

United States Environmental Protection Agency

TWSTEWATER INFORMATION System Tool User Guide

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Prepared for the U.S. Environmental Protection Agency by Tetra Tech, Inc.

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I. Introduction

The TWIST database was created for local, county, and state health departments or other agencies that need an adaptable tool for tracking and managing onsite and clustered wastewater treatment systems. TWIST is designed to track information related to the facility served, permits, site evaluations, system types, services provided, and complaints (see Section V on page 22 for a complete list of data elements). It can also provide guidance to private vendors who might be

developing databases with similar purposes. TWIST is a template which can be modified to meet specific needs.

TWIST is a Microsoft® Access-based data management tool. Because TWIST has a narrowly defined purpose, it does not include the whole set of

Important Note:

TWIST is not a secure database. Users concerned about security should develop secure protocols for using TWIST.

functions that can be achieved by similar Microsoft® Access databases.

TWIST Database System Requirements

TWIST is a customized Microsoft® Access-based database and therefore has similar hardware and software requirements as Microsoft® Access. TWIST can be operated on IBM-compatible personal computers (PCs) with a RAM of 128 MB or greater. The operating system should be Microsoft Windows® 2000 with Service Pack 3 (SP3), Windows XP, or later. The system is developed in Microsoft® Access 2003; therefore, some of the functionalities may not work on earlier versions. The operating systems should be Windows NT® or higher.

TWIST User Guide

This document is provided as guidance for TWIST database. The User Guide is divided into two major sections, for two slightly different audiences. The first section, "Data Management," instructs the TWIST user on entering, searching, and modifying data. This section is written for beginners who don't need to be very familiar with Microsoft® Access.

The second major section, "Database Design," is written for users who might want to modify the

TWIST database, create new forms, or otherwise make changes to accommodate specific user needs. This section would be most applicable to the intermediate or advanced Microsoft® Access user.

The User Guide is not intended to offer instructions on using Microsoft® Access. For such guidance, the user should refer to the Helpdesk available in the software.

Important Note:

Questions about the TWIST database or User Manual should be directed to Rod Frederick (202.566.1197) or Robert Goo (202.566.1201) at EPA

II. Getting Started

Downloading the TWIST Database

The database is available on CD and the Internet at www.epa.gov and may be copied onto a local or shared folder (as C:\Twist, for example). After copying the database file, make sure that the file is NOT read-only. To verify this, go to the correct file directory and rightclick on the newly copied file name. Click on **Properties**. If the **Read-Only** box at the bottom of the dialog is checked, un-check the box and click **OK**.

Important Note:

If making the database accessible to many users at the same time, the database must be saved in a shared network drive. Multiple users can enter data simultaneously, but only one person at a time can make database design changes to the database. See the "Database Design" section of this User Guide for more information.

To open the database, go to the correct file directory and double-click the file name. If a **Security Warning** dialog box opens with "*Do you want to open this file or cancel the operation?*" click **Open**. The database *Login* screen will appear (Figure 1).

State Wastewater Information System Enumerator (StateWISE) [TWIST: Login]	
: Elle Edit Insert Records Window Help AdobePDF	Type a question for help 💿 👻 🗗 🗙
The Wastewater Information System Tool (TWIST) Draft Beta-Lest Version of July 2005.	
USEPA's Microsoft Access User Login based Data Management Tool developed to manage User Name the onsite and clustered wastewater treatment Password systems.	
Login Exit Database Register Help	
This tool was developed for UO EPA by Tatia Tech as a service to state and local agencies involved with managing decentralized wastewater treatment systems. No updates are planned. Users may adapt or amend this tool without restriction.	

Figure 1. Database Login screen. To enter information into the database or to view stored data, a user name and password must be entered. First-time users must register before being allowed to log on.

User Registration

To create a new user (register a new account), click the **Register** button on the database *Login* screen. Enter all the information on the user registration screen (Figure 2) and click the **Register** button. If the registration was successful, the user will be re-directed back to the database *Login* screen (Figure 1).

State Wastewater Information System Enumerator (StateWISE) - [Personnels]	
Eile Edit Insert Records Window Help	Type a question for help 🚽 🗗
The Wastewater Information System Tool (TW User Registration First Time Registration	/IST):
Name	
Form View	

Figure 2. User Registration screen. First-time users must complete the fields on this screen before being permitted to log in to the database.

User Login

To log in to the database, returning users and first-time users who have registered can enter their user name and password while on the database *Login* screen (Figure 1). Click the **Login** button to complete the log-in process. The TWIST *Main Form* (Figure 3) will then appear.

