Instructions for the Web Based Data Entry System
Local Authority NO$_2$ Diffusion Tube Data

Prepared on behalf of Defra and the Devolved Administrations

ED 48674041
AEAT/ENV/R/2021/Issue 4
Date July 2007
<table>
<thead>
<tr>
<th>Title</th>
<th>Instructions for the Web Based Data Entry System – Local Authority NO₂ Diffusion Tube Data</th>
</tr>
</thead>
<tbody>
<tr>
<td>Customer</td>
<td>Defra and the Devolved Administrations</td>
</tr>
<tr>
<td>Customer reference</td>
<td></td>
</tr>
<tr>
<td>Confidentiality, copyright and reproduction</td>
<td>None</td>
</tr>
<tr>
<td>File reference</td>
<td>ED 48674041</td>
</tr>
<tr>
<td>Reference number</td>
<td>AEAT/ENV/R/2021/Issue 4</td>
</tr>
</tbody>
</table>

AEA Energy & Environment  
Building 551.11  
Harwell Business Centre  
Didcot  
Oxfordshire  
OX11 0QJ

t: 0870 190 6669  
f: 0870 190 6386

AEA is a business name of AEA Technology plc  
AEA is certificated to ISO9001 and ISO14001

| Author | Name | Jaume Targa  
Alison Loader |
|--------|------|---------------|
| Approved by | Name | Xingyu Xiao  
Alan Collings |
| Signature | | ![Signature] |
| Date | | 13/07/2007 |
# Table of contents

1 Getting Started  
   1.1 Logging On 1  

2 Data Management 4  
   2.1 Input New Data 4  
   2.2 To View And Amend Existing Data 10  
   2.3 Entering Data For Multiple Tube Sites 16  
   2.4 Entering Data in a Batch 16  
   2.5 Entering Data from Co-located Automatic NO₂ Analysers 19  

3 NO₂ Site Administration 21  
   3.1 Adding, viewing & amending sites 21  
   3.2 Multiple Tube Exposure 25  
   3.3 Co-Location With Automatic Analysers 27  
   3.4 Changing Laboratory Details 27  

4 Amending User Details 29  
   4.1 To Change Your Password 29  
   4.2 To Update Your Contact Details 29  

5 Logging off 30
1 Getting Started

This Instruction Manual has been prepared for Local Authorities using nitrogen dioxide diffusion tubes as part of their Local Air Quality Management. It provides guidance on using AEA Energy & Environment’s Web-Based Data Entry System. Originally developed by AEA Energy & Environment for the former NO2 Network, this system has been retained by Defra, as a convenient way for Local Authorities to store, manage, and share data from their diffusion tube monitoring sites via the internet. The system is operated as part of the Defra contract for Support to Local Authorities for Local Air Quality Management.

The Web-Based Data Entry System will allow you to do the following:
- Enter your NO2 diffusion tube results on a monthly basis, as soon as you receive them from your analyst.
- Review the data you have previously entered, and make any amendments quickly and easily.
- Look at the details of your diffusion tube sites and check that they are correct; make amendments where necessary
- Start up new sites and shut down old ones.
- Include details of co-located automatic analysers
- Keep your contact details up to date, so that AEA Energy & Environment can get in touch with you if necessary. (These details won’t be passed on to any other organisation).

We hope that the system will be useful to all Local Authorities using diffusion tubes as part of their LAQM. This manual provides information on how to use the web-based data entry system. If you have any difficulty, please contact Jaume Targa on 0870 190 6669.

1.1 Logging On

To use the system, you will need your user name and password. These were issued to all participants during 2005; if you need reminding of your password, please contact AEA Energy & Environment. Your password was created randomly, and we suggest that once you have logged in to the system, you change it to something easy to remember. The system is password-protected, so you can only see and amend your own data and contact details, not that of any other users. (This manual contains some real examples, used with permission of the site operators concerned, and also some dummy data).

To get started, go to http://www.airquality.co.uk/archive/NO2admintools/NO2_logon.php (Note the underscore between “NO2” and “logon”).

