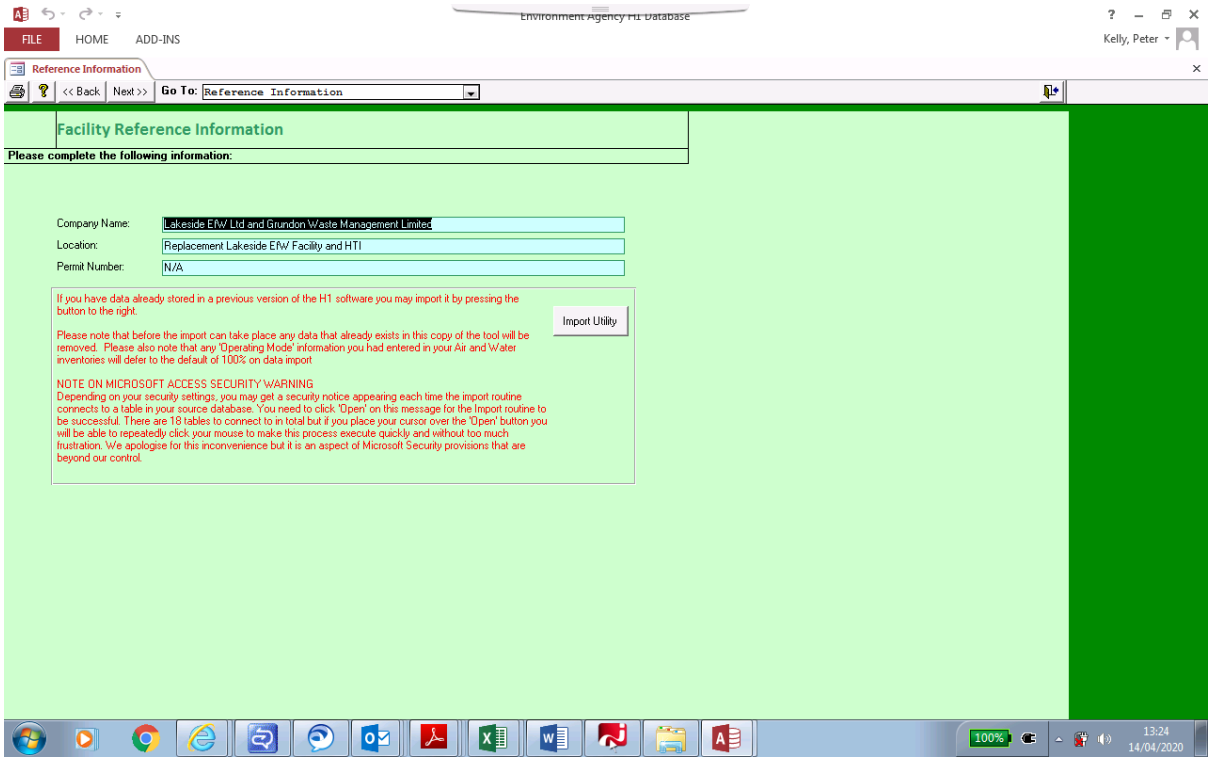
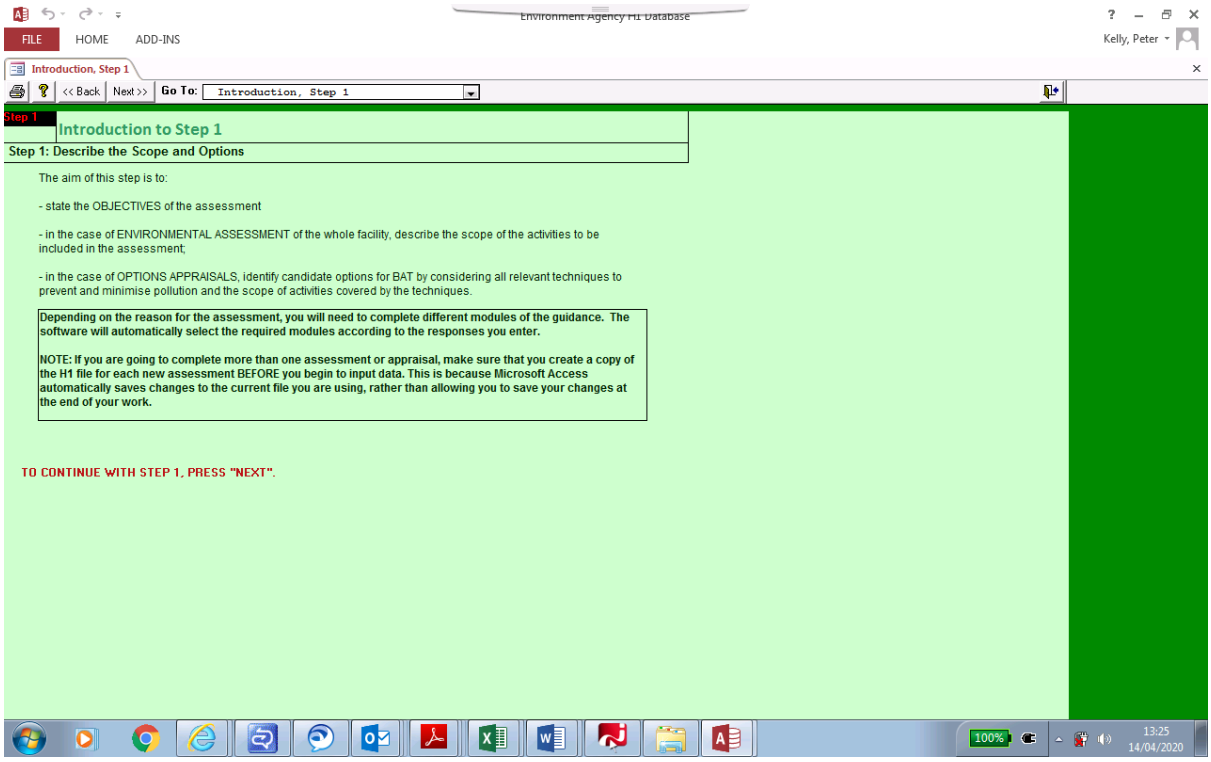
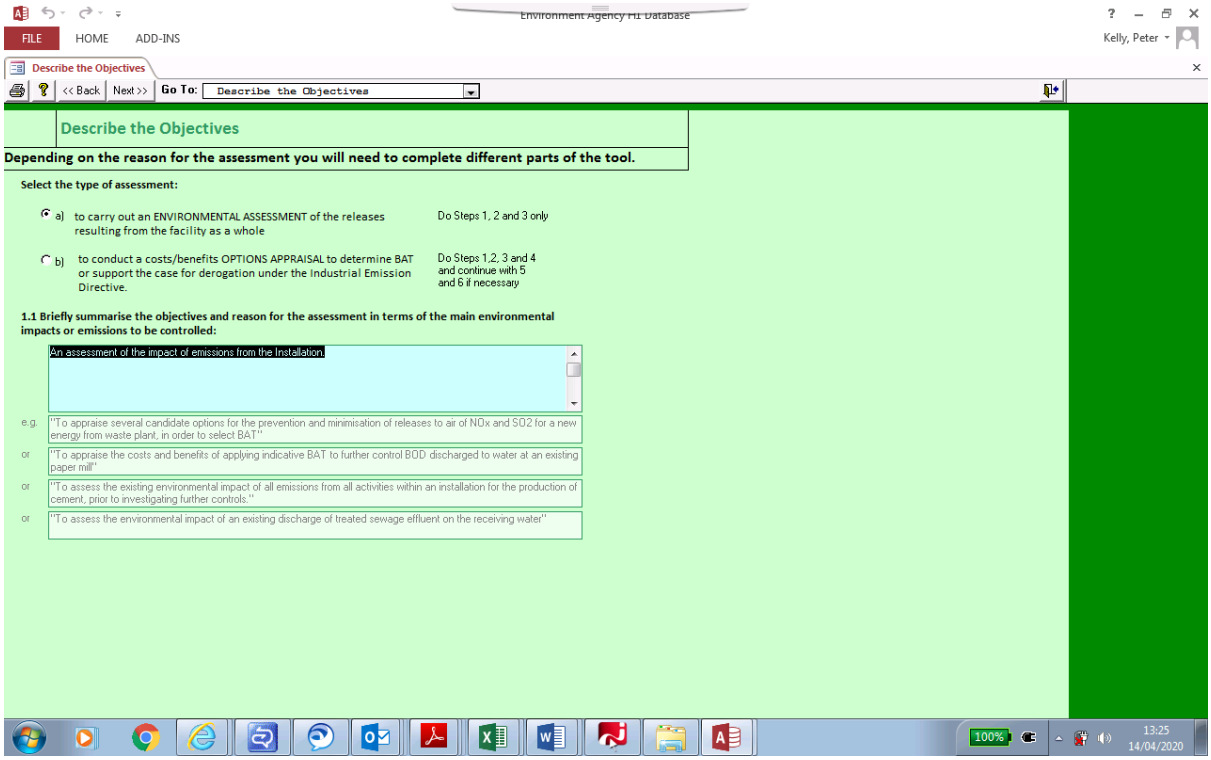
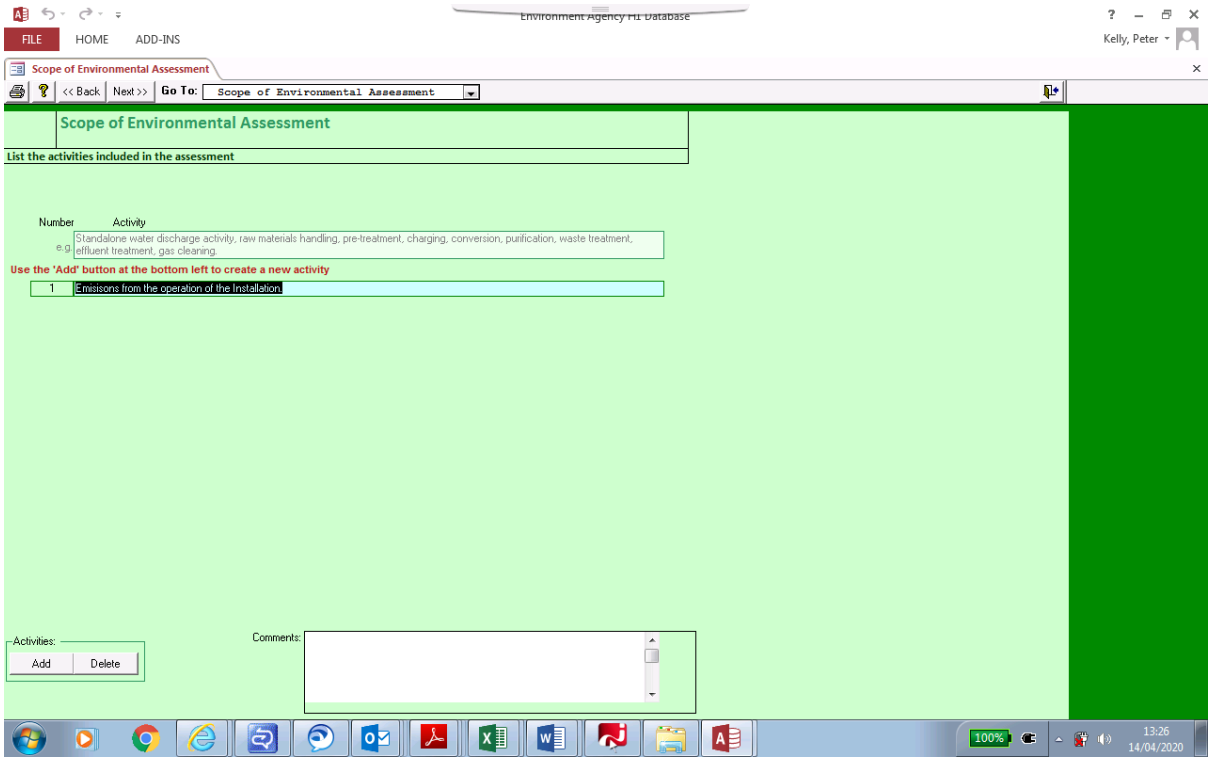
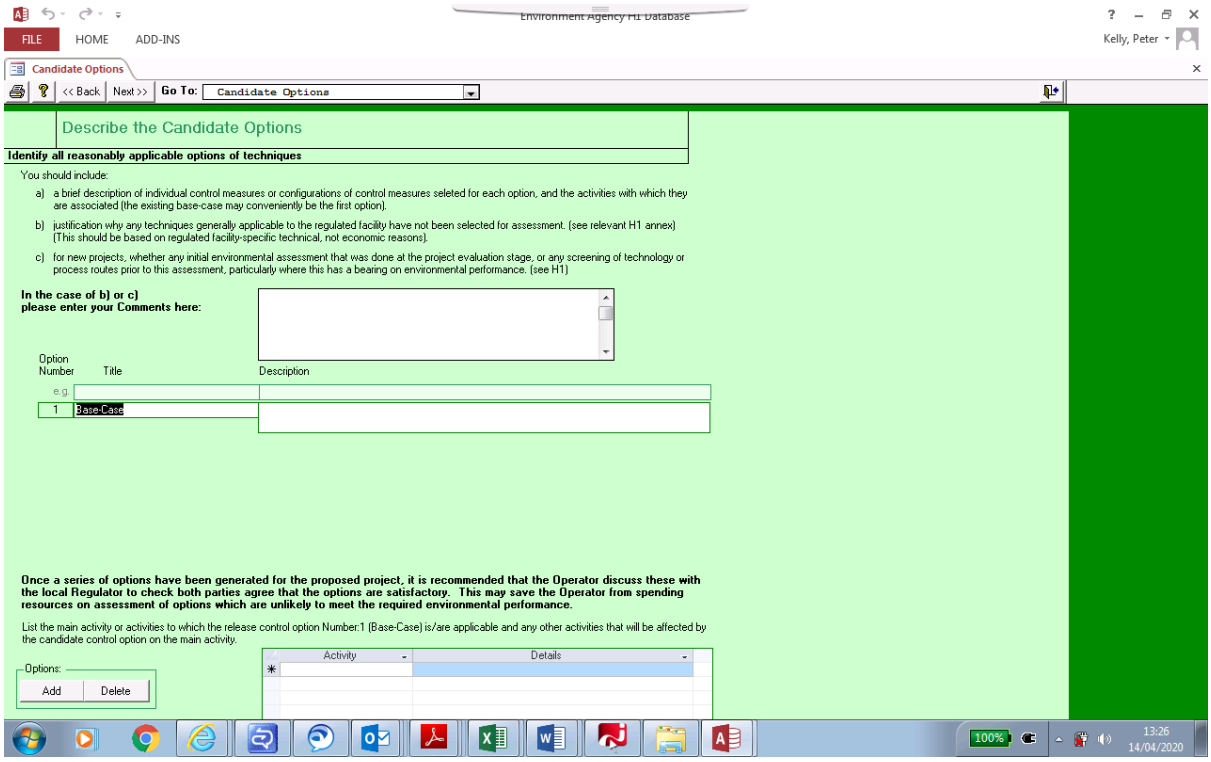
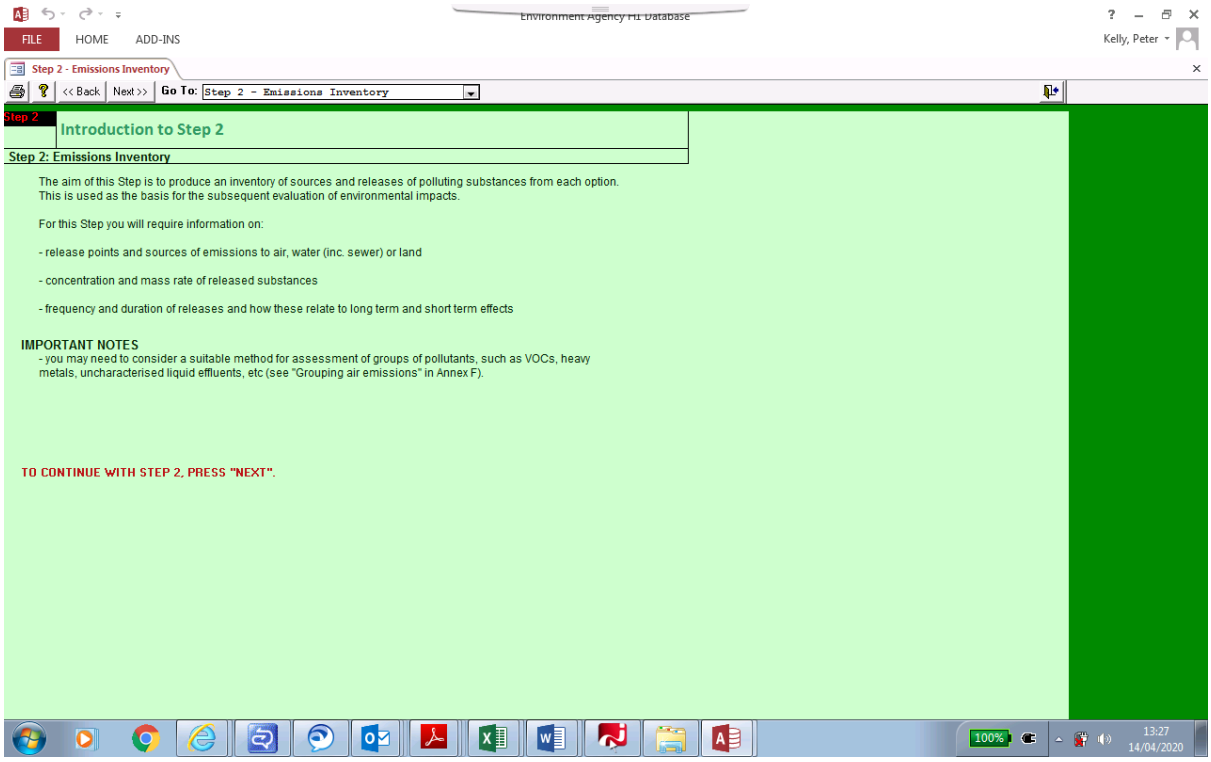