🔎 Sta	te Wa	stewate	r Informa	tion Syste	m Enun	nerator (StateWISE) -	[MainForm : Form]		- D ×
Eile Eile	<u>E</u> dit	Insert	<u>R</u> ecords	<u>W</u> indow	Help			Type a question for help	-₽×
1	[he]	Waste	water	Inform	atior	ı System Tool (TWIST): Maiı	n Form	
			Cur	rent User		System User			
			Age	ency Divisi	ion	Division 1			
			Loc	al Office N	ame	Office 1			
			En			Permit Information			
				Enter Ne	w Servi	ice Information			
				Upo	late Exi	sting Data			
				Loo	kup Exi	sting Data			
				G	enerat	e Report			
					Log	out			
Form	view						FLTR		

Figure 3. TWIST Main Form. This form is the starting point for all data management activities.

III. Data Management

After successfully logging into the system, the user can begin to enter or view data. From the TWIST *Main Form*, (Figure 3), the user can:

- enter new data;
- update existing data;
- view existing data; and
- view a sample report.

Instructions for these activities are provided later in this section.

It is important to note here that various data categories are linked together and in some cases, "dependent" upon other categories. That is, some data cannot be entered until other prerequisite data are entered first. Several of these connections are illustrated in Figure 4.

For illustrative purposes only, Figure 4 divides data into three categories: Tier 1, Tier 2 and Tier 3. Nearly all data in TWIST is dependent upon the data entered in *General Site Information*, represented by a clear box in Figure 4 and labeled TIER 1. Until data are entered in the *General Site Information* data form, data regarding permits, site details, and the wastewater treatment

system (represented by the TIER 2 *Permit Information, Site Evaluation Information*, and *Treatment System Information* boxes in Figure 4, respectively) cannot be entered. Likewise, TIER 3 data can be entered only after the requisite TIER 2 data are entered.

In Figure 4, the TIER 3 *Complaints* box is connected to the TIER 2 *Treatment System Information* box by a broken arrow. This shows that the *Complaints* form is connected to *Treatment System Information*, but unlike the other data, *Complaints* data can be entered without corresponding *Treatment System Information* being entered. This exception to the general rule is explained later in this section.

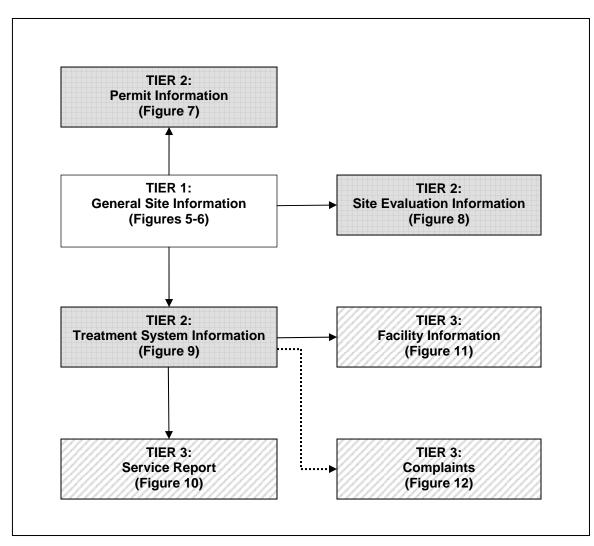


Figure 4. Relationships between various data elements in the TWIST database. TIER 3 data can be entered only after TIER 2 data, which can be entered only after TIER 1 data. An exception to this rule is the TIER 3 Complaints data, which can be entered without the TIER 2 Treatment System Information data. Boxes in this illustration also refer to figures in the User Guide showing screen shots of the various data elements.

New Data Entry

The bottom of each data entry form shows the following set of buttons:



The function performed by these buttons, from left to

right, are: navigate to the previous record, navigate to the next record, save current record, and add a new record, respectively.

The following sections explain how to enter first-time data into the TWIST database. The steps are intended as key examples illustrating the data relationships shown in Figure 4 and do not cover every data form. In addition, other than Step 1, the order of many steps can be arbitrary.

Step 1: General Site Information

As illustrated in Figure 4, most data cannot be entered into the database until TIER 1 data is entered. To begin entering new data, click the **Enter New Site and Permit Information** button on the TWIST *Main Form* (Figure 3). This will take the user to the *General Site Information* form (Figure 5).

The *General Site Information* form contains two sets of data fields—*Ownership* (Figure 5) and *Property Information* (Figure 6). Toggle between the data field sets by clicking on the tabs near the top of the general site information form. After entering the applicable data, click the save button (

Important Note:

New or edited data will only be saved by clicking on the save button **before** moving to another record or data entry form.

Important Note:

Many data forms contain a field labeled, "Apartment or Suite." To be able to save a record, this field must be completed even if the actual site address does not have an apartment or suite number. In such cases, the user should enter some place holder, such as the number "0".

