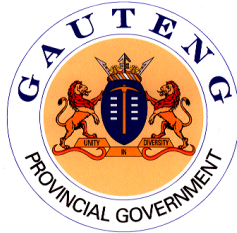# GAUTENG DACEL

HEALTH CARE WASTE INFORMATION SYSTEM

USER'S GUIDE

FOR HEALTH CARE WASTE TRANSPORTERS AND TREATMENT FACILITIES

**Prepared for Gauteng Department of Agriculture, Conservation, Environment and Land Affairs
by the CSIR**

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1 SETTING UP

The Health Care Waste Information System (HCWIS) is an internet based information system. Therefore if users already have access to the internet, no additional software needs to be installed on the users computer. For users without internet access, existing software such as Microsoft Excel or Quattro Pro would suffice.

2 SYSTEM REQUIREMENTS

The HCWIS has been designed to allow all users/reporters with varying computer systems availability, access to the system. Direct access to the HCWIS can be gained via the internet, at the following address: http://deviation.icomtek.csir.co.za/wastemanagement/
For this users must have a modem and internet account, or other means of access to the internet. Both Internet Explorer vs 5 (and above) and Netscape Navigator browsers are supported.

However, should reporters not have access to the internet, the required data may be captured in a spreadsheet or text file, in the specified format, and E-mailed, faxed or posted to the Gauteng Department of Agriculture, Conservation, Environment and Land Affairs' (DACEL) system administrator. E-mail address: @gpg.gov.za , Tel (011) 355-19**, Fax (011) 355-19**.

The format for data capture is available on the enclosed 3½ " disk, file name: upload.txt, and is outlined in more detail in Section 6.

3 REPORTER TYPES

Two reporter types or system users are required to report to the DACEL HCWIS.
  (i)   *Transporters* of HCRW, who remove the waste from Gauteng Province, for disposal in another province. Transporters are recognised by their Access Username as GP**T**-02-107.
  (ii) *Treatment facilities* within Gauteng, which receive HCRW for treatment, from both generators within the Gauteng Province as well as other provinces. Treatment facilities are recognised by their Access Username as GP**F**-01-098.

Generators of HCRW are currently not required to report to the HCWIS. Generators are identified by their Access Username as GP**G**-00-306.

3.1 Transporters

Transporters are only required to report to the HCWIS, when waste leaves Gauteng Province, for treatment and disposal in another province. The Treatment Facility ID, should be selected as the Province Name to which the waste is being taken, and not a specific treatment company ID.

3.2 Treatment Facilities

Treatment Facilities are required to report to the HCWIS on all waste received for treatment from both within Gauteng as well as from other provinces. When received from another province, the generator should be identified as the Province Name and not an individual generator ID. For small generators of HCRW within Gauteng (< 5 kg/day), the Metropolitan Municipality within which the generator resides should be selected as the generator ID, e.g. Ekurhuleni Metropolitan Council (see Figures 1 and 2 for correct Metro and Province Names).

4   ACCESS

Access to data stored within the HCWIS is restricted by means of the username and password. Reporters to the HCWIS only have access to view their own entered data. The Gauteng DACEL administrator will have access to view all entered data.

A facility has been made available for the general public to access limited, summary reports of total tonnages of HCRW generated and treated within the Province as well as amounts transported out of the province for treatment in other provinces. The public will not have access to detailed information, including facility specific information.

4.1 Login

Reporters to the HCWIS are required to login to the system so as to enter or upload data. Upon registration of companies by the Gauteng DACEL System Administrator, in the HCWIS, a unique username and password will be issued, e.g. Username: GPT-00-001, Password: GPT-00-001. Initially the password is set to the same as the username. It is therefore important for the user to change the login password as soon as possible, to limit unrestricted access to their information by other users (See section 5).

