (O) Outputs (kg) | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Solvent | (I) Inputs (kg) | Organic solvent emission in waste | Solvents lost in water (kg) | Collected waste solvent (kg) | Fugitive Organic Solvent (kg) | Solvent released in other ways e.g. | Solvents destroyed onsite through | Total emission of Solvent to air (kg) |
| | | | | | | | | |
| Methanol | 144.57 | | | | | | | |
| ALCOHOL, ISOPRO | 27.21 | | | | | | | |
| TETRAHYDROFURA | 28.81 | | | | | | | |
| ETHYL ACETATE | 110.49 | | | | | | | |
| METHYLENE CHLO | 50.07 | | | | | | | |
| DIMETHYL SULFOX | 68.61 | | | | | | | |
| ETHANOL | 32.04 | | | | | | | |
| N-METHYL MORPH | 0.43 | | | | | | | |
| IPAC | 84.54 | | | | | | | |
| N-METHYLPYRROL | 13.32 | | | | | | | |
| HYDROC. ACID | 0.45 | | | | | | | |
| DIMETHYLFORMAM | 11.47 | | | | | | | |
| ETHANOL WITH TO | 20.87 | | | | | | | |
| ACETONITRILE | 1.34 | | | | | | | |
| | | | | | | | | |
| | | | | | | | Total | |

**AER Monitoring returns summary template-WATER/WASTEWATER(SEWER)** Lic No: P0643-02 Year 2015

| | | | Additional information |
|---|---|---|---|
| 1 | Does your site have licensed emissions direct to surface water or direct to sewer? If yes please complete table W2 and W3 below for the current reporting year and answer further questions. If **you do not have** licenced emissions you only need to complete table W1 and or W2 for storm water analysis and visual inspections | Yes | The stormwater discharge reference is SW-1 and the sewer discharge reference is SE-1. |
| 2 | Was it a requirement of your licence to carry out visual inspections on any surface water discharges or watercourses on or near your site? If yes please complete table W2 below summarising only any evidence of contamination noted during visual inspections | Yes | Licence Condition 6.8.2: A visual examination of the storm water discharge shall be carried out daily. A log of such inspections shall be maintained. |

**Table W1 Storm water monitoring**

| Location reference | Location relative to site activities | PRTR Parameter | Licenced Parameter | Monitoring date | ELV or trigger level in licence or any revision thereof* | Licence Compliance criteria | Measured value | Unit of measurement | Compliant with licence | Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| SW-1 | onsite | n/a | COD | Weekly | 1300 | All results < 1.2 times ELV, plus 8 from ten results must be < ELV | 10 | mg/L | yes | |
| SW-1 | onsite | n/a | pH | Daily | 6 - 9 | No pH value shall deviate from the specified range. | 7.87 | pH units | yes | |
| SW-1 | onsite | n/a | Temperature | Daily | 40 | No pH value shall deviate from the specified range. | 12.79 | degrees C | yes | |
| | | | | | | | | | | |

trigger values may be agreed

**Table W2 Visual inspections-Please only enter details where contamination was observed.**

| Location Reference | Date of inspection | Description of contamination | Source of contamination | Corrective action | Comments |
|---|---|---|---|---|---|
| SW-1 | 11/03/2015 | Turbid | site | none | Minor observation, returned to clear shortly after inspection |
| SW-1 | 12/03/2015 | Turbid | site | none | Minor observation, returned to clear shortly after inspection |
| SW-1 | 13/03/2015 | Turbid | site | none | Minor observation, returned to clear shortly after inspection |
| SW-1 | 15/03/2015 | Turbid | site | none | Minor observation, returned to clear shortly after inspection |
| SW-1 | 16/03/2015 | Turbid | site | none | Minor observation, returned to clear shortly after inspection |
| SW-1 | 17/03/2015 | Turbid | site | none | Minor observation, returned to clear shortly after inspection |
| SW-1 | 18/03/2015 | Turbid | site | none | Minor observation, returned to clear shortly after inspection |
| SW-1 | 19/03/2015 | Turbid | site | none | Minor observation, returned to clear shortly after inspection |
| SW-1 | 20/03/2015 | Turbid | site | none | Minor observation, returned to clear shortly after inspection |
| SW-1 | 23/03/2015 | Turbid | site | none | Minor observation, returned to clear shortly after inspection |

**Licensed Emissions to water and /or wastewater(sewer)-periodic monitoring (non-continuous)**

| | | | | Additional information |
|---|---|---|---|---|
| 3 | Was there any result in breach of licence requirements? If yes please provide brief details in the comment section of Table W3 below | | No | |
| 4 | Was all monitoring carried out in accordance with EPA guidance and checklists for Quality of Aqueous Monitoring Data Reported to the EPA? If no please detail what areas require improvement in additional information box | External /Internal Lab Quality checklist / Assessment of results checklist | Yes | |

**AER Monitoring returns summary template-WATER/WASTEWATER(SEWER)** Lic No: P0643-02 Year 2015

**Table W3: Licensed Emissions to water and /or wastewater (sewer)-periodic monitoring (non-continuous)**

| Emission reference no: | Emission released to | Parameter/ SubstanceNote 1 | Type of sample | Frequency of monitoring | Averaging period | ELV or trigger values in licence or any revision therof[Note 2] | Licence Compliance criteria | Measured value | Unit of measurement | Compliant with licence | Method of analysis | Procedural reference source | Procedural reference standard number | Annual mass load (kg) | Comments |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SE-1 | Wastewater/Sewer | Ammonia (as N) | composite | Weekly | N/A | 25 | All results < 1.2 times ELV, plus 8 from ten results must be < ELV | 1.43 | mg/L | yes | ISE (Ion Selective Electrode) | SELECT | | 14.58 | |
| SE-1 | Wastewater/Sewer | BOD | composite | Weekly | N/A | 450 | All results < 1.2 times ELV, plus 8 from ten results must be < ELV | 16.2 | mg/L | yes | 5-day incubation and DO probe | QP-CHEM-2016 | | 164.8 | |
| SE-1 | Wastewater/Sewer | Detergents (as MBAS) | composite | Quaterly | N/A | 20 | All results < 1.2 times ELV, plus 8 from ten results must be < ELV | 0.21 | mg/L | yes | Standard Method | | | 2.14 | |
| SE-1 | Wastewater/Sewer | Nitrate (as N) | composite | Monthly | N/A | N/A | All results < 1.2 times ELV, plus 8 from ten results must be < ELV | 9.52 | mg/L | yes | ISE (Ion Selective Electrode) | QP-CHEM-2016 | | 96.86 | |
| SE-1 | Wastewater/Sewer | Nitrite (as N) | composite | Monthly | N/A | N/A | All results < 1.2 times ELV, plus 8 from ten results must be < ELV | 0.0353 | mg/L | yes | Standard Method | | | 0.36 | |
| SE-1 | Wastewater/Sewer | Total nitrogen | composite | Monthly | N/A | N/A | All results < 1.2 times ELV, plus 8 from ten results must be < ELV | 7.33 | mg/L | yes | Standard Method | | | 74.56 | |
| SE-1 | Wastewater/Sewer | Fats, Oils and Greases | composite | Quaterly | N/A | 10 | All results < 1.2 times ELV, plus 8 from ten results must be < ELV | 5* | mg/L | yes | Hexane Extraction and Gravimetry | QP-CHEM-2019 | | 50.88 | Less than detection limit (<10mg/l) therefore actual value taken at 50% of detectiion limit |
| SE-1 | Wastewater/Sewer | Sulphate | composite | Monthly | N/A | 1500 | All results < 1.2 times ELV, plus 8 from ten results must be < ELV | 120.1 | mg/L | yes | Turbidimetry | QP-CHEM-2050 | | 1221.77 | |
| SE-1 | Wastewater/Sewer | Kjeldahl Nitrogen | composite | Monthly | N/A | N/A | All results < 1.2 times ELV, plus 8 from ten results must be < ELV | 5.18 | mg/L | yes | Digestion and Spectometry | QP-CHEM-2073 | | 52.73 | |
| SE-1 | Wastewater/Sewer | Total phosphorus | composite | Weekly | N/A | 10 | All results < 1.2 times ELV, plus 8 from ten results must be < ELV | 3.18 | mg/L | yes | Standard Method | | | 33.07 | |
| SE-1 | Wastewater/Sewer | Toxicity | composite | Annual | N/A | N/A | All results < 1.2 times ELV, plus 8 from ten results must be < ELV | 10.44 | mg/L | no (if no please enter details in comments box) | Respirometry Test | EN ISO 8192:2007 | | | |

Note 1: Volumetric flow shall be included as a reportable parameter

Note 2: Where Emission Limit Values (ELV) do not apply to your licence please compare results against EQS for Surface water or relevant receptor quality standards

**AER Monitoring returns summary template-WATER/WASTEWATER(SEWER)** Lic No: P0643-02 Year 2015

## Continuous monitoring

| | | | Additional Information |
|---|---|---|---|
| 5 | Does your site carry out continuous emissions to water/sewer monitoring? | Yes | |
| | **If yes please summarise your continuous monitoring data below in Table W4 and compare it to its relevant Emission Limit Value (ELV)** | | |
| 6 | Did continuous monitoring equipment experience downtime? **If yes please record downtime in table W4 below** | Yes | |
| 7 | Do you have a proactive service contract for each piece of continuous monitoring equipment on site? | Yes | Service level agreeements in |
| 8 | Did abatement system bypass occur during the reporting year? **If yes please complete table W5 below** | No | |

## Table W4: Summary of average emissions -continuous monitoring

| Emission reference no: | Emission released to | Parameter/ Substance | ELV or trigger values in licence or any revision thereof | Averaging Period | Compliance Criteria | Units of measurement | Annual Emission for current reporting year (kg) | % change +/- from previous reporting year | Monitoring Equipment downtime (hours) | Number of ELV exceedences in reporting year | Comments |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SE-1 | Wastewater/Sewer | pH | 6-9 | 24 hour | No pH value shall deviate from the .specified range | pH units | 7.5 | n/a | 0 | 0 | Average value |
| SE-1 | Wastewater/Sewer | Temperature | 40 | 24 hour | No temperature value shall exceed the limit .value | degrees C | 11.19 | n/a | 0 | 0 | Average value |
| SE-1 | Wastewater/Sewer | COD | 1300 | 24 hour | All results < 1.2 times ELV, plus 8 from ten results must be < ELV | mg/L | 216.51 | -93.70% | 0 | 0 | Reduction due to reduced volumetric flow |
| SE-1 | Wastewater/Sewer | Suspended Solids | 350 | 24 hour | All results < 1.2 times ELV, plus 8 from ten results must be < ELV | mg/L | 174.71 | -91.5 | 0 | 0 | Reduction due to reduced volumetric flow |
| SE-1 | Wastewater/Sewer | volumetric flow | 300 | 24 hour | No flow value shall exceed the specific limit. | m3/day | 10176 (Total Yearly Flow) | -85.40% | 0 | 0 | Reduction due to reduced volumetric flow |

note 1: Volumetric flow shall be included as a reportable parameter.

## Table W5: Abatement system bypass reporting table

| Date | Duration (hours) | Location | Resultant emissions | Reason for bypass | Corrective action* | Was a report submitted to the EPA? | When was this report submitted? |
|---|---|---|---|---|---|---|---|
| 11/06/2015 | 360 | SW-1 | No Emissions | Equipemnt malfunction | Replace Toc meter | Yes | 02/07/2015 |
| | | | | | | | |
| | | | | | | | |

*Measures taken or proposed to reduce or limit bypass frequency

| Bund/Pipeline testing template | Lic No: | P0643-02 | Year | 2015 | |
|---|---|---|---|---|---|

Bund testing — dropdown menu click to see options

| | | | Additional information |
|---|---|---|---|
| 1 | Are you required by your licence to undertake integrity testing on bunds and containment structures ? if yes please fill out table B1 below listing all **new bunds and containment structures** on site, in addition to **all bunds which failed** the integrity test-**all bunding structures which failed including mobile bunds must be listed in the table below, please include all bunds outside the licenced testing period** (mobile bunds and chemstore included) | Yes | |
| 2 | Please provide integrity testing frequency period | 3 years | |
| 3 | Does the site maintain a register of bunds, underground pipelines (including stormwater and foul), Tanks, sumps and containers? (containers refers to "Chemstore" type units and mobile bunds) | Yes | |
| 4 | How many bunds are on site? | 47 | |
| 5 | How many of these bunds have been tested within the required test schedule? | 47 | |
| 6 | How many mobile bunds are on site? | | |
| 7 | Are the mobile bunds included in the bund test schedule? | Yes | |
| 8 | How many of these mobile bunds have been tested within the required test schedule? | | |
| 9 | How many sumps on site are included in the integrity test schedule? | | |
| 10 | How many of these sumps are integrity tested within the test schedule? | 3 | |
| | **Please list any sump integrity failures in table B1** | | |
| 11 | Do all sumps and chambers have high level liquid alarms? | N/A | |
| 12 | If yes to Q11 are these failsafe systems included in a maintenance and testing programme? | N/A | |
| 13 | Is the Fire Water Retention Pond included in your integrity test programme? | N/A | |