State Wastewater Information System Enumera	tor (StateWISE) - [StateWISE: Site Information]	
[£] <u>F</u> ile <u>E</u> dit <u>I</u> nsert <u>R</u> ecords <u>W</u> indow <u>H</u> elp		Type a question for help 👻 🗗
	ation System Tool (TWIST): ite Information	
Property Owner Details Select name to autofill address Name	System Owner Details Same as Property Owner Name List Name	
Apartment Or Suite	Apartment Or Suite	Permit Info
Street	Street	Site Evaluation
City	City	Treatment System
State	State 🗾 🔽	Return to Main Form
Zip Code	Zip Code	
Phone Number	Phone Number	
Email	Email	
*Edits will only be saved by clicking the Save bu	tton	
Form View		

Figure 5. General site Information form showing the Ownership set of data fields. With few exceptions, data must be entered into this TIER 1 form before data can be entered into other forms.

State Wastewater Information System Enumerator (StateWISE) - [StateWISE: Site Information]	
Eile Edit Insert Records Window Help	Type a question for help 🚽 🗗
The Wastewater Information System Tool (TWIST): General Site Information	
Ownership Property Details County Place Type Township Place Name Range Zoning Classification	
Section In Overlay Zone? Plat Overlay Zone Designation 1	Permit Info Site Evaluation
Lot Number Overlay Zone Designation 2 Tax Number Property Control ID	Treatment System Return to Main Form
Parcel Or Lot Size Geographic Coordinates Latitude 0 Longitude 0	
*Edits will only be saved by clicking the Save button	
County where the property is located	

Figure 6. General Site Information form (showing the Property Information set of data fields).

Step 2: Permit Information

As a TIER 2 data element, *Permit Information* is linked to the *General Site Information* form (Figures 5-6). Therefore, the user can enter *Permit Information* only after the *General Site Information* data is entered.

Clicking on the **Permit Info** button located on the right side of the *General Site Information* form takes the user to the *Permit Information* form (Figure 7). After entering and saving data, the user can return to the *General Site Information* form by clicking the **Back to Site** button. Alternatively, the user can return to the TWIST *Main Form* by clicking the **Return to Main Form** button.

Edit View Insert Format Records		Type a question for help
132 3 3 7 1 1 B 1		
-	B ∠ U E E E 2 + A + 2 + T + - +	-
	ormation System Tool (TWIST):	
Pe	rmit Information	
rmit Details Permitee Operating Permit Main	enance Permit Violations	
General Information	Special Permit Conditions	
System Permit Number:	Variance Issued?	
Permit Type	Type Of Variance	
Permit Issuance Date	Other Conditions	
	Operating Permit Needed?	
Permit Fee		Back to Site Return to Main Form
Permit Fee Paid?	Maintenance Contractor Needed?	
Building Permit Fee Paid?	I	
Other Fee Paid?		
lits will only be saved by clicking the Sav	hutton	

Figure 7. Permit Information form. This TIER 2 data cannot be entered until the TIER 1 General Site Information form is completed.

Step 3: Site Evaluation Information

Another TIER 2 data element, *Site Evaluation* is also tied to the *General Site Information* form. Hence, the user can enter *Site Evaluation* information only after the *General Site Information* is entered.

To get to the *Site Evaluation* form (Figure 8), click on the **Site Evaluation** button located on the right side of the *General Site Information* form. After entering and saving data, the user can return to the *General Site Information* form by clicking the **Return to Site Info** button. Alternatively, the user can return to the TWIST *Main Form* (Figure 3) by clicking the **Return to Main Form** button.

	r Information System Tool (TWIST): Evaluation Information		
Site Description Control ID Date of Evaluation (MM/DD/YYY) Evaluator Name Evaluator ID	Soil Analysis Snil Analysis Type II Other, Specify Soil Analysis Result		
Did Site Pass Evaluation?	Depth of Pit (for Pit/Bore Hole) Percolation Rate (for Percolation Test)	0	Return to Site Info
Infiltration Area Landscape Info Landscape Type	Its Soil Compacted? Depth To Seasonal Ground Water	<u> </u>	Return to Main Form
Landscape Position Slope Angle (Hor to Ver)	Perched Ground Water? Depth To Bedrock	<u> </u>	
	Cuttain Drain Needed?	Y	
	Curtain Drain Installation		
	Drainfield Area Replaced? Replaced Area		
Filits will only be saved by clicking th	*		

Figure 8. Site Evaluation Information form. This TIER 2 data cannot be entered until the TIER 1 General Site Information form is completed.

Step 4: Treatment System Information

The third TIER 2 data element shown in Figure 4, *Treatment System Information*, is also tied to the *General Site Information* form.

The *Treatment System Information* form (Figure 9) is accessed by clicking the **Treatment System** button on the *General Site Information* form.

	water Information System Treatment System Informa	tion	
erol Info Track Info Treatment System Details Control Id Number of Structures Date Installed (MM/DD/VYVY Installer Details Name List Name C Apartment or Suite Street City State Zip Code Email Reuistration/Likense	Electrical/Mechanical Features Infiltration Setback System Manager Name List Name Apartment or Suite Street Gity State Jondon Massachusetts 10002 (999) 999-9999 Jack@email.com	Lack welch 201 1 Downing Street London Massachusetts T 10002 (999) 999-9999 jack@email.com	Service Reports Facility Served Return to Sure Info Return to Lookup Form
cits will only be saved by clic	king the Save button		

Figure 9. Treatment System Information form. This TIER 2 data cannot be entered until the TIER 1 General Site Information form is completed.