The screen will appear as in Figure 1. Enter your username and password in the appropriate boxes and click on “Log on”. Both user-name and password are case-sensitive.
Figure 1. Log-on page

If you have any problems logging on, please read section 1.1.1. If the problem persists, contact the system administrator, by clicking on the link shown on the page.

Having logged on, you will be prompted with the home page explaining the options included in the system (Fig. 2). If new features are included in the future, these will be highlighted here.

There is also a link at the bottom of the home page, to allow you to download the latest version of these instructions.
1.1.1 Problems Logging on

If you have any problems logging on, it might be for one of these reasons; there may be a problem with the system, you have entered your user-name or password incorrectly, or AEA Energy & Environment have provided an incorrect username or password. Please note that both username and password are case sensitive. If the problems persist, please contact the Administrator by clicking on the link.
2 Data Management

The Data Management section allows you to carry out the basic functions of entering your monthly results, viewing and amending existing data already entered.

2.1 Input New Data

To enter new data into the system, select the appropriate year, then monitoring period, and then click next. Note that when you select a year, the monitoring calendar for that year is displayed, to assist you in selecting the correct monitoring period (Fig. 4).

![Figure 4. Selecting year and period](image_url)

If you get any error messages please refer to section 2.1.1.

Having selected the monitoring period, you will be prompted with the following screen so that you can input the data to the system (Fig. 5).
First, you will need to enter the actual sampling dates, only if different from the calendar sampling dates. Please note that if the actual sampling dates differ from the calendar sampling date by more than ± 2 days, the result will be considered unsuitable for upload. These data will be stored in the database but will not be uploaded to the Air Quality Archive (www.airquality.co.uk).

It is important to note that if the actual sampling dates are within ± 2 days, the calendar sampling dates will be stored instead of the actual dates.

If only one site is outside the calendar sampling dates, highlight this in the Comment by using the option Different Exposure. Only the results from this site will be considered “Not suitable for upload”.

Having entered the calendar dates, if necessary, enter the data for each site in the appropriate box (see figure 6). Move through the boxes using the tab key on your keyboard to move forwards, and <shift> tab to move backwards. (You can also select a box using the mouse).

If data is not valid, leave the concentration cell as “0.0” and select the comment “No Valid Data”. Although the cell shows 0.0 as a default value, this will be stored as a null value, not a zero. An error message will appear if the zero is deleted and not replaced, or is replaced with a non-numeric value.

Table 1 explains further the different comments that you might want to attach to your tube results. Leave the box as “0.0” or enter your tube results anyway if a comment is selected. If you encounter a problem that’s not included in our list, please let us know.
Table 1. Summary of Comments for Tube Results

<table>
<thead>
<tr>
<th>Comments</th>
<th>Example of problems</th>
</tr>
</thead>
<tbody>
<tr>
<td>&quot; &quot; blank comment</td>
<td>Valid data</td>
</tr>
<tr>
<td>Different Exposure</td>
<td>Outside ± 2 days of calendar sampling dates</td>
</tr>
<tr>
<td>No Valid Data</td>
<td>• Data is not valid (ie, problems with analysis)</td>
</tr>
<tr>
<td></td>
<td>• No data available</td>
</tr>
<tr>
<td>Tube missing</td>
<td>• Tube missing from site</td>
</tr>
<tr>
<td>Tube on the ground</td>
<td>• Tube found lying on the ground</td>
</tr>
<tr>
<td>Broken tube/cap</td>
<td>• Crack on the cap</td>
</tr>
<tr>
<td></td>
<td>• Crack on the tube</td>
</tr>
<tr>
<td></td>
<td>• Broken tube/cap</td>
</tr>
<tr>
<td>Condensation in tube</td>
<td>Condensation in tube</td>
</tr>
<tr>
<td>Dirt in Tube</td>
<td>• Dirt or mud in the tube</td>
</tr>
<tr>
<td></td>
<td>• Tube dirty inside or outside</td>
</tr>
<tr>
<td>Liquid in Tube</td>
<td>Liquid in Tube – i.e. large droplets</td>
</tr>
<tr>
<td>Spider in Tube</td>
<td>• Spider (or insect) in the tube</td>
</tr>
<tr>
<td></td>
<td>• Spider’s web in the tube</td>
</tr>
<tr>
<td>Other</td>
<td>Any other unusual problem</td>
</tr>
</tbody>
</table>

![UK NO₂ Diffusion Tube Measurement Management Form](image)

ADD
Calendar sampling start date and end date for period 1 are: from 03/01/2006 to 31/01/2006. Actual sampling start date and end date if different *: from 03/01/2006 to 31/01/2006.