Environment Agency H1 Database
FILE
HOME
ADD-INS
Kelly, Peter
Reference Information
<< Back
Next >>
Go To: Reference Information
Facility Reference Information
Please complete the following information:
Company Name:
Lakeside EfW Ltd and Grundon Waste Management Limited
Location:
Replacement Lakeside EfW Facility and HTI
Permit Number:
N/A
If you have data already stored in a previous version of the H1 software you may import it by pressing the button to the right.
Please note that before the import can take place any data that already exists in this copy of the tool will be removed. Please also note that any 'Operating Mode' information you had entered in your Air and Water inventories will defer to the default of 100% on data import
NOTE ON MICROSOFT ACCESS SECURITY WARNING
Depending on your security settings, you may get a security notice appearing each time the import routine connects to a table in your source database. You need to click 'Open' on this message for the Import routine to be successful. There are 18 tables to connect to in total but if you place your cursor over the 'Open' button you will be able to repeatedly click your mouse to make this process execute quickly and without too much frustration. We apologise for this inconvenience but it is an aspect of Microsoft Security provisions that are beyond our control.
Import Utility
100%
13:24
14/04/2020

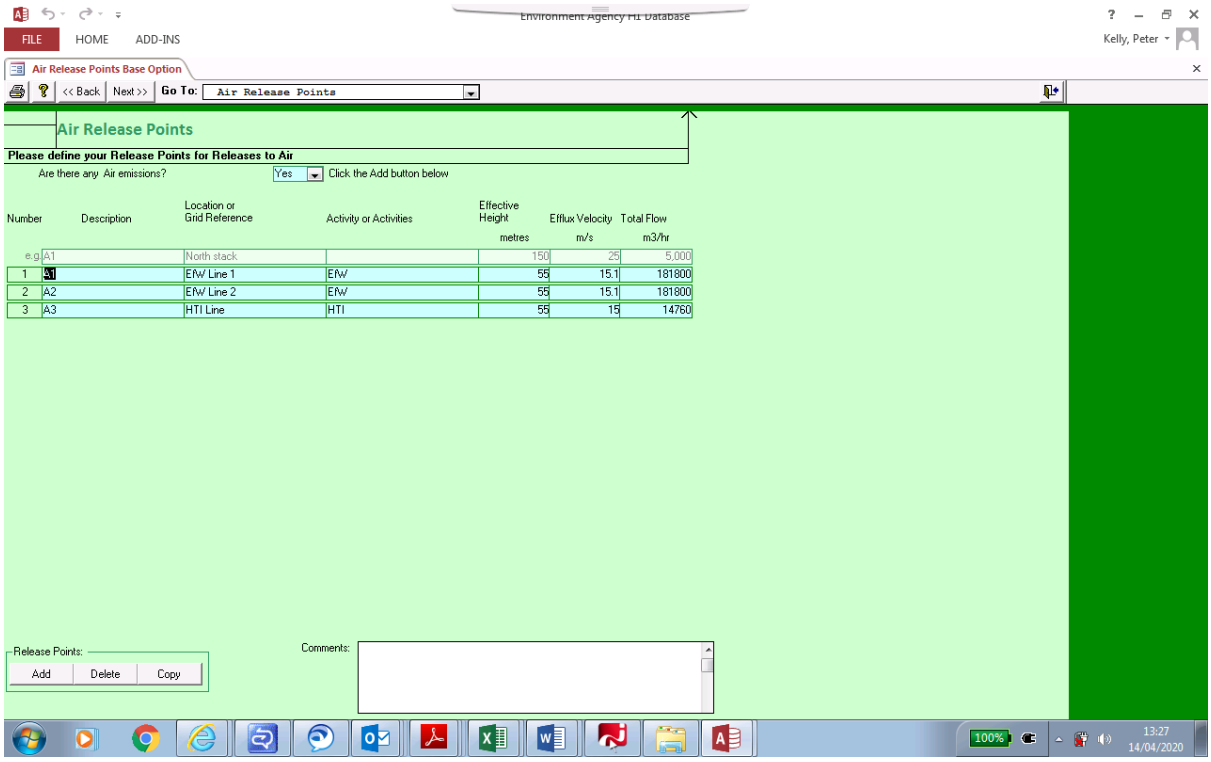

Environment Agency H1 Database
FILE
HOME
ADD-INS
Kelly, Peter
Introduction, Step 1
<< Back
Next >>
Go To: Introduction, Step 1
Step 1
Introduction to Step 1
Step 1: Describe the Scope and Options
The aim of this step is to:
- state the OBJECTIVES of the assessment
- in the case of ENVIRONMENTAL ASSESSMENT of the whole facility, describe the scope of the activities to be included in the assessment;
- in the case of OPTIONS APPRAISALS, identify candidate options for BAT by considering all relevant techniques to prevent and minimise pollution and the scope of activities covered by the techniques.
Depending on the reason for the assessment, you will need to complete different modules of the guidance. The software will automatically select the required modules according to the responses you enter.
NOTE: If you are going to complete more than one assessment or appraisal, make sure that you create a copy of the H1 file for each new assessment BEFORE you begin to input data. This is because Microsoft Access automatically saves changes to the current file you are using, rather than allowing you to save your changes at the end of your work.
TO CONTINUE WITH STEP 1, PRESS "NEXT".
100%
13:25
14/04/2020

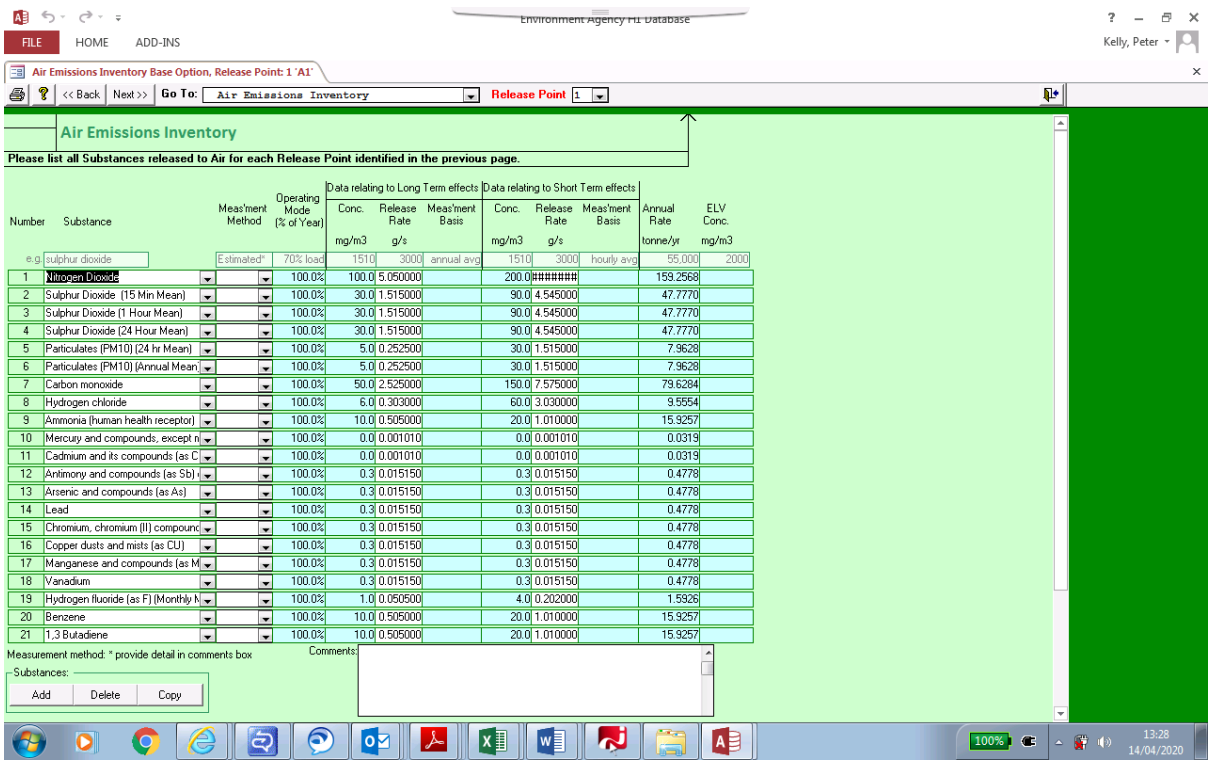

Environment Agency H1 Database
FILE
HOME
ADD-INS
Kelly, Peter
Describe the Objectives
<< Back
Next >>
Go To:
Describe the Objectives
Describe the Objectives
Depending on the reason for the assessment you will need to complete different parts of the tool.
Select the type of assessment:
a) to carry out an ENVIRONMENTAL ASSESSMENT of the releases resulting from the facility as a whole
Do Steps 1, 2 and 3 only
b) to conduct a costs/benefits OPTIONS APPRAISAL to determine BAT or support the case for derogation under the Industrial Emission Directive.
Do Steps 1,2, 3 and 4 and continue with 5 and 6 if necessary
1.1 Briefly summarise the objectives and reason for the assessment in terms of the main environmental impacts or emissions to be controlled:
An assessment of the impact of emissions from the Installation.
e.g. "To appraise several candidate options for the prevention and minimisation of releases to air of NOx and SO2 for a new energy from waste plant, in order to select BAT"
or "To appraise the costs and benefits of applying indicative BAT to further control BOD discharged to water at an existing paper mill"
or "To assess the existing environmental impact of all emissions from all activities within an installation for the production of cement, prior to investigating further controls."
or "To assess the environmental impact of an existing discharge of treated sewage effluent on the receiving water"
100%
13:25
14/04/2020

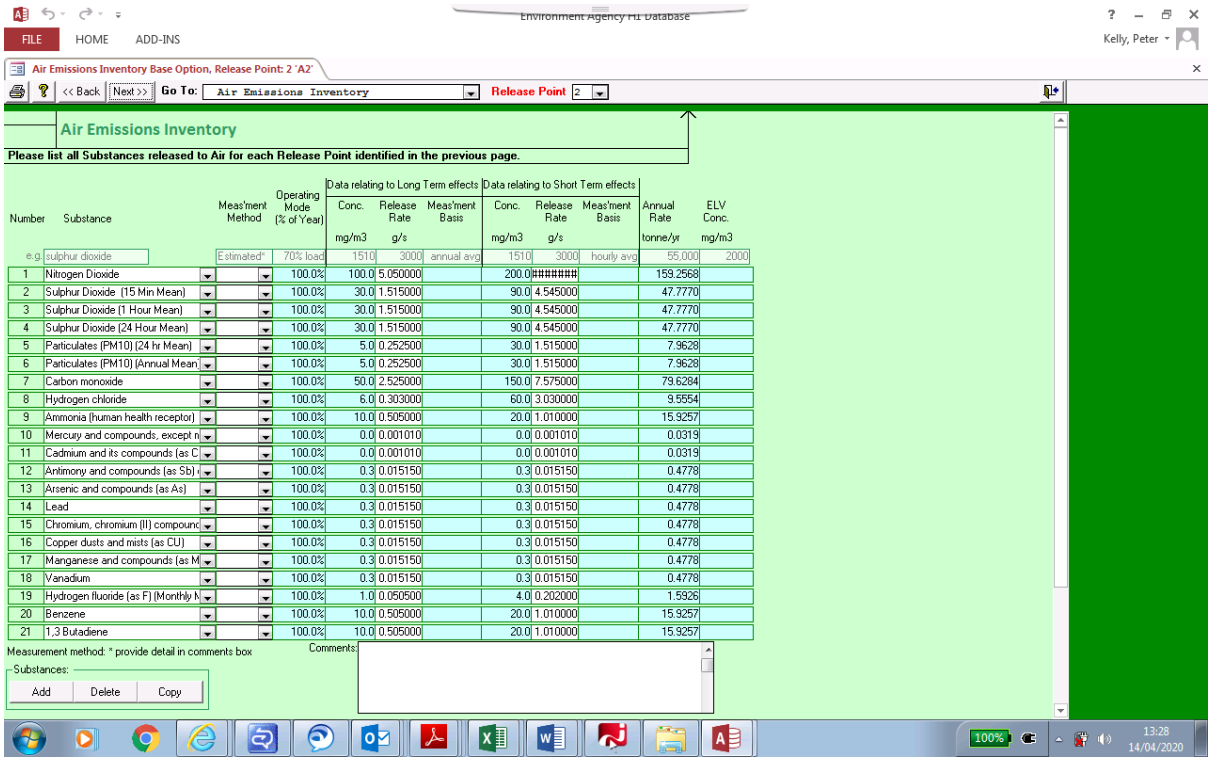

Environment Agency H1 Database
FILE
HOME
ADD-INS
Kelly, Peter
Scope of Environmental Assessment
<< Back
Next >>
Go To:
Scope of Environmental Assessment
Scope of Environmental Assessment
List the activities included in the assessment
Number
Activity
e.g. Standalone water discharge activity, raw materials handling, pre-treatment, charging, conversion, purification, waste treatment, effluent treatment, gas cleaning.
Use the 'Add' button at the bottom left to create a new activity
1
Emissions from the operation of the Installation.
Activities:
Add
Delete
Comments:
100%
13:26
14/04/2020

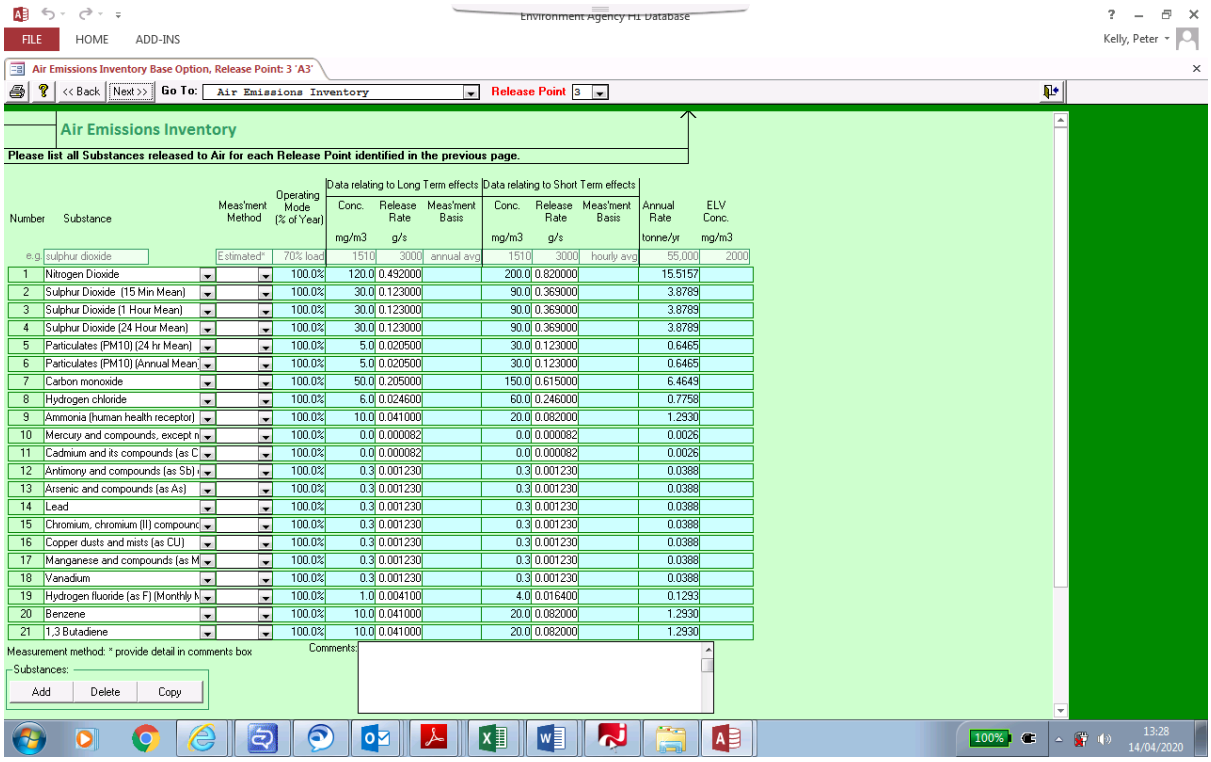

Environment Agency H1 Database
FILE
HOME
ADD-INS
Kelly, Peter
Candidate Options
<< Back
Next >>
Go To:
Candidate Options
Describe the Candidate Options
Identify all reasonably applicable options of techniques
You should include:
a) a brief description of individual control measures or configurations of control measures seleted for each option, and the activities with which they are associated (the existing base-case may conveniently be the first option).
b) justification why any techniques generally applicable to the regulated facility have not been selected for assessment. (see relevant H1 annex) (This should be based on regulated facility-specific technical, not economic reasons).
c) for new projects, whether any initial environmental assessment that was done at the project evaluation stage, or any screening of technology or process routes prior to this assessment, particularly where this has a bearing on environmental performance. (see H1)
In the case of b) or c) please enter your Comments here:
Option Number
Title
Description
e.g.
1
Base-Case
Once a series of options have been generated for the proposed project, it is recommended that the Operator discuss these with the local Regulator to check both parties agree that the options are satisfactory. This may save the Operator from spending resources on assessment of options which are unlikely to meet the required environmental performance.
List the main activity or activities to which the release control option Number:1 (Base-Case) is/are applicable and any other activities that will be affected by the candidate control option on the main activity.
Activity
Details
Options:
Add
Delete
100%
13:26
14/04/2020