**Table B1:** Summary details of bund /containment structure integrity test

| Bund/Containment structure ID | Type | Specify Other type | Product containment | Actual capacity | Capacity required* | Type of integrity test | Other test type | Test date | Integrity reports maintained on site? | Results of test | Integrity test failure explanation <50 words | Corrective action taken | Scheduled date for retest | Results of retest(if in current reporting year) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 004A | prefabricated | Plastic | Chemstore | 1.35 | 1.1 | Hydraulic test | | 08/12/2015 | Yes | Pass | | SELECT | 2018 | |
| 004B | prefabricated | Steel | Chemstore | 1.35 | 1.1 | Hydraulic test | | 08/12/2015 | Yes | Pass | | | 2018 | |
| 005A | prefabricated | Steel | Chemstore | 1.35 | 1.1 | Hydraulic test | | 08/12/2015 | Yes | Pass | | | 2018 | |
| 005B | prefabricated | Steel | Chemstore | 1.35 | 1.1 | Hydraulic test | | 08/12/2015 | Yes | Pass | | | 2018 | |
| 006A | prefabricated | Steel | Chemstore | 1.35 | 1.1 | Hydraulic test | | 08/12/2015 | Yes | Pass | | | 2018 | |
| 006B | prefabricated | Steel | Chemstore | 1.35 | 1.1 | Hydraulic test | | 08/12/2015 | Yes | Pass | | | 2018 | |
| 007A | prefabricated | Steel | Chemstore | 1.35 | 1.1 | Hydraulic test | | 08/12/2015 | Yes | Pass | | | 2018 | |
| 007B | prefabricated | Steel | Chemstore | 1.35 | 1.1 | Hydraulic test | | 08/12/2015 | Yes | Pass | | | 2018 | |
| 010 | prefabricated | Steel | Incoming warehouse goods | 0.22 | 0.2 | Hydraulic test | | 07/12/2015 | Yes | Pass | | | 2018 | |
| 011 | prefabricated | Steel | Mobile storage bund | 0.22 | 0.2 | Hydraulic test | | 07/12/2015 | Yes | Pass | | | 2018 | |
| 201 | reinforced concrete | | Drug product and lab sump | 60 | 8 | Hydraulic test | | 07/12/2015 | Yes | Pass | | | 2018 | |
| 205 | prefabricated | Steel | B20 Ph Neutralisation Skid | 1.57 | 1.4 | Hydraulic test | | 07/12/2015 | Yes | Pass | | | 2018 | |
| 401 | reinforced concrete | | Catch pot bund | 8.43 | 6.65 | Hydraulic test | | 07/12/2015 | Yes | Pass | | | 2018 | |
| 401 | reinforced concrete | | Solvent waste tank bund | 12.4 | 5.43 | Hydraulic test | | 07/12/2015 | Yes | Pass | | | 2018 | |
| 403 | reinforced concrete | | Aqueous waste tank bund | 13 | 5.43 | Hydraulic test | | 07/12/2015 | Yes | Pass | | | 2018 | |
| 406 | reinforced concrete | | Drum charge bund | 4.9 | 1 | Hydraulic test | | 07/12/2015 | Yes | Pass | | | 2018 | |
| 407 | reinforced concrete | | Mother liquors storage tank | 22.76 | 20 | Hydraulic test | | 07/12/2015 | Yes | Pass | | | 2018 | |
| 408 | prefabricated | Steel | Mother liquors storage tank | 1 | 2 | Hydraulic test | | 07/12/2015 | Yes | Pass | | | 2018 | |
| 409 | prefabricated | Steel | Mother liquors IBC Bund | 1.2 | 1 | Hydraulic test | | 07/12/2015 | Yes | Pass | | | 2018 | |
| 410 | prefabricated | Steel | Mother liquors IBC Bund | 1.2 | 1 | Hydraulic test | | 07/12/2015 | Yes | Pass | | | 2018 | |
| 411A | prefabricated | Plastic | Ph skid | 0.2 | 0.0275 | Hydraulic test | | 08/12/2015 | Yes | Pass | | | 2018 | |
| 411B | prefabricated | Plastic | Ph skid | 0.2 | 0.0275 | Hydraulic test | | 08/12/2015 | Yes | Pass | | | 2018 | |

| Bund/Pipeline testing template | | | | | Lic No: | P0643-02 | | | Year | 2015 | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SPEC NX1164A | prefabricated | Plastic | Ph skid | 0.53 | 0.13 | Hydraulic test | | 08/12/2015 | Yes | Pass | | | 2018 | | |
| SPEC NX1164B | prefabricated | Plastic | Ph skid | 0.53 | 0.13 | Hydraulic test | | 08/12/2015 | Yes | Pass | | | 2018 | | |
| SPEC NX1164C | prefabricated | Plastic | Within 701 | 0.53 | 0.13 | Hydraulic test | | 08/12/2015 | Yes | Pass | | | 2018 | | |
| 704 | reinforced concrete | | 704 | 3.23 | 3 | Hydraulic test | | 08/12/2015 | Yes | Pass | | | 2018 | | |
| 705 | other (please specify) | Steel | Oil storage | 2.5 | 2 | Hydraulic test | | 08/12/2015 | Yes | Pass | | | 2018 | | |
| 706A | other (please specify) | Steel | Storage container | 1.35 | 1 | Hydraulic test | | 08/12/2015 | Yes | Pass | | | 2018 | | |
| 706B | other (please specify) | Steel | Storage container | 1.35 | 1 | Hydraulic test | | 08/12/2015 | Yes | Pass | | | 2018 | | |
| 011 | other (please specify) | Steel | Paint Store | 0.2 | 0.12 | Hydraulic test | | 08/12/2015 | Yes | Pass | | | 2018 | | |
| 710 | other (please specify) | Plastic | Boiler dosing bund | 5.5 | 0.55 | Hydraulic test | | 08/12/2015 | Yes | Pass | | | 2018 | | |
| 711 | other (please specify) | Plastic | Boiler dosing bund | 0.25 | 0.55 | Hydraulic test | | 08/12/2015 | Yes | Pass | | | 2018 | | |
| 712 | other (please specify) | Plastic | Boiler dosing bund | 5.5 | 0.55 | Hydraulic test | | 08/12/2015 | Yes | Pass | | | 2018 | | |
| 901 | other (please specify) | Plastic | Tank farm pumps bund | 13.2 | 11 | Hydraulic test | | 08/12/2015 | Yes | Pass | | | 2018 | | |
| 906 | other (please specify) | Plastic | Chlorine dosing bund | 1.1 | 1 | Hydraulic test | | 08/12/2015 | Yes | Pass | | | 2018 | | |
| 907A | other (please specify) | Plastic | TK 906 Dosing skid | 0.2 | 0.12 | Hydraulic test | | 08/12/2015 | Yes | Pass | | | 2018 | | |
| 907B | other (please specify) | Steel | TK 906 Dosing skid | 0.2 | 0.12 | Hydraulic test | | 08/12/2015 | Yes | Pass | | | 2018 | | |
| Flam A | other (please specify) | Steel | Warehouse bund A | 0.16 | 0.11 | Hydraulic test | | 08/12/2015 | Yes | Pass | | | 2018 | | |
| Flam B | other (please specify) | Steel | Warehouse bund B | 0.16 | 0.11 | Hydraulic test | | 08/12/2015 | Yes | Pass | | | 2018 | | |
| Flam C | other (please specify) | Steel | Warehouse bund C | 0.39 | 0.16 | Hydraulic test | | 08/12/2015 | Yes | Pass | | | 2018 | | |
| Flam D | other (please specify) | Steel | Warehouse bund D | 0.39 | 0.16 | Hydraulic test | | 08/12/2015 | Yes | Pass | | | 2018 | | |
| Drumstore | reinforced concrete | | Warehouse bund D | 187.7 | 78 | Hydraulic test | | 08/12/2015 | Yes | Pass | | | 2018 | | |
| 202 | reinforced concrete | | Pump Containment | 0.84 | 0.7 | Other (please specify) | Visual | 16/12/2015 | Yes | Pass | | | 2018 | | |
| 404 | reinforced concrete | | Pump Containment | 5 | 0 | Other (please specify) | Visual | 16/12/2015 | Yes | Pass | | | 2018 | | |
| 701 | reinforced concrete | | Pump Containment | 61.6 | 0 | Other (please specify) | Visual | 16/12/2015 | Yes | Pass | | | 2018 | | |
| 703 | reinforced concrete | | RMC bund | 96.5 | 40 | Other (please specify) | Visual | 16/12/2015 | Yes | Pass | | | 2018 | | |
| 713 | other (please specify) | Steel | Self bunded tank | 96.5 | 40 | Other (please specify) | Visual | 16/12/2015 | Yes | Pass | | | 2018 | | |
| 801 | other (please specify) | Steel | Self bunded tank | 65.6 | 40 | Other (please specify) | Visual | 16/12/2015 | Yes | Pass | | | 2018 | | |
| 902 | reinforced concrete | | Self bunded tank | 65.1 | 30 | Other (please specify) | Visual | 16/12/2015 | Yes | Pass | | | 2018 | | |
| 904 | reinforced concrete | | Self bunded tank | 82.3 | 44 | Other (please specify) | Visual | 16/12/2015 | Yes | Pass | | | 2018 | | |
| | | | | | | | | | | | | | | | |
| | SELECT | | | | | SELECT | | | SELECT | SELECT | | SELECT | | | |

| **Bund/Pipeline testing template** | Lic No: | P0643-02 | Year | 2015 | |
|---|---|---|---|---|---|

* Capacity required should comply with 25% or 110% containment rule as detailed in your licence

| | | | Commentary |
|---|---|---|---|
| 15 | Has integrity testing been carried out in accordance with licence requirements and are all structures tested in line with BS8007/EPA Guidance? bunding and storage guidelines | Yes | |
| 16 | Are channels/transfer systems to remote containment systems tested? | n/a | |
| 17 | Are channels/transfer systems compliant in both integrity and available volume? | n/a | |

Pipeline/underground structure testing

| | | | |
|---|---|---|---|
| 1 | Are you required by your licence to undertake integrity testing* on underground structures e.g. pipelines or sumps etc ? if yes please fill out table 2 below listing all underground structures and pipelines on site **which failed the integrity test and all which have not been tested withing the integrity test period as specified** | Yes | Underground foul sewer line and surface water lines tested and inspected in March 2013 - due for reinspection in March 2016. |
| 2 | Please provide integrity testing frequency period | 3 years | |

*please note integrity testing means water tightness testing for process and foul pipelines (as required under your licence)

**Table B2:** Summary details of pipeline/underground structures integrity test

| Structure ID | Type system | Material of construction: | Does this structure have Secondary containment? | Type of secondary containment | Type integrity testing | Integrity reports maintained on site? | Results of test | Integrity test failure explanation <50 words | Corrective action taken | Scheduled date for retest | Results of retest(if in current reporting year) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | SELECT | SELECT | SELECT | SELECT | SELECT | SELECT | SELECT | | | | SELECT |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |

Please use commentary for additional details not answered by tables/ questions above

| Groundwater/Soil monitoring template | Lic No: | P0643-02 | Year | 2015 |
|---|---|---|---|---|

| | | | Comments | |
|---|---|---|---|---|
| 1 | Are you required to carry out groundwater monitoring as part of your licence requirements? | yes | GW monitoring is carried out at 4 no. locations (MW1, MW2, MW3 and MW4) | Please provide an interpretation of groundwater monitoring data in the interpretation box below or if you require additional space please include a groundwater/contaminated land monitoring results interpretaion as an additional section in this AER |
| 2 | Are you required to carry out soil monitoring as part of your licence requirements? | no | | |
| 3 | Do you extract groundwater for use on site? If yes please specify use in comment section | no | | |
| 4 | Do monitoring results show that groundwater generic assessment criteria such as GTVs or IGVs are exceeded or is there an upward trend in results for a substance? If yes, please complete the Groundwater Monitoring Guideline Template Report (link in cell G8) and submit separately through ALDER as a licensee return AND answer questions 5-12 below. Groundwater monitoring template | no | | Exceedance of Aluminum IGV (0.15mg/l) during the April monitoring round at MW-2 (0.4mg/l), MW-3 (0.8mg/l) & MW-4 (1.3mg/l) and during the November monitoring round at MW-1 (1.7mg/l) & MW-4 (0.6mg/l) likely due to poor background groundwater quality.<br><br>Exceedance of Sulphate IGV (187.5mg/l) during the November monitoring round at MW-1 (219.1 mg/l) likely due to poor background groundwater quality.<br><br>Exceedance of Potassium IGV (5mg/l) during the November monitoring round at MW-1 (5.8mg/l) likely due to poor background groundwater quality. |
| 5 | Is the contamination related to operations at the facility (either current and/or historic) | n/a | | |
| 6 | Have actions been taken to address contamination issues?If yes please summarise remediation strategies proposed/undertaken for the site | n/a<br>n/a | | |
| 7 | Please specify the proposed time frame for the remediation strategy | n/a | | |
| 8 | Is there a licence condition to carry out/update ELRA for the site? | n/a | | |
| 9 | Has any type of risk assesment been carried out for the site? | n/a | | |
| 10 | Has a Conceptual Site Model been developed for the site? | n/a | | |
| 11 | Have potential receptors been identified on and off site? | n/a | | |
| 12 | Is there evidence that contamination is migrating offsite? | n/a | | |

**Table 1: Upgradient Groundwater monitoring results**

| Date of sampling | Sample location reference | Parameter/ Substance | Methodology | Monitoring frequency | Maximum Concentration++ | Average Concentration+ | unit | GTV's* | SELECT** | Upward trend in pollutant concentration over last 5 years of monitoring data |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | SELECT | | | SELECT |
| | | | | | | | SELECT | | | SELECT |

.+ where average indicates arithmetic mean

.++ maximum concentration indicates the maximum measured concentration from all monitoring results produced during the reporting year