Please enter the measurement record below:

<table>
<thead>
<tr>
<th>Site details</th>
<th>Tube No.</th>
<th>Concentration (ugm⁻³)</th>
<th>Status</th>
<th>Comment (If applicable)</th>
</tr>
</thead>
<tbody>
<tr>
<td>01794 - Glasgow 1 ROADSIDE</td>
<td>1</td>
<td>49.9</td>
<td>U</td>
<td></td>
</tr>
<tr>
<td>01794 - Glasgow 4h URBAN BACKGROUND</td>
<td>1</td>
<td>0.0</td>
<td>U</td>
<td>No Valid Data</td>
</tr>
<tr>
<td>02103 - Glasgow 5h URBAN BACKGROUND</td>
<td>1</td>
<td>25.0</td>
<td>U</td>
<td>Spider in tube</td>
</tr>
<tr>
<td>03643 - Glasgow 6h ROADSIDE</td>
<td>1</td>
<td>45.0</td>
<td>U</td>
<td>Different exposure</td>
</tr>
</tbody>
</table>

*): If actual sampling dates differ from the calendar sampling date by more than ±2 days, it is considered unsuitable for upload.
If actual sampling dates are within ±2 days, the calendar sampling dates will be stored instead of the actual dates.

Figure 6. Inputting Data in the System, and Adding Comments

Having entered all the data, click on Proceed. The screen will appear as in Fig. 7, showing the data you have just entered. Check at this stage that all the data you have entered are correct. If so, click on Submit and you will be prompted with a message confirming the values you have entered (Fig. 8).
2.1.1 Warning Messages You May See

We hope that you will find the system easy to use and will not have any problems. However, here are some warning messages you may see.

(i) Selecting a period with existing data

If you select a period for which you have already entered data, you will be prompted with the following message "Measurement data are found for the year .... period ..." – Figure 9. Unless you have outstanding data for some of your sites, please select another period. If unsure which periods you have already entered, click on "View & Amend Existing Data".
(ii) Entering data when none has been entered for the previous period

If you miss an exposure period, (for example March), and then attempt to enter data for the subsequent period (for example April) you will be prompted with the following message “Warning: you have one or more sites for which no data have been entered for previous period” as in Figure 10 below. You will also see this message if you have entered the previous month’s data for some, but not all of your sites.
Warning: you have one or more sites for which no data have been entered for the previous period
Calendar sampling start date and end date for period S are: from 02/05/2007 to 30/05/2007
Actual sampling start date and end date if different *: from 02/05/2007 to 30/05/2007
Please enter the measurement record below:

<table>
<thead>
<tr>
<th>Site details</th>
<th>Tube No.</th>
<th>Concentration (ugm⁻³)</th>
<th>Status</th>
<th>Comment (if applicable)</th>
</tr>
</thead>
<tbody>
<tr>
<td>B1936 - Stonehaven 1n ROADSIDE</td>
<td>1</td>
<td>0.0</td>
<td>U</td>
<td></td>
</tr>
<tr>
<td>B1938 - Stonehaven 3n URBAN BACKGROUND</td>
<td>1</td>
<td>0.0</td>
<td>U</td>
<td></td>
</tr>
<tr>
<td>B2223 - Stonehaven 6n URBAN BACKGROUND</td>
<td>1</td>
<td>0.0</td>
<td>U</td>
<td></td>
</tr>
<tr>
<td>B4223 - Inverurie 1n ROADSIDE</td>
<td>1</td>
<td>0.0</td>
<td>U</td>
<td></td>
</tr>
<tr>
<td>B4224 - Inverurie 2n URBAN BACKGROUND</td>
<td>1</td>
<td>0.0</td>
<td>U</td>
<td></td>
</tr>
<tr>
<td>B4225 - Inverurie 3n URBAN BACKGROUND</td>
<td>1</td>
<td>0.0</td>
<td>U</td>
<td></td>
</tr>
<tr>
<td>B4226 - Inverurie 4n URBAN BACKGROUND</td>
<td>1</td>
<td>0.0</td>
<td>U</td>
<td></td>
</tr>
<tr>
<td>B4227 - Westhill 1n URBAN BACKGROUND</td>
<td>1</td>
<td>0.0</td>
<td>U</td>
<td></td>
</tr>
<tr>
<td>B4228 - Westhill 2n ROADSIDE</td>
<td>1</td>
<td>0.0</td>
<td>U</td>
<td></td>
</tr>
<tr>
<td>B4229 - Peterhead 1n ROADSIDE</td>
<td>1</td>
<td>0.0</td>
<td>U</td>
<td></td>
</tr>
<tr>
<td>B4230 - Peterhead 2n ROADSIDE</td>
<td>1</td>
<td>0.0</td>
<td>U</td>
<td></td>
</tr>
<tr>
<td>B4231 - Peterhead 3n ROADSIDE</td>
<td>1</td>
<td>0.0</td>
<td>U</td>
<td></td>
</tr>
<tr>
<td>B4232 - Peterhead 4n ROADSIDE</td>
<td>1</td>
<td>0.0</td>
<td>U</td>
<td></td>
</tr>
<tr>
<td>B4233 - Mintlaw 1n ROADSIDE</td>
<td>1</td>
<td>0.0</td>
<td>U</td>
<td></td>
</tr>
</tbody>
</table>

This message won’t prevent you entering data for the month you have selected. However, it does mean you should then go back to the previous month and either enter that month’s outstanding results, or enter comments explaining why there are no valid results.

(iii) Entering blank results for no valid data

All months and sites need to be accounted for. If you leave the cell blank you will get an error message. The cell value defaults to “0.0”, which is stored as a null value. Null values must be accompanied by a comment of “No Valid Data”, if applicable. Please ensure that all months are accounted for.
Figure 11.Warning Message – Leaving the data cell blank.

2.2 To View And Amend Existing Data

The system allows you to view data previously entered, and to amend it if necessary. Click on the “NO₂ Data Management” tab, then select “View and Amend Existing Data”. From the screen shown in Fig. 12, select the appropriate year -

Your data for the year will be displayed as in Figure 13 -
2.2.1 Data Status

The data are highlighted with a coloured background, according to their status:

- Unchecked (blue) – not checked by AEA Energy & Environment. You can amend this data.
- Checked (green) – has been approved by AEA Energy & Environment for upload to the Air Quality Archive. Once checked, data become read-only. You will need to contact AEA Energy & Environment in order to amend checked data.
- Not suitable for upload (yellow) – cases where the exposure period does not match that specified, or results highlighted as suspect with a comment after being audited.
- Exported (pink) – data have been checked and exported to the Defra Air Quality Archive. Again, you will need to contact AEA Energy & Environment in order to amend checked data.

Null values are displayed as normal data with “n/a”.

In the example below (Fig. 14), to amend the existing values the user should click on the “Amend” button, at the bottom of the table below the results they wish to change.
Each individual site’s data for the selected period can then be amended if necessary (Fig. 15). Click on “Proceed” when you are happy with the changes you have made. You can also delete data completely if necessary. Selecting “Cancel” will abandon the changes and take you back to the previous screen (Fig. 14).