The *Treatment System Information* form has two TIER 3 data elements associate with it: *Service Report* and *Facility Information* (see Figure 4).

Service Report

The *Service Report* form (Figure 10) can be accessed from the *Treatment System Information* form by clicking the **Service Reports** button. In addition, the *Service Report* form can be reached from the TWIST *Main Form* (Figure 3) by clicking the **Enter New Service Information** button.

Important Note:

If accessing the Service Report form via the TWIST Main Form, the user must manually select the appropriate treatment system control ID from the pull down menu (see Figure 10). If accessing the Service Report from via the Treatment System Information form, the treatment system control ID is selected automatically.

After entering data in this form, the user can return to the *Treatment System Information* form by clicking the **Treatment System** button on the right side of the screen. Alternatively, the user can return to the TWIST *Main Form* by clicking the **Return to Main Form** button.

Lefe Lefe Lefe Lefe Leverds Window Belp Type & question for help The Wastewater Information System Tool (TWIST): Service Reports Select Treatment Street System Control ID Street Cay State Zp State Service Information Inspection Infe Service Information Service Information Service Dote: The Manual Control IN	
Service Provider Name Apartment of Suite Street City State Zip Code Phone Number Email	
Zip Code Phone Number	

Figure 10. Service Report form. A TIER 3 data element, this form is connected to the TIER 2 Treatment System Information form and is also accessible from the TWIST Main Form.

Facility Information

The *Facility Information* form (Figure 11) describes the structure served by the treatment system. This form can be accessed from the *Treatment System Information* form by clicking the **Facility Served** button.

After entering data in this form, the user can return to the *Treatment System Information* form by clicking the **Return to Treatment System** button on the right side of the screen. Alternatively, the user can return to the TWIST *Main Form* (Figure 3) by clicking the **Return to Main Form** button.

MS Sans Ser		치 · · · · · · · · · · · · · · · · · · ·	
The Wastewa	ter Information Sy Facility Inform	vstem Tool (TWIST): ation	
Facility Deterits Facility Type Dther Facility Type Facility Area Number of Bathrooms Number of Bedrooms Number of Bedrooms Number of Guests Seasonal Use Only? Season Period (MM-MM)		Number of Hot Tubs Capacity of Hot Tubs Has Water Softener? Additional Special Fixtures Year Structure Built Is Rental Property?	Return to Treatment System
Has In-Sink Grinders?	1	Other Water Supply Source	Return to Main Form

Figure 11. Facility Information form. A TIER 3 data element, this is connected to the TIER 2 Treatment System Information form.

Step 5: Complaint (Optional – Completed as Needed)

As mentioned previously in this document and illustrated in Figure 4, the data for the *Complaint* TIER 3 element can be entered even if the user does not enter related TIER 2 *Treatment System Information*. This goes against the general rule that TIER 2 data is required before TIER 3 data can be entered.

This exception is in the database because in many cases public complaints about wastewater treatment systems must be recorded before specific information about the problem treatment system is known. This allows for electronic reporting even in cases where a treatment system is not entered into the database. Thus, for information collection purposes, the *Complaint* data element is not fully dependent upon the treatment system information.

The *Complaint* form (Figure 12) is reached via the TWIST *Main Form* (Figure 3) by clicking on the **Enter New Complaint** button.

The Wastewater Information System Tool Ireatment System Location Sueet City Stale Compleint Control ID Compleint Description	Edir Insent Berords Window Help Adobe HDF	Type a question for help 🔸
Auantment ur Suite Street City State Zip Code	The Wastewater Information System Tool (TWIST): Complaint	
Street City State City State City Complaint Control ID Complaint Description Complaint Description	Treatment System Location	
City State Zip Code	Apartment or Suite	
State Zip Code Ceneral Information Complaint Control ID Complaint Description Complaint Description	Street	
Zip Code General Information Complaint Control ID Complaint Type Complaint Description Return to Main Form Return to Main Form	City	
General Infurmation Complaint Control ID Complaint Description Complaint Description Return to Main Form Return to Main Form	State	
Complaint Control ID Complaint Type Complaint Description Complain	Zip Code	
Complaint Type Complaint Description Complai	General Information	
Complaint Description	Complaint Control ID	
Return to Main Form	Complaint Type	
	Complaint Description	
	Return to Main Form	
*Edits will only be saved by clicking the Save button		
	Edits will only be saved by clicking the Save button	

Figure 12. Complaint form. This form is loosely connected to the Treatment System Information form, but is not fully dependent on Treatment System Information data.

Reviewing Data

To review previously entered data, first click on the **Lookup Existing Data** button on the TWIST *Main Form* (Figure 3). This will generate a form (Figure 13) similar in appearance to the *Main Form*.

