



Missouri  
Department of  
Natural Resources

# Sanitary Sewer Overflow/Facility Bypass Application

Water Pollution Control facilities use the Sanitary Sewer Overflow/Bypass application to report Sanitary Sewer Overflow and Facility Bypass events to the Missouri Department of Natural Resources.

*Reporting Events to  
the Department of  
Natural Resources.*

March 1, 2013

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## **Sanitary Sewer Overflow/Facility Bypass Application**

The SSO Bypass application can help wastewater officials quickly and easily report sanitary sewer overflows and wastewater facility bypasses, in order to meet Missouri's reporting requirements established in permit conditions. The application also serves as a database to store and update SSO and bypass information. To gain access, facilities must log in to the Citizen's Application Gateway. Department of Natural Resources users access the SSO Bypass application through a separate Internet address, using their department-issued log-on credentials.

SSOs can be caused by a variety of reasons including blockages, line breaks, sewer defects, lapses in sewer system operation and maintenance, inadequate sewer design and construction, power failures, and vandalism. An SSO is defined as an untreated or partially treated sewage release from a sanitary sewer system. Overflows can occur during dry or wet weather and at any point in the collection system, and include overflows from manholes. A bypass is a release of untreated, or partially treated, wastewater at the treatment plant.

Wastewater systems are required to report bypasses and sanitary sewer overflows and are encouraged to use this application rather than telephoning the "24-hour" report or mailing in the "5-day" written reports. Wastewater system staff can still phone/write and DNR staff in the Regional Offices will enter the data in the SSO Bypass application. If you have questions about the online reporting application, please contact Keith Bertels at 573-526-4227.

## **Citizens Application Gateway**

Before using the Sanitary Sewer Overflow system the first time, a facility official must establish a user account through the department's Citizens Application Gateway. The official will access the SSO Bypass application through the Citizen Application Gateway each time he or she wants to update an existing record or enter a new one.

## **Establishing User Credentials**

To establish user credentials, go to the gateway's home page, which is located at <http://www.dnr.mo.gov/modnrcag/>, and click on the "Request User Account" link.

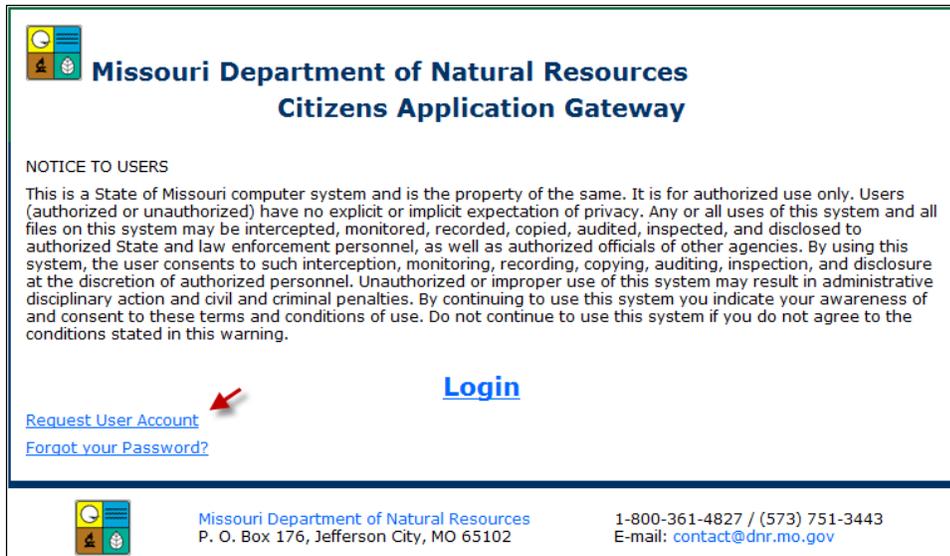


Figure 1 - Citizens Application Gateway Login Screen

The gateway will open a new page, which has an image with an embedded security code. Read the code and enter it into the Security Code field. The code is different for each request, so the code in the example below will not work for a request that is made later.



Figure 2 - Citizens Application Gateway User Account Request Screen

Enter a valid e-mail address in the second field and click on the “Submit” button.

The Citizens Application Gateway will send you an e-mail message with a link that will help you create an account.

From: [contact@dnr.mo.gov](mailto:contact@dnr.mo.gov)  
To: [example@gmail.com](mailto:example@gmail.com)  
Subject: DNR Account Request  
Sent: Dec 14, 2012 8:01 AM

Follow this link to create your account:  
<https://www.dnr.mo.gov/modnrcag/accountrequest.do?email=example@gmail.com>

Figure 3 - Sample E-mail Message that provides a link for Account Creation.

Follow the link to the User Account Maintenance screen.

**Missouri Department of Natural Resources  
Citizens Application Gateway**

### User Account Maintenance

*Fields labeled with \* are required.*

\*First Name   
\*Last Name   
Organization   
Department   
Title   
\*Phone Type   
Country Code   
\*Telephone   
\*Address Type   
\*Address 1   
Address Line 2   
\*City   
\*State   
\*Zip Code   
\*County   
\*Country   
\*E-mail Address Type   
\*E-mail Address   
\*Security Question   
\*Answer   
Password must contain seven to forty characters and contain at least one digit, one upper case letter, one lower case letter and one non-alphanumeric (for example: !, \$, #, or %) character. Do not use your first name, last name or user id in your password.  
\*Password   
\*Confirm Password   
\*Applications  
 SSO Bypass  
 ePermitting

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E-mail: [contact@dnr.mo.gov](mailto:contact@dnr.mo.gov)

Figure 4 - Citizens Application Gateway User Account Maintenance Screen

Enter your information on the User Account Maintenance screen. Fields with a red asterisk are required to create an account. Make a confidential record of the security question and answer, because this will be important if you lose your password. A password must contain seven to forty characters and contain at least one digit, one upper case letter, one lower case letter and one non-alphanumeric (for example: !, \$, #, or %).