If only one tube result needs amending, you can click on the result itself and you will be able to amend that result only (see Fig. 16).
Figure 15. Amending all sites’ data for a given year and exposure period

Calendar sampling start date and end date are: from 04/04/2007 to 02/05/2007

Please update the data records below:

<table>
<thead>
<tr>
<th>Site details</th>
<th>Tube No.</th>
<th>Concentration (ugm⁻³)</th>
<th>Status</th>
<th>Comment (if applicable)</th>
<th>Delete</th>
</tr>
</thead>
<tbody>
<tr>
<td>81653 - Lincoln 3n ROADSIDE</td>
<td>1</td>
<td>60.3</td>
<td>U</td>
<td></td>
<td></td>
</tr>
<tr>
<td>81656 - Lincoln 4n URBAN BACKGROUND</td>
<td>1</td>
<td>17.7</td>
<td>U</td>
<td></td>
<td></td>
</tr>
<tr>
<td>82699 - Lincoln 5n URBAN BACKGROUND</td>
<td>1</td>
<td>38.3</td>
<td>U</td>
<td></td>
<td></td>
</tr>
<tr>
<td>82943 - Lincoln 6n ROADSIDE</td>
<td>1</td>
<td>39.8</td>
<td>U</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Keys: U-Unchecked, P-Checked, N-Not suitable for upload, E-Exported

*If actual sampling dates differ from the calendar sampling data by more than 1-2 days, it is considered unsuitable for upload. If actual sampling dates are within 1-2 days, the calendar sampling dates will be stored instead of the actual dates.
Figure 16. Amending just one site’s data

It is also possible to enter new data via this route. Click on "New" at the bottom of the column for the selected exposure period (Figure 17). You will be prompted with the same form as you use when entering the data from the "Input New Data" tab (Fig 18).
Figure 17. Entering new data via “View & Amend Existing Data” option

Figure 18. Inputting New Data
### 2.3 Entering Data For Multiple Tube Sites

If any of your sites are set up for multiple tube exposure (see section 3.2 for how to do this), the data entry and data amendment screens will provide a “box” for each tube at the site – see Figure 19, which shows an example of some sites with two tubes.

![Figure 19. Entering Data for Multiple Tube Exposure Sites](image)

**Table:**

<table>
<thead>
<tr>
<th>Site details</th>
<th>Tube No.</th>
<th>Concentration (ugm⁻³)</th>
<th>Status</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>82696 - Ashfield 7m ROADSIDE</td>
<td>1</td>
<td>0.0</td>
<td>U</td>
<td>✓</td>
</tr>
<tr>
<td>82696 - Ashfield 7m ROADSIDE</td>
<td>2</td>
<td>0.0</td>
<td>U</td>
<td>✓</td>
</tr>
<tr>
<td>82999 - Ashfield 4m URBAN BACKGROUND</td>
<td>1</td>
<td>0.0</td>
<td>U</td>
<td>✓</td>
</tr>
<tr>
<td>82999 - Ashfield 4m URBAN BACKGROUND</td>
<td>2</td>
<td>0.0</td>
<td>U</td>
<td>✓</td>
</tr>
<tr>
<td>92903 - Ashfield 9m ROADSIDE</td>
<td>1</td>
<td>0.0</td>
<td>U</td>
<td>✓</td>
</tr>
<tr>
<td>92903 - Ashfield 9m ROADSIDE</td>
<td>2</td>
<td>0.0</td>
<td>U</td>
<td>✓</td>
</tr>
</tbody>
</table>

**Keys:**

- P-Checked
- E-Audited & Exported
- R-Ratified
- U-Unchecked
- N-Not suitable for upload
- PR-P-Ratified
- PE-P-Eratified

- *If actual sampling dates differ from the calendar sampling date by more than ±2 days, it is considered unsuitable for upload. If actual sampling dates are within ±2 days, the calendar sampling dates will be stored instead of the actual dates.*

### 2.4 Entering Data in a Batch

For Local Authorities with a very large number of sites, the system incorporates the option to enter data in a batch, from a spreadsheet. From the Home Page, click on the Data Management tab. Then click on the link marked “Click here if you would like to upload data in a batch” – see figure 20.
Figure 20. Link to upload data in a batch

This takes you to a page explaining the batch data upload form – Figure 21. As explained on this page, before using this option you must make sure that all your sites’ details are entered and up to date on the Web Based Data Entry System.

There are three stages:
- Downloading a copy of the batch data upload form to your local PC, which you will use as a template
- Entering your data and creating the batch upload file
- Submitting the file to the Web-Based Data Entry System.