🔎 Stat	State Wastewater Information System Enumerator (StateWISE) - [Lookup Data]									
Eile	<u>E</u> dit	Insert	<u>R</u> ecords	<u>W</u> indow	<u>H</u> elp			Type a q	lestion for help	• 8 ×
	The Wastewater Information System Tool (TWIST):									
	Edit or Lookup Existing Data									
			Curi	rent User		System User				
			Age	ncy Divisi	on	Division 1				
	Local Office Name Office 1									
	Site Related Information									
	Service Report Information									
	Complaint Information									
	Return To Main Form									
	Logout									
 	·						TD			
Form V	new					FL	.TR			

Figure 13. Edit or Lookup Existing Data window. This is accessible via the TWIST Main Form and allows the user to access and review information that has already been entered.

Clicking on the **Site Related Information** button allows the user to view previously entered data in the *General Site Information, Permit Information, Site Evaluation Information, Treatment System Information*, and *Facility Information* forms.

Important Note:

While the *Service Reports* form can be located in this manner (by navigating through the *Treatment System Information* form), it can also be accessed directly by clicking on the **Service Report Information** button in Figure 13.

When TWIST database is in Lookup Existing Data mode, users cannot modify existing data or create new records.

Finally, *Complaint* form can be reviewed by clicking on the **Complaint Information** button in Figure 13.

Updating Data

To modify previously entered data, first click on the **Update Existing Data** button on the TWIST *Main Form* (Figure 3). This will generate a form similar in appearance to form in Figure 13.

Clicking on the **Site Related Information** button allows the user to locate and modify previously entered data in the *General Site Information, Permit Information, Site Evaluation Information, Treatment System Information*, and *Facility Information* forms. Accessibility to different forms is the same as mentioned in the section *New Data Entry* found previously in this User Guide.

Unlike the *Lookup Existing Data* mode, new records can be added to TWIST database while in *Update Existing Data* mode.

Generating Data Reports

The TWIST *Main Form* contains a **Generate Report** button. Clicking this button takes the user to the window shown in Figure 14. From this window, the user can produce various data summaries. By clicking the **Site Report** button, the user can view tables containing all the data entered in the *General Site Information* form. **Site Report** is the only active button in the *Generate Report* window. The user would need to activate the other reports by modifying the database.

Edir Insent Re	erards Window Help Adobe PDF	Type a question for help
The Was	tewater Information System Tool (TWIST): Generate Reports	
	Current User Ron	
	Agency Division Coastal Carolina	
	Local Office Name Chanticleers	
	Site Report	
	Treatment System Report	
	Service Information Report	
	Permit Report	
	Return To Main Form	
	Logout	

Figure 14. Generate Reports window. This is the starting point for creating reports. The TWIST user would need to modify the database to generate other reports.

IV. Database Design

The regular menus and toolbars are disabled when the user opens the database. To be able to modify the database design or functionalities, press and hold the Shift key while opening the database. The database is in an editable mode when the screen shown in Figure 15 appears.

Microsoft Access Ele Edit View Insert Iools B B B B B B B B B B B B B B B B B B B	2000 file format)	- 12 00 13 13 - 10 ×	Type a question for help 🔸
Opiects Objects Tables Outries Outries Forms Reports Pages Macros Modules Groups Favorites	Create form in Design view Create form by using wizard Addresses Complaint EditData Facilities FrmLatLong FrmLogin MainForm Permit Permit PermitViolation	 ShowReports SiteEvaluationInfo SiteInfo TreatmentSystem 	

Figure 15. TWIST database window, showing the database's list of forms.

Adding New Data Fields or Modifying Fields

With the database in the "editable" mode and the screen in Figure 15 is showing, select **Tables** in the **Objects** list.

Right-click the table to be modified and then click on **Design View**. This will open the desired table in design view.

To add a new field move below the last existing field, type the field name in the *Field Name* column and select the field data type under the *Data Type* column (Figure 16). The user can optionally insert information about the newly-added field under the *Description* column.

-	Field Name	Data Type		
8	Complaint ID	AutoNumber		
-	Control ID	Text	Complaint control ID	
	TreatmentSystem_Address_I Number 4		Address ID for the treatment system	
	Complaint_Type_ID	Number	Type of complaint	
	Complaint_desc	Text	Detailed description of complaint	
	NewFieldname	Text		
		Text	A second s	
		Memo	Field Properties	
10 10 10 10 10 10 10 10 10 10 10 10 10 1	Field Size Format Input Mask Caption Default Value Validation Rule	50 Currency AutoNumber Yes/No OLE Object Hyperlink Lookup Wizard	The data type determine the kind of values that use	
	Validation Text		can store in the field. Pre	
Required		No	F1 for help on data type	
	Allow Zero Length	Yes		
	Indexed	No		
	Unicode Compression	Yes		
1.1	IME Mode	No Control		
	IME Sentence Mode	None		

Figure 16. Dialog box for adding or modifying a data field in TWIST database.