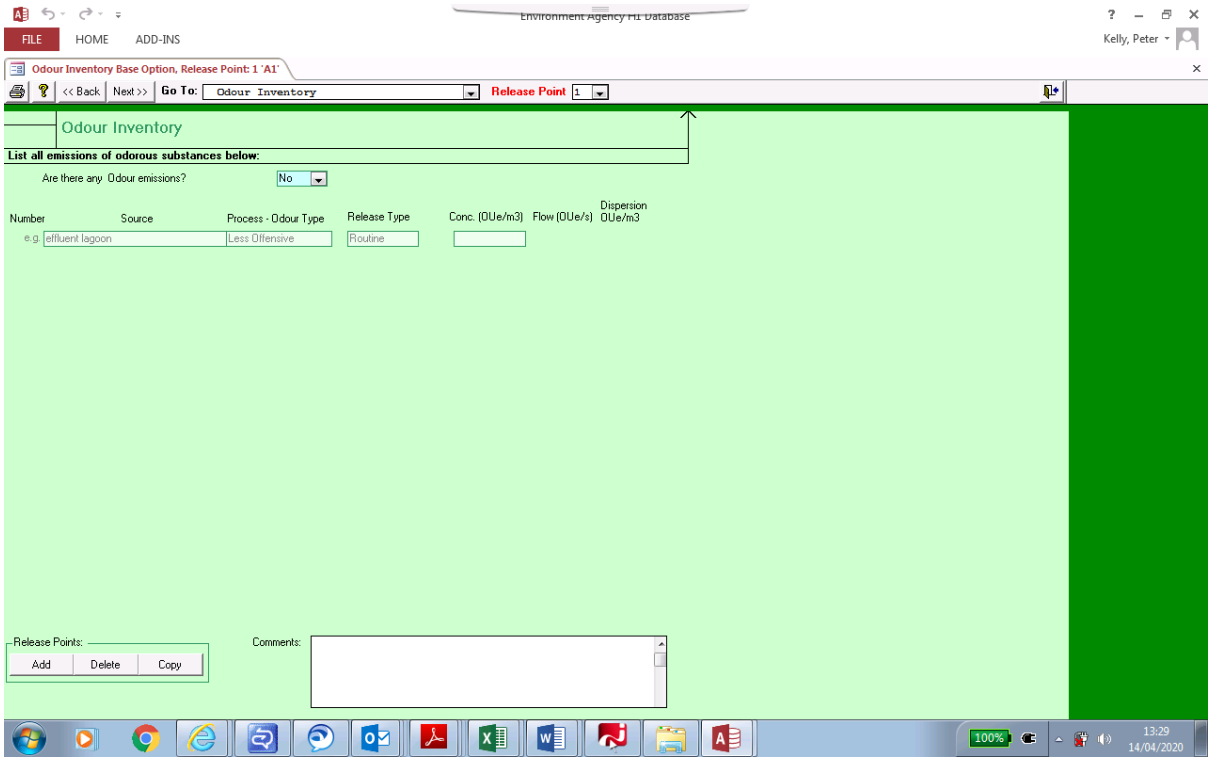

Environment Agency H1 Database
FILE
HOME
ADD-INS
Kelly, Peter
Step 2 - Emissions Inventory
<< Back
Next >>
Go To:
Step 2 - Emissions Inventory
Step 2
Introduction to Step 2
Step 2: Emissions Inventory
The aim of this Step is to produce an inventory of sources and releases of polluting substances from each option.
This is used as the basis for the subsequent evaluation of environmental impacts.
For this Step you will require information on:
- release points and sources of emissions to air, water (inc. sewer) or land
- concentration and mass rate of released substances
- frequency and duration of releases and how these relate to long term and short term effects
IMPORTANT NOTES
- you may need to consider a suitable method for assessment of groups of pollutants, such as VOCs, heavy metals, uncharacterised liquid effluents, etc (see "Grouping air emissions" in Annex F).
TO CONTINUE WITH STEP 2, PRESS "NEXT".
100%
13:27
14/04/2020

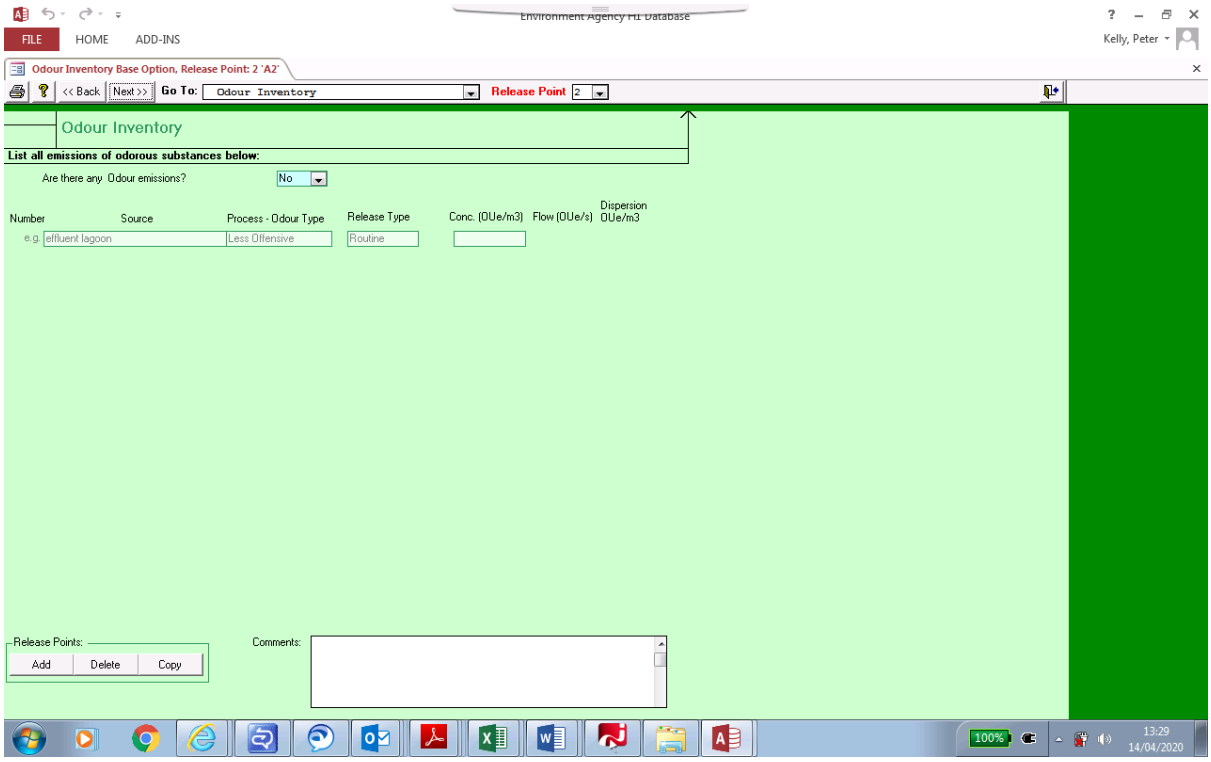

Environment Agency H1 Database
FILE
HOME
ADD-INS
Kelly, Peter
Air Release Points Base Option
<< Back
Next >>
Go To:
Air Release Points
Air Release Points
Please define your Release Points for Releases to Air
Are there any Air emissions?
Yes
Click the Add button below
Number
Description
Location or Grid Reference
Activity or Activities
Effective Height
metres
Efflux Velocity
m/s
Total Flow
m3/hr
e.g.
A1
North stack
150
25
5,000
1
A1
EfW Line 1
EfW
55
15.1
181800
2
A2
EfW Line 2
EfW
55
15.1
181800
3
A3
HTI Line
HTI
55
15
14760
Release Points:
Add
Delete
Copy
Comments:
100%
13:27
14/04/2020

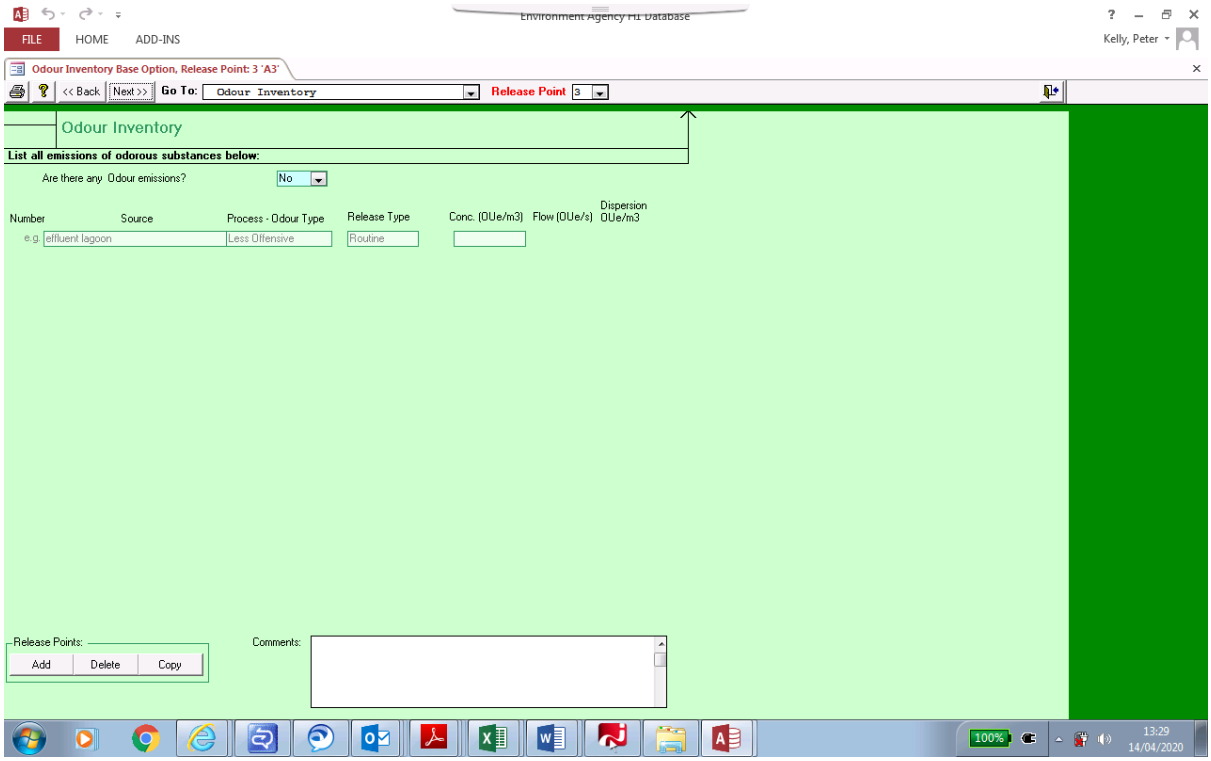

Environment Agency H1 Database
FILE
HOME
ADD-INS
Kelly, Peter
Air Emissions Inventory Base Option, Release Point: 1 'A1'
<< Back
Next >>
Go To:
Air Emissions Inventory
Release Point
1
Air Emissions Inventory
Please list all Substances released to Air for each Release Point identified in the previous page.
Number
Substance
Meas'ment Method
Operating Mode (% of Year)
Data relating to Long Term effects
Conc.
mg/m3
Release Rate
g/s
Meas'ment Basis
Data relating to Short Term effects
Conc.
mg/m3
Release Rate
g/s
Meas'ment Basis
Annual Rate
tonne/yr
ELV Conc.
mg/m3
e.g.
sulphur dioxide
Estimated*
70% load
1510
3000
annual avg
1510
3000
hourly avg
55,000
2000
1 Nitrogen Dioxide 100.0% 100.0 5.050000 200.0 ######## 159.2568
2 Sulphur Dioxide (15 Min Mean) 100.0% 30.0 1.515000 90.0 4.545000 47.7770
3 Sulphur Dioxide (1 Hour Mean) 100.0% 30.0 1.515000 90.0 4.545000 47.7770
4 Sulphur Dioxide (24 Hour Mean) 100.0% 30.0 1.515000 90.0 4.545000 47.7770
5 Particulates (PM10) (24 hr Mean) 100.0% 5.0 0.252500 30.0 1.515000 7.9628
6 Particulates (PM10) (Annual Mean) 100.0% 5.0 0.252500 30.0 1.515000 7.9628
7 Carbon monoxide 100.0% 50.0 2.525000 150.0 7.575000 79.6284
8 Hydrogen chloride 100.0% 6.0 0.303000 60.0 3.030000 9.5554
9 Ammonia (human health receptor) 100.0% 10.0 0.505000 20.0 1.010000 15.9257
10 Mercury and compounds, except n 100.0% 0.0 0.001010 0.0 0.001010 0.0319
11 Cadmium and its compounds (as C 100.0% 0.0 0.001010 0.0 0.001010 0.0319
12 Antimony and compounds (as Sb) (100.0% 0.3 0.015150 0.3 0.015150 0.4778
13 Arsenic and compounds (as As) 100.0% 0.3 0.015150 0.3 0.015150 0.4778
14 Lead 100.0% 0.3 0.015150 0.3 0.015150 0.4778
15 Chromium, chromium (III) compounc 100.0% 0.3 0.015150 0.3 0.015150 0.4778
16 Copper dusts and mists (as CU) 100.0% 0.3 0.015150 0.3 0.015150 0.4778
17 Manganese and compounds (as M 100.0% 0.3 0.015150 0.3 0.015150 0.4778
18 Vanadium 100.0% 0.3 0.015150 0.3 0.015150 0.4778
19 Hydrogen fluoride (as F) (Monthly N 100.0% 1.0 0.050500 4.0 0.202000 1.5926
20 Benzene 100.0% 10.0 0.505000 20.0 1.010000 15.9257
21 1,3 Butadiene 100.0% 10.0 0.505000 20.0 1.010000 15.9257
Measurement method: * provide detail in comments box
Substances:
Add
Delete
Copy
Comments:
100%
13:28
14/04/2020

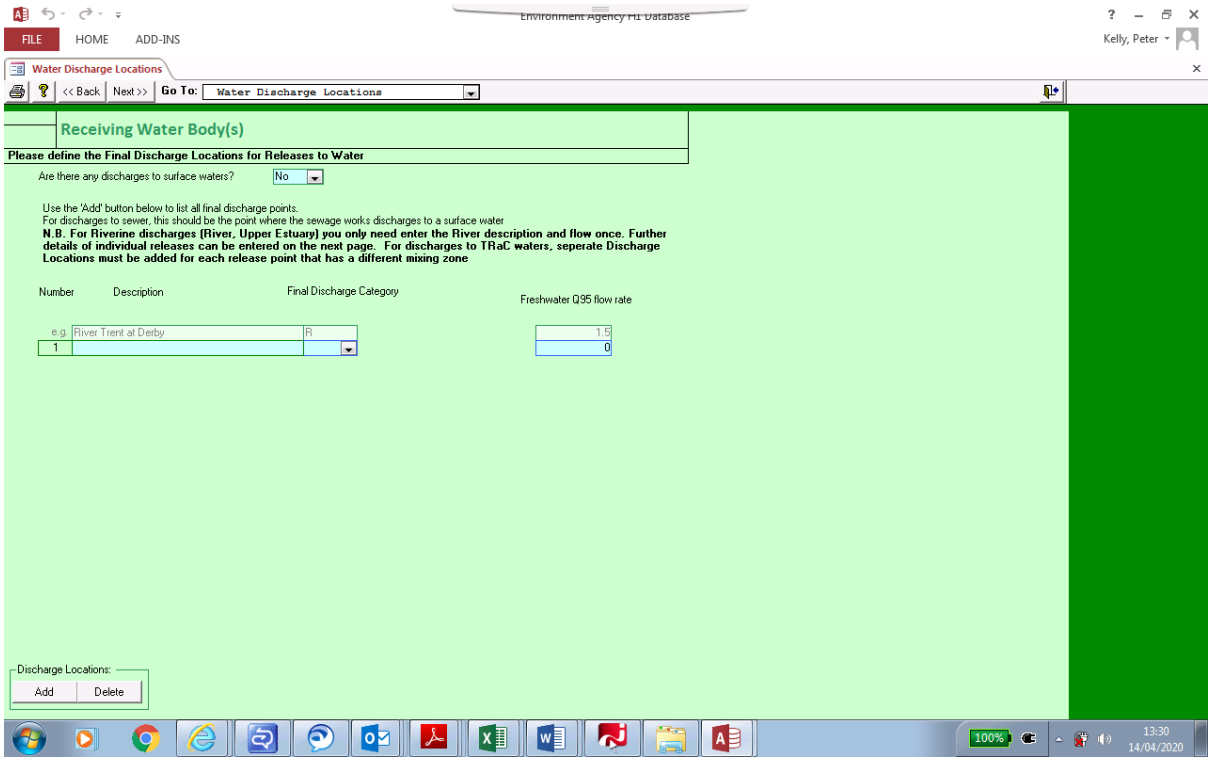

Environment Agency H1 Database
FILE
HOME
ADD-INS
Kelly, Peter
Air Emissions Inventory Base Option, Release Point: 2 'A2'
<< Back
Next >>
Go To:
Air Emissions Inventory
Release Point 2
Air Emissions Inventory
Please list all Substances released to Air for each Release Point identified in the previous page.
Number
Substance
Meas'ment Method
Operating Mode (% of Year)
Data relating to Long Term effects
Conc. mg/m3
Release Rate g/s
Meas'ment Basis
Data relating to Short Term effects
Conc. mg/m3
Release Rate g/s
Meas'ment Basis
Annual Rate tonne/yr
ELV Conc. mg/m3
e.g. sulphur dioxide Estimated* 70% load 1510 3000 annual avg 1510 3000 hourly avg 55,000 2000
1 Nitrogen Dioxide 100.0% 100.0 5.050000 200.0 ######## 159.2568
2 Sulphur Dioxide (15 Min Mean) 100.0% 30.0 1.515000 90.0 4.545000 47.7770
3 Sulphur Dioxide (1 Hour Mean) 100.0% 30.0 1.515000 90.0 4.545000 47.7770
4 Sulphur Dioxide (24 Hour Mean) 100.0% 30.0 1.515000 90.0 4.545000 47.7770
5 Particulates (PM10) (24 hr Mean) 100.0% 5.0 0.252500 30.0 1.515000 7.9628
6 Particulates (PM10) (Annual Mean 100.0% 5.0 0.252500 30.0 1.515000 7.9628
7 Carbon monoxide 100.0% 50.0 2.525000 150.0 7.575000 79.6284
8 Hydrogen chloride 100.0% 6.0 0.303000 60.0 3.030000 9.5554
9 Ammonia (human health receptor) 100.0% 10.0 0.505000 20.0 1.010000 15.9257
10 Mercury and compounds, except n 100.0% 0.0 0.001010 0.0 0.001010 0.0319
11 Cadmium and its compounds (as C 100.0% 0.0 0.001010 0.0 0.001010 0.0319
12 Antimony and compounds (as Sb) 100.0% 0.3 0.015150 0.3 0.015150 0.4778
13 Arsenic and compounds (as As) 100.0% 0.3 0.015150 0.3 0.015150 0.4778
14 Lead 100.0% 0.3 0.015150 0.3 0.015150 0.4778
15 Chromium, chromium (II) compounc 100.0% 0.3 0.015150 0.3 0.015150 0.4778
16 Copper dusts and mists (as CU) 100.0% 0.3 0.015150 0.3 0.015150 0.4778
17 Manganese and compounds (as M 100.0% 0.3 0.015150 0.3 0.015150 0.4778
18 Vanadium 100.0% 0.3 0.015150 0.3 0.015150 0.4778
19 Hydrogen fluoride (as F) (Monthly M 100.0% 1.0 0.050500 4.0 0.202000 1.5926
20 Benzene 100.0% 10.0 0.505000 20.0 1.010000 15.9257
21 1,3 Butadiene 100.0% 10.0 0.505000 20.0 1.010000 15.9257
Measurement method: * provide detail in comments box
Comments:
Substances:
Add
Delete
Copy
100%
13:28
14/04/2020