Click on either of the two links shown to download the Excel spreadsheet based tool. **(Note: this file contains macros, which your system must accept in order to use this option).**

Figure 21. Link to batch data upload form

The spreadsheet will be opened, and will appear as in Figure 22:
Save a copy in your own local area - for example in a convenient directory on the C: drive of your PC. *It is this local copy that you will use.*

When you are ready to upload your data, open the copy of the file that you have made on your PC. Read the instructions carefully.

Go to the worksheet labelled “Tube Data” – see Figure 24 - and enter your diffusion tube site numbers, exposure dates and results in the yellow area as instructed. (Having entered all your site numbers once, you can save a copy so that you do not need to re-enter these every month). When you have entered all your data, with comments where required, please check the data carefully.

Then, click the green button at the top right hand side of the page marked “Create Upload File”. This will create the upload file. **Note: it is important to use this button, rather than simply saving the file, to ensure that the file is saved in the correct format.**
The spreadsheet will prompt you to save the file in a directory of your choosing. Having done so, close the file.

To send your data to the Web Based Data Entry System, use the “submit” option on the web page shown in Figure 21. (Alternatively you can e-mail it to the address provided, but the former is quicker).

Return to the web page, position the cursor in the box marked “select a document” and click on “Browse”. Select the data upload file you created. Then click on the button marked “Submit” to send the file. It may take a few minutes for the data to be uploaded, but once they are in the system, you should be able to “View and Amend” the values as if you had entered them via the screen-based method.

2.5 Entering Data from Co-located Automatic NOx Analysers

Where a Local Authority is operating an automatic NOx monitoring site, they will usually find it useful to carry out co-located diffusion tube measurements at the site. The co-located measurements, if carried out over a sufficiently long period, can be used to assess the accuracy of the diffusion tubes, relative to the automatic analyser. The Web Based Data Entry System now allows users to enter monthly mean NO2 concentrations measured by one or more automatic analysers, co-located with any of their diffusion tube sites.

To do this, proceed as follows. First, it is necessary to ensure that the co-located automatic monitoring site’s details are entered into the system. To do this, follow the instructions in section 3.4.
Once your co-located site is set up on the system, entry of co-located data is done as follows. First, click on the "Data Management" tab, then click on "Input New Colocated Data".

The co-located data entry screen will appear as in Figure 25:

![Figure 25. Co-located Data Entry Screen](image)

Enter the mean NO$_2$ concentration for the exposure period (which must match, to the day, the exposure period of the diffusion tubes with which the analyser is co-located), and also the percentage data capture of the analyser, for the period specified.

Click on "Proceed", then "Submit".
# 3 NO₂ Site Administration

The system also allows you to add and amend details of your sites – select the tab marked “NO₂ Site Admin” – Fig. 26.

3.1 Adding, viewing & amending sites

3.1.1 To Add A New Site

Click on the button marked “Add New Site”. The screen will appear as in Figure 26. A site identification number will be automatically assigned. Choose a unique site name, which should be of the format “TOWN/CITY NAME XN” where X is a number. X should be a number not used for any other NO₂ site – it must be unique. “N” indicates that the site is an NO₂ diffusion tube site. This format ensures that anyone downloading data from the Air Quality Archive knows (i) what town the site is in, and (ii) what type of site it is.

Please ensure that you enter the 1st line of the address, i.e. the nearest building to the site, Location Type, Site Easting and Northing and the Start Date of Monitoring. Please see our other document “NO₂ Diffusion Tubes for LAQM: Guidance Notes for Local Authorities” for detailed siting criteria. Roadside sites must be within 1-5m of the kerb of a busy road; Urban Background sites must be at least 50m from any busy road. Height above ground should be between 2-5m.
Figure 27. Adding a New Site - Site Details Screen

For “Network” select “NO2 Diffusion Tube”. If your new site is co-located with an automatic analyser, and you wish to be able to input data from this analyser also, select “NO2 Co-location Site” for Network.

The details of the new site will be checked by AEA Energy & Environment, and if they are satisfactory, you will receive an e-mail notifying that the new site has been accepted.
3.1.2 View and Amend Existing Sites

The system will let you amend details of your sites, such as address and grid reference. However, please note that this is only intended to allow you to correct errors and make minor changes to the address of an existing site. In cases where a site is replaced, or re-located to a different address, this constitutes a new site. It must be entered as such using the “Add New Site” option, and requires a new number and name. All site changes will have to be approved by AEA Energy & Environment.