After modifying the data field in the table, add a control (e.g., text box or combo box) in the corresponding form. While most forms in TWIST database have the same corresponding table name, there are some exceptions. Table 1 shows the names of tables and the names of their corresponding forms.

Table 1. Corresponding form and table names in TWIST database.

Form Name	Table Name
Addresses	Addresses
Complaint	Complaint
Facilities	Facilities
Permit	Permit
PermitViolation	PermitViolation
Personnels	Personnels
ServiceReports	ServiceReport
SiteEvaluationInfo	SiteEvaluationInfo
SiteInfo	Properties
TreatmentSystem	TreatmentSystem

Enforcing User-Level Privileges

It may be necessary to specify the individuals who can access the database from a shared network. Instructions for doing this are provided in this section. To do this, click on Tools / Security / User-Level Security Wizard as shown in Figure 17.



Figure 17. First step for enforcing user-level privileges.

In the window that opens, check **Create a new workgroup information file** and click **Next**. Provide the file name, optional name, and company name in the following dialog box. Make sure that **I want to create a shortcut to open my security-enhanced database** is selected and click **Next**.

In the next dialog box, select the objects (tables, queries, etc.) to which security options will be applied, and click **Next**.

Select the groups of users to include in the security file (Figure 18), and click Next.

Security Wizard					
users you will assign to the group. Opermissions.	These optional security group accounts each define specific permissions for the users you will assign to the group. Click a group to see a list of the group's permissions. What groups do you want to include in your workgroup information file?				
🗖 🍢 Backup Operators	Group name:	Read-Only Users			
Son Full Data Users Son Full Permissions	<u>G</u> roup ID:	BJBIDMSONy4zSWbNKYG			
Service Permissions Service Permissions	Group permissions:				
Project Designers	This group can read all data but can't alter				
I I I I I I I I I I I I I I I I I I I	data or the desig	n of any database objects.			
Each group is uniquely identified by an encoded value generated from the combination of its name and its Group ID, which is a unique alphanumeric string 4-20 characters long.					
<u>H</u> elp Cancel	< <u>B</u> ack	Next > Einish			

Figure 18. Selecting users to include in the security file.

In the next dialog (Figure 19), provide permissions to the user groups and click Next.

Security Wizard All users belong to the Users group in all workgroup information files. By default the wizard assigns no permissions to the Users group, but you may want to assign limited permissions to this group. Don't assign full permissions to the Users group, because this will remove all security.					
	Would you like to grant i				
	 Yes, I would like to grant some permissions to the Users group. No, the Users group should not have any permissions. 				
	Database Tables Q	ueries Forms Report	ts Macros		
	Ogen/Run	🗮 Rgad Data	CAUTION: Anyone with a copy of		
	Open E <u>x</u> clusive Modify Design	👿 Update Data 👿 Insert Data	Access will have the same permissions that		
(1927)	Admini <u>s</u> ter	🔳 <u>D</u> elete Data	you assign to the Users group!		
Help	Cancel	< <u>B</u> ack	<u>N</u> ext > <u>Finish</u>		

Figure 19. Providing user group permissions.

Create users in the next dialog (Figure 20). Type in the User Name and Password, then click on the **Add This User to the List** button. When finished adding users, click **Next**.

Security Wizard						
password and unique in the box on the lef	Now you can add users to your workgroup information file and assign each user a password and unique Personal ID (PID). To edit a password or PID, click a name in the box on the left. What users do you want in your workgroup information file?					
Add New User>	User name: user1					
	Password:					
	PID: Th6wATMrBstAjlp2gZf					
	Add This User to the List					
Each user is uniquely identified by an encoded value generated from the user name and PID. The PID is a unique alphanumeric string 4-20 characters long.						
Can	cel < <u>B</u> ack <u>N</u> ext > <u>F</u> inish					

Figure 20. Dialog box for adding users.

Assign user group privileges to newly created users or assign users to different groups (Figure 21). Click **Next.**

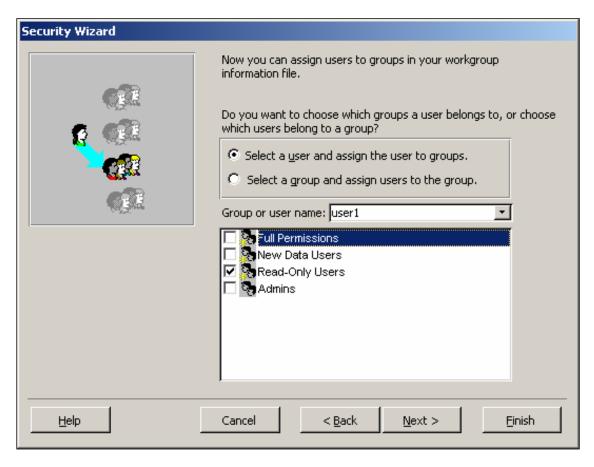


Figure 21. Assigning user group privileges.