5   ADMINISTRATION FUNCTIONS

Administration functions currently available to reporters include the change in login password. By default, user passwords are created the same as the username (e.g. GPT-00-001), upon registration. It is therefore up to the user to change their password as soon as possible thereafter to ensure that no access can be gained to their reporting site by other users.

By selecting the 'Administration' tab at the top right of the screen, users are taken to the Administration screen, where a new password can be entered and verified.

In addition, users may view their details in the HCWIS by selecting the 'View My Details' next to the 'Add New Report' option, under either the 'Transporter' or 'Treatment Facility' tab (depending on user type). Should any of the information be incorrect, or require updating, the correct information should be sent to the DACEL System Administrator either by E-mail, fax or mail. Company details can not be changed online by the user.

6   REPORTING

6.1   Information to be reported

6.1.1   What must be reported ?

Information required for reporting to the HCWIS includes:
- Weight of HCRW in kilograms (kg)
- Generator ID – as generated by the HCWIS
- Transporter ID – as generated by the HCWIS
- Treatment Facility ID – as generated by the HCWIS
- Month and Year for which HCRW was generated and treated.

6.1.2   For which generators must information be reported ?

Information from small GPs, vets, clinics etc. which produce less than 5 kg per day does not need to be entered into the HCWIS.

NOTE
HCRW from all hospitals, clinics and other major HCRW generators must be reported to the HCWIS. Any other generator producing more than **5 kg per day** needs to be captured on the HCWIS.

6.1.3   How must the waste be weighed ?

The weight of HCRW generated, transported and treated may be obtained in a number of ways. The method of weighing is not prescribed, but could include:
- Accurate weighing of each container of HCRW, either by the transporter on collection, or by the treatment facility upon delivery
- Proportionate weight, as calculated by the total weighbridge load, divided by the number of boxes per generator.

Example of Proportionate Weight Calculation:
Weighbridge reading (truck + waste) = 9205 kg
Weighbridge reading (truck) = 7510 kg
Weight of waste = 1695 kg
Total number of containers in load = 185
Number of containers e.g. 136 ℓ, in load for generator (GPG-000-01) = 55
Number of containers e.g. 136 ℓ, in load for generator (GPG-000-02) = 20
Number of containers e.g. 136 ℓ, in load for generator (GPG-000-03) = 110
Calculated weight of HCRW from generator (GPG-000-01) = (55/185)*1694 = 504 kg
Calculated weight of HCRW from generator (GPG-000-02) = (20/185)*1694 = 183 kg
Calculated weight of HCRW from generator (GPG-000-03) = (110/185)*1694 = 1008 kg

6.2 Means of reporting

The data required by Gauteng DACEL may be reported to the HCWIS in a number of formats:

- (i) Online Internet Access:
    - a. entered directly into the HCWIS online, a single entry at a time
    - b. uploaded into the HCWIS with a batch of entries
- (ii) E-mail:
    - a. entered electronically into a spreadsheet or text file, in the required format (see file 'upload.txt') and E-mailed to Gauteng DACEL System Administrator.
- (iii) Mail / Fax
    - a. Printed copy of data, in the required format (see file 'upload.txt') and posted or faxed to Gauteng DACEL System Administrator.

6.2.1 Internet Data Entry

Data may be entered online, as single data entries. Once logged in, this may be done by following the outlined steps below:

```
1.  'Add New Report'
2.  Select Month and Year for which data is given
3.  Enter amount of HCRW (in kilograms)
4.  Select Waste Type (only HCRW currently available)
5.  Select Generator ID from which waste was collected
6.  Select Transporter ID who transported the waste
7.  Select Treatment Facility ID who received the waste for treatment
8.  'Save' entry
```