To view your existing site details, select the NO₂ Site Admin tab, then “View and Amend Existing Sites”. All your active and ceased sites details will be displayed as in Figure 28.

To make changes, click on “update” to the right hand side of the site name, as in Figure 29.
This will display details of the selected site (Figure 30) which can then be updated as necessary. To submit your changes, click on “update” as highlighted in Figure 30.
3.2  Multiple Tube Exposure

At present, tubes are exposed singly at the majority of sites. However, there are a substantial number of cases where tubes are exposed in pairs, triplicate or more. The web-based data entry system is designed to cope with multiple tube exposure.

The “View and Amend Existing Sites” screen (Figure 29 above) shows the number of tubes currently exposed at your sites. For single-tube sites it says “This is a site with a single tube”. To designate the site as a multi-tube site, click on “Add Number of Tubes” (Figure 31). This will allow you to add new tubes at the sites. Maximum number allowed is five replicate tubes. Follow the example below to see how to enter data for a site with three tubes.

Since the starting dates of the additional tubes may be different, you can enter a different start date in each case. (These are the dates that the multiple exposures started, not the exposure dates of any individual tubes). Click “Proceed” to submit the details. If, at a later date, the number of tubes at the site is reduced (e.g. if the site goes back to being a single exposure site), you can enter an “end date” for the multiple exposures via this screen.

![Figure 31. Entering Details of multiple tube exposure](image)

3.2.1  Triplicate site example

If you have a site (eg 82711, BALLYMENA 3N), which has changes from having only one tube to having three tubes (triplicate), you will have to do the following. Click on “Add Number of Tubes” and select the site as in Figure 32.

Despite being a single tube site already, we need to activate tube 1, 2 and 3. Note that the “Tube Number” select bar is not the number of tubes on the site. This refers to each tube individually (1 – first tube, 2 – second tube, 3 – third tube, 4 – forth tube and 5 – fifth tube). As seen in Figure 27, you will have to select the site, and then tube 1 and the start date (30/11/2004). After this, click “Proceed” and “Submit”.

Then click again on “Add Number of Tubes”, select the site, select the second tube (“2”) and the start date (30/11/2004). After this click “Proceed” and “Submit”.

Then click again on “Add Number of Tubes”, select the site, select the second tube (“3”) and the start date (30/11/2004). After this click “Proceed” and “Submit”.

AEEA/ENV/R/2021 Issue 4  Instructions for Web-Based Data Entry System
### ADD Sample Tube Details

<table>
<thead>
<tr>
<th>Local Authority Region:</th>
<th>Ballymena Borough Council</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tube:</td>
<td>62711, BALLYMENA3N</td>
</tr>
<tr>
<td>Start Date:</td>
<td>30/11/2004</td>
</tr>
<tr>
<td>End Date:</td>
<td>Please select</td>
</tr>
</tbody>
</table>

(Dates defined by the monitoring calendar)

**ADD**

This tube details is saved for local authority Ballymena Borough Council site id 82711

<table>
<thead>
<tr>
<th>Start Date</th>
<th>End Date</th>
<th>Tube Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>30/11/2004</td>
<td></td>
<td>1</td>
</tr>
</tbody>
</table>

### ADD Sample Tube Details

<table>
<thead>
<tr>
<th>Local Authority Region:</th>
<th>Ballymena Borough Council</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tube:</td>
<td>62711, BALLYMENA3N</td>
</tr>
<tr>
<td>Start Date:</td>
<td>30/11/2004</td>
</tr>
<tr>
<td>End Date:</td>
<td>Please select</td>
</tr>
</tbody>
</table>

(Dates defined by the monitoring calendar)

**ADD**

This tube details is saved for local authority Ballymena Borough Council site id 82711

<table>
<thead>
<tr>
<th>Start Date</th>
<th>End Date</th>
<th>Tube Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>30/11/2004</td>
<td></td>
<td>2</td>
</tr>
</tbody>
</table>