**Groundwater/Soil monitoring template** Lic No: P0643-02 Year 2015

**Table 2: Downgradient Groundwater monitoring results**

| Date of sampling | Sample location reference | Parameter/ Substance | Methodology | Monitoring frequency | Maximum Concentration | Average Concentration | unit | GTV's* | IGV | Upward trend in yearly average pollutant concentration over last 5 years of monitoring data |
|---|---|---|---|---|---|---|---|---|---|---|
| 06 May 2015 & 05 Nov 2015 | MW-1 | Chloride | Standard Method | Biannual | 33 | 26.2 | mg/l | 187.5 | | no |
| 06 May 2015 & 05 Nov 2015 | MW-1 | Fluoride | | Biannual | 0.202 | 0.202 | mg/l | | 1 | no |
| 06 May 2015 & 05 Nov 2015 | MW-1 | Sulphate | | Biannual | **219.1** | 124.25 | mg/l | 187.5 | | no |
| 06 May 2015 & 05 Nov 2015 | MW-1 | Nitrate NO3 | Ion Selective Electrode | Biannual | 2.44 | 1.745 | mg/l | 37.5 | | no |
| 06 May 2015 & 05 Nov 2015 | MW-1 | COD | Standard Method | Biannual | 14 | 9.5 | mg/l | No Abnormal Change | | no |
| 06 May 2015 & 05 Nov 2015 | MW-1 | Conductivity | pH electrode/meter | Biannual | 543 | 428.5 | uS/cm | 800-1875 | | no |

| Groundwater/Soil monitoring template | | | | Lic No: | P0643-02 | | | Year | 2015 | |
|---|---|---|---|---|---|---|---|---|---|---|
| 06 May 2015 & 05 Nov 2015 | MW-1 | pH | pH electrode/meter | Biannual | 7.9 | 7.55 | pH Units | 6.5-9.5 | | no |
| 06 May 2015 & 05 Nov 2015 | MW-1 | Nitrite NO2 | Ion Selective Electrode | Biannual | 0.08 | 0.0525 | mg/l | 375 | | no |
| 06 May 2015 & 05 Nov 2015 | MW-1 | Ammonia NH4 | Ion Selective Electrode | Biannual | 0.27 | 0.27 | mg/l | 0.0165-0.175 | | no |
| 06 May 2015 & 05 Nov 2015 | MW-1 | rtho-Phosphate | | Biannual | 0.02 | 0.02 | mg/l | - | - | no |
| 06 May 2015 & 05 Nov 2015 | MW-1 | Temperature | Thermometer | Biannual | 11.3 | 11.3 | degrees C | 25 | | no |
| 06 May 2015 & 05 Nov 2015 | MW-1 | Aluminium | Atomic Absorption/ICP | Biannual | 1.7 | 0.9 | mg/l | 0.15 | | no |
| 06 May 2015 & 05 Nov 2015 | MW-1 | Cadmium | Atomic Absorption/ICP | Biannual | 0.0006 | 0.0006 | mg/l | 0.004 | | no |
| 06 May 2015 & 05 Nov 2015 | MW-1 | Calcium | Atomic Absorption/ICP | Biannual | 132 | 93.2 | mg/l | | 200 | no |

| Groundwater/Soil monitoring template | | | | | Lic No: | P0643-02 | | Year | 2015 | |
|---|---|---|---|---|---|---|---|---|---|---|
| 06 May 2015 & 05 Nov 2015 | MW-1 | Chromium | Atomic Absorption/ICP | Biannual | 0.005 | 0.0035 | mg/l | 0.0375 | | no |
| 06 May 2015 & 05 Nov 2015 | MW-1 | Cobalt | Atomic Absorption/ICP | Biannual | 0.004 | 0.003 | mg/l | - | - | no |
| 06 May 2015 & 05 Nov 2015 | MW-1 | Copper | Atomic Absorption/ICP | Biannual | 0.014 | 0.0115 | mg/l | 1.5 | | no |
| 06 May 2015 & 05 Nov 2015 | MW-1 | Iron | Atomic Absorption/ICP | Biannual | 1.96 | 1.095 | mg/l | | 0.2 | no |
| 06 May 2015 & 05 Nov 2015 | MW-1 | Lead | Atomic Absorption/ICP | Biannual | 0.006 | 0.006 | mg/l | 0.019 | | no |
| 06 May 2015 & 05 Nov 2015 | MW-1 | Magnesium | Atomic Absorption/ICP | Biannual | 12.3 | 9 | mg/l | | 50 | no |
| 06 May 2015 & 05 Nov 2015 | MW-1 | Manganese | Atomic Absorption/ICP | Biannual | 0.651 | 0.334 | mg/l | | 0.05 | no |
| 06 May 2015 & 05 Nov 2015 | MW-1 | Mercury | Atomic Absorption/ICP | Biannual | 0.00015 | 0.000125 | mg/l | 0.00075 | | no |

| Groundwater/Soil monitoring template | | | | | Lic No: | P0643-02 | | Year | 2015 | |
|---|---|---|---|---|---|---|---|---|---|---|
| 06 May 2015 & 05 Nov 2015 | MW-1 | Nickel | Atomic Absorption/ICP | Biannual | 0.018 | 0.013 | mg/l | 0.015 | | no |
| 06 May 2015 & 05 Nov 2015 | MW-1 | Potassium | Atomic Absorption/ICP | Biannual | 5.8 | 4.815 | mg/l | | 5 | no |
| 06 May 2015 & 05 Nov 2015 | MW-1 | Silver | Atomic Absorption/ICP | Biannual | 0.0011 | 0.0009 | mg/l | - | - | no |
| 06 May 2015 & 05 Nov 2015 | MW-1 | Sodium | Atomic Absorption/ICP | Biannual | 25 | 17.95 | mg/l | 150 | | no |
| 06 May 2015 & 05 Nov 2015 | MW-1 | Tin | Atomic Absorption/ICP | Biannual | 0.01 | 0.0085 | mg/l | - | - | no |
| 06 May 2015 & 05 Nov 2015 | MW-1 | Zinc | Atomic Absorption/ICP | Biannual | 0.018 | 0.014 | mg/l | - | - | no |
| 06 May 2015 & 05 Nov 2015 | MW-1 | Antimony | Atomic Absorption/ICP | Biannual | 0.0014 | 0.0013 | mg/l | - | - | no |
| 06 May 2015 & 05 Nov 2015 | MW-1 | Selenium | Atomic Absorption/ICP | Biannual | 0.00129 | 0.001045 | mg/l | - | - | no |

| Groundwater/Soil monitoring template | | | | | Lic No: | P0643-02 | | Year | 2015 | |
|---|---|---|---|---|---|---|---|---|---|---|
| 06 May 2015 & 05 Nov 2015 | MW-1 | Arsenic | Atomic Absorption/ICP | Biannual | 0.0017 | 0.0016 | mg/l | 0.0075 | | no |
| 01 April 2015 & 05 Nov 2015 | MW-2 | Chloride | Standard Method | Biannual | 75 | 52.25 | mg/l | 187.5 | | no |
| 01 April 2015 & 05 Nov 2015 | MW-2 | Fluoride | | Biannual | 0.328 | 0.328 | mg/l | | 1 | no |
| 01 April 2015 & 05 Nov 2015 | MW-2 | Sulphate | | Biannual | 58.7 | 55.65 | mg/l | 187.5 | | no |
| 01 April 2015 & 05 Nov 2015 | MW-2 | Nitrate NO3 | Ion Selective Electrode | Biannual | 3.07 | 2.735 | mg/l | 37.5 | | no |
| 01 April 2015 & 05 Nov 2015 | MW-2 | COD | Standard Method | Biannual | 5 | 5 | mg/l | No Abnormal Change | | no |
| 01 April 2015 & 05 Nov 2015 | MW-2 | Conductivity | pH electrode/meter | Biannual | 698 | 634.5 | uS/cm | 800-1875 | | no |
| 01 April 2015 & 05 Nov 2015 | MW-2 | pH | pH electrode/meter | Biannual | 8.03 | 7.715 | pH Units | 6.5-9.5 | | no |

| Groundwater/Soil monitoring template | | | | | Lic No: | P0643-02 | | Year | 2015 | |
|---|---|---|---|---|---|---|---|---|---|---|
| 01 April 2015 & 05 Nov 2015 | MW-2 | Nitrite NO2 | Ion Selective Electrode | Biannual | 0.08 | 0.0525 | mg/l | 375 | | no |
| 01 April 2015 & 05 Nov 2015 | MW-2 | Ammonia NH4 | Ion Selective Electrode | Biannual | 0.27 | 0.27 | mg/l | 0.0165-0.175 | | no |
| 01 April 2015 & 05 Nov 2015 | MW-2 | rtho-Phosphate | | Biannual | 0.03 | 0.025 | mg/l | - | - | no |
| 01 April 2015 & 05 Nov 2015 | MW-2 | Temperature | Thermometer | Biannual | 11.8 | 11.8 | degrees C | 25 | | no |
| 01 April 2015 & 05 Nov 2015 | MW-2 | Aluminium | Atomic Absorption/ICP | Biannual | 0.4 | 0.25 | mg/l | 0.15 | | no |
| 01 April 2015 & 05 Nov 2015 | MW-2 | Cadmium | Atomic Absorption/ICP | Biannual | 0.0006 | 0.0006 | mg/l | 0.004 | | no |
| 01 April 2015 & 05 Nov 2015 | MW-2 | Calcium | Atomic Absorption/ICP | Biannual | 112 | 61.2 | mg/l | | 200 | no |
| 01 April 2015 & 05 Nov 2015 | MW-2 | Chromium | Atomic Absorption/ICP | Biannual | 0.002 | 0.002 | mg/l | 0.0375 | | no |

| Groundwater/Soil monitoring template | | | | | Lic No: | P0643-02 | | Year | 2015 | |
|---|---|---|---|---|---|---|---|---|---|---|
| 01 April 2015 & 05 Nov 2015 | MW-2 | Cobalt | Atomic Absorption/ICP | Biannual | 0.005 | 0.0035 | mg/l | - | - | no |
| 01 April 2015 & 05 Nov 2015 | MW-2 | Copper | Atomic Absorption/ICP | Biannual | 0.024 | 0.0165 | mg/l | 1.5 | | no |
| 01 April 2015 & 05 Nov 2015 | MW-2 | Iron | Atomic Absorption/ICP | Biannual | 1.55 | 0.925 | mg/l | | 0.2 | no |
| 01 April 2015 & 05 Nov 2015 | MW-2 | Lead | Atomic Absorption/ICP | Biannual | 0.007 | 0.0065 | mg/l | 0.019 | | no |
| 01 April 2015 & 05 Nov 2015 | MW-2 | Magnesium | Atomic Absorption/ICP | Biannual | 13.2 | 11.8 | mg/l | | 50 | no |
| 01 April 2015 & 05 Nov 2015 | MW-2 | Manganese | Atomic Absorption/ICP | Biannual | 0.509 | 0.284 | mg/l | | 0.05 | no |
| 01 April 2015 & 05 Nov 2015 | MW-2 | Mercury | Atomic Absorption/ICP | Biannual | 0.0001 | 0.0001 | mg/l | 0.00075 | | no |
| 01 April 2015 & 05 Nov 2015 | MW-2 | Nickel | Atomic Absorption/ICP | Biannual | 0.015 | 0.011 | mg/l | 0.015 | | no |

| Groundwater/Soil monitoring template | | | | | Lic No: | P0643-02 | | Year | 2015 | |
|---|---|---|---|---|---|---|---|---|---|---|
| 01 April 2015 & 05 Nov 2015 | MW-2 | Potassium | Atomic Absorption/ICP | Biannual | 2.53 | 2.335 | mg/l | | 5 | no |
| 01 April 2015 & 05 Nov 2015 | MW-2 | Silver | Atomic Absorption/ICP | Biannual | 0.0012 | 0.00095 | mg/l | - | - | no |
| 01 April 2015 & 05 Nov 2015 | MW-2 | Sodium | Atomic Absorption/ICP | Biannual | 36.9 | 29.85 | mg/l | 150 | | no |
| 01 April 2015 & 05 Nov 2015 | MW-2 | Tin | Atomic Absorption/ICP | Biannual | 0.007 | 0.007 | mg/l | - | - | no |
| 01 April 2015 & 05 Nov 2015 | MW-2 | Zinc | Atomic Absorption/ICP | Biannual | 0.04 | 0.0235 | mg/l | - | - | no |
| 01 April 2015 & 05 Nov 2015 | MW-2 | Antimony | Atomic Absorption/ICP | Biannual | 0.0012 | 0.0012 | mg/l | - | - | no |
| 01 April 2015 & 05 Nov 2015 | MW-2 | Selenium | Atomic Absorption/ICP | Biannual | 0.0008 | 0.0008 | mg/l | - | - | no |
| 01 April 2015 & 05 Nov 2015 | MW-2 | Arsenic | Atomic Absorption/ICP | Biannual | 0.003 | 0.002 | mg/l | 0.0075 | | no |

| Groundwater/Soil monitoring template | | | | | Lic No: | P0643-02 | | Year | 2015 | |
|---|---|---|---|---|---|---|---|---|---|---|
| 01 April 2015 & 05 Nov 2015 | MW-3 | Chloride | Standard Method | Biannual | 72.5 | 52.75 | mg/l | 187.5 | | no |
| 01 April 2015 & 05 Nov 2015 | MW-3 | Fluoride | | Biannual | 0.187 | 0.187 | mg/l | | 1 | no |
| 01 April 2015 & 05 Nov 2015 | MW-3 | Sulphate | | Biannual | 41.4 | 35.3 | mg/l | 187.5 | | no |
| 01 April 2015 & 05 Nov 2015 | MW-3 | Nitrate NO3 | Ion Selective Electrode | Biannual | 2.14 | 1.87 | mg/l | 37.5 | | no |
| 01 April 2015 & 05 Nov 2015 | MW-3 | COD | Standard Method | Biannual | 5 | 5 | mg/l | No Abnormal Change | | no |
| 01 April 2015 & 05 Nov 2015 | MW-3 | Conductivity | pH electrode/meter | Biannual | 774 | 672.5 | uS/cm | 800-1875 | | no |
| 01 April 2015 & 05 Nov 2015 | MW-3 | pH | pH electrode/meter | Biannual | 7.94 | 7.47 | pH Units | 6.5-9.5 | | no |
| 01 April 2015 & 05 Nov 2015 | MW-3 | Nitrite NO2 | Ion Selective Electrode | Biannual | 0.08 | 0.0525 | mg/l | 375 | | no |

| Groundwater/Soil monitoring template | | | | | Lic No: | P0643-02 | | Year | 2015 | |
|---|---|---|---|---|---|---|---|---|---|---|
| 01 April 2015 & 05 Nov 2015 | MW-3 | Ammonia NH4 | Ion Selective Electrode | Biannual | 0.27 | 0.27 | mg/l | 0.0165-0.175 | | no |
| 01 April 2015 & 05 Nov 2015 | MW-3 | rtho-Phosphate | | Biannual | 0.02 | 0.02 | mg/l | - | - | no |
| 01 April 2015 & 05 Nov 2015 | MW-3 | Temperature | Thermometer | Biannual | 11.5 | 11.5 | degrees C | 25 | | no |
| 01 April 2015 & 05 Nov 2015 | MW-3 | Aluminium | Atomic Absorption/ICP | Biannual | 0.8 | 0.45 | mg/l | 0.15 | | no |
| 01 April 2015 & 05 Nov 2015 | MW-3 | Cadmium | Atomic Absorption/ICP | Biannual | 0.0006 | 0.0006 | mg/l | 0.004 | | no |
| 01 April 2015 & 05 Nov 2015 | MW-3 | Calcium | Atomic Absorption/ICP | Biannual | 163 | 147.5 | mg/l | | 200 | no |
| 01 April 2015 & 05 Nov 2015 | MW-3 | Chromium | Atomic Absorption/ICP | Biannual | 0.002 | 0.002 | mg/l | 0.0375 | | no |
| 01 April 2015 & 05 Nov 2015 | MW-3 | Cobalt | Atomic Absorption/ICP | Biannual | 0.003 | 0.0025 | mg/l | - | - | no |