6.2.2 Internet Data Upload

A batch of data (i.e. more than one entry) may be uploaded directly to the HCWIS, by using the file format supplied on the 3½ " disk, file name: upload.txt. The uploading of data requires that data be captured in a comma delimited format, in the following sequence:

```
** Upload file format **
***********************

** Delimiter is a ", " <comma followed by a space>
** Format:
** Amount of Waste (kg), Generator ID, Transporter ID, Treatment Facility
ID, Waste Type (always HCRW), Date (YYYY/MM/DD), Approved (always N), T (if
the reporter is a Transporter, or F if reporter is a Treatment Facility)

** Note: If Reporter is a Transporter (T), Treatment Facility will always
be a Province:
**      Province is case-sensitive and will be one of the following:
**      Eastern Cape
**      Free State
```

```
**      Kwa-Zulu Natal
**      Limpopo Province
**      Mpumalanga
**      Northern Cape
**      North West
**      Western Cape


** Example, where Reporter is a Transporter (GPT-00-001)


133.4, GPG-00-004, GPT-00-001, Eastern Cape, HCRW, 2002/04/01, N, T
13.4, GPG-00-005, GPT-00-001, Limpopo Province, HCRW, 2002/04/01, N, T


** Example, where Reporter is a Treatment Facility (GPF-00-001)


133.4, GPG-00-004, GPT-00-001, GPF-00-001, HCRW, 2002/04/01, N, F
13.4, GPG-00-005, GPT-00-002, GPF-00-001, HCRW, 2002/04/01, N, F
```

> *NOTE*
> For transporters reporting, only a province name can be given as the treatment facility ID and not a GPF-**-*** ID. For treatment facilities reporting, unique GPG, GPT and GPF ID should be used.

Data may be entered in batch format by following the outlined steps below:

```
1.  'Add New Report'
2.  In 'Select a File to Upload' field, select browse to locate the
    upload file.
3.  Select file to upload.
4.  'Upload'
```

> *NOTE*
> Files uploaded to the HCWIS should be in one of the following formats – Text (*.txt) or Excel (*.csv).

> *NOTE*
> Unless the required reporting format is used, data will not be correctly uploaded. All data should be checked by the reporter after uploading, to ensure that the data is correct and in the correct fields.

> *NOTE*
> For batch uploads the Approved Status should always be given as 'N' for no, to allow data to be corrected or modified before being committed by the Gauteng DACEL System Administrator.

6.2.3   E-mail Data Submission

Batch data may be saved as a text file, in comma delimited format, as per the required reporting format, and submitted to the Gauteng DACEL System Administrator by E-mail or a diskette/CD-ROM. The System Administrator will notify the Reporter that the data has been received and successfully uploaded.   Should no response be received from the System Administrator, it is the responsibility of the reporter to follow up that the data has been received, is in the correct format for upload, and that all required data was supplied.

NOTE
Data already reported to the HCWIS for previous reporting months, should not be resubmitted, as this will result in duplications. Only data for the required reporting cycle, should be submitted. The name of the file submitted should reflect the company name, e.g. GPT001.txt

NOTE
Files submitted to the Gauteng DACEL System Administrator should be in one of the following formats – Text (*.txt), Excel (*.xls, or .csv), Quattro (*.wq1), Database (*.dbf)

6.2.4 Hardcopy Data Submission

The batch data for the required reporting cycle, may be printed out, as per the required reporting format, and faxed or posted to the Gauteng DACEL System Administrator. The System Administrator will notify the Reporter that the data has been received and successfully uploaded. Should no response be received from the System Administrator, it is the responsibility of the reporter to follow up that the data has been received, is in the correct format for upload, and that all required data was supplied.

NOTE
Data already reported to the HCWIS for previous reporting months, should not be resubmitted, as this will result in duplications. Only data for the required reporting cycle, should be submitted.

6.3   Frequency of reporting

During the piloting of the HCWIS, which will run from 1 August 2002 to the 31 January 2003, monthly totals of HCRW must be reported to the HCWIS, preferably on the last working day of each month. After piloting, on implementation of the HCWIS, monthly totals of HCW will need to be reported to the HCWIS on a quarterly basis, at the end of March, June, September and December.