### ADD Sample Tube Details

<table>
<thead>
<tr>
<th>Local Authority Region:</th>
<th>Ballymena Borough Council</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tube:</td>
<td>62711, BALLYMENA3N</td>
</tr>
<tr>
<td>Start Date:</td>
<td>30/11/2004</td>
</tr>
<tr>
<td>End Date:</td>
<td>Please select</td>
</tr>
</tbody>
</table>

(Dates defined by the monitoring calendar)

**ADD**

This tube details is saved for local authority Ballymena Borough Council site id 82711

<table>
<thead>
<tr>
<th>Start Date</th>
<th>End Date</th>
<th>Tube Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>30/11/2004</td>
<td></td>
<td>3</td>
</tr>
</tbody>
</table>

**Figure 32. Entering Details of multiple tube exposure**
By clicking in “View & Amend Existing Multiple Tubes”, you will be able to see the number of tubes at each site. As can be seen in Figure 33, there are 3 individual tubes active for BALLYMENA 3N (a triplicate).

You can also change the number of tubes at existing multiple tube sites, by clicking on “View and Amend Existing Multiple Tubes” – Figure 33.

### 3.3 Co-Location With Automatic Analysers

Sites may be set up as diffusion tube sites only (which the majority of sites will be) or as co-location study sites (at which there is an automatic analyser in addition to the diffusion tubes).

When setting up a new diffusion tube site at which an automatic analyser is co-located, follow the instructions in section 3.1.1 for setting up a new site. When completing the “New Site Details” screen (Figure 27), for “Network” select “Co-location Site”.

You will then be able to enter monthly mean NO₂ concentrations from the automatic analyser along with the monthly diffusion tube means. This may be useful when you come to calculate bias adjustment factors at a later date.

### 3.4 Changing Laboratory Details

The system allows you to check and update details of the analytical laboratory, and type of diffusion tubes, that you use.

To view the existing laboratory details held on the database for your Local Authority, first select the “NO₂ Site Admin” tab (as in Figure 25 at the beginning of this section), then select “View and Amend Existing Lab Details” button (Figure 34). If no laboratory details have been submitted, the screen will appear as in the example in Figure 35.
Laboratory details can be added by clicking on the “Add Lab Usage Details” button – Fig. 34. Select an option from each of the lists provided, then click “Proceed”, followed by “Submit”. (If the lab or method you use is not included in the lists, please contact AEA Energy & Environment.)

If the laboratory details shown are incorrect (or if they require updating at any time in the future) this can be done via the “View and Amend Existing Lab Details” button.
4 Amending User Details

4.1 To Change Your Password

The password issued by AEA Energy & Environment was assigned randomly. We recommend that you change your password to something easy to remember. From the home page, select the "NO2 User Admin" tab. Your user name, password and contact details will be displayed on screen, as in Figure 36 (In this example, the contact details are AEA Energy & Environment's but we have not shown a real user name or password.) Just change your password, and click on "proceed", then "submit".

![Figure 36. Changing your Password](image)

4.2 To Update Your Contact Details

Use the same facility to make changes to any contact details; the name, address, phone number, fax number or e-mail of the site operator. We suggest that the contact details supplied should be those of whoever normally changes the diffusion tubes, as he or she is usually the best person to answer any questions we may have about the data or sites.

Please enter an e-mail address if you have one. It will help us contact you quickly and easily if we need to, and we will not pass it on to any other organisations.
5 Logging off

To log off, just click on the “log off” tab, (top RHS – see Figure 3 above). This will take you back to the Log On page (Figure 2.)

We hope you will find the web-Based Data Entry System easy to use, and that it will provide a quick and convenient way of storing and sharing your NO₂ diffusion tube data to AEA Energy & Environment. However, if you do have any difficulties, please click on the link from the log on page to contact the Administrator, or else ring Jaume Targa (0870 190 6669) or Alison Loader (0870 190 6518).

This manual will be updated whenever there are significant changes to the Web-Based Data Entry System. Rather than distribute printed copies, we will make the updated version available from a link on the system’s Home Page.