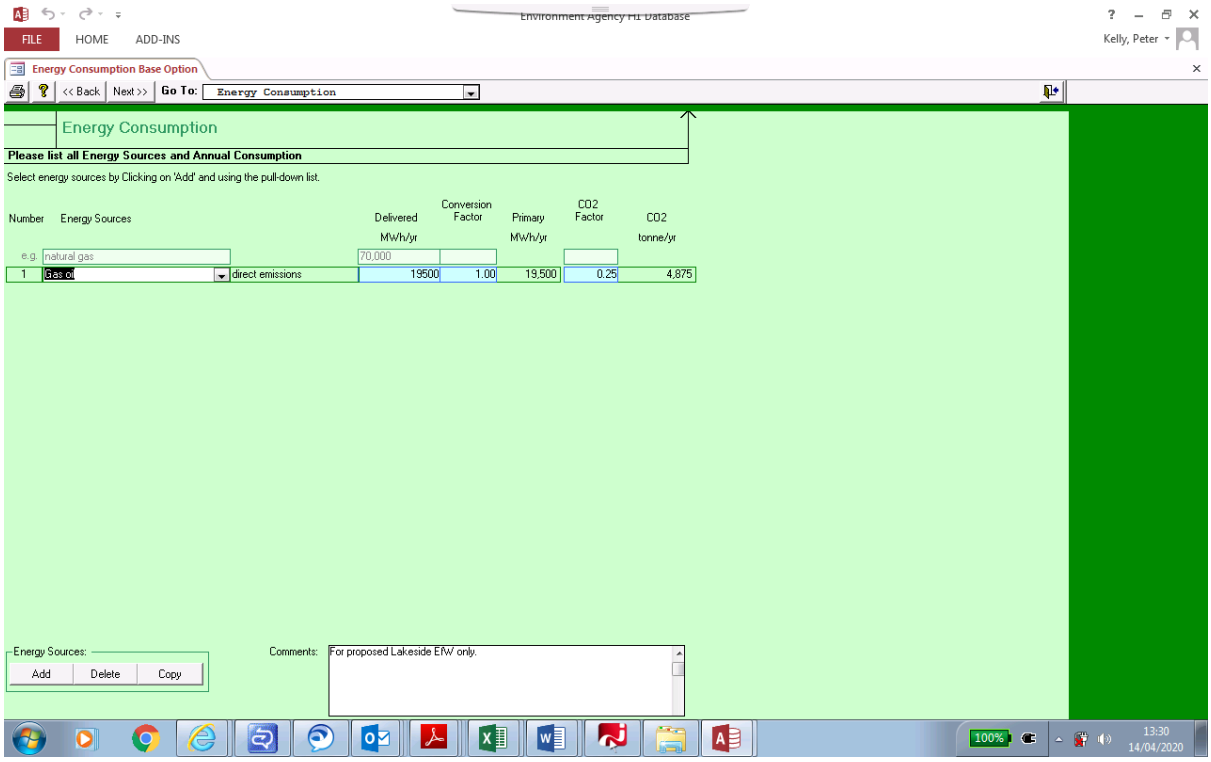

Environment Agency H1 Database
FILE
HOME
ADD-INS
Kelly, Peter
Air Emissions Inventory Base Option, Release Point: 3 'A3'
<< Back
Next >>
Go To:
Air Emissions Inventory
Release Point 3
Air Emissions Inventory
Please list all Substances released to Air for each Release Point identified in the previous page.
Number
Substance
Meas'ment Method
Operating Mode (% of Year)
Data relating to Long Term effects
Conc. mg/m3
Release Rate g/s
Meas'ment Basis
Data relating to Short Term effects
Conc. mg/m3
Release Rate g/s
Meas'ment Basis
Annual Rate tonne/yr
ELV Conc. mg/m3
e.g. sulphur dioxide Estimated* 70% load 1510 3000 annual avg 1510 3000 hourly avg 55,000 2000
1 Nitrogen Dioxide 100.0% 120.0 0.492000 200.0 0.820000 15.5157
2 Sulphur Dioxide (15 Min Mean) 100.0% 30.0 0.123000 90.0 0.369000 3.8789
3 Sulphur Dioxide (1 Hour Mean) 100.0% 30.0 0.123000 90.0 0.369000 3.8789
4 Sulphur Dioxide (24 Hour Mean) 100.0% 30.0 0.123000 90.0 0.369000 3.8789
5 Particulates (PM10) (24 hr Mean) 100.0% 5.0 0.020500 30.0 0.123000 0.6465
6 Particulates (PM10) (Annual Mean 100.0% 5.0 0.020500 30.0 0.123000 0.6465
7 Carbon monoxide 100.0% 50.0 0.205000 150.0 0.615000 6.4649
8 Hydrogen chloride 100.0% 6.0 0.024600 60.0 0.246000 0.7758
9 Ammonia (human health receptor) 100.0% 10.0 0.041000 20.0 0.082000 1.2930
10 Mercury and compounds, except n 100.0% 0.0 0.000082 0.0 0.000082 0.0026
11 Cadmium and its compounds (as C 100.0% 0.0 0.000082 0.0 0.000082 0.0026
12 Antimony and compounds (as Sb) 100.0% 0.3 0.001230 0.3 0.001230 0.0388
13 Arsenic and compounds (as As) 100.0% 0.3 0.001230 0.3 0.001230 0.0388
14 Lead 100.0% 0.3 0.001230 0.3 0.001230 0.0388
15 Chromium, chromium (II) compounc 100.0% 0.3 0.001230 0.3 0.001230 0.0388
16 Copper dusts and mists (as CU) 100.0% 0.3 0.001230 0.3 0.001230 0.0388
17 Manganese and compounds (as M 100.0% 0.3 0.001230 0.3 0.001230 0.0388
18 Vanadium 100.0% 0.3 0.001230 0.3 0.001230 0.0388
19 Hydrogen fluoride (as F) (Monthly M 100.0% 1.0 0.004100 4.0 0.016400 0.1293
20 Benzene 100.0% 10.0 0.041000 20.0 0.082000 1.2930
21 1,3 Butadiene 100.0% 10.0 0.041000 20.0 0.082000 1.2930
Measurement method: * provide detail in comments box
Comments:
Substances:
Add
Delete
Copy
100%
13:28
14/04/2020

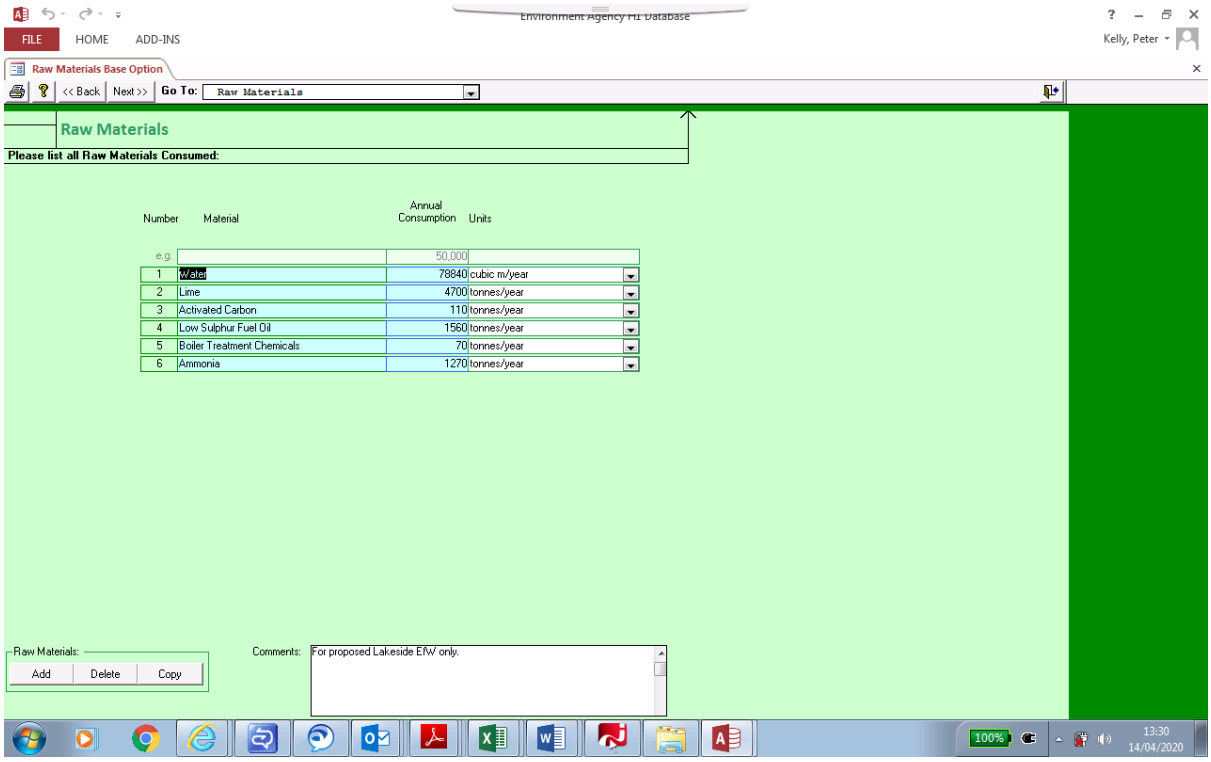

Environment Agency H1 Database
FILE
HOME
ADD-INS
Kelly, Peter
Odour Inventory Base Option, Release Point: 1 'A1'
<< Back
Next >>
Go To:
Odour Inventory
Release Point
1
Odour Inventory
List all emissions of odorous substances below:
Are there any Odour emissions?
No
Number
Source
Process - Odour Type
Release Type
Conc. (OUe/m3)
Flow (OUe/s)
Dispersion OUe/m3
e.g.
effluent lagoon
Less Offensive
Routine
Release Points:
Add
Delete
Copy
Comments:
100%
13:29
14/04/2020

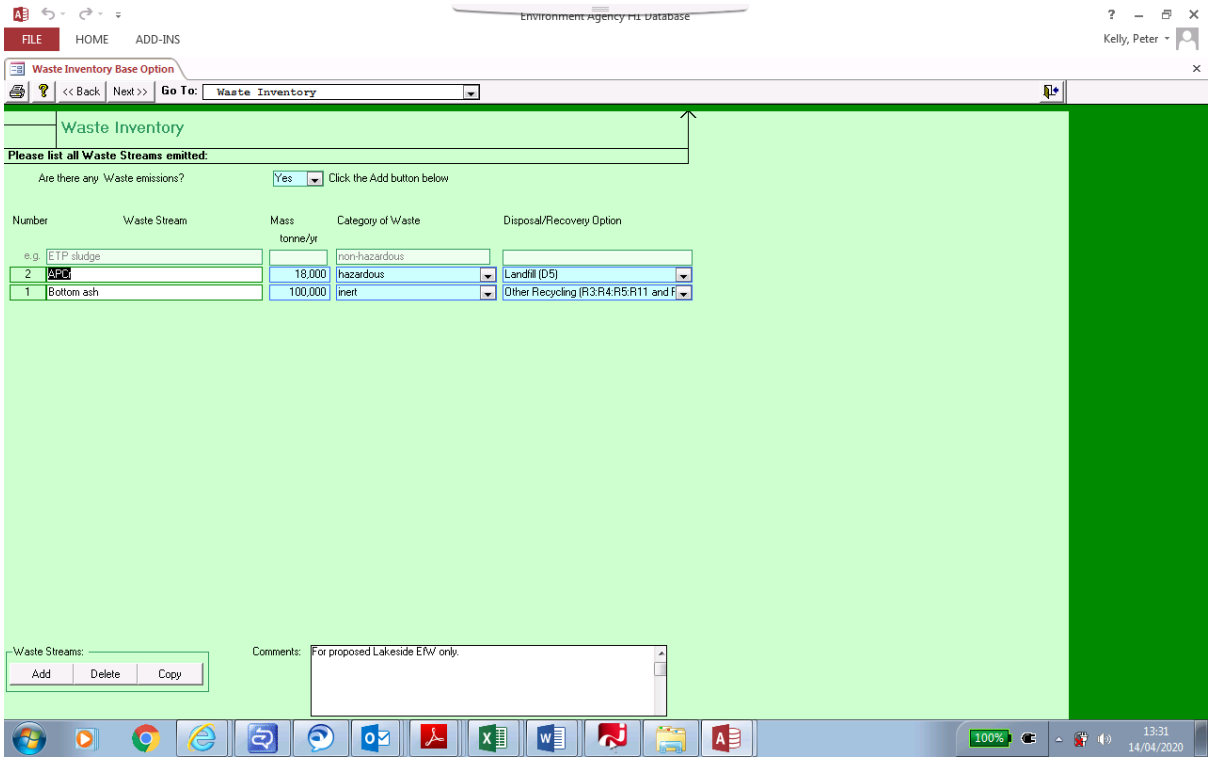

Environment Agency H1 Database
FILE
HOME
ADD-INS
Kelly, Peter
Odour Inventory Base Option, Release Point: 2 'A2'
<< Back
Next >>
Go To:
Odour Inventory
Release Point
2
Odour Inventory
List all emissions of odorous substances below:
Are there any Odour emissions?
No
Number
Source
Process - Odour Type
Release Type
Conc. (OUe/m3)
Flow (OUe/s)
Dispersion OUe/m3
e.g.
effluent lagoon
Less Offensive
Routine
Release Points:
Add
Delete
Copy
Comments:
100%
13:29
14/04/2020

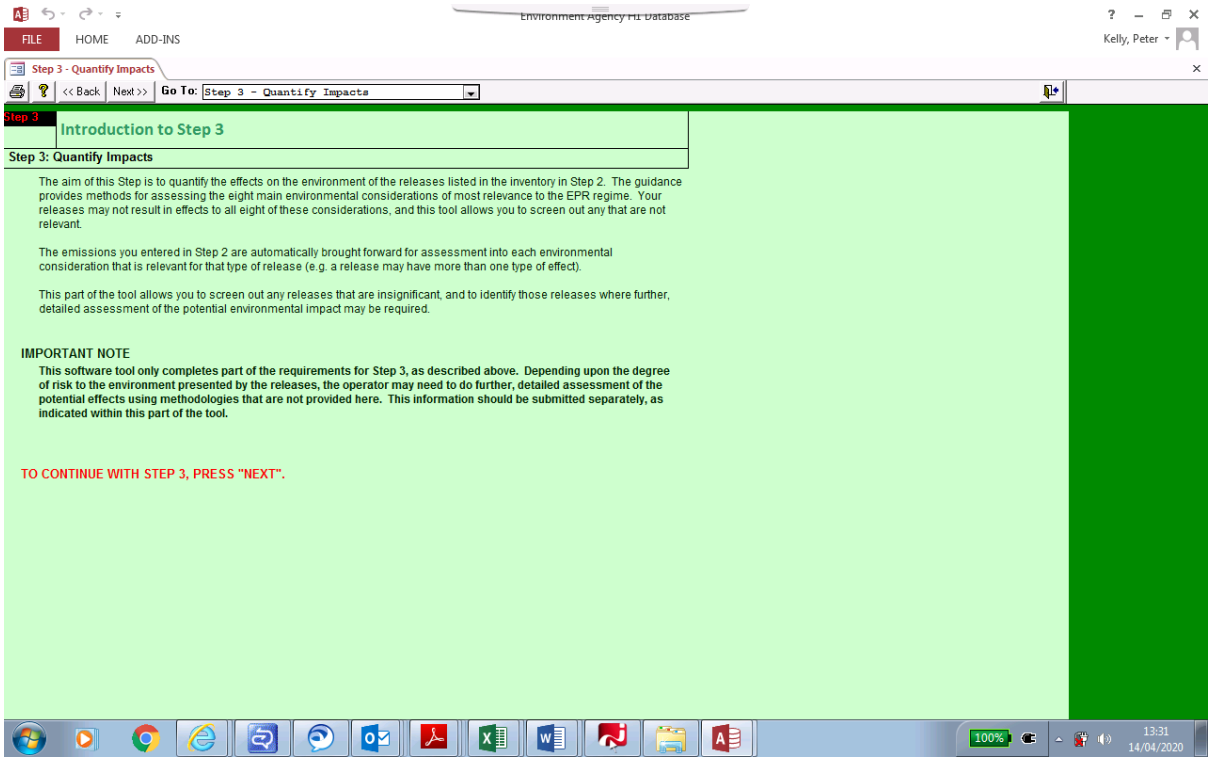

Environment Agency H1 Database
FILE
HOME
ADD-INS
Kelly, Peter
Odour Inventory Base Option, Release Point: 3 'A3'
<< Back
Next >>
Go To:
Odour Inventory
Release Point
3
Odour Inventory
List all emissions of odorous substances below:
Are there any Odour emissions?
No
Number
Source
Process - Odour Type
Release Type
Conc. (OUe/m3)
Flow (OUe/s)
Dispersion OUe/m3
e.g.
effluent lagoon
Less Offensive
Routine
Release Points:
Add
Delete
Copy
Comments:
100%
13:29
14/04/2020