| Groundwater/Soil monitoring template | | | | | Lic No: | P0643-02 | | Year | 2015 | |
|---|---|---|---|---|---|---|---|---|---|---|
| 01 April 2015 & 05 Nov 2015 | MW-3 | Copper | Atomic Absorption/ICP | Biannual | 0.009 | 0.009 | mg/l | 1.5 | | no |
| 01 April 2015 & 05 Nov 2015 | MW-3 | Iron | Atomic Absorption/ICP | Biannual | 17.7 | 9.755 | mg/l | | 0.2 | no |
| 01 April 2015 & 05 Nov 2015 | MW-3 | Lead | Atomic Absorption/ICP | Biannual | 0.01 | 0.008 | mg/l | 0.019 | | no |
| 01 April 2015 & 05 Nov 2015 | MW-3 | Magnesium | Atomic Absorption/ICP | Biannual | 18.9 | 17.55 | mg/l | | 50 | no |
| 01 April 2015 & 05 Nov 2015 | MW-3 | Manganese | Atomic Absorption/ICP | Biannual | 0.087 | 0.056 | mg/l | | 0.05 | no |
| 01 April 2015 & 05 Nov 2015 | MW-3 | Mercury | Atomic Absorption/ICP | Biannual | 0.0001 | 0.0001 | mg/l | 0.00075 | | no |
| 01 April 2015 & 05 Nov 2015 | MW-3 | Nickel | Atomic Absorption/ICP | Biannual | 0.01 | 0.0085 | mg/l | 0.015 | | no |
| 01 April 2015 & 05 Nov 2015 | MW-3 | Potassium | Atomic Absorption/ICP | Biannual | 2.21 | 2.18 | mg/l | | 5 | no |

| Groundwater/Soil monitoring template | | | | | Lic No: | P0643-02 | | Year | 2015 | |
|---|---|---|---|---|---|---|---|---|---|---|
| 01 April 2015 & 05 Nov 2015 | MW-3 | Silver | Atomic Absorption/ICP | Biannual | 0.0007 | 0.0007 | mg/l | - | - | no |
| 01 April 2015 & 05 Nov 2015 | MW-3 | Sodium | Atomic Absorption/ICP | Biannual | 18.5 | 18.25 | mg/l | 150 | | no |
| 01 April 2015 & 05 Nov 2015 | MW-3 | Tin | Atomic Absorption/ICP | Biannual | 0.01 | 0.0085 | mg/l | - | - | no |
| 01 April 2015 & 05 Nov 2015 | MW-3 | Zinc | Atomic Absorption/ICP | Biannual | 0.018 | 0.014 | mg/l | - | - | no |
| 01 April 2015 & 05 Nov 2015 | MW-3 | Antimony | Atomic Absorption/ICP | Biannual | 0.0012 | 0.0012 | mg/l | - | - | no |
| 01 April 2015 & 05 Nov 2015 | MW-3 | Selenium | Atomic Absorption/ICP | Biannual | 0.00423 | 0.002515 | mg/l | - | - | no |
| 01 April 2015 & 05 Nov 2015 | MW-3 | Arsenic | Atomic Absorption/ICP | Biannual | 0.006 | 0.0035 | mg/l | 0.0075 | | no |
| 01 April 2015 & 05 Nov 2015 | MW-4 | Chloride | Standard Method | Biannual | 55 | 49.5 | mg/l | 187.5 | | no |

| Groundwater/Soil monitoring template | | | | Lic No: | P0643-02 | | | Year | 2015 | |
|---|---|---|---|---|---|---|---|---|---|---|
| 01 April 2015 & 05 Nov 2015 | MW-4 | Fluoride | | Biannual | 0.665 | 0.665 | mg/l | | 1 | no |
| 01 April 2015 & 05 Nov 2015 | MW-4 | Sulphate | | Biannual | 72.2 | 61.9 | mg/l | 187.5 | | no |
| 01 April 2015 & 05 Nov 2015 | MW-4 | Nitrate NO3 | Ion Selective Electrode | Biannual | 1 | 1 | mg/l | 37.5 | | no |
| 01 April 2015 & 05 Nov 2015 | MW-4 | COD | Standard Method | Biannual | 8 | 6.5 | mg/l | No Abnormal Change | | no |
| 01 April 2015 & 05 Nov 2015 | MW-4 | Conductivity | pH electrode/meter | Biannual | 784 | 759.5 | uS/cm | 800-1875 | | no |
| 01 April 2015 & 05 Nov 2015 | MW-4 | pH | pH electrode/meter | Biannual | 7.27 | 7.235 | pH Units | 6.5-9.5 | | no |
| 01 April 2015 & 05 Nov 2015 | MW-4 | Nitrite NO2 | Ion Selective Electrode | Biannual | 0.08 | 0.0525 | mg/l | 375 | | no |
| 01 April 2015 & 05 Nov 2015 | MW-4 | Ammonia NH4 | Ion Selective Electrode | Biannual | 0.27 | 0.27 | mg/l | 0.0165-0.175 | | no |

| Groundwater/Soil monitoring template | | | | Lic No: | P0643-02 | | Year | 2015 | |
|---|---|---|---|---|---|---|---|---|---|
| 01 April 2015 & 05 Nov 2015 | MW-4 | rtho-Phosphate | Biannual | 0.02 | 0.02 | mg/l | - | - | no |
| 01 April 2015 & 05 Nov 2015 | MW-4 | Temperature | Thermometer | Biannual | 11.9 | 11.9 | degrees C | 25 | | no |
| 01 April 2015 & 05 Nov 2015 | MW-4 | Aluminium | Atomic Absorption/ICP | Biannual | 1.3 | 0.95 | mg/l | 0.15 | | no |
| 01 April 2015 & 05 Nov 2015 | MW-4 | Cadmium | Atomic Absorption/ICP | Biannual | 0.0006 | 0.0006 | mg/l | 0.004 | | no |
| 01 April 2015 & 05 Nov 2015 | MW-4 | Calcium | Atomic Absorption/ICP | Biannual | 187 | 166.5 | mg/l | | 200 | no |
| 01 April 2015 & 05 Nov 2015 | MW-4 | Chromium | Atomic Absorption/ICP | Biannual | 0.005 | 0.004 | mg/l | 0.0375 | | no |
| 01 April 2015 & 05 Nov 2015 | MW-4 | Cobalt | Atomic Absorption/ICP | Biannual | 0.003 | 0.0025 | mg/l | - | - | no |
| 01 April 2015 & 05 Nov 2015 | MW-4 | Copper | Atomic Absorption/ICP | Biannual | 0.04 | 0.0245 | mg/l | 1.5 | | no |

| Groundwater/Soil monitoring template | | | | | Lic No: | P0643-02 | | Year | 2015 | |
|---|---|---|---|---|---|---|---|---|---|---|
| 01 April 2015 & 05 Nov 2015 | MW-4 | Iron | Atomic Absorption/ICP | Biannual | 2.37 | 1.74 | mg/l | | 0.2 | no |
| 01 April 2015 & 05 Nov 2015 | MW-4 | Lead | Atomic Absorption/ICP | Biannual | 0.013 | 0.0095 | mg/l | 0.019 | | no |
| 01 April 2015 & 05 Nov 2015 | MW-4 | Magnesium | Atomic Absorption/ICP | Biannual | 26.2 | 24.95 | mg/l | | 50 | no |
| 01 April 2015 & 05 Nov 2015 | MW-4 | Manganese | Atomic Absorption/ICP | Biannual | 1.01 | 0.756 | mg/l | | 0.05 | no |
| 01 April 2015 & 05 Nov 2015 | MW-4 | Mercury | Atomic Absorption/ICP | Biannual | 0.0001 | 0.0001 | mg/l | 0.00075 | | no |
| 01 April 2015 & 05 Nov 2015 | MW-4 | Nickel | Atomic Absorption/ICP | Biannual | 0.009 | 0.0075 | mg/l | 0.015 | | no |
| 01 April 2015 & 05 Nov 2015 | MW-4 | Potassium | Atomic Absorption/ICP | Biannual | 2.32 | 2.115 | mg/l | | 5 | no |
| 01 April 2015 & 05 Nov 2015 | MW-4 | Silver | Atomic Absorption/ICP | Biannual | 0.0027 | 0.0017 | mg/l | - | - | no |
| 01 April 2015 & 05 Nov 2015 | MW-4 | Sodium | Atomic Absorption/ICP | Biannual | 22 | 21.5 | mg/l | 150 | | no |

| Groundwater/Soil monitoring template | | | | Lic No: | P0643-02 | | | Year | 2015 | |
|---|---|---|---|---|---|---|---|---|---|---|
| 01 April 2015 & 05 Nov 2015 | MW-4 | Tin | Atomic Absorption/ICP | Biannual | 0.007 | 0.007 | mg/l | - | - | no |
| 01 April 2015 & 05 Nov 2015 | MW-4 | Zinc | Atomic Absorption/ICP | Biannual | 0.04 | 0.0235 | mg/l | - | - | no |
| 01 April 2015 & 05 Nov 2015 | MW-4 | Antimony | Atomic Absorption/ICP | Biannual | 0.0012 | 0.0012 | mg/l | - | - | no |
| 01 April 2015 & 05 Nov 2015 | MW-4 | Selenium | Atomic Absorption/ICP | Biannual | 0.0008 | 0.0008 | mg/l | - | - | no |
| 01 April 2015 & 05 Nov 2015 | MW-4 | Arsenic | Atomic Absorption/ICP | Biannual | 0.0027 | 0.00185 | mg/l | 0.0075 | | no |
| | | | | | | | SELECT | | | SELECT |

*please note exceedance of generic assessment criteria (GAC) such as a Groundwater Threshold Value (GTV) or an Interim Guideline Value (IGV) or an upward trend in results for a substance indicates that further interpretation of monitoring results is required. In addition to completing the above table, please complete the Groundwater Monitoring Guideline Template Report at the link provided and submit separately through ALDER as a licensee return or as otherwise instructed by the EPA.

Groundwater monitoring template

More information on the use of soil and groundwater standards/ generic assessment criteria (GAC) and risk assessment tools is available in the EPA published guidance (see the link in G31)

Guidance on the Management of Contaminated Land and Groundwater at EPA Licensed Sites (EPA 2013).

**Depending on location of the site and proximity to other sensitive receptors alternative Receptor based Water Quality standards should be used in addition to the GTV e.g. if the site is close to surface water compare to Surface Water Environmental Quality Standards (SWEQS), If the site is close to a drinking water supply compare results to the Drinking Water Standards (DWS)

Surface water EQS | Groundwater regulations GTV's | Drinking water (private supply) standards | Drinking water (public supply) standards | Interim Guideline Values (IGV)

| **Groundwater/Soil monitoring template** | Lic No: | P0643-02 | Year | 2015 |
|---|---|---|---|---|

**Table 3: Soil results**

| Date of sampling | Sample location reference | Parameter/ Substance | Methodology | Monitoring frequency | Maximum Concentration | Average Concentration | unit |
|---|---|---|---|---|---|---|---|
| | | | | | | | SELECT |
| | | | | | | | SELECT |

Where additional detail is required please enter it here in 200 words or less

| Environmental Liabilities template | Lic No: | P0643-02 | Year | 2015 |
|---|---|---|---|---|

Click here to access EPA guidance on Environmental Liabilities and Financial provision

| | | | Commentary |
|---|---|---|---|
| 1 | ELRA initial agreement status | TBC | AbbVie are engaging with the EPA to agree ELRA |
| 2 | ELRA review status | Review required and not completed; | AbbVie are engaging with the EPA to agree ELRA |
| 3 | Amount of Financial Provision cover required as determined by the latest ELRA | €75,375 (2010) | |
| 4 | Financial Provision for ELRA status | TBC | AbbVie are engaging with the EPA to agree ELRA |
| 5 | Financial Provision for ELRA - amount of cover | TBC | |
| 6 | Financial Provision for ELRA - type | TBC | |
| 7 | Financial provision for ELRA expiry date | TBC | |
| 8 | Closure plan initial agreement status | TBC | AbbVie are engaging with the EPA to agree CRAMP |
| 9 | Closure plan review status | Review required and not completed | AbbVie are engaging with the EPA to agree CRAMP |
| 10 | Financial Provision for Closure status | TBC | |
| 11 | Financial Provision for Closure - amount of cover | TBC | |
| 12 | Financial Provision for Closure - type | TBC | |
| 13 | Financial provision for Closure expiry date | TBC | |

| Programme/Continuous | Lic No: | P0643-02 | Year | 2015 |
|---|---|---|---|---|

| | Highlighted cells contain dropdown menu click to view | | Additional Information |
|---|---|---|---|
| 1 | Do you maintain an Environmental Mangement System (EMS) for the site. If yes, please detail in additional information | Yes | Abbvie has been ISO14001 accredited since 2012 |
| 2 | Does the EMS reference the most significant environmental aspects and associated impacts on-site | Yes | The purpose of the EMP is to identify the Environmental objectives and targets and action plans which have been created by the Health, Safety and Environmental Manager. The Register of Aspects references the most significant environental aspects and is based on the risk assessment process. From this assessment the environmental objectives and targets are prioritised. |
| 3 | Does the EMS maintain an Environmental Management Programme (EMP) as required in accordance with the licence requirements | Yes | |
| 4 | Do you maintain an environmental documentation/communication system to inform the public on environmental performance of the facility, as required by the licence | Yes | The Environmental Policy is available in the reception area. The HS&E manager, in conjunction with the relevant personnel, review the EMP on an annual basis with a view to demonstrating a commitment to continual improvement of environmental performance within the company. This is reported to the relevant personel within Honeywell. Hard copies are available for viewing by the EPA on site. |