Be sure to check the box beside “SSO Bypass”. When the page is completed, click on the “Add” button.

The Citizens Application Gateway will provide a message at the top of the screen to indicate that your user account has been added. Make note of the user name issued by the system, in this case “nr.bertk2”. User names will not expire; however, passwords will expire after 60 days. If your password expires you will not be able to log into the SSO portal. See the [Changing a Password](#) section for more information.



Figure 5 - Citizens Application Gateway User Account Maintenance Screen Showing Added Account

The gateway will also provide the user name and a “Login” link at the bottom of the User Account Maintenance screen. As indicated in the message, there may be a delay between the time a user establishes credentials and the time when he or she can access the SSO Bypass application.

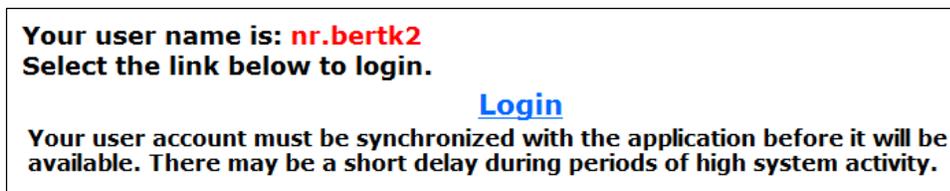


Figure 6 - Citizens Application Gateway User Account Maintenance Screen Showing Login Link

Each time a facility official visits the Sanitary Sewer Overflow system, he or she must log in to the Citizens Application Gateway, so have your user name and password available.

### Logging into the Gateway

Before using the Sanitary Sewer Overflow system, first log in to the department’s Citizens Application Gateway, which is located at <http://www.dnr.mo.gov/modnrcag/>. Missouri Department of Natural Resources staff use a different mechanism to access the SSO Bypass application. First-time users of the Citizens Application Gateway should see the [Establishing User Credentials](#) section of this document.

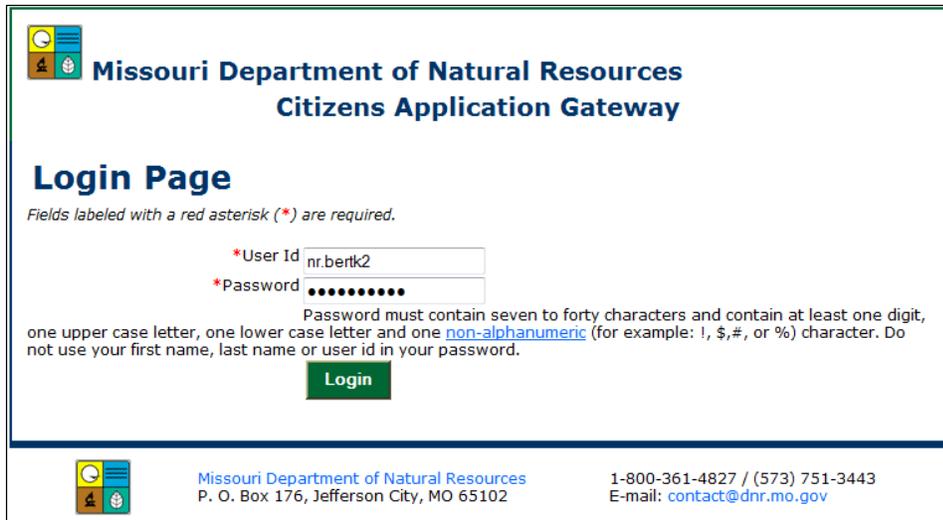


Figure 7 - Citizens Application Gateway Login Page

Once a user logs in, the Citizen’s Application Gateway displays links which allow user account maintenance, log off from the system, or navigation to the SSO Bypass application.



Figure 8 - Citizens Application Gateway Main Menu

To maintain your user account or reset your Citizens Application Gateway password, click on the “Maintain User Account or Reset Password” link. See the [Changing a Password](#) section for more information.

To enter or edit an SSO or Bypass event, click on the SSO Bypass link.

### Changing a Password

If you know your password and would like to change it, first log in to the Citizens Application Gateway, and then click on the “Maintain User Account or Reset Password” link in the main menu. The gateway will open the User Account Maintenance screen.

**Missouri Department of Natural Resources  
Citizens Application Gateway**

**User Account Maintenance**

User Id **nr.berth2**

*Fields labeled with \* are required.*

\*First Name [text input]  
 \*Last Name [text input]  
 Organization [text input]  
 Department [text input]  
 Title [text input]  
 \*Phone Type [text input]  
 Country Code [text input]  
 \*Telephone [text input]  
 \*Address Type [text input]  
 \*Address 1 [text input]  
 Address Line 2 [text input]  
 \*City [text input]  
 \*State [text input]  
 \*Zip Code [text input]  
 \*County [text input]  
 \*Country [text input]  
 \*E-mail Address Type [text input]  
 \*E-mail Address [text input]  
 \*Security Question [text input]  
 \*Answer [text input]

Password must contain seven to forty characters and contain at least one digit, one upper case letter, one lower case letter and one [non-alphanumeric](#) (for example: !, \$, #, or %) character. Do not use your first name, last name or user id in your password.

\*Password [password input]  
 \*Confirm Password [password input]  
 \*Applications  
 SSO Bypass  
 ePermitting

**Update** **