Environment Agency H1 Database
FILE
HOME
ADD-INS
Kelly, Peter
Water Discharge Locations
<< Back
Next >>
Go To:
Water Discharge Locations
Receiving Water Body(s)
Please define the Final Discharge Locations for Releases to Water
Are there any discharges to surface waters?
No
Use the 'Add' button below to list all final discharge points.
For discharges to sewer, this should be the point where the sewage works discharges to a surface water
N.B. For Riverine discharges (River, Upper Estuary) you only need enter the River description and flow once. Further details of individual releases can be entered on the next page. For discharges to TRaC waters, seperate Discharge Locations must be added for each release point that has a different mixing zone
Number
Description
Final Discharge Category
Freshwater Q95 flow rate
e.g.
River Trent at Derby
R
1.5
1
0
Discharge Locations:
Add
Delete
100%
13:30
14/04/2020


Environment Agency H1 Database
FILE
HOME
ADD-INS
Kelly, Peter
Energy Consumption Base Option
<< Back
Next >>
Go To:
Energy Consumption
Energy Consumption
Please list all Energy Sources and Annual Consumption
Select energy sources by Clicking on 'Add' and using the pull-down list.
Number
Energy Sources
Delivered MWh/yr
Conversion Factor
Primary MWh/yr
CO2 Factor
CO2 tonne/yr
e.g.
natural gas
70,000
1
Gas oil
direct emissions
19500
1.00
19,500
0.25
4,875
Energy Sources:
Add
Delete
Copy
Comments:
For proposed Lakeside EfW only.
100%
13:30
14/04/2020


Environment Agency H1 Database
FILE
HOME
ADD-INS
Kelly, Peter
Raw Materials Base Option
<< Back
Next >>
Go To:
Raw Materials
Raw Materials
Please list all Raw Materials Consumed:
Number
Material
Annual Consumption
Units
e.g.
50,000
1
Water
78840
cubic m/year
2
Lime
4700
tonnes/year
3
Activated Carbon
110
tonnes/year
4
Low Sulphur Fuel Oil
1560
tonnes/year
5
Boiler Treatment Chemicals
70
tonnes/year
6
Ammonia
1270
tonnes/year
Raw Materials:
Add
Delete
Copy
Comments:
For proposed Lakeside EfW only.
100%
13:30
14/04/2020


Environment Agency H1 Database
FILE
HOME
ADD-INS
Kelly, Peter
Waste Inventory Base Option
<< Back
Next >>
Go To:
Waste Inventory
Waste Inventory
Please list all Waste Streams emitted:
Are there any Waste emissions?
Yes
Click the Add button below
Number
Waste Stream
Mass
tonne/yr
Category of Waste
Disposal/Recovery Option
e.g.
ETP sludge
non-hazardous
2
APC
18,000
hazardous
Landfill (D5)
1
Bottom ash
100,000
inert
Other Recycling (R3;R4;R5;R11 and F
Waste Streams:
Add
Delete
Copy
Comments:
For proposed Lakeside EfW only.
100%
13:31
14/04/2020


Environment Agency H1 Database
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Kelly, Peter
Step 3 - Quantify Impacts
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Go To:
Step 3 - Quantify Impacts
Step 3
Introduction to Step 3
Step 3: Quantify Impacts
The aim of this Step is to quantify the effects on the environment of the releases listed in the inventory in Step 2. The guidance provides methods for assessing the eight main environmental considerations of most relevance to the EPR regime. Your releases may not result in effects to all eight of these considerations, and this tool allows you to screen out any that are not relevant.
The emissions you entered in Step 2 are automatically brought forward for assessment into each environmental consideration that is relevant for that type of release (e.g. a release may have more than one type of effect).
This part of the tool allows you to screen out any releases that are insignificant, and to identify those releases where further, detailed assessment of the potential environmental impact may be required.
IMPORTANT NOTE
This software tool only completes part of the requirements for Step 3, as described above. Depending upon the degree of risk to the environment presented by the releases, the operator may need to do further, detailed assessment of the potential effects using methodologies that are not provided here. This information should be submitted separately, as indicated within this part of the tool.
TO CONTINUE WITH STEP 3, PRESS "NEXT".
100%
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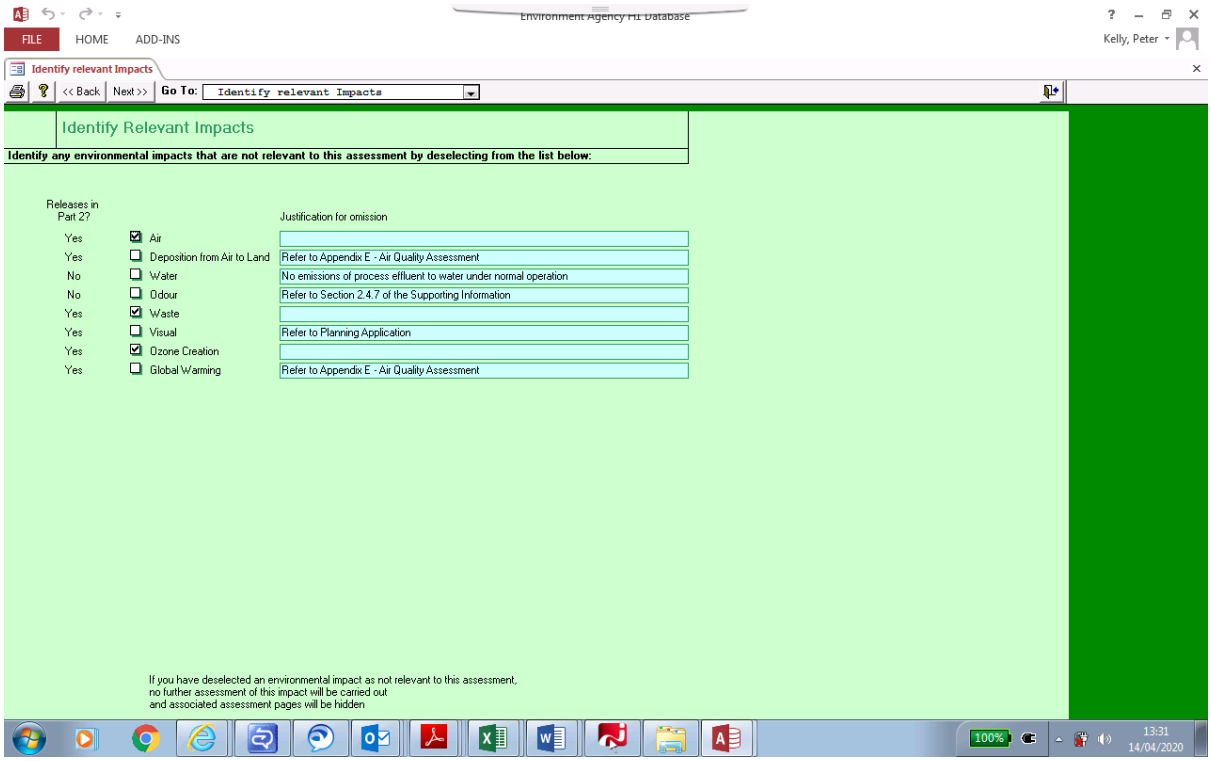
14/04/2020


Environment Agency H1 Database
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HOME
ADD-INS
Kelly, Peter
Identify relevant Impacts
<< Back
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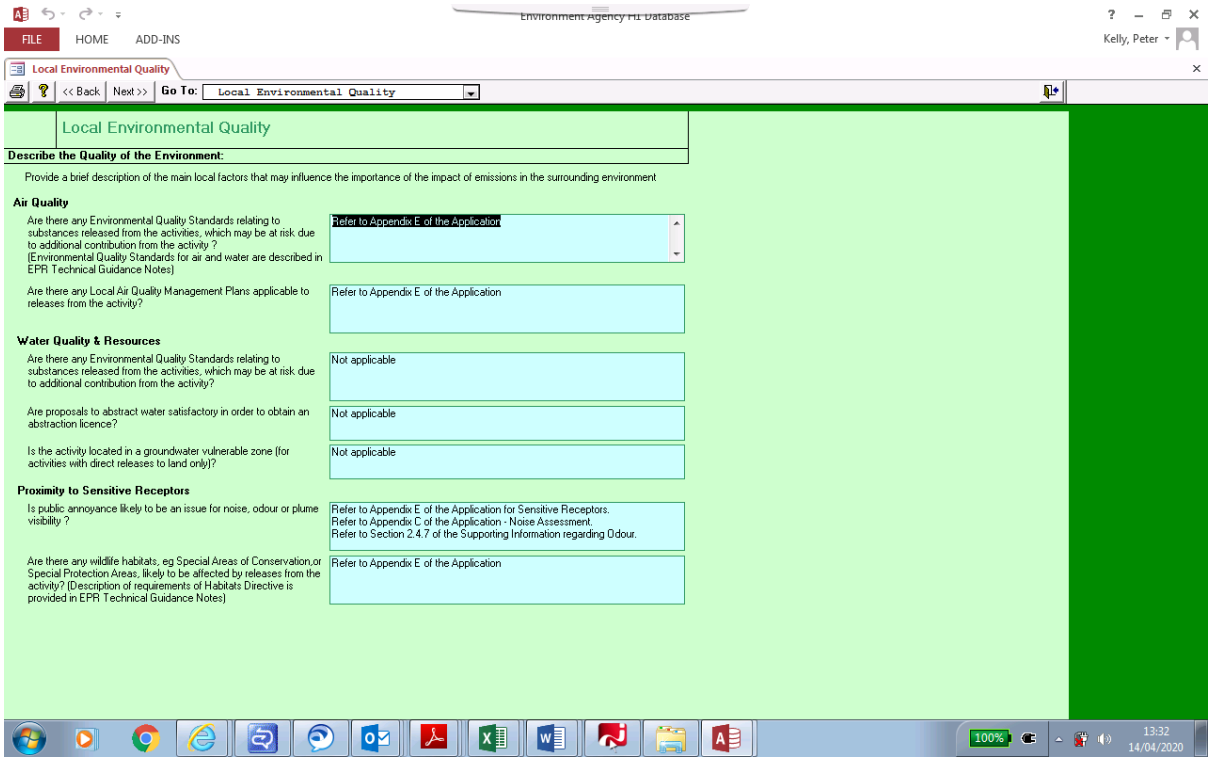
Go To:
Identify relevant Impacts
Identify Relevant Impacts
Identify any environmental impacts that are not relevant to this assessment by deselecting from the list below:
Releases in Part 2?
Justification for omission
Yes
Air
Yes
Deposition from Air to Land
Refer to Appendix E - Air Quality Assessment
No
Water
No emissions of process effluent to water under normal operation
No
Odour
Refer to Section 2.4.7 of the Supporting Information
Yes
Waste
Yes
Visual
Refer to Planning Application
Yes
Ozone Creation
Yes
Global Warming
Refer to Appendix E - Air Quality Assessment
If you have deselected an environmental impact as not relevant to this assessment,
no further assessment of this impact will be carried out
and associated assessment pages will be hidden
100%
13:31
14/04/2020


Environment Agency H1 Database
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Kelly, Peter
Local Environmental Quality
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Go To:
Local Environmental Quality
Local Environmental Quality
Describe the Quality of the Environment:
Provide a brief description of the main local factors that may influence the importance of the impact of emissions in the surrounding environment
Air Quality
Are there any Environmental Quality Standards relating to substances released from the activities, which may be at risk due to additional contribution from the activity ? (Environmental Quality Standards for air and water are described in EPR Technical Guidance Notes)
Refer to Appendix E of the Application
Are there any Local Air Quality Management Plans applicable to releases from the activity?
Refer to Appendix E of the Application
Water Quality & Resources
Are there any Environmental Quality Standards relating to substances released from the activities, which may be at risk due to additional contribution from the activity?
Not applicable
Are proposals to abstract water satisfactory in order to obtain an abstraction licence?
Not applicable
Is the activity located in a groundwater vulnerable zone (for activities with direct releases to land only)?
Not applicable
Proximity to Sensitive Receptors
Is public annoyance likely to be an issue for noise, odour or plume visibility ?
Refer to Appendix E of the Application for Sensitive Receptors.
Refer to Appendix C of the Application - Noise Assessment.
Refer to Section 2.4.7 of the Supporting Information regarding Odour.
Are there any wildlife habitats, eg Special Areas of Conservation,or Special Protection Areas, likely to be affected by releases from the activity? (Description of requirements of Habitats Directive is provided in EPR Technical Guidance Notes)
Refer to Appendix E of the Application
100%
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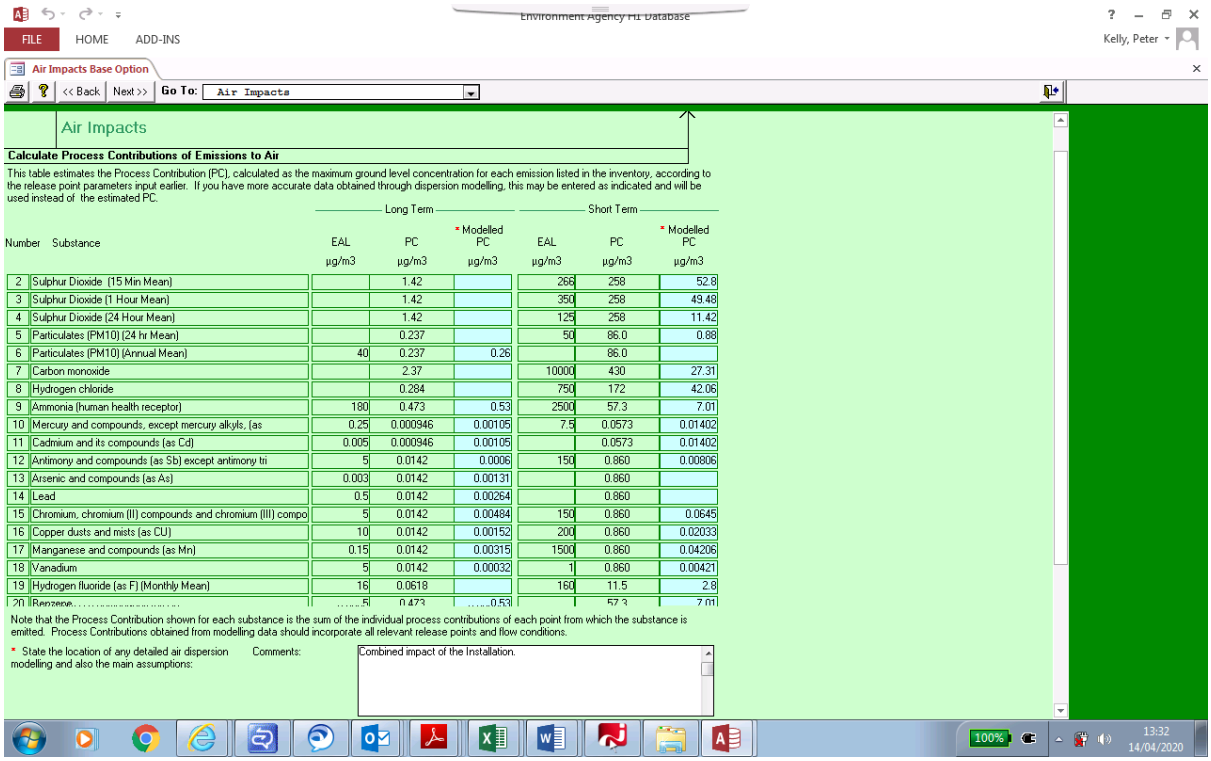
14/04/2020



Environment Agency H1 Database

FILE HOME ADD-INS

Kelly, Peter

Air Impacts Base Option

<< Back Next >> Go To: Air Impacts

Air Impacts

Calculate Process Contributions of Emissions to Air

This table estimates the Process Contribution (PC), calculated as the maximum ground level concentration for each emission listed in the inventory, according to the release point parameters input earlier. If you have more accurate data obtained through dispersion modelling, this may be entered as indicated and will be used instead of the estimated PC.

Number	Substance	Long Term EAL µg/m3	Long Term PC µg/m3	Long Term * Modelled PC µg/m3	Short Term EAL µg/m3	Short Term PC µg/m3	Short Term * Modelled PC µg/m3
2	Sulphur Dioxide (15 Min Mean)		1.42		266	258	52.8
3	Sulphur Dioxide (1 Hour Mean)		1.42		350	258	49.48
4	Sulphur Dioxide (24 Hour Mean)		1.42		125	258	11.42
5	Particulates (PM10) (24 hr Mean)		0.237		50	86.0	0.88
6	Particulates (PM10) (Annual Mean)	40	0.237	0.26		86.0	
7	Carbon monoxide		2.37		10000	430	27.31
8	Hydrogen chloride		0.284		750	172	42.06
9	Ammonia (human health receptor)	180	0.473	0.53	2500	57.3	7.01
10	Mercury and compounds, except mercury alkyls, (as	0.25	0.000946	0.00105	7.5	0.0573	0.01402
11	Cadmium and its compounds (as Cd)	0.005	0.000946	0.00105		0.0573	0.01402
12	Antimony and compounds (as Sb) except antimony tri	5	0.0142	0.0006	150	0.860	0.00806
13	Arsenic and compounds (as As)	0.003	0.0142	0.00131		0.860	
14	Lead	0.5	0.0142	0.00264		0.860	
15	Chromium, chromium (III) compounds and chromium (III) compo	5	0.0142	0.00484	150	0.860	0.0645
16	Copper dusts and mists (as CU)	10	0.0142	0.00152	200	0.860	0.02033
17	Manganese and compounds (as Mn)	0.15	0.0142	0.00315	1500	0.860	0.04206
18	Vanadium	5	0.0142	0.00032	1	0.860	0.00421
19	Hydrogen fluoride (as F) (Monthly Mean)	16	0.0618		160	11.5	2.8
20	Benzene	5	0.473	0.53		57.3	7.01

Note that the Process Contribution shown for each substance is the sum of the individual process contributions of each point from which the substance is emitted. Process Contributions obtained from modelling data should incorporate all relevant release points and flow conditions.

* State the location of any detailed air dispersion modelling and also the main assumptions:

Comments: Combined impact of the Installation.