**Environmental Management Programme (EMP) report**

| Objective Category | Target | Status (% completed) | How target was progressed | Responsibility | Intermediate outcomes |
|---|---|---|---|---|---|
| Reduction of emissions to Wastewater | Investigate methods for the on site treatment of process related aqueous waste | 100 | Identify waste reduction/ optimisation for 2015 & include in the Environmental Sustainability LRP | Section Head | Improved Environmental Management Practices |
| Reduction of emissions to Wastewater | Assess the impact of any new active ingredients on the existing environment and the municipal WWTP in Sligo | 100 | Assess the impact of the undiluted process effluent on the  receiving environment and  Sligo wastewater treatment plant | Section Head | Improved Environmental Management Practices |
| Reduction of emissions to Wastewater | Develop test methods for the measurement of pharmaceutical actives in water | 50 | Ensure that all new products coming to the facility have suitable test methods for the measurement of Pharmaceutical actives in water | Section Head | Improved Environmental Management Practices |

| Programme/Continuous | | | | Lic No: | P0643-02 | Year | 2015 |
|---|---|---|---|---|---|---|---|
| Reduction of emissions to Water | Maintain the response programme for occurrences when the TOC warning and action levels of the discharge to surface water are reached | 100 | Maintain the response programme for occurrences when the TOC warning and action levels of the discharge to surface water are reached. This programme shall be submitted to the agency as part of the AER. | Section Head | Improved Environmental Management Practices | | |
| Reduction of emissions to Water | Investigate methods for linking the automatic outlet valve on the retention pond to the TOC analyser in order to close the valve on a high reading | 50 | Investigate methods for linking the automatic outlet valve on the retention pond to the TOC analyser in order to close the valve on a high reading. | Section Head | Improved Environmental Management Practices | | |
| Energy Efficiency/Utility conservation | The loading and unloading of materials shall be carried out in designated area protected against spillages and leachate run-off | 100 | Ensure all suppliers delivering hazardous materials are supervised by an appropriate person when making a delivery to the site. | Section Head | Improved Environmental Management Practices | | |
| Energy Efficiency/Utility conservation | The company shall keep a full record of matters relating to hazardous waste management operations and practices at the site. | 100 | Ensure a file is retained of all correct documentation required when receiving or arranging a delivery of hazardous materials | Section Head | Improved Environmental Management Practices | | |
| Waste reduction/Raw material usage efficiency | Maintain ISO 50001 certification | 100 | The company shall maintain certification in the energy management standard, ISO 50001 through internal audits and external surveillance audits | Section Head | Improved Environmental Management Practices | | |
| Waste reduction/Raw material usage efficiency | Review water usage at AbbVie | 0 | Carry out a water opportunities' assessment in 2015 & include potential projects into the 2020 Sustainability LRP. | Section Head | Improved Environmental Management Practices | | |

| Programme/Continuous | | | | Lic No: | P0643-02 | Year | 2015 |
|---|---|---|---|---|---|---|---|
| Waste reduction/Raw material usage efficiency | Determine requirement for water minimisation programme | 100 | Carry out a survey to determine efficiency of raw material usage at AbbVie for new product introductions. Solvent is monitored per campaign currently. This will be reviewed annually. | Section Head | Improved Environmental Management Practices | | |
| Waste reduction/Raw material usage efficiency | Review raw material usage at AbbVie | 100 | Achieve 5% reduction in CO2 emissions for 2015 | Section Head | Reduced emissions | | |
| Waste reduction/Raw material usage efficiency | Determine requirement for raw material minimisation programme | 100 | Support the implementation of a new Thermal Oxidiser for non-chlorinated processes as per the EPA approved Test programme | Section Head | Installation of infrastructure | | |
| Reduction of emissions to Air | Maintain a preventative maintenance programme for the Thermal Oxidiser, Cryogenic Condenser, Scrubber and the continuous emission monitors | 100 | Support the license review for the new TO to be approved for the use of both chlorinated and non-chlorinated waste streams | Section Head | Improved Environmental Management Practices | | |
| Reduction of emissions to Air | Eliminate/minimise thermal oxidiser shutdown events | 100 | Submit an RFA for new products introductions to the EPA in advance of process commencing | Section Head | Improved Environmental Management Practices | | |
| Reduction of emissions to Air | Undertake a programme to identify fugitive emissions to air from activities at AbbVie | 60 | Maintain a preventative maintenance programme for the Thermal Oxidiser, Cryogenic Condenser, Scrubber and the continuous emission monitors. | Section Head | Reduced number of bypasses | | |
| Reduction of emissions to Air | Maintain a programme of leak testing of refrigeration and air conditioning systems containing fluorinated refrigerant gases | 50 | Maintain a response programme to eliminate/minimise thermal oxidiser shutdown events. | Section Head | Reduced number of bypasses | | |

| Programme/Continuous | | | | Lic No: | P0643-02 | Year | 2015 |
|---|---|---|---|---|---|---|---|
| Materials Handling/Storage/Bunding | Prepare a Bund Integrity Assessment | 100 | The integrity and water tightness of all the bunding structures and their resistance to penetration by water or other materials stored therein must be tested and demonstrated. The results must be reported to the Agency. This must be repeated every three years. | Section Head | Increased compliance with licence conditions | | |
| Materials Handling/Storage/Bunding | Conduct annual testing of foul sewer line and testing of double contained lines every three years | 100 | The integrity and water tightness of all the bunding structures and their resistance to penetration by water or other materials stored therein must be tested and demonstrated. The results must be reported to the Agency. This must be repeated every three years. | Section Head | Increased compliance with licence conditions | | |
| Noise reduction | Conduct annual noise survey | 100 | Conduct annual noise survey | Section Head | Increased compliance with licence conditions | | |
| Waste reduction/Raw material usage efficiency | Maintain procedures for waste handling storage and disposal | 100 | In order to ensure that waste is handled stored and disposed of in an appropriate manner it is necessary to have written procedures to control the handling storage and disposal of waste. Employees will be trained on these procedures as part of the on-going training programme. | Section Head | Improved Environmental Management Practices | | |
| Waste reduction/Raw material usage efficiency | Investigation of on site recovery of solvent waste | 100 | Introduce new lab waste segregation improvement process in the labs. | Section Head | Improved Environmental Management Practices | | |
| Waste reduction/Raw material usage efficiency | Waste contractors will be audited on a five year basis. | 100 | Waste vendors due for reaudit as per the AbbVie waste vendor global standard | Section Head | Improved Environmental Management Practices | | |
| Waste reduction/Raw material usage efficiency | Reduce waste going to landfill | 100 | Maintain zero waste to landfill | Section Head | Reduced emissions | | |
| Waste reduction/Raw material usage efficiency | Reduce waste going to landfill | 100 | Set up a green waste team | Section Head | Reduced emissions | | |

| **Programme/Continuous** | | | | Lic No: | P0643-02 | Year | 2015 |
|---|---|---|---|---|---|---|---|
| Waste reduction/Raw material usage efficiency | Adoption of Cleaner Technology in All New developments | 100 | In order to ensure that the potential environmental impact of any proposed developments is considered in the future AbbVie intend to introduce a procedure where the environmental impact of the development is considered at the design stage, thereby facilitating the incorporation of clean technology in all developments as far as is practicably possible. | Section Head | Improved Environmental Management Practices | | |
| Waste reduction/Raw material usage efficiency | Substitution of harmful substances | 100 | The company shall examine, at least annually, the possibility of substituting 2-Methoxyethanol, the List I substances and the List II substances used onsite with less harmful substances. | Section Head | Reduced emissions | | |

| Programme/Continuous | | | | Lic No: | P0643-02 | Year | 2015 |
|---|---|---|---|---|---|---|---|
| Waste reduction/Raw material usage efficiency | Substitution of Risk Phrase VOCs | 100 | Any substance or preparation, which, because of its content of VOCs classified as carcinogens, mutagens or toxic to reproduction under Directive 67/548/EEC, is assigned or needs to carry the risk phrases R45, R46, R49, R60, R61 shall be replaced, as far as possible within the shortest possible timeframe and, taking into account article 20(l)(b) of S.I. No. 543 of 2002, by less harmful substances or preparations. Guidance on replacement given in Council Directive 1999/13/EC shall be observed. Measures for replacement of such substances or preparations shall be incorporated into the Schedule of Environmental Objectives and Targets under Condition 2.2.2.2. | Section Head | Reduced emissions | |

## Noise monitoring summary report

Lic No: P0643-02 Year 2015

| | | |
|---|---|---|
| 1 | Was noise monitoring a licence requirement for the AER period? If yes please fill in table N1 noise summary below | Yes |
| 2 | Was noise monitoring carried out using the EPA Guidance note, including completion of the "Checklist for noise measurement report" included in the guidance note as table 6? (Noise Guidance note NG4) | Yes |
| 3 | Does your site have a noise reduction plan | No |
| 4 | When was the noise reduction plan last updated? | n/a |
| 5 | Have there been changes relevant to site noise emissions (e.g. plant or operational changes) since the last noise survey? | No |

**Table N1: Noise monitoring summary**

| Date of monitoring | Time period | Noise location (on site) | Noise sensitive location -NSL (if applicable) | $LA_{eq}$ | $LA_{90}$ | $LA_{10}$ | $LA_{max}$ | Tonal or Impulsive noise* (Y/N) | If tonal /impulsive noise was identified was 5dB penalty applied? | Comments (ex. main noise sources on site, & extraneous noise ex. road traffic) | Is site compliant with noise limits (day/evening/night)? |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 25-Sep-15 | 15:04 | B1 | | 47 | 60 | 48 | 46 | No | n/a | Road traffic noise in addition to distant construction noise main sources Plant noise also audible | Yes |
| 25-Sep-15 | 16:13 | B1 | | 49 | 58 | 50 | 47 | No | n/a | Road traffic noise in addition to distant construction noise main sources Plant noise also audible | Yes |
| 25-Sep-15 | 23:26 | B1 | | 43 | 53 | 44 | 41 | No | n/a | Plant noise audible at low level. Background noise from road traffic. | Yes |
| 25-Sep-15 | 14:35 | B2 | | 47 | 52 | 48 | 47 | No | n/a | Plant noise main background source. Traffic along N16 also contributes. | Yes |
| 25-Sep-15 | 15:50 | B2 | | 48 | 60 | 48 | 47 | No | n/a | Plant noise main background source. Traffic along N16 also contributes. | Yes |

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 25-Sep-15 | 23:01 | B2 | | 46 | 62 | 47 | 45 | No | n/a | Plant noise main noise source. Distant road traffic noise audible at low level. | Yes |
| 25-Sep-15 | 14:14 | B3 | | 52 | 58 | 53 | 50 | No | n/a | Plant emissions main source noted. Intermittent on-site facility traffic in addition to traffic along the N16 Road. | Yes |
| 25-Sep-15 | 15:30 | B3 | | 52 | 59 | 53 | 50 | No | n/a | Plant emissions main source noted. Intermittent on-site facility traffic in addition to traffic along the N16 Road. | Yes |
| 25-Sep-15 | 22:41 | B3 | | 51 | 61 | 52 | 50 | No | n/a | Plant main source in addition to background noise from N16 Road. | Yes |
| 25-Sep-15 | 17:07 | B4 | NSL1 | 50 | 62 | 51 | 47 | No | n/a | Road traffic along N16 main source. Abbvie plant not audible | Yes |
| 25-Sep-15 | 18:15 | B4 | NSL1 | 48 | 68 | 50 | 45 | No | n/a | Road traffic along N16 main source. Abbvie plant not audible | Yes |
| 26-Sep-15 | 00:12 | B4 | NSL1 | 48 | 75 | 45 | 40 | No | n/a | Intermittent road traffic main source. Plant noise audible at low level | Yes |
| 26-Sep-15 | 01:26 | B4 | NSL1 | 41 | 58 | 42 | 39 | No | n/a | Intermittent road traffic main source. Plant noise audible at low level | Yes |
| 25-Sep-15 | 17:29 | | NSL2 | 52 | 62 | 55 | 46 | No | n/a | Intermittent road traffic main source. Plant noise audible at low level | Yes |

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 25-Sep-15 | 18:39 | | NSL2 | 50 | 61 | 52 | 44 | No | n/a | Intermittent road traffic main source. Plant noise audible at low level | Yes |
| 26-Sep-15 | 00:35 | | NSL2 | 49 | 66 | 54 | 40 | No | n/a | Road traffic is the dominant noise source. Plant emissions also audible at low level. | Yes |
| 25-Sep-15 | 01:49 | | NSL2 | 46 | 66 | 50 | 39 | No | n/a | Road traffic is the dominant noise source. Plant emissions also audible at low level. | Yes |
| 25-Sep-15 | 17:51 | | NSL 3 | 62 | 71 | 66 | 49 | No | n/a | Road traffic passing along N16 main noise source. Plant emissions not audible. | Yes |
| 25-Sep-15 | 19:00 | | NSL 3 | 60 | 71 | 65 | 44 | No | n/a | Road traffic passing along N16 main noise source. Plant emissions not audible. | Yes |
| 26-Sep-15 | 01:01 | | NSL 3 | 48 | 70 | 45 | 37 | No | n/a | Passing intermittent traffic along N16 main source. Plant emissions also audible at low level. | Yes |
| 26-Sep-15 | 02:13 | | NSL 3 | 52 | 77 | 44 | 38 | No | n/a | Passing intermittent traffic along N16 main source. Plant emissions also audible at low level. | Yes |

*Please ensure that a tonal analysis has been carried out as per guidance note NG4. These records must be maintained onsite for future inspection

| | |
|---|---|
| If noise limits exceeded as a result of noise attributed to site activities, please choose the corrective action from the following options? | n/a |

| |
|---|
| ** please explain the reason for not taking action/resolution of noise issues? |
| Any additional comments? (less than 200 words) |

| Resource Usage/Energy efficiency summary | Lic No: | P0643-02 | Year | 2015 |
|---|---|---|---|---|

| | | | Additional information |
|---|---|---|---|
| 1 | When did the site carry out the most recent energy efficiency audit? Please list the recommendations in table 3 below | 30/10/2015 | Audits are carried out annually - AbbVie achieved ISO50001:2011 in 2013. |
| 2 | Is the site a member of any accredited programmes for reducing energy usage/water conservation such as the SEAI programme linked to the right? If yes please list them in additional information | Yes | Member of SEAI - LIEN Group and part of the American Chamber of Commerce Energy Sub-Group |
| 3 | Where Fuel Oil is used in boilers on site is the sulphur content compliant with licence conditions? Please state percentage in additional information | Yes | |

SEAI - Large Industry Energy Network (LIEN)

Table R1 Energy usage on site

| Energy Use | Previous year | Current year | Production +/- % compared to previous reporting year** | Energy Consumption +/- % vs overall site production* |
|---|---|---|---|---|
| Total Energy Used (MWHrs) | 10737 | 10823 | | |
| Total Energy Generated (MWHrs) | | | | |
| Total Renewable Energy Generated (MWHrs) | | | | |
| Electricity Consumption (MWHrs) | 10737 | 10823 | | |
| Fossil Fuels Consumption: | | | | |
| Heavy Fuel Oil (m3) | | | | |
| Light Fuel Oil (m3) | 1314 | 1053 | | |
| Natural gas (m3) | 468 | 321,150 | | |
| Coal/Solid fuel (metric tonnes) | | | | |
| Peat (metric tonnes) | | | | |
| Renewable Biomass | | | | |
| Renewable energy generated on site | | | | |

* where consumption of energy can be compared to overall site production please enter this information as percentage increase or decrease compared to the previous reporting year.