NOTE
Data may be entered into the system at any time prior to the requested due date and will only be committed by the Gauteng DACEL System Administrator on the last working day of the month, of the reporting cycle, e.g. for quarterly reporting, the user may wish to enter the monthly totals at the end of each month, and not all at once at the end of 3 months.

6.4   Viewing Data

Data which has been entered or uploaded in the HCWIS may be viewed and modified until the data has been committed by the DACEL System Administrator. Thereafter, the data is not available for change. This is to ensure that historical data is not changed or deleted. Data may be viewed by accessing the '`Reports & Statistics`' tab available to users.

7   REPORTS AND STATISTICS

Reporters may view committed data to the HCWIS by selecting the '`Reports & Statistics`' tab. The year for which data will be reported must be selected, e.g. 2002. All data for that year, as well as the previous two years, will then be provided. Two different summary reports are available for users.

For Transporters:
> `Monthly Tonnage of HCRW Received per Generator for Year Ending 2002`
> `Monthly Tonnage of HCRW Delivered per Treatment Facility for Year Ending 2002`

For Treatment Facilities:
> `Monthly Tonnage of HCRW Received per Generator for Year Ending 2002`
> `Monthly Tonnage of HCRW Delivered per Transporter for Year Ending 2002`

The reports may be exported to a spreadsheet by selecting the '`Export Report`' function below the summary report.

8   REMINDERS

A reminder notice will be sent out by the Gauteng DACEL System Administrator, either by E-mail (if E-mail address available) or post, prior to the reporting period, to remind all reporters to submit their data by the requested data. Should data not be received on time, a second reminder notice will be sent out requesting reporters to submit their data.

9   SUPPORT

Additional software support may be obtained from the Gauteng DACEL System Administrator or from Ms Linda Godfrey of the CSIR, on E-mail: lgodfrey@csir.co.za , Tel (012) 841-3675 or Fax (012) 841-2506.