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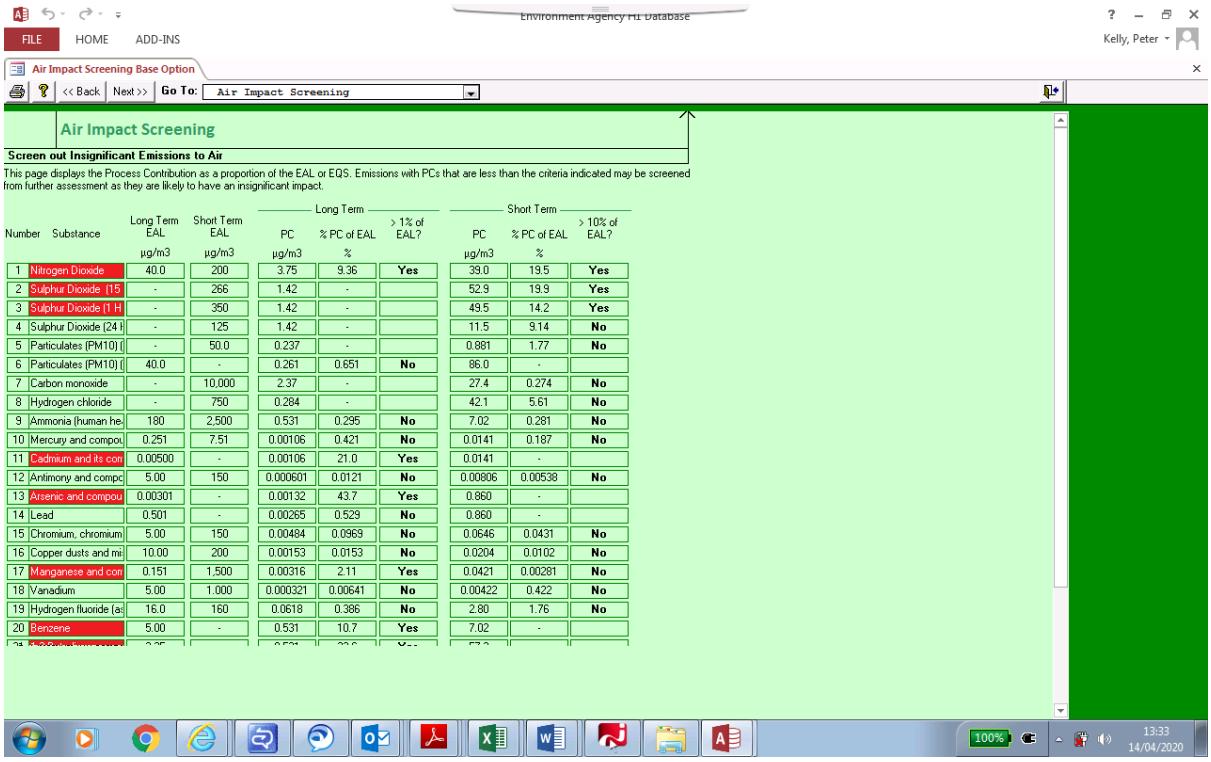

Environment Agency H1 Database

FILE HOME ADD-INS

Kelly, Peter

Air Impact Screening Base Option

<< Back Next >> Go To: Air Impact Screening

Air Impact Screening

Screen out Insignificant Emissions to Air

This page displays the Process Contribution as a proportion of the EAL or EQS. Emissions with PCs that are less than the criteria indicated may be screened from further assessment as they are likely to have an insignificant impact.

Number	Substance	Long Term EAL µg/m3	Short Term EAL µg/m3	Long Term PC µg/m3	Long Term % PC of EAL %	Long Term > 1% of EAL?	Short Term PC µg/m3	Short Term % PC of EAL %	Short Term > 10% of EAL?
1	Nitrogen Dioxide	40.0	200	3.75	9.36	Yes	39.0	19.5	Yes
2	Sulphur Dioxide (15	-	266	1.42	-		52.9	19.9	Yes
3	Sulphur Dioxide (1 H	-	350	1.42	-		49.5	14.2	Yes
4	Sulphur Dioxide (24 H	-	125	1.42	-		11.5	9.14	No
5	Particulates (PM10) (	-	50.0	0.237	-		0.881	1.77	No
6	Particulates (PM10) (	40.0	-	0.261	0.651	No	86.0	-	
7	Carbon monoxide	-	10,000	2.37	-		27.4	0.274	No
8	Hydrogen chloride	-	750	0.284	-		42.1	5.61	No
9	Ammonia (human he	180	2,500	0.531	0.295	No	7.02	0.281	No
10	Mercury and compou	0.251	7.51	0.00106	0.421	No	0.0141	0.187	No
11	Cadmium and its con	0.00500	-	0.00106	21.0	Yes	0.0141	-	
12	Antimony and compo	5.00	150	0.000601	0.0121	No	0.00806	0.00538	No
13	Arsenic and compou	0.00301	-	0.00132	43.7	Yes	0.860	-	
14	Lead	0.501	-	0.00265	0.529	No	0.860	-	
15	Chromium, chromium	5.00	150	0.00484	0.0969	No	0.0646	0.0431	No
16	Copper dusts and mi	10.00	200	0.00153	0.0153	No	0.0204	0.0102	No
17	Manganese and con	0.151	1,500	0.00316	2.11	Yes	0.0421	0.00281	No
18	Vanadium	5.00	1.000	0.000321	0.00641	No	0.00422	0.422	No
19	Hydrogen fluoride (as	16.0	160	0.0618	0.386	No	2.80	1.76	No
20	Benzene	5.00	-	0.531	10.7	Yes	7.02	-	

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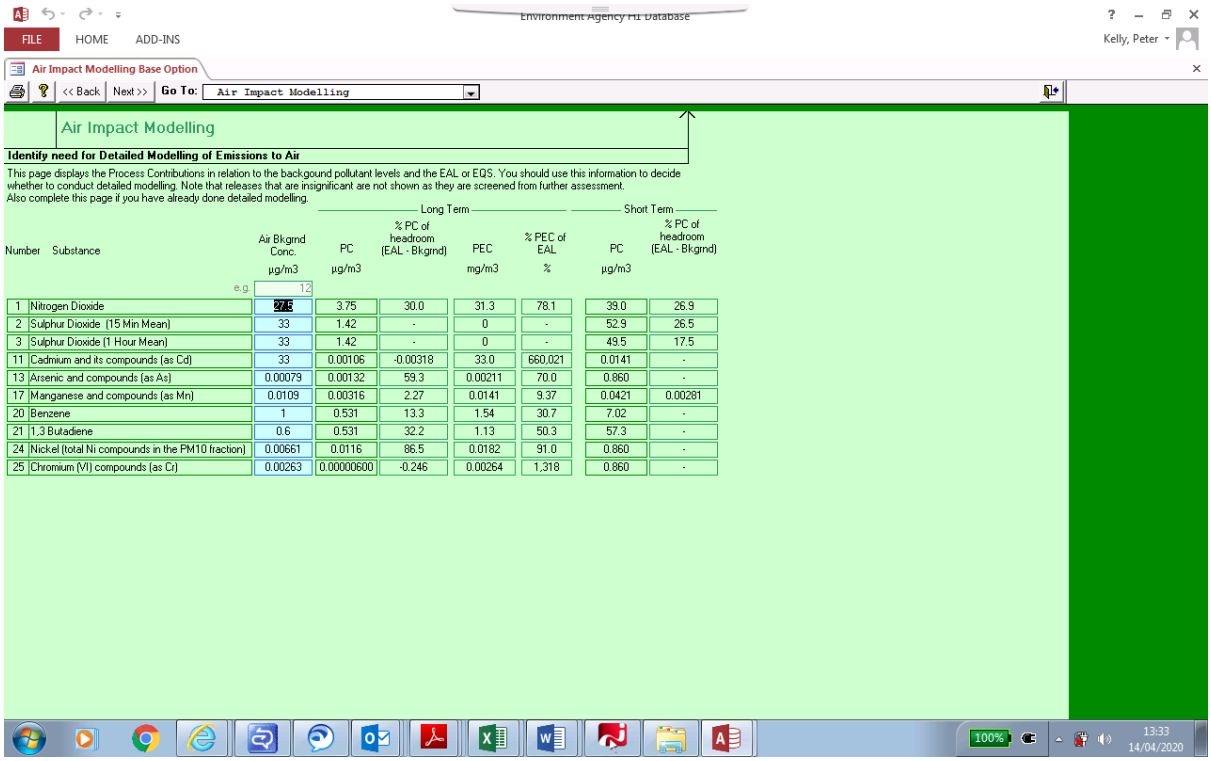
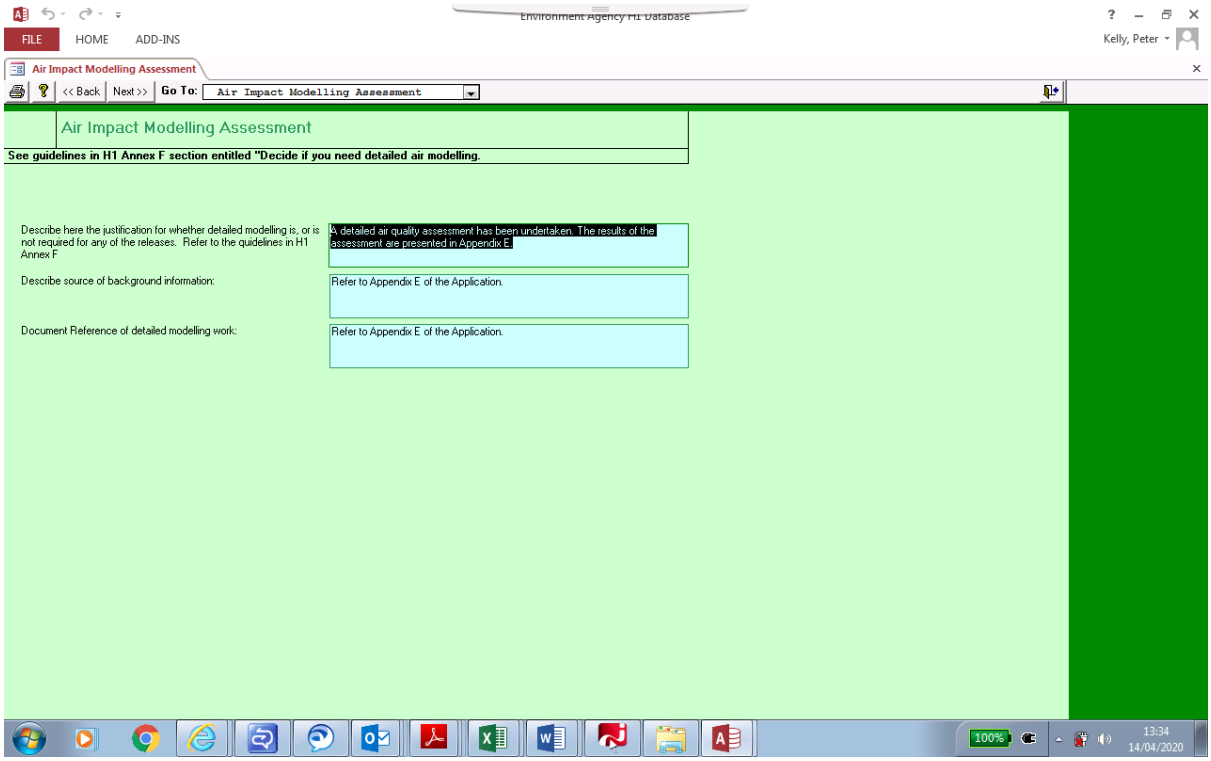

Environment Agency H1 Database
FILE
HOME
ADD-INS
Kelly, Peter
Air Impact Modelling Base Option
<< Back
Next >>
Go To:
Air Impact Modelling
Air Impact Modelling
Identify need for Detailed Modelling of Emissions to Air
This page displays the Process Contributions in relation to the background pollutant levels and the EAL or EQS. You should use this information to decide whether to conduct detailed modelling. Note that releases that are insignificant are not shown as they are screened from further assessment.
Also complete this page if you have already done detailed modelling.
Long Term
Short Term
Number
Substance
Air Bkgrnd Conc.
PC
% PC of headroom (EAL - Bkgrnd)
PEC
% PEC of EAL
PC
% PC of headroom (EAL - Bkgrnd)
µg/m3
µg/m3
mg/m3
%
µg/m3
e.g. 12
1 Nitrogen Dioxide 27.5 3.75 30.0 31.3 78.1 39.0 26.9
2 Sulphur Dioxide (15 Min Mean) 33 1.42 - 0 - 52.9 26.5
3 Sulphur Dioxide (1 Hour Mean) 33 1.42 - 0 - 49.5 17.5
11 Cadmium and its compounds (as Cd) 33 0.00106 -0.00318 33.0 660,021 0.0141 -
13 Arsenic and compounds (as As) 0.00079 0.00132 59.3 0.00211 70.0 0.860 -
17 Manganese and compounds (as Mn) 0.0109 0.00316 2.27 0.0141 9.37 0.0421 0.00281
20 Benzene 1 0.531 13.3 1.54 30.7 7.02 -
21 1,3 Butadiene 0.6 0.531 32.2 1.13 50.3 57.3 -
24 Nickel (total Ni compounds in the PM10 fraction) 0.00661 0.0116 86.5 0.0182 91.0 0.860 -
25 Chromium (VI) compounds (as Cr) 0.00263 0.00000600 -0.246 0.00264 1,318 0.860 -
100%
13:33
14/04/2020


Environment Agency H1 Database
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ADD-INS
Kelly, Peter
Air Impact Modelling Assessment
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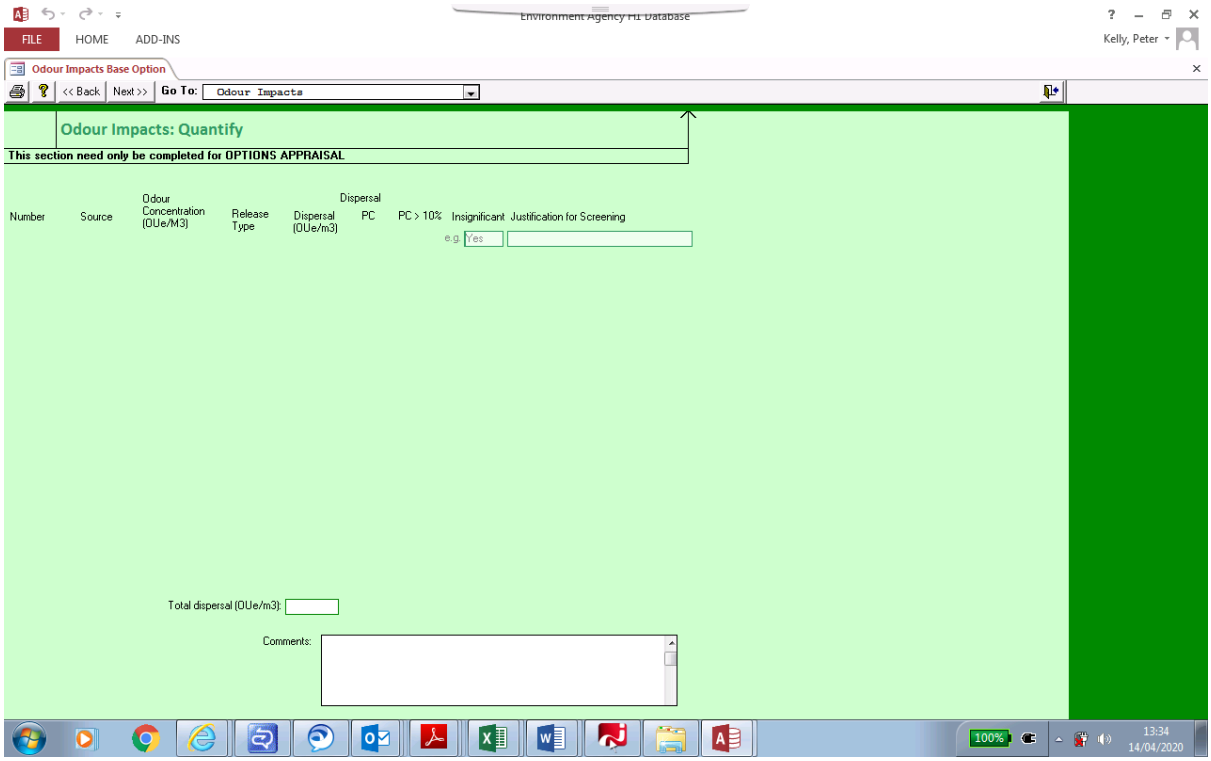
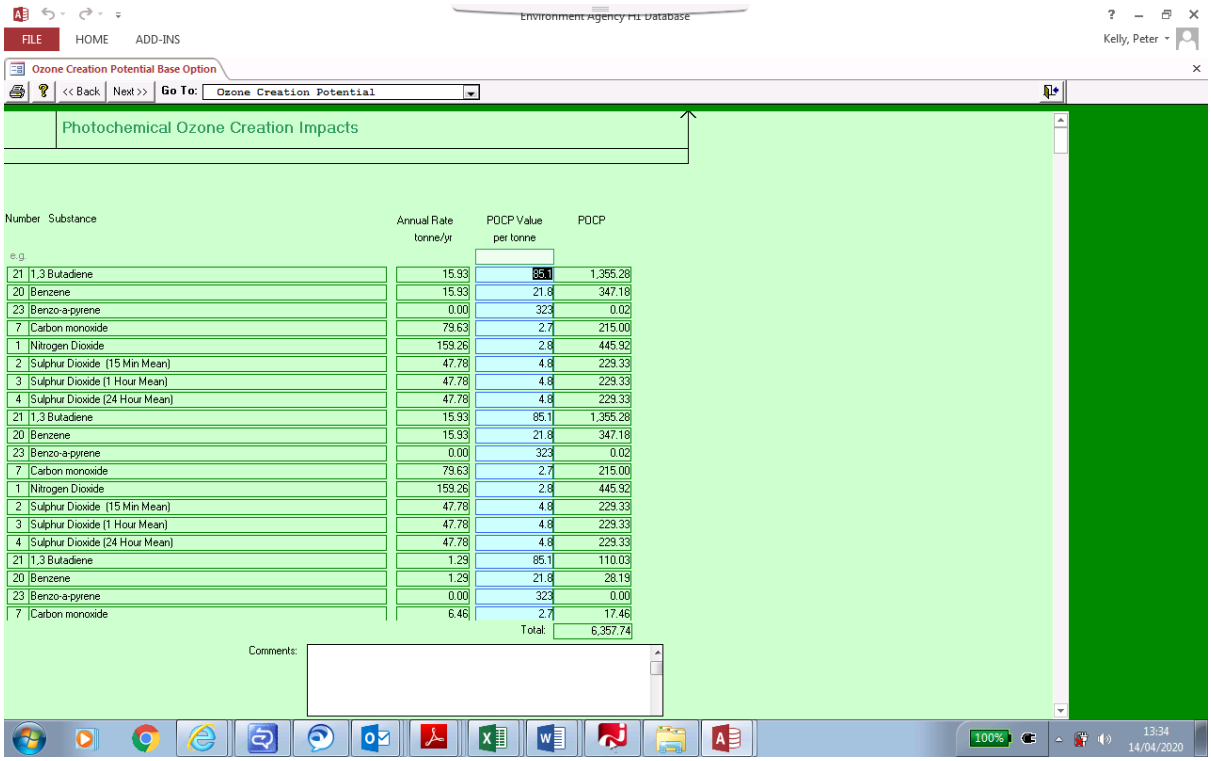
Go To:
Air Impact Modelling Assessment
Air Impact Modelling Assessment
See guidelines in H1 Annex F section entitled "Decide if you need detailed air modelling.
Describe here the justification for whether detailed modelling is, or is not required for any of the releases. Refer to the guidelines in H1 Annex F
A detailed air quality assessment has been undertaken. The results of the assessment are presented in Appendix E.
Describe source of background information:
Refer to Appendix E of the Application.
Document Reference of detailed modelling work:
Refer to Appendix E of the Application.
100%
13:34
14/04/2020