** where site production information is available please enter percentage increase or decrease compared to previous year

## Resource Usage/Energy efficiency summary

Lic No: P0643-02 Year 2015

Table R2 Water usage on site

| Water use | Water extracted Previous year m3/yr. | Water extracted Current year m3/yr. | Production +/- % compared to previous reporting year** | Energy Consumption +/- % vs overall site production* | **Water Emissions** Volume Discharged back to environment($m^3$yr): | **Water Consumption** Volume used i.e not discharged to environment e.g. released as steam m3/yr | Unaccounted for Water: |
|---|---|---|---|---|---|---|---|
| Groundwater | | | | | | | |
| Surface water | | | | | | | |
| Public supply | 80,869 | 91,304 | | | 8801 | 7392 | |
| Recycled water | | | | | | | |
| Total | 80,869 | 91,304 | | | 8801 | 7392 | |

* where consumption of water can be compared to overall site production please enter this information as percentage increase or decrease compared to the previous reporting year.

** where site production information is available please enter percentage increase or decrease compared to previous year

Table R3 Waste Stream Summary

| | Total | Landfill | Incineration | Recycled | Other |
|---|---|---|---|---|---|
| Hazardous (Tonnes) | 2851.06 | | | | |
| Non-Hazardous (Tonnes) | 117.17 | | | | |

**Resource Usage/Energy efficiency summary** Lic No: P0643-02 Year 2015

Table R4: Energy Audit finding recommendations

| Date of audit | Recommendations | Description of Measures proposed | Origin of measures | Predicted energy savings % | Implementation date | Responsibility | Completion date | Status and comments |
|---|---|---|---|---|---|---|---|---|
| 30/10/2015 | 1 no. non-conformance - The energy review process does not meet the requirements of the standard | Abbvie to implement corrective action plan | energy audit | n/a | Ongoing | Energy Team Leader | Ongoing | Ongoing |
| 30/10/2015 | OFI02/14 & OFI03/14 recommendiations from 2014 are open | 2014 recommendations are currently within company corrective action system | energy audit | n/a | Ongoing | Energy Team Leader | Ongoing | Ongoing |
| | | | SELECT | | | | | |

Table R5: Power Generation: Where power is generated onsite (e.g. power generation facilities/food and drink industry)please complete the following information

| | Unit ID | Unit ID | Unit ID | Unit ID | Station Total |
|---|---|---|---|---|---|
| Technology | Trial Wind Mast | | | | |
| Primary Fuel | Wind | | | | |
| Thermal Efficiency | n/a | | | | |
| Unit Date of Commission | 23-Dec-14 | | | | |
| Total Starts for year | n/a | | | | |
| Total Running Time | n/a | | | | |
| Total Electricity Generated (GWH) | trial | | | | |
| House Load (GWH) | n/a | | | | |
| KWH per Litre of Process Water | n/a | | | | |
| KWH per Litre of Total Water used on | Site | | | | |

## Complaints and Incidents summary template

Lic No: P0643-02 Year 2015

### Complaints

| Have you received any environmental complaints in the current reporting year? If yes please complete summary details of complaints received on site in table 1 below | No | Additional information |
|---|---|---|

Table 1 Complaints summary

| Date | Category | Other type (please specify) | Brief description of complaint (Free txt <20 words) | Corrective action< 20 words | Resolution status | Resolution date | Further information |
|---|---|---|---|---|---|---|---|
| | SELECT | | | | SELECT | | |
| | SELECT | | | | SELECT | | |
| | SELECT | | | | SELECT | | |
| | SELECT | | | | SELECT | | |
| | SELECT | | | | SELECT | | |

| | |
|---|---|
| Total complaints open at start of reporting year | |
| Total new complaints received during reporting year | |
| Total complaints closed during reporting year | |
| Balance of complaints end of reporting year | |

### Incidents

| Have any incidents occurred on site in the current reporting year? Please list all incidents for current reporting year in Table 2 below | Yes | Additional information |
|---|---|---|
| | | Two incidents reported during 2015 |

| *For information on how to report and what constitutes an incident | What is an incident |
|---|---|

Table 2 Incidents summary

| Date of occurrence | Incident nature | Location of occurrence | Incident category*please refer to guidance | Receptor | Cause of incident | Other cause(please specify) | Activity in progress at time of incident | Communication | Occurrence | Corrective action<20 words | Preventative action <20 words | Resolution status | Resolution date | Likelihood of reoccurence |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 11/06/2015 | Monitoring equipment offline | Licenced discharge point (typ | 1. Minor | Water | Plant or equipment issues | | Normal activities | EPA | New | TOC meter replaced | | Complete | 17/07/2015 | Low |
| 14/11/2015 | Monitoring equipment offline | Licenced discharge point (typ | 1. Minor | Air | Plant or equipment issues | | Normal activities | EPA | New | Automation solution o | Classroom trai | Complete | 18/12/2015 | Low |

| | |
|---|---|
| Total number of incidents current year | 2 |
| Total number of incidents previous year | 4 |
| % reduction/ increase | 25% reduction |

Environmental Protection Agency

Guidance to completing the PRTR workbook

# PRTR Returns Workbook

Version 1.1.19

| | |
|---|---|
| **REFERENCE YEAR** | 2015 |

**1. FACILITY IDENTIFICATION**

| | |
|---|---|
| Parent Company Name | AbbVie Ireland NL B.V. |
| Facility Name | AbbVie Ireland NL B.V. |
| PRTR Identification Number | P0643 |
| Licence Number | P0643-03 |

Classes of Activity

| **No.** | **class_name** |
|---|---|
| - | Refer to PRTR class activities below |

| | |
|---|---|
| Address 1 | Manorhamilton Road |
| Address 2 | Sligo |
| Address 3 | |
| Address 4 | |
| | |
| | Sligo |
| Country | Ireland |
| Coordinates of Location | -8.45312 54.2850 |
| River Basin District | IEWE |
| NACE Code | 2120 |
| Main Economic Activity | Manufacture of pharmaceutical preparations |
| **AER Returns Contact Name** | Lorraine Gillespie |
| **AER Returns Contact Email Address** | lorraine.gillespie@abbvie.com |
| **AER Returns Contact Position** | EHS Team Leader |
| **AER Returns Contact Telephone Number** | 071-9137785 |
| **AER Returns Contact Mobile Phone Number** | |
| **AER Returns Contact Fax Number** | |
| **Production Volume** | 0.0 |
| **Production Volume Units** | |
| **Number of Installations** | 1 |
| **Number of Operating Hours in Year** | 8712 |
| **Number of Employees** | 200 |
| **User Feedback/Comments** | |
| **Web Address** | |

**2. PRTR CLASS ACTIVITIES**

| **Activity Number** | **Activity Name** |
|---|---|
| 4(e) | Installations using a chemical or biological process for the production on an industrial scale of basic pharmaceutical products |

**3. SOLVENTS REGULATIONS (S.I. No. 543 of 2002)**

| | |
|---|---|
| Is it applicable? | |
| Have you been granted an exemption ? | |
| If applicable which activity class applies (as per Schedule 2 of the regulations) ? | |
| Is the reduction scheme compliance route being used ? | |

**4. WASTE IMPORTED/ACCEPTED ONTO SITE** Guidance on waste imported/accepted onto site

| | |
|---|---|
| Do you import/accept waste onto your site for on-site treatment (either recovery or disposal activities) ? | |

This question is only applicable if you are an IPPC or Quarry site

**4.1 RELEASES TO AIR** Link to previous years emissions data



**SECTION A : SECTOR SPECIFIC PRTR POLLUTANTS**

| RELEASES TO AIR | | | | | Please enter all quantities in this section in KGs | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| POLLUTANT | | METHOD | | | | | | QUANTITY | | |
| | | | Method Used | | A1-1 & A1-2 | | | | | |
| No. Annex II | Name | M/C/E | Method Code | Designation or Description | Emission Point 1 | Emission Point 2 | Emission Point 3 | T (Total) KG/Year | A (Accidental) KG/Year | F (Fugitive) KG/Year |
| 11 | Sulphur oxides (SOx/SO2) | M | OTH | Continuous by Infrared Analyser | 220.36 | 0.0 | 0.0 | 220.36 | 0.0 | 0.0 |
| **08** | **Nitrogen oxides (NOx/NO2)** | M | OTH | Continuous by Infrared Analyser | 12881.05 | 0.0 | 0.0 | 12881.05 | 0.0 | 0.0 |

* Select a row by double-clicking on the Pollutant Name (Column B) then click the delete button

**SECTION B : REMAINING PRTR POLLUTANTS**

| RELEASES TO AIR | | | | | Please enter all quantities in this section in KGs | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| POLLUTANT | | METHOD | | | | | | QUANTITY | | |
| | | | Method Used | | A1-1 & A1-2 | | | | | |
| No. Annex II | Name | M/C/E | Method Code | Designation or Description | Emission Point 1 | Emission Point 2 | Emission Point 3 | T (Total) KG/Year | A (Accidental) KG/Year | F (Fugitive) KG/Year |
| 02 | Carbon monoxide (CO) | M | OTH | Continuous by Infrared Analyser | 1825.48 | 0.0 | 0.0 | 1825.48 | 0.0 | 0.0 |

* Select a row by double-clicking on the Pollutant Name (Column B) then click the delete button

**SECTION C : REMAINING POLLUTANT EMISSIONS (As required in your Licence)**

| RELEASES TO AIR | | | | | Please enter all quantities in this section in KGs | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| POLLUTANT | | METHOD | | | | | | | QUANTITY | | |
| | | | Method Used | | A2-1(a) | A2-1(b) | A2-3 | A2-4 | | | |
| Pollutant No. | Name | M/C/E | Method Code | Designation or Description | Emission Point 1 | Emission Point 2 | Emission Point 3 | Emission Point 4 | T (Total) KG/Year | A (Accidental) KG/Year | F (Fugitive) KG/Year |
| 244 | Total Particulates | M | OTH | | 0.0 | 0.0 | 5.65 | 7.26 | 12.91 | 0.0 | 0.0 |
| 202 | 2-methyoxyethanol | M | OTH | Adsropton, absorption and GCMS | 34.59 | 6.53 | 0.0 | 0.0 | 41.12 | 0.0 | 0.0 |
| 230 | TA Luft organic substances class 1 | M | OTH | VDI 3481 Adsorption, absorption and GCMS | 36.04 | 4.56 | 0.0 | 0.0 | 40.6 | 0.0 | 0.0 |
| 209 | Dimethylformamide | M | OTH | Adsropton, absorption and GCMS | 34.59 | 6.53 | 0.0 | 0.0 | 41.12 | 0.0 | 0.0 |
| 351 | Total Organic Carbon (as C) | M | OTH | Continuous using flame ionisation detection | 3.99 | 0.49 | 0.0 | 0.0 | 4.48 | 0.0 | 0.0 |
| 231 | TA Luft organic substances class 2 | M | OTH | US EPA Method 18 Adsorption, absorption and GCMS | 36.04 | 4.56 | 0.0 | 0.0 | 40.6 | 0.0 | 0.0 |

* Select a row by double-clicking on the Pollutant Name (Column B) then click the delete button

## Additional Data Requested from Landfill operators

**For the purposes of the National Inventory on Greenhouse Gases, landfill operators are requested to provide summary data on landfill gas (Methane) flared or utilised on their facilities to accompany the figures for total methane generated. Operators should only report their Net methane (CH4) emission to the environment under T(total) KG/yr for Section A: Sector specific PRTR pollutants above. Please complete the table below:**

**Landfill:** AbbVie Ireland NL B.V.

| **Please enter summary data on the quantities of methane flared and / or utilised** | T (Total) kg/Year | M/C/E | Method Used: Method Code | Method Used: Designation or Description | Facility Total Capacity m3 per hour | |
|---|---|---|---|---|---|---|
| Total estimated methane generation (as per site model) | 0.0 | | | | N/A | |
| Methane flared | 0.0 | | | | 0.0 | (Total Flaring Capacity) |
| Methane utilised in engine/s | 0.0 | | | | 0.0 | (Total Utilising Capacity) |
| Net methane emission (as reported in Section A above) | 0.0 | | | | N/A | |

## 4.2 RELEASES TO WATERS

Link to previous years emissions data



### SECTION A : SECTOR SPECIFIC PRTR POLLUTANTS

Data on ambient monitoring of storm/surface water or groundwater, conducted as part of your licence requirements, should NOT be submitted under AER / PRTR Reporting as this onl

| RELEASES TO WATERS | | | | | Please enter all quantities in this section in KGs | | | |
|---|---|---|---|---|---|---|---|---|
| POLLUTANT | | | | | QUANTITY | | | |
| | | | Method Used | | | | | |
| No. Annex II | Name | M/C/E | Method Code | Designation or Description | Emission Point 1 | T (Total) KG/Year | A (Accidental) KG/Year | F (Fugitive) KG/Year |
| | | | | | 0.0 | 0.0 | 0.0 | 0.0 |