10   SOFTWARE 'BUGS'

It is recommended that any problems encountered with the HCWIS be reported to the System Administrator, as well as any recommendations which may help in improving the efficiency of reporting to the HCWIS. The attached form may be used to note any recommendations or comments in this regard.
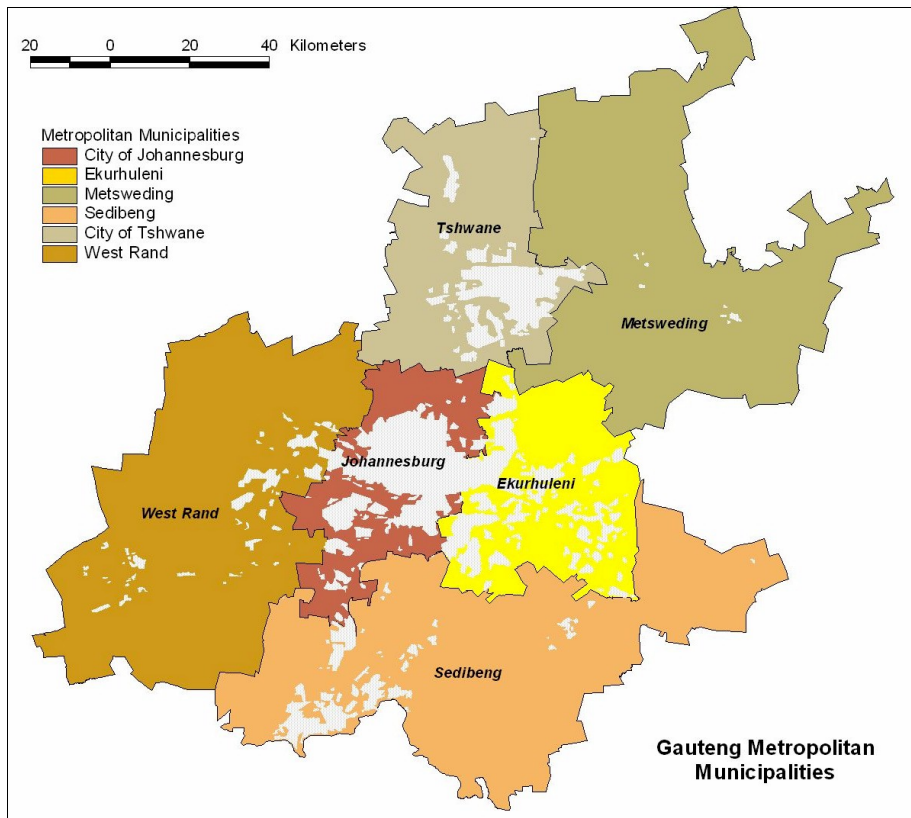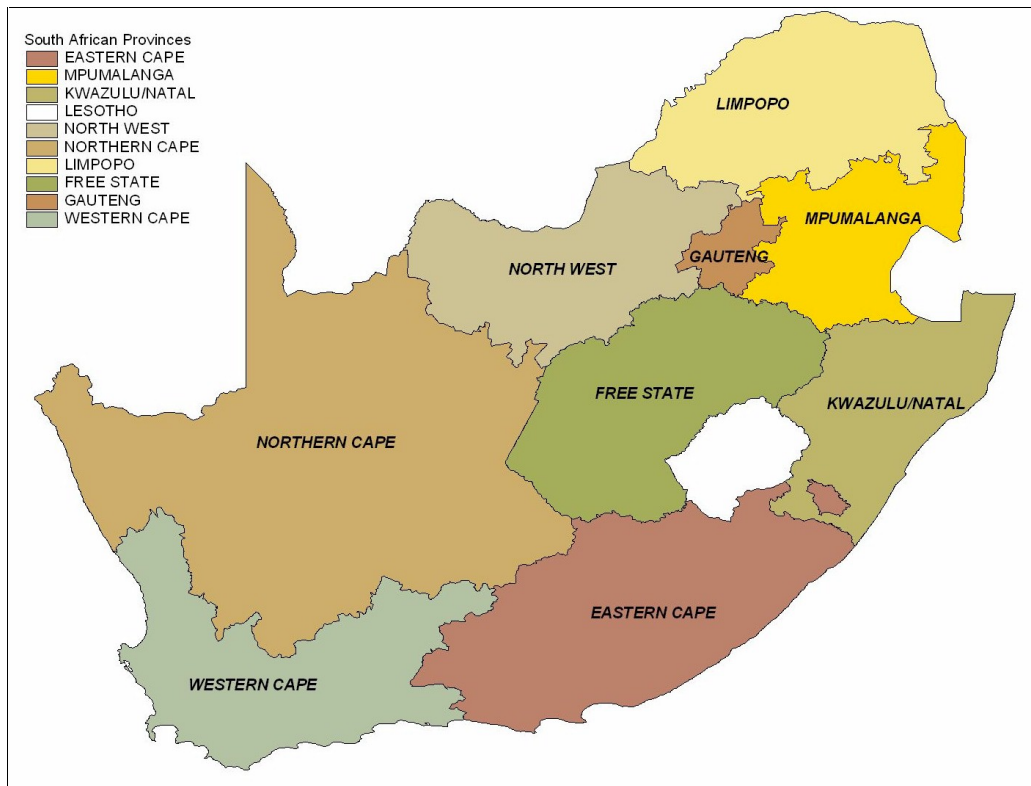
Figure 1. Gauteng Metropolitan Municipalities

Figure 2. South African Provinces

IDENTIFIED SOFTWARE PROBLEMS AND/OR SUGGESTIONS

Description of test: *Health Care Waste Information System, Pilot Testing*

Date: *1 July 2002 – 31 December 2002*

Client Name:

#	Description	Severity	CSIR Response

Client Signature: _____   Date: _____

Severity Scale: (1) Critical; (2) Normal; (3) Minor