In the next window, click Finish.

For more details, search the Microsoft® Access Helpdesk for "About user-level security."

V. List of Data Elements in TWIST

TWIST is designed as an easy-to-use tool for entering, storing, and reporting data on onsite/cluster system site locations, permits, services, and other information. The following table lists the data elements in TWIST. Users can select the data fields they wish to fill in – it is not necessary to fill in all the blanks. For example, counties in the eastern U.S. will not likely list the "range" and "section" location information, since those terms are mostly used out West.

Drop-down boxes with checkoff selections are used where small arrows appear to the right of the data field title. Text entries should be typed in where the data field box does not show a drop-down arrow. Local users should coordinate and agree on which data fields will be used, and how terms are defined locally before using TWIST. Users can adapt TWIST in any manner they choose, such as adding or deleting data fields, changing the appearance of the pages, etc. TWIST is a free-use tool developed by US EPA and Tetra Tech as a service to state, local, and tribal agencies and other users from the public and private sectors.

Data category	Data elements in TWIST				
Main Form (Front Page)	Agency Name Agency Division Local Office Name Person Entering Data Username Password	Action Taken Date DD/MM/YYYY Enter New Site & Permit Info Enter New Complaint Enter New Service Info Update Existing Data Lookup Existing Data Generate Report Report Type			
General Site Information	Property Owner Name Apt/Suite/PO Box Street City State Zip Code Phone # Email System Owner (If Different) Name Apt/Suite/PO Box Street City State Zip Code	Property Information County Township Range Section Plat Lot # Tax Number Parcel/Lot Size In City/Village/Town Limits Y/N City/Village/Town Name (If Applicable) Zoning Classification Overlay Zone Y/N Overlay Zone Designation 1 Overlay Zone Designation 2 Property Control/ID # Lat/Long (GPS) Coordinates:			
Permit Information	Phone # Email Permit Type New System Installation Replacement System System Repair Holding Tank Only Other System Permit Number Permit Issued To	Maintenance Contract Needed Y/N Control or ID # Name of Maintenance Contractor Apt/Suite/PO Box Street City State Zip Code Phone			
	Name ID Number Apt/Suite/PO Box Street City State Zip Code Phone # Email Permit Details Date of Permit Issuance DD/MM/YYYY Permit Fee Permit Fee Paid Y/N Building Permit Fee Paid Y/N Other Fee Paid Y/N Special Permit Conditions Variance Issued Y/N Type of Variance Issued (Specify): Other Conditions (Specify)	Email Permit Violations Date of Violation DD/MM/YYYY Permit Violation # Violation Investigator Name Violation Investigator ID # Type of Violation Sewage Surfacing Discharge to Surf. Water Receiving Water Name Installed W/O Permit Operating W/O Permit Action Taken (Specify): Compliance Date DD/MM/YYYY Compliance Confirmed Y/N Fine Assessed Y/N Fine Amount Fine Paid Y/N			

	Operating Permit Needed Y/N Operator Name ID Number Apt/Suite/PO Box Street City State Zip Code Phone # Email	Type of Operating Permit Local State NPDES Operating Permit # Date of Permit Expiration Permit Fee Amount Fee Paid Y/N Operating Permit Conditions Inspections Monthly/Quarterly/Annually Every Years Pumpout Every Years Effluent Sampling Y/N Monthly/Quarterly/Annually Groundwater Sampling Y/N Monthly/Quarterly/Annually
Facility Served	Facility Address (If Different) Apt/Suite Street City State Zip Code Type of Facility Single Family Residence # Bedrooms # Bedrooms # Bedrooms # Bedrooms # Baths Square Footage Multi-Family Residential # of Dwelling Units Multiple Single Family Homes # Homes Served Commercial/Public Facility Office Building Retail Store Restaurant Service Station Park Campground Youth/Other Camp RV Park Camp Resort Church Airport Bar/Tavern Hotel/Motel Laundry Theater Industrial (Sanitary Only) Other Facility Type (Specify)	Facility Information Facility Square Footage sq ft # Bathrooms # Sleeping Rooms # Employees # Customers/Guests Seasonal Use Y/N Months in Use MM – MM Special Fixtures In-Sink Grinder(s) Hot Tub(s) Drained to Treatment System # of Hot Tubs Hot Tub(s) Capacity Gallons Total Water Softener Other (Specify) Approximate Year Structure(s) Built YYYY Rental Property Y/N Last Property Transfer MM/YYYY Water Supply Source Public Water Line Well Private Public Cistern Lake Spring Other (Specify): Untreated Treated