* Select a row by double-clicking on the Pollutant Name (Column B) then click the delete button

### SECTION B : REMAINING PRTR POLLUTANTS

| RELEASES TO WATERS | | | | | Please enter all quantities in this section in KGs | | | |
|---|---|---|---|---|---|---|---|---|
| POLLUTANT | | | | | QUANTITY | | | |
| | | | Method Used | | | | | |
| No. Annex II | Name | M/C/E | Method Code | Designation or Description | Emission Point 1 | T (Total) KG/Year | A (Accidental) KG/Year | F (Fugitive) KG/Year |
| | | | | | 0.0 | 0.0 | 0.0 | 0.0 |

* Select a row by double-clicking on the Pollutant Name (Column B) then click the delete button

### SECTION C : REMAINING POLLUTANT EMISSIONS (as required in your Licence)

| RELEASES TO WATERS | | | | | Please enter all quantities in this section in KGs | | | |
|---|---|---|---|---|---|---|---|---|
| POLLUTANT | | | | | QUANTITY | | | |
| | | | Method Used | | | | | |
| Pollutant No. | Name | M/C/E | Method Code | Designation or Description | Emission Point 1 | T (Total) KG/Year | A (Accidental) KG/Year | F (Fugitive) KG/Year |
| | | | | | 0.0 | 0.0 | 0.0 | 0.0 |

* Select a row by double-clicking on the Pollutant Name (Column B) then click the delete button

## SECTION A : PRTR POLLUTANTS

| OFFSITE TRANSFER OF POLLUTANTS DESTINED FOR WASTE-WATER TREATMENT OR SEWER | | | | | Please enter all quantities in this section in KGs | | | |
|---|---|---|---|---|---|---|---|---|
| POLLUTANT | | METHOD | | | QUANTITY | | | |
| | | | Method Used | | SE-1 | | | |
| No. Annex II | Name | M/C/E | Method Code | Designation or Description | Emission Point 1 | T (Total) KG/Year | A (Accidental) KG/Year | F (Fugitive) KG/Year |
| 06 | Ammonia (NH3) | M | OTH | Spectrophotometry Lab is on the Register of Quality Approved Labs submitting Data to EPA | 14.58 | 14.58 | 0.0 | 0.0 |
| 13 | Total phosphorus | M | OTH | ICP-AES. APHA/AWWA/WEF | 33.07 | 0.0 | 0.0 | 0.0 |
| 12 | Total nitrogen | M | OTH | | 74.56 | 74.56 | 0.0 | 0.0 |

* Select a row by double-clicking on the Pollutant Name (Column B) then click the delete button

## SECTION B : REMAINING POLLUTANT EMISSIONS (as required in your Licence)

| OFFSITE TRANSFER OF POLLUTANTS DESTINED FOR WASTE-WATER TREATMENT OR SEWER | | | | | Please enter all quantities in this section in KGs | | | |
|---|---|---|---|---|---|---|---|---|
| POLLUTANT | | METHOD | | | QUANTITY | | | |
| | | | Method Used | | SE-1 | | | |
| Pollutant No. | Name | M/C/E | Method Code | Designation or Description | Emission Point 1 | T (Total) KG/Year | A (Accidental) KG/Year | F (Fugitive) KG/Year |
| 306 | COD | M | OTH | Spectrophotometry. Lab is on the Register of Quality Approved Labs submitting Data to EPA. | 216.51 | 216.51 | 0.0 | 0.0 |
| 303 | BOD | M | OTH | 5 Day Incubation & DO Probe. Lab is on the Register of Quality Approved Labs submitting Data to EPA. | 164.8 | 164.8 | 0.0 | 0.0 |
| 240 | Suspended Solids | M | OTH | Ion-selective electrode, spectrophotometry. Lab is on the Register of Quality Approved Labs submitting Data to EPA. | 174.71 | 174.71 | 0.0 | 0.0 |
| 362 | Kjeldahl Nitrogen | M | OTH | Digestion & Spectrophotometry. Lab is on the Register of Quality Approved Labs submitting Data to EPA | 52.73 | 52.73 | 0.0 | 0.0 |
| 327 | Nitrate (as N) | M | OTH | Ion Selective Electrode. Lab is on the Register of Quality Approved Labs submitting Data to EPA. | 96.86 | 96.86 | 0.0 | 0.0 |
| 372 | Nitrite (as N) | M | OTH | Spectrophotometry. Lab is on the Register of Quality Approved Labs submitting Data to EPA. | 0.36 | 0.36 | 0.0 | 0.0 |
| 343 | Sulphate | M | OTH | Turbidimetry. Lab is on the Register of Quality Approved Labs submitting Data to EPA. | 1221.77 | 1221.77 | 0.0 | 0.0 |
| 314 | Fats, Oils and Greases | M | OTH | Standard Method | 50.88 | 50.88 | 0.0 | 0.0 |
| **308** | **Detergents (as MBAS)** | M | OTH | Standard Method | 2.14 | 2.14 | 0.0 | 0.0 |
| | | | | | 0.0 | 0.0 | 0.0 | 0.0 |

## 4.4 RELEASES TO LAND

Link to previous years emissions data



### SECTION A : PRTR POLLUTANTS

| RELEASES TO LAND | | | | | Please enter all quantities in this section in KGs | | |
|---|---|---|---|---|---|---|---|
| POLLUTANT | | METHOD | | | QUANTITY | | |
| | | | Method Used | | | | |
| No. Annex II | Name | M/C/E | Method Code | Designation or Description | Emission Point 1 | T (Total) KG/Year | A (Accidental) KG/Year |
| | | | | | 0.0 | 0.0 | 0.0 |

* Select a row by double-clicking on the Pollutant Name (Column B) then click the delete button

### SECTION B : REMAINING POLLUTANT EMISSIONS (as required in your Licence)

| RELEASES TO LAND | | | | | Please enter all quantities in this section in KGs | | |
|---|---|---|---|---|---|---|---|
| POLLUTANT | | METHOD | | | QUANTITY | | |
| | | | Method Used | | | | |
| Pollutant No. | Name | M/C/E | Method Code | Designation or Description | Emission Point 1 | T (Total) KG/Year | A (Accidental) KG/Year |
| | | | | | 0.0 | 0.0 | 0.0 |

## 5. ONSITE TREATMENT & OFFSITE TRANSFERS OF WASTE



**Please enter all quantities on this sheet in Tonnes**

0

| Transfer Destination | European Waste Code | Hazardous | Quantity (Tonnes per Year) | Description of Waste | Waste Treatment Operation | Method Used | | Location of Treatment | Haz Waste : Name and Licence/Permit No of Next Destination Facility Non Haz Waste: Name and Licence/Permit No of Recover/Disposer | Haz Waste : Address of Next Destination Facility Non Haz Waste: Address of Recover/Disposer | Name and License / Permit No. and Address of Final Recoverer / Disposer (HAZARDOUS WASTE ONLY) | Actual Address of Final Destination i.e. Final Recovery / Disposal Site (HAZARDOUS WASTE ONLY) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | M/C/E | Method Used | | | | | |
| To Other Countries | 06 01 06 | Yes | 0.415 | other acids | D10 | M | Weighed | Abroad | Indaver Ireland Limited,W0036-02 | Tolka Quay Road,Dublin Port,Dublin 1,.,Ireland | Indaver NV,MLAV1/9800000485/MV /bd ,Poldervlietweg 5,Haven 550 2030,Antwerp,.,Belgium | Poldervlietweg 5,Haven 550 2030,Antwerp,.,Belgium |
| To Other Countries | 06 02 04 | Yes | 0.01 | sodium and potassium hydroxide | D10 | M | Weighed | Abroad | Indaver Ireland Limited,W0036-02 | Tolka Quay Road,Dublin Port,Dublin 1,.,Ireland | Indaver NV,MLAV1/9800000485/MV /bd ,Poldervlietweg 5,Haven 550 2030,Antwerp,.,Belgium | Poldervlietweg 5,Haven 550 2030,Antwerp,.,Belgium |
| To Other Countries | 06 02 05 | Yes | 0.139 | other bases | D10 | M | Weighed | Abroad | Indaver Ireland Limited,W0036-02 | Tolka Quay Road,Dublin Port,Dublin 1,.,Ireland | Indaver NV,MLAV1/9800000485/MV /bd ,Poldervlietweg 5,Haven 550 2030,Antwerp,.,Belgium | Poldervlietweg 5,Haven 550 2030,Antwerp,.,Belgium |
| To Other Countries | 07 05 01 | Yes | 25.44 | aqueous washing liquids and mother liquors | D10 | M | Weighed | Abroad | Indaver Ireland Limited,W0036-02 | Tolka Quay Road,Dublin Port,Dublin 1,.,Ireland | AVG (Abfall Verwertungs Gesellschaft GmbH,B01VS0013 B01CA0012 B01BA0286,Borsignstrasse 2,.,Hamburg,22113,Germany | Borsignstrasse 2,.,Hamburg,22113,Germany |
| To Other Countries | 07 05 01 | Yes | 328.796 | aqueous washing liquids and mother liquors | D10 | M | Weighed | Abroad | Indaver Ireland Limited,W0036-02 | Tolka Quay Road,Dublin Port,Dublin 1,.,Ireland | Indaver NV,MLAV1/9800000485/MV /bd ,Poldervlietweg 5,Haven 550 2030,Antwerp,.,Belgium | Poldervlietweg 5,Haven 550 2030,Antwerp,.,Belgium |
| To Other Countries | 07 05 01 | Yes | 1542.72 | aqueous washing liquids and mother liquors | D10 | M | Weighed | Abroad | Indaver Ireland Limited,W0036-02 | Tolka Quay Road,Dublin Port,Dublin 1,.,Ireland | ARF,AP4_07_2009,Zl La Soudiere,Route de Soissons,02300 Chauny,.,France | Zl La Soudiere,Route de Soissons,02300 Chauny,.,France |
| To Other Countries | 07 05 03 | Yes | 98.4 | organic halogenated solvents, washing liquids and mother liquors | D10 | M | Weighed | Abroad | Indaver Ireland Limited,W0036-02 | Tolka Quay Road,Dublin Port,Dublin 1,.,Ireland | Indaver NV,MLAV1/9800000485/MV /bd ,Poldervlietweg 5,Haven 550 2030,Antwerp,.,Belgium | Poldervlietweg 5,Haven 550 2030,Antwerp,.,Belgium |

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| To Other Countries | 07 05 04 | Yes | 22.82 | other organic solvents, washing liquids and mother liquors | D15 | M | Weighed | Abroad | Indaver Ireland Limited,W0036-02 | Tolka Quay Road,Dublin Port,Dublin 1,.,Ireland | AVG (Abfall Verwertungs Gesellschaft GmbH,B01VS0013 B01CA0012 B01BA0286,Borsignstrasse 2,.,Hamburg,22113,Germany | Borsignstrasse 2,.,Hamburg,22113,Germany |
| To Other Countries | 07 05 04 | Yes | 45.065 | other organic solvents, washing liquids and mother liquors | D10 | M | Weighed | Abroad | Indaver Ireland Limited,W0036-02 | Tolka Quay Road,Dublin Port,Dublin 1,.,Ireland | Indaver NV,MLAV1/9800000485/MV /bd ,Poldervlietweg 5,Haven 550 2030,Antwerp,.,Belgium | Poldervlietweg 5,Haven 550 2030,Antwerp,.,Belgium |
| Within the Country | 07 05 04 | Yes | 374.95 | other organic solvents, washing liquids and mother liquors | R1 | M | Weighed | Offsite in Ireland | Indaver Ireland Limited,W0036-02 | Tolka Quay Road,Dublin Port,Dublin 1,.,Ireland | Indaver Ireland Limited,W0036-02 ,Tolka Quay Road,Dublin Port,Dublin 1,.,Ireland ARF,AP4_07_2009,Zl La Soudiere,Route de Soissons,02300 Chauny,.,France | Tolka Quay Road,Dublin Port,Dublin 1,.,Ireland Zl La Soudiere,Route de Soissons,02300 Chauny,.,France |
| To Other Countries | 07 05 04 | Yes | 43.24 | other organic solvents, washing liquids and mother liquors | R1 | M | Weighed | Abroad | Indaver Ireland Limited,W0036-02 | Tolka Quay Road,Dublin Port,Dublin 1,.,Ireland | Indaver NV,MLAV1/9800000485/MV /bd ,Poldervlietweg 5,Haven 550 2030,Antwerp,.,Belgium | Poldervlietweg 5,Haven 550 2030,Antwerp,.,Belgium |
| To Other Countries | 07 05 13 | Yes | 7.603 | solid wastes containing dangerous substances | D10 | M | Weighed | Abroad | Indaver Ireland Limited,W0036-02 | Tolka Quay Road,Dublin Port,Dublin 1,.,Ireland | Indaver NV,MLAV1/9800000485/MV /bd ,Poldervlietweg 5,Haven 550 2030,Antwerp,.,Belgium | Poldervlietweg 5,Haven 550 2030,Antwerp,.,Belgium |
| To Other Countries | 13 01 13 | Yes | 0.924 | other hydraulic oils | D10 | M | Weighed | Abroad | Indaver Ireland Limited,W0036-02 | Tolka Quay Road,Dublin Port,Dublin 1,.,Ireland | Indaver NV,MLAV1/9800000485/MV /bd ,Poldervlietweg 5,Haven 550 2030,Antwerp,.,Belgium | Poldervlietweg 5,Haven 550 2030,Antwerp,.,Belgium |
| To Other Countries | 13 03 10 | Yes | 2.106 | other insulating and heat transmission oils | D10 | M | Weighed | Abroad | Indaver Ireland Limited,W0036-02 | Tolka Quay Road,Dublin Port,Dublin 1,.,Ireland | Indaver NV,MLAV1/9800000485/MV /bd ,Poldervlietweg 5,Haven 550 2030,Antwerp,.,Belgium | Poldervlietweg 5,Haven 550 2030,Antwerp,.,Belgium |
| Within the Country | 15 01 01 | No | 5.38 | paper and cardboard packaging | R3 | M | Weighed | Offsite in Ireland | Bruscar Bhearna Teoranta,W0106-02 | Carrowbrowne,.,Headford Road Galway,.,Ireland | | |
| Within the Country | 15 01 06 | No | 22.405 | mixed packaging | R3 | M | Weighed | Offsite in Ireland | Bruscar Bhearna Teoranta,W0106-02 | Carrowbrowne,.,Headford Road Galway,.,Ireland | | |
| To Other Countries | 15 01 10 | Yes | 0.107 | packaging containing residues of or contaminated by dangerous substances | D10 | M | Weighed | Abroad | Indaver Ireland Limited,W0036-02 | Tolka Quay Road,Dublin Port,Dublin 1,.,Ireland | AVG (Abfall Verwertungs Gesellschaft GmbH,B01VS0013 B01CA0012 B01BA0286,Borsignstrasse 2,.,Hamburg,22113,Germany | Borsignstrasse 2,.,Hamburg,22113,Germany |
| To Other Countries | 15 01 10 | Yes | 13.797 | packaging containing residues of or contaminated by dangerous substances | D10 | M | Weighed | Abroad | Indaver Ireland Limited,W0036-02 | Tolka Quay Road,Dublin Port,Dublin 1,.,Ireland | Indaver NV,MLAV1/9800000485/MV /bd ,Poldervlietweg 5,Haven 550 2030,Antwerp,.,Belgium | Poldervlietweg 5,Haven 550 2030,Antwerp,.,Belgium |
| To Other Countries | 15 02 02 | Yes | 33.75 | absorbents, filter materials (including oil filters not otherwise specified), wiping cloths, protective clothing contaminated by dangerous substances | D10 | M | Weighed | Abroad | Indaver Ireland Limited,W0036-02 | Tolka Quay Road,Dublin Port,Dublin 1,.,Ireland | Indaver NV,MLAV1/9800000485/MV /bd ,Poldervlietweg 5,Haven 550 2030,Antwerp,.,Belgium | Poldervlietweg 5,Haven 550 2030,Antwerp,.,Belgium |
| Within the Country | 16 02 13 | Yes | 2.642 | discarded equipment containing hazardous components (16) other than those mentioned in 16 02 09 to 16 02 12 | R4 | M | Weighed | Offsite in Ireland | Indaver Ireland Limited,W0036-02 | Tolka Quay Road,Dublin Port,Dublin 1,.,Ireland | KMK Metals,W0113-03 ,Cappincur Industrial Estate,Daingean Road,Tullamore,Co.Offally,Ireland | Cappincur Industrial Estate,Daingean Road,Tullamore,Co.Offally,Ireland |
| To Other Countries | 16 03 03 | Yes | 0.954 | inorganic wastes containing dangerous substances | D10 | M | Weighed | Abroad | Indaver Ireland Limited,W0036-02 | Tolka Quay Road,Dublin Port,Dublin 1,.,Ireland | Indaver NV,MLAV1/9800000485/MV /bd ,Poldervlietweg 5,Haven 550 2030,Antwerp,.,Belgium | Poldervlietweg 5,Haven 550 2030,Antwerp,.,Belgium |