Environment Agency H1 Database
FILE
HOME
ADD-INS
Kelly, Peter
Odour Impacts Base Option
<< Back
Next >>
Go To:
Odour Impacts
Odour Impacts: Quantify
This section need only be completed for OPTIONS APPRAISAL
Number
Source
Odour Concentration (OUe/M3)
Release Type
Dispersal (OUe/m3)
Dispersal PC
PC > 10%
Insignificant
Justification for Screening
e.g.
Yes
Total dispersal (OUe/m3):
Comments:
100%
13:34
14/04/2020


Environment Agency H1 Database
FILE
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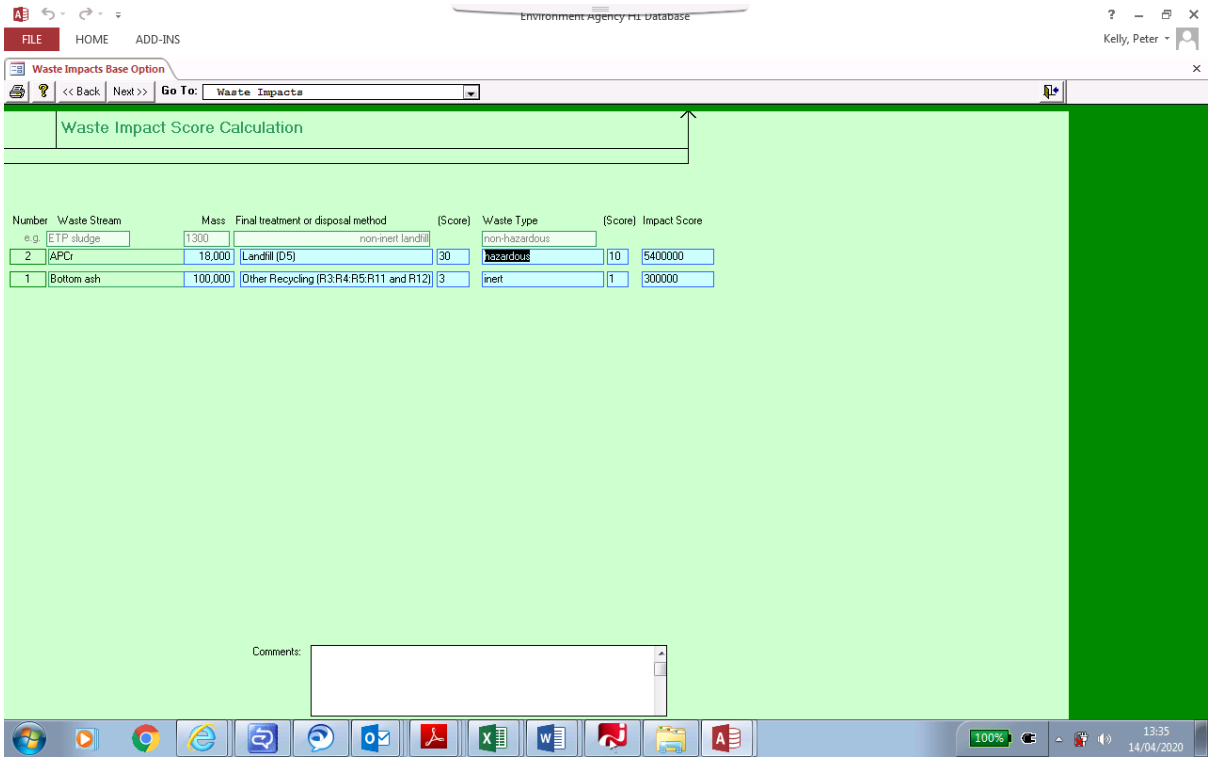
ADD-INS
Kelly, Peter
Ozone Creation Potential Base Option
<< Back
Next >>
Go To:
Ozone Creation Potential
Photochemical Ozone Creation Impacts
Number Substance
Annual Rate tonne/yr
POCP Value per tonne
POCP
e.g.
21 1,3 Butadiene 15.93 85.1 1,355.28
20 Benzene 15.93 21.8 347.18
23 Benzo-a-pyrene 0.00 323 0.02
7 Carbon monoxide 79.63 2.7 215.00
1 Nitrogen Dioxide 159.26 2.8 445.92
2 Sulphur Dioxide (15 Min Mean) 47.78 4.8 229.33
3 Sulphur Dioxide (1 Hour Mean) 47.78 4.8 229.33
4 Sulphur Dioxide (24 Hour Mean) 47.78 4.8 229.33
21 1,3 Butadiene 15.93 85.1 1,355.28
20 Benzene 15.93 21.8 347.18
23 Benzo-a-pyrene 0.00 323 0.02
7 Carbon monoxide 79.63 2.7 215.00
1 Nitrogen Dioxide 159.26 2.8 445.92
2 Sulphur Dioxide (15 Min Mean) 47.78 4.8 229.33
3 Sulphur Dioxide (1 Hour Mean) 47.78 4.8 229.33
4 Sulphur Dioxide (24 Hour Mean) 47.78 4.8 229.33
21 1,3 Butadiene 1.29 85.1 110.03
20 Benzene 1.29 21.8 28.19
23 Benzo-a-pyrene 0.00 323 0.00
7 Carbon monoxide 6.46 2.7 17.46
Total: 6,357.74
Comments:
100%
13:34
14/04/2020


Environment Agency H1 Database
FILE
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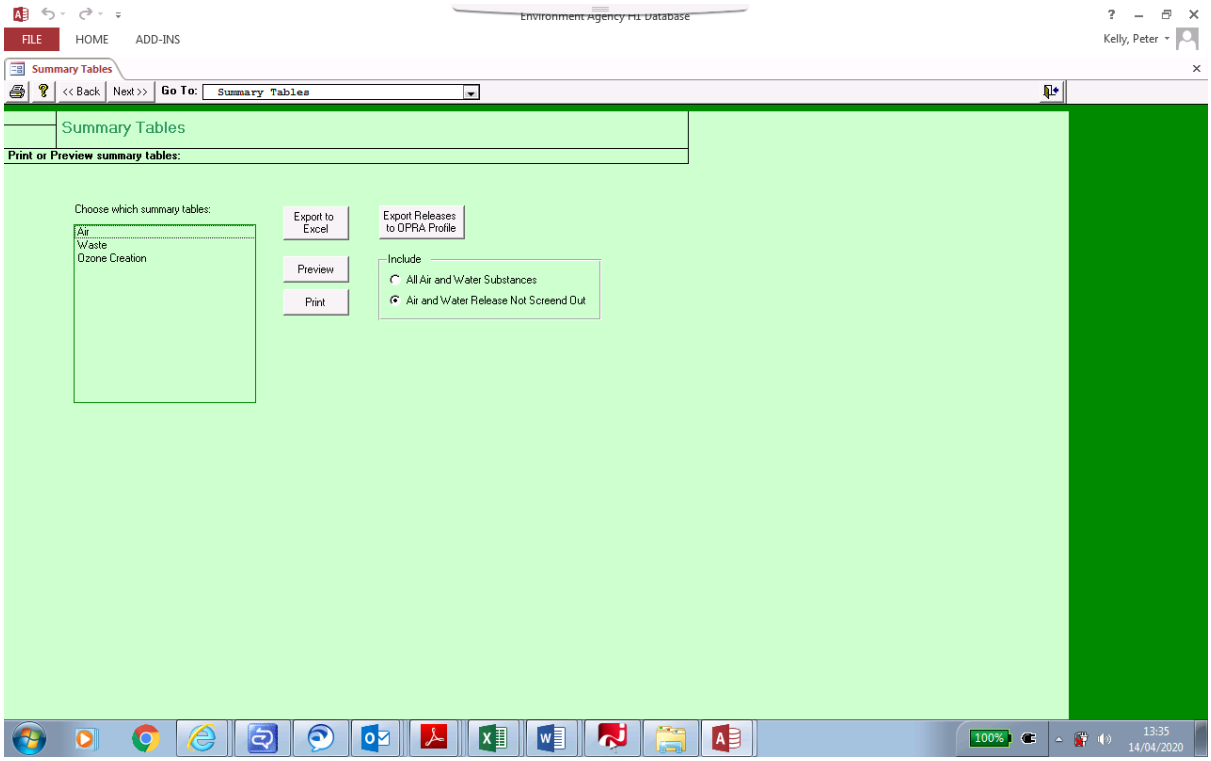
ADD-INS
Kelly, Peter
Waste Impacts Base Option
<< Back
Next >>
Go To:
Waste Impacts
Waste Impact Score Calculation
Number
Waste Stream
Mass
Final treatment or disposal method
(Score)
Waste Type
(Score)
Impact Score
e.g. ETP sludge
1300
non-inert landfill
non-hazardous
2
APCr
18,000
Landfill (D5)
30
hazardous
10
5400000
1
Bottom ash
100,000
Other Recycling (R3:R4:R5:R11 and R12)
3
inert
1
300000
Comments:
100%
13:35
14/04/2020


Environment Agency H1 Database
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Kelly, Peter
Summary Tables
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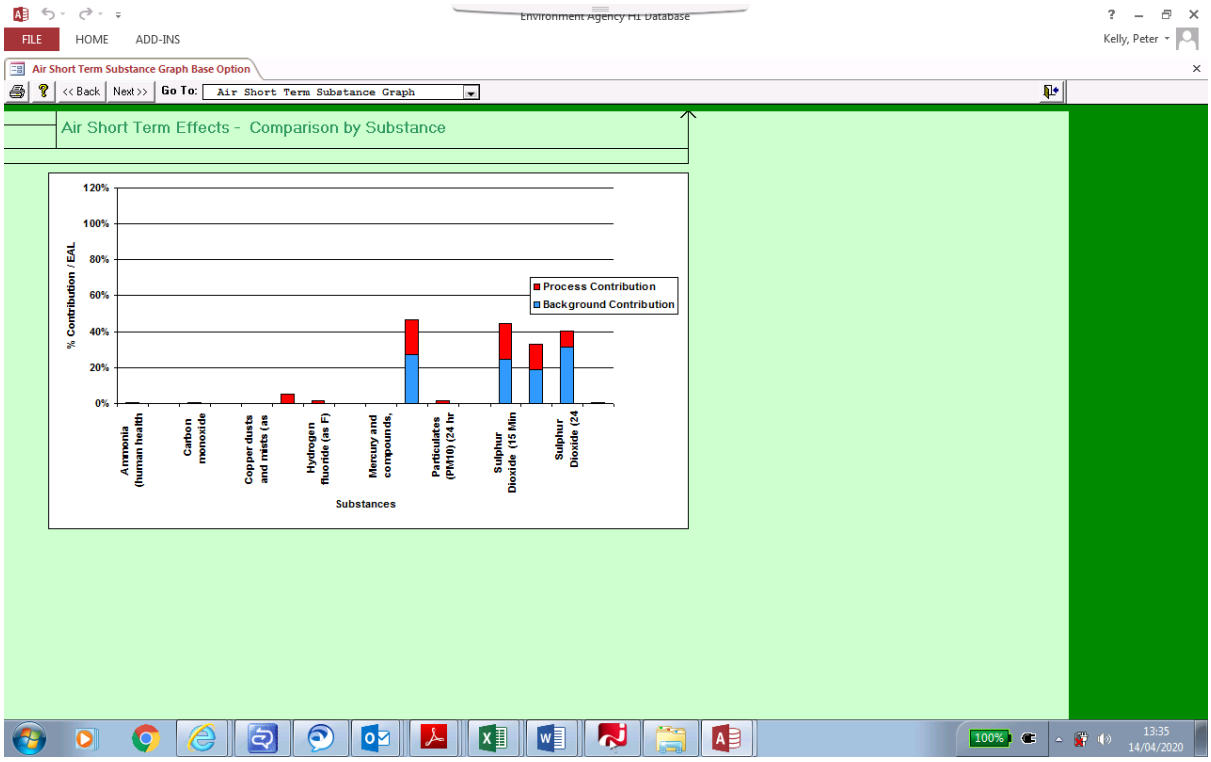
Go To:
Summary Tables
Summary Tables
Print or Preview summary tables:
Choose which summary tables:
Air
Waste
Ozone Creation
Export to Excel
Export Releases to OPRA Profile
Preview
Print
Include
All Air and Water Substances
Air and Water Release Not Screend Out
100%
13:35
14/04/2020


Environment Agency H1 Database
FILE
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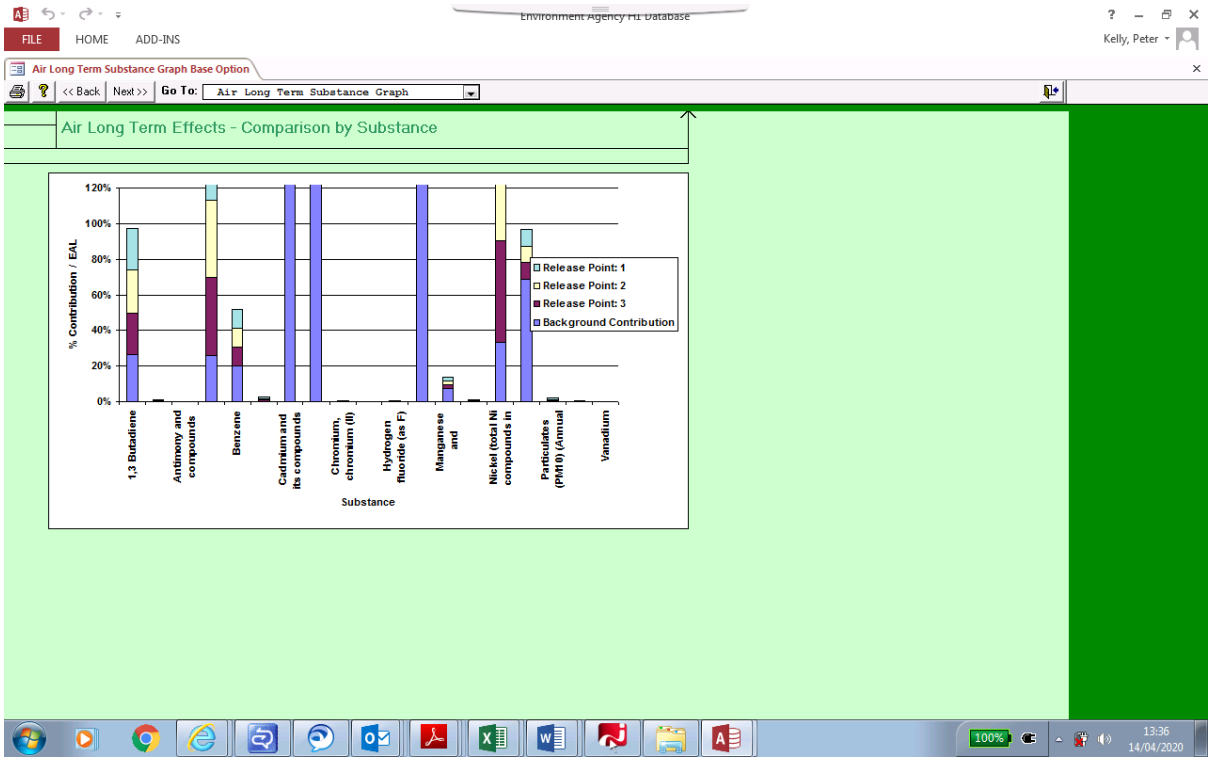
ADD-INS
Kelly, Peter
Air Short Term Substance Graph Base Option
<< Back
Next >>
Go To:
Air Short Term Substance Graph
Air Short Term Effects - Comparison by Substance
% Contribution / EAL
120%
100%
80%
60%
40%
20%
0%
Process Contribution
Background Contribution
Ammonia (human health)
Carbon monoxide
Copper dusts and mists (as
Hydrogen fluoride (as F)
Mercury and compounds,
Particulates (PM10) (24 hr
Sulphur Dioxide (15 Min
Sulphur Dioxide (24
Substances
100%
13:35
14/04/2020