Site Evaluation Information	Site Description Control or ID # Date of Site Evaluation DD/MM/YYYY Evaluator Name Evaluator ID # Site Passed Evaluation Y/N Area System Density: #s/Acre = <u>Type of Soil Analysis</u> Backhoe Pit Auger Holes Depth of Pit/Bore Hole ft Percolation Test Min/Inch Other (Specify) <u>Landscape Position – Infiltration Area</u> Level / Slightly Rolling Top of Slope Upper Slope Shoulder Middle of Slope Lower Slope Toe of Slope Floodplain Slope Angle: Horiz to Ver	Soil Analysis Results Soil Drainage Class Excessively Drained Somewhat Excessively Drained Well Drained Moderately Well Drained Somewhat Poorly Drained Poorly Drained Very Poorly Drained Soil Compacted Y/N Depth to Seasonal GW inches Perched GW Table Y/N Depth to Bedrock inches Curtain Drain Needed Y/N Curtain Drain Installation N E S W side Available Drainfield Area sq ft Drainfield Replacement Area Y/N Replace Area sq ft
Treatment System	Installation Information Control or ID # # of Structures Served Date Installed DD/MM/YYYY Installer Name Apt/Suite/PO Box Street City State Zip Code Phone Installer Registration/License/Certification # System Manager (If Not Homeowner) Homeowner Other Manager Name of Manager Name of Manager Name of Manager Apt/Suite/PO Box Street City State Zip Code Phone Moderate Information Design Flow Gallons Per Day Waste Strength Moderate (e.g., Residential) High (e.g., Some Kitchen Service) Very High (e.g., Restaurant) Non-Conventional Wastes (Specify)	Tanks Grease Trap Tank # 1 Size Gallons Type of Material Concrete Plastic Fiberglass Metal Grease Trap Tank # 2 Size Gallons Type of Material Concrete Plastic Fiberglass Metal Septic Tank #1 Size Gallons Type or Material Concrete Plastic Fiberglass Metal Septic Tank #1 Size Gallons Type or Material Concrete Plastic Fiberglass Metal Manufacturer Compartments: 1 or 2

Post-Tank Treatment Soil Infiltration Only Aerobic Treatment Unit Wetland Lagoon Media Filter Sand or Gravel Mound Type Contained in Tank/Structure Textile Compartment Peat Modules Other Media (Specify) **Recirculation Y/N** Sequencing Batch Reactor Soil Infiltration System Infiltration Area _____ sq ft Depth of Infiltration System ____ inches Distribution System Type Perforated Pipe & Aggregate Leaching Chambers Gravelless Pipe Pipe & Plastic/Other Drain Modules Pressure Drip Tubing Seepage Pit Spray Field Evaporation Field/Trenches Other (Specify) # of Trenches/Lines Total Length of Trench/Lines ft Observation Wells in Trenches Y/N Surface Discharging System Y/N

Surface Discharging System Y/N Receiving Water Name _____ NPDES Permit # _____

Flow

Gravity Flow Pumped Distribution

Service Reports Service Information Service Date DD/MM/YYYY Service Control or ID # Service Provider Name Apt/Suite/PO Box Street City State Zip Code Phone Email Registration/License #

Septic Tank #2 Size ____ Gallons Type of Material Concrete Plastic Fiberglass Metal Manufacturer Compartments: 1 or 2 Septic Tank #3 Size ____ Gal Type or Material Concrete Plastic Fiberglass Metal Manufacturer Compartments: 1 or 2 Tank Risers Above Final Grade Y/N Effluent Filter(s) on Tanks Y/N **Electrical/Mechanical Features** Pumps Y/N # of Pumps Timers Y/N Float Switches Y/N Siphon Y/N Alarms Y/N Alarm Type Modem or Remote Sensor Y/N Infiltration System Setbacks Groundwater Well Within 200 ft Y/N Distance to Well ____ ft Well in Use Y/N Depth of Well _____ ft Distance to Stream/Lake/Wetland ____ ft Stream/Lake/Wetland Name Distance to Property Line(s) ____ ft Distance to Structures(s) Tank Pumpout # of Tanks Pumped Gallons Pumped Septage Destination Septage Destination ID/Control # Manifest/Control # System Repair Control or ID # Type of Repair Tank Repair/Replacement Pumps/Switches Infiltration System **Rehabilitate Infiltration System Replace Infiltration System** Other (Specify)

Inspection

Pre-Coverup Construction Inspection Regular/Scheduled Inspection Complaint Investigation Complaint Received Date Complaint Control/ID # Nature of Complaint Sewage Surfacing Discharge to Water Body Odors No Installation Permit Installation Sediment Runoff Complaint Referred To (Specify)

Components Inspected Tank(s) 1 2 3 Infiltration Area(s) 1 2 3 Float Switches Alarms Instrument Panel Pumps Other Components (Specify) System In Compliance Y/N

Repair Needed Y/N Tank Repair/Replacement Needed Infiltrat. Field Repair/Replacement Needed Pumps/Control Repair/Replace. Needed Media Filter Repair/Replacement Needed Complete System Replacement Needed Compliance Required By DD/MM/YYYY Compliance Achieved On DD/MM/YYY

System to be Replaced Y/N New Permit # _____

Complaint Address Control or ID Number

Complaint Type Complaint Description