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| To Other Countries | 16 05 04 | Yes | 0.02 | gases in pressure containers (including halons) containing dangerous substances | D10 | M | Weighed | Abroad | Indaver Ireland Limited,W0036-02 | Tolka Quay Road,Dublin Port,Dublin 1,.,Ireland | Indaver NV,MLAV1/9800000485/MV /bd ,Poldervlietweg 5,Haven 550 2030,Antwerp,.,Belgium | Poldervlietweg 5,Haven 550 2030,Antwerp,.,Belgium |
| To Other Countries | 16 05 06 | Yes | 0.52 | laboratory chemicals, consisting of or containing dangerous substances, including mixtures of laboratory chemicals | D10 | M | Weighed | Abroad | Indaver Ireland Limited,W0036-02 | Tolka Quay Road,Dublin Port,Dublin 1,.,Ireland | Indaver NV,MLAV1/9800000485/MV /bd ,Poldervlietweg 5,Haven 550 2030,Antwerp,.,Belgium | Poldervlietweg 5,Haven 550 2030,Antwerp,.,Belgium |
| To Other Countries | 16 05 06 | Yes | 0.263 | laboratory chemicals, consisting of or containing dangerous substances, including mixtures of laboratory chemicals | D10 | M | Weighed | Abroad | Indaver Ireland Limited,W0036-02 | Tolka Quay Road,Dublin Port,Dublin 1,.,Ireland | AVG (Abfall Verwertungs Gesellschaft GmbH,B01VS0013 B01CA0012 B01BA0286,Borsignstrasse 2,.,Hamburg,22113,Germany | Borsignstrasse 2,.,Hamburg,22113,Germany |
| To Other Countries | 16 05 07 | Yes | 0.073 | discarded inorganic chemicals consisting of or containing dangerous substances | D10 | M | Weighed | Abroad | Indaver Ireland Limited,W0036-02 | Tolka Quay Road,Dublin Port,Dublin 1,.,Ireland | Indaver NV,MLAV1/9800000485/MV /bd ,Poldervlietweg 5,Haven 550 2030,Antwerp,.,Belgium | Poldervlietweg 5,Haven 550 2030,Antwerp,.,Belgium |
| Within the Country | 20 01 08 | No | 6.849 | biodegradable kitchen and canteen waste | R3 | M | Weighed | Offsite in Ireland | Bruscar Bhearna Teoranta,W0106-02 | Carrowbrowne,.,Headford Road Galway,.,Ireland | | |
| Within the Country | 20 01 21 | Yes | 0.06 | fluorescent tubes and other mercury-containing waste | R4 | M | Weighed | Offsite in Ireland | Indaver Ireland Limited,W0036-02 | Tolka Quay Road,Dublin Port,Dublin 1,.,Ireland | Irish Lamp Recycling Co Ltd.,WFP-KE-14-0072-01,Woodstock Industrial Estate,Kilkenny Road,Athy,Co. Kildare,Ireland | Woodstock Industrial Estate,Kilkenny Road,Athy,Co. Kildare,Ireland |
| Within the Country | 20 01 38 | No | 11.74 | wood other than that mentioned in 20 01 37 | R3 | M | Weighed | Offsite in Ireland | Bruscar Bhearna Teoranta,W0106-02 | Carrowbrowne,.,Headford Road Galway,.,Ireland | | |
| Within the Country | 20 01 39 | No | 7.948 | plastics | R3 | M | Weighed | Offsite in Ireland | Bruscar Bhearna Teoranta,W0106-02 | Carrowbrowne,.,Headford Road Galway,.,Ireland | | |
| Within the Country | 20 01 40 | No | 8.56 | metals | R4 | M | Weighed | Offsite in Ireland | Bruscar Bhearna Teoranta,W0106-02 | Carrowbrowne,.,Headford Road Galway,.,Ireland | | |
| Within the Country | 20 03 01 | No | 33.644 | mixed municipal waste | D5 | M | Weighed | Offsite in Ireland | Bruscar Bhearna Teoranta,W0106-02 | Carrowbrowne,.,Headford Road Galway,.,Ireland | | |
| Within the Country | 20 03 07 | No | 19.944 | bulky waste | R1 | M | Weighed | Offsite in Ireland | Bruscar Bhearna Teoranta,W0106-02 | Carrowbrowne,.,Headford Road Galway,.,Ireland | | |
| To Other Countries | 07 05 01 | Yes | 91.9 | aqueous washing liquids and mother liquors | D15 | M | Weighed | Abroad | Indaver Ireland Limited,W0036-02 | Tolka Quay Road,Dublin Port,Dublin 1,.,Ireland | ARF,AP4_07_2009,Zl La Soudiere,Route de Soissons,02300 Chauny,.,France | Zl La Soudiere,Route de Soissons,02300 Chauny,.,France |
| To Other Countries | 07 05 01 | Yes | 46.26 | aqueous washing liquids and mother liquors | D15 | M | Weighed | Abroad | Indaver Ireland Limited,W0036-02 | Tolka Quay Road,Dublin Port,Dublin 1,.,Ireland | Indaver NV,MLAV1/9800000485/MV /bd ,Poldervlietweg 5,Haven 550 2030,Antwerp,.,Belgium | Poldervlietweg 5,Haven 550 2030,Antwerp,.,Belgium |
| Within the Country | 07 05 01 | Yes | 116.52 | aqueous washing liquids and mother liquors | D10 | M | Weighed | Offsite in Ireland | Indaver Ireland Limited,W0036-02 | Tolka Quay Road,Dublin Port,Dublin 1,.,Ireland | Indaver Ireland Limited,W0036-02 ,Tolka Quay Road,Dublin Port,Dublin 1,.,Ireland | Tolka Quay Road,Dublin Port,Dublin 1,.,Ireland |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|
| To Other Countries | 06 02 05 | Yes | 0.317 | other bases | D10 | M | Weighed | Abroad | Indaver Ireland Limited,W0036-02 | Tolka Quay Road,Dublin Port,Dublin 1,.,Ireland | AVG (Abfall Verwertungs Gesellschaft GmbH,B01VS0013 B01CA0012 B01BA0286,Borsignstrasse 2,.,Hamburg,22113,Germany | Borsignstrasse 2,.,Hamburg,22113,Germany |
| To Other Countries | 07 05 04 | Yes | 20.84 | other organic solvents, washing liquids and mother liquors | D15 | M | Weighed | Abroad | Indaver Ireland Limited,W0036-02 | Tolka Quay Road,Dublin Port,Dublin 1,.,Ireland | ARF,AP4_07_2009,Zl La Soudiere,Route de Soissons,02300 Chauny,.,France | Zl La Soudiere,Route de Soissons,02300 Chauny,.,France |
| To Other Countries | 07 05 13 | Yes | 0.029 | solid wastes containing dangerous substances | D15 | M | Weighed | Abroad | Indaver Ireland Limited,W0036-02 | Tolka Quay Road,Dublin Port,Dublin 1,.,Ireland | Indaver NV,MLAV1/9800000485/MV /bd ,Poldervlietweg 5,Haven 550 2030,Antwerp,.,Belgium | Poldervlietweg 5,Haven 550 2030,Antwerp,.,Belgium |
| To Other Countries | 07 05 13 | Yes | 0.163 | solid wastes containing dangerous substances | D10 | M | Weighed | Abroad | Indaver Ireland Limited,W0036-02 | Tolka Quay Road,Dublin Port,Dublin 1,.,Ireland | AVG (Abfall Verwertungs Gesellschaft GmbH,B01VS0013 B01CA0012 B01BA0286,Borsignstrasse 2,.,Hamburg,22113,Germany | Borsignstrasse 2,.,Hamburg,22113,Germany |
| Within the Country | 08 03 18 | No | 0.695 | waste printing toner other than those mentioned in 08 03 17 | R3 | M | Weighed | Offsite in Ireland | Source Imaging Ltd., | Unit 3, Syngefield Industrial Estate,Birr Co. Offaly,Ireland | | |
| Within the Country | 13 02 08 | Yes | 14.84 | other engine, gear and lubricating oils | D9 | M | Weighed | Offsite in Ireland | Enva Ireland Ltd,COR-MH-14-003-01 | Cloneylogan,Kildalkey,Co. Meath,.,Ireland | Enva Ireland Ltd,COR-MH-14-003-01,Cloneylogan,Kildalkey,Co. Meath,.,Ireland | Cloneylogan,Kildalkey,Co. Meath,.,Ireland |
| Within the Country | 16 02 11 | Yes | 0.025 | discarded equipment containing chlorofluorocarbons, HCFC, HFC | R4 | M | Weighed | Offsite in Ireland | Indaver Ireland Limited,W0036-02 | Tolka Quay Road,Dublin Port,Dublin 1,.,Ireland | KMK Metals,W0113-03 ,Cappincur Industrial Estate,Daingean Road,Tullamore,Co.Offaly,Ireland | Cappincur Industrial Estate,Daingean Road,Tullamore,Co.Offaly,Ireland |
| To Other Countries | 16 03 05 | Yes | 12.908 | organic wastes containing dangerous substances | D10 | M | Weighed | Abroad | Indaver Ireland Limited,W0036-02 | Tolka Quay Road,Dublin Port,Dublin 1,.,Ireland | Indaver NV,MLAV1/9800000485/MV /bd ,Poldervlietweg 5,Haven 550 2030,Antwerp,.,Belgium | Poldervlietweg 5,Haven 550 2030,Antwerp,.,Belgium |
| To Other Countries | 16 05 06 | Yes | 0.02 | laboratory chemicals, consisting of or containing dangerous substances, including mixtures of laboratory chemicals | D15 | M | Weighed | Abroad | Indaver Ireland Limited,W0036-02 | Tolka Quay Road,Dublin Port,Dublin 1,.,Ireland | Indaver NV,MLAV1/9800000485/MV /bd ,Poldervlietweg 5,Haven 550 2030,Antwerp,.,Belgium | Poldervlietweg 5,Haven 550 2030,Antwerp,.,Belgium |
| Within the Country | 16 05 06 | Yes | 0.026 | laboratory chemicals, consisting of or containing dangerous substances, including mixtures of laboratory chemicals | D15 | M | Weighed | Offsite in Ireland | Indaver Ireland Limited,W0036-02 | Tolka Quay Road,Dublin Port,Dublin 1,.,Ireland | Indaver Ireland Limited,W0036-02 ,Tolka Quay Road,Dublin Port,Dublin 1,.,Ireland | Tolka Quay Road,Dublin Port,Dublin 1,.,Ireland |
| Within the Country | 16 06 01 | Yes | 2.394 | lead batteries | R4 | M | Weighed | Offsite in Ireland | Indaver Ireland Limited,W0036-02 | Tolka Quay Road,Dublin Port,Dublin 1,.,Ireland | KMK Metals,W0113-03 ,Cappincur Industrial Estate,Daingean Road,Tullamore,Co.Offaly,Ireland | Cappincur Industrial Estate,Daingean Road,Tullamore,Co.Offaly,Ireland |

* Select a row by double-clicking the Description of Waste then click the delete button