Environment Agency H1 Database
FILE
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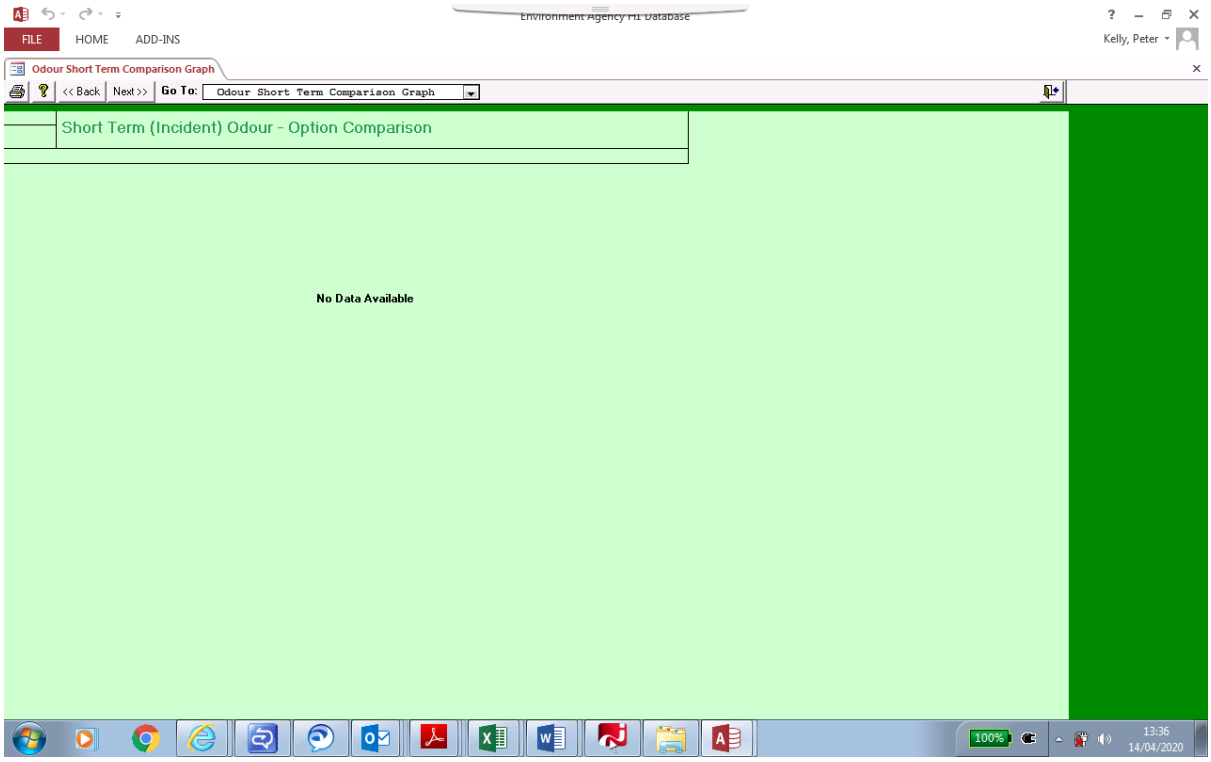
ADD-INS
Kelly, Peter
Air Long Term Substance Graph Base Option
<< Back
Next >>
Go To:
Air Long Term Substance Graph
Air Long Term Effects - Comparison by Substance
% Contribution / EAL
120%
100%
80%
60%
40%
20%
0%
Release Point: 1
Release Point: 2
Release Point: 3
Background Contribution
1,3 Butadiene
Antimony and compounds
Benzene
Cadmium and its compounds
Chromium, chromium (II)
Hydrogen fluoride (as F)
Manganese and
Nickel (total Ni compounds in
Particulates (PM10) (Annual
Vanadium
Substance
100%
13:36
14/04/2020


Environment Agency H1 Database
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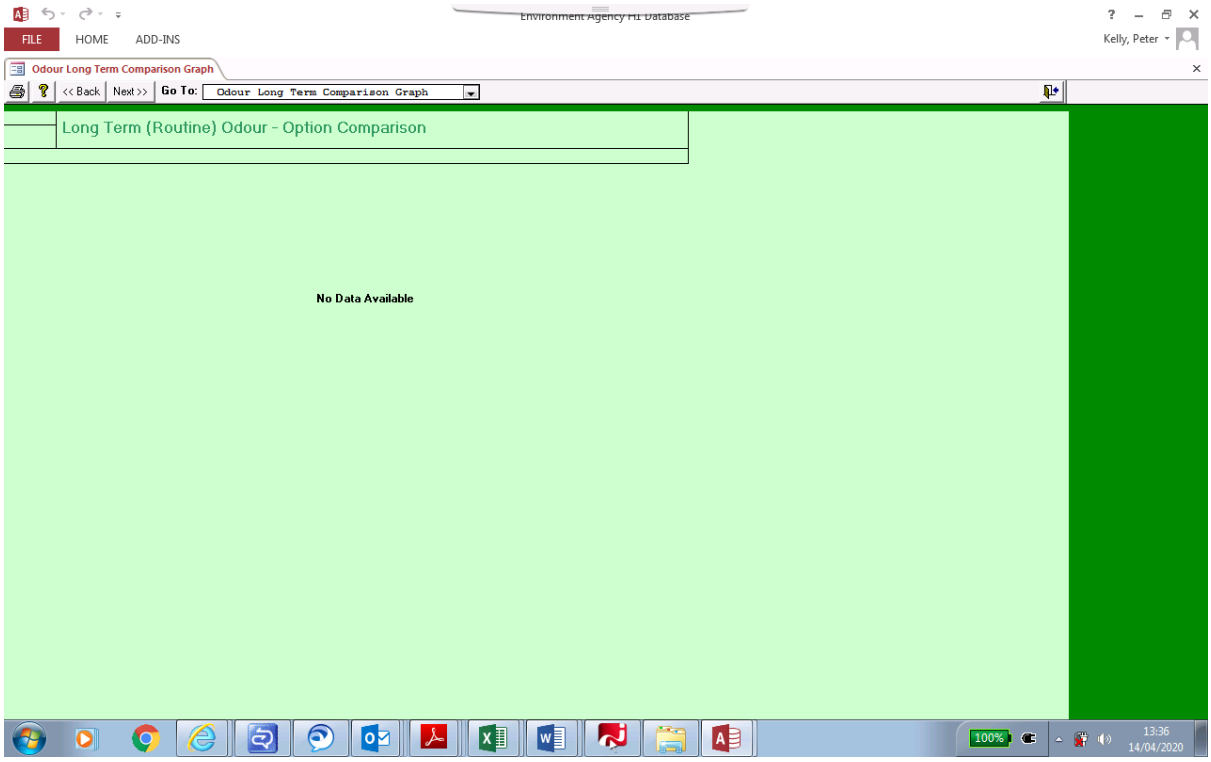
ADD-INS
Kelly, Peter
Odour Short Term Comparison Graph
<< Back
Next >>
Go To:
Odour Short Term Comparison Graph
Short Term (Incident) Odour - Option Comparison
No Data Available
100%
13:36
14/04/2020


Environment Agency H1 Database
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Kelly, Peter
Odour Long Term Comparison Graph
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Go To:
Odour Long Term Comparison Graph
Long Term (Routine) Odour - Option Comparison
No Data Available
100%
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Environment Agency H1 Database

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Kelly, Peter

Odour Totals Option Graph

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Odour Type - Option Comparison of total odour concentration by odour status

No Data Available

100% 13:37 14/04/2020

Environment Agency H1 Database

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Kelly, Peter

Ozone Creation Substance Graph

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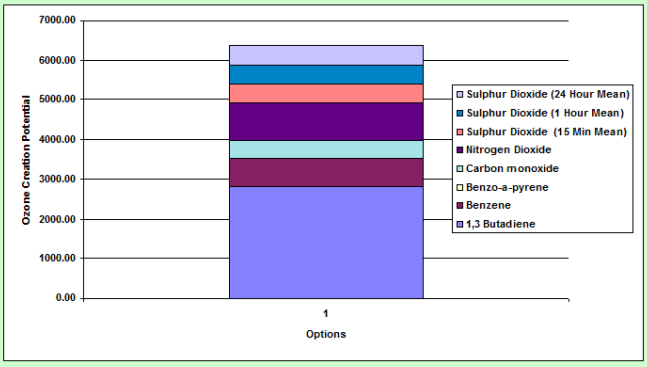
Ozone Creation - Substance Comparison



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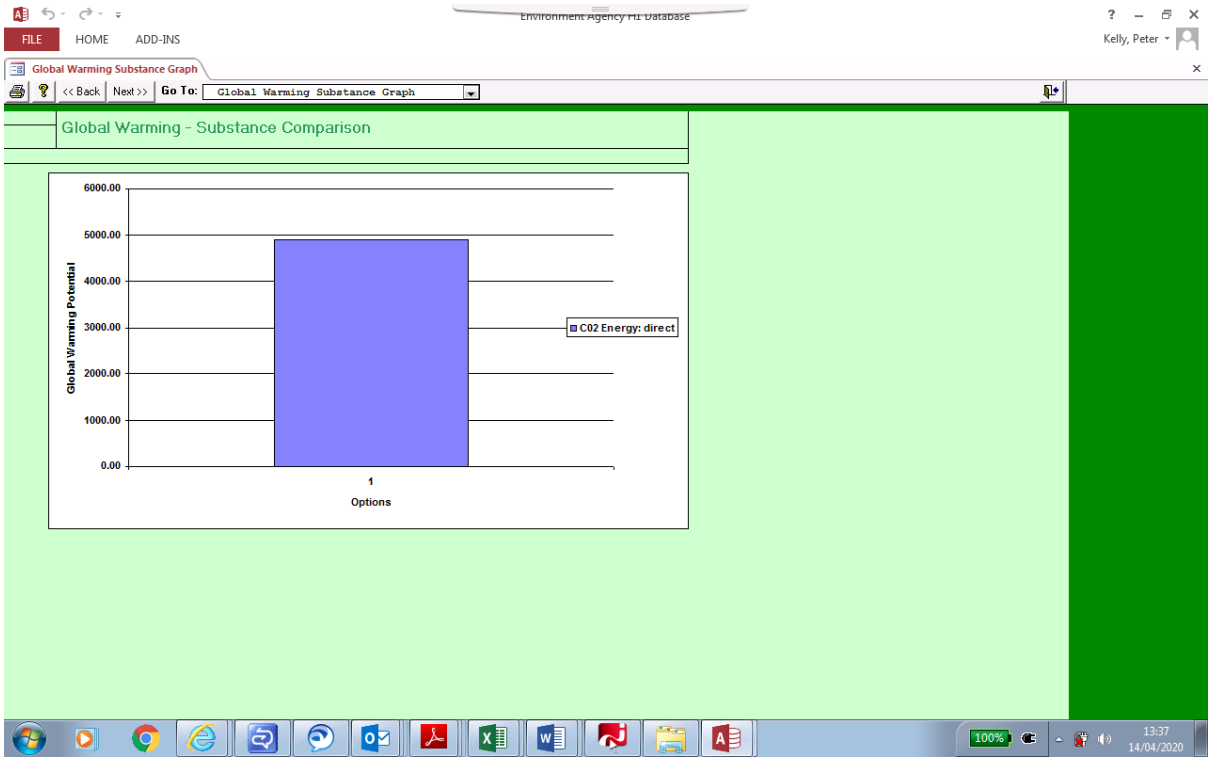
Environment Agency H1 Database
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ADD-INS
Kelly, Peter
Global Warming Substance Graph
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Go To:
Global Warming Substance Graph
Global Warming - Substance Comparison
6000.00
5000.00
4000.00
3000.00
2000.00
1000.00
0.00
Global Warming Potential
C02 Energy: direct
1
Options
100%
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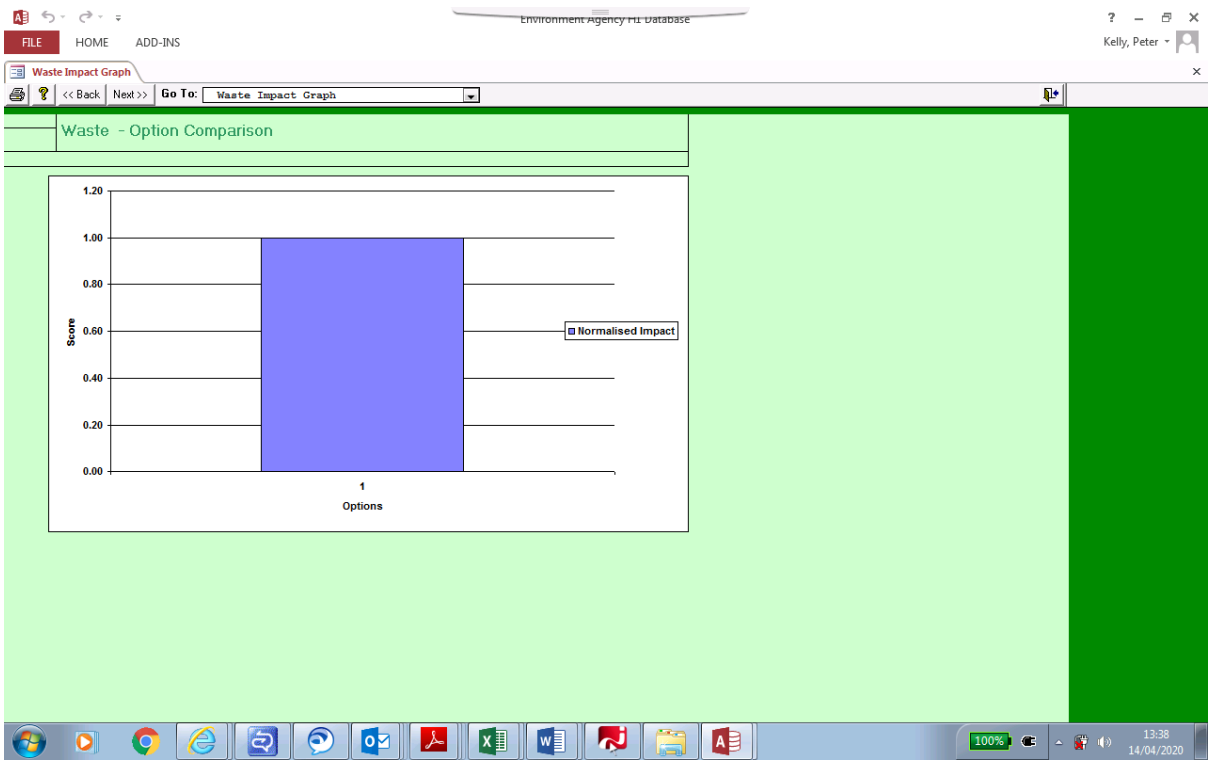
14/04/2020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Waste - Option Comparison
1.20
1.00
0.80
0.60
0.40
0.20
0.00
Score
Normalised Impact
1
Options
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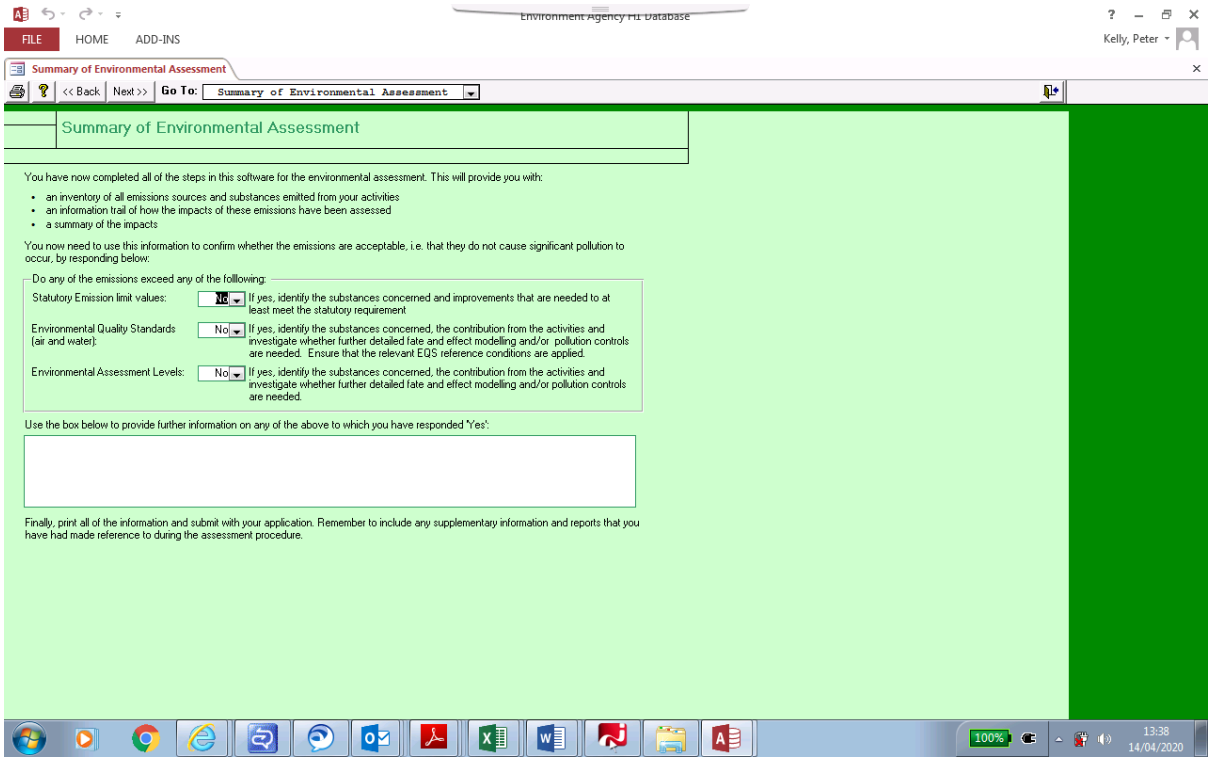
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Summary of Environmental Assessment
You have now completed all of the steps in this software for the environmental assessment. This will provide you with:
an inventory of all emissions sources and substances emitted from your activities
an information trail of how the impacts of these emissions have been assessed
a summary of the impacts
You now need to use this information to confirm whether the emissions are acceptable, i.e. that they do not cause significant pollution to occur, by responding below:
Do any of the emissions exceed any of the following:
Statutory Emission limit values:
No
If yes, identify the substances concerned and improvements that are needed to at least meet the statutory requirement
Environmental Quality Standards (air and water):
No
If yes, identify the substances concerned, the contribution from the activities and investigate whether further detailed fate and effect modelling and/or pollution controls are needed. Ensure that the relevant EQS reference conditions are applied.
Environmental Assessment Levels:
No
If yes, identify the substances concerned, the contribution from the activities and investigate whether further detailed fate and effect modelling and/or pollution controls are needed.
Use the box below to provide further information on any of the above to which you have responded 'Yes':
Finally, print all of the information and submit with your application. Remember to include any supplementary information and reports that you have had made reference to during the assessment procedure.
100%
13:38
14/04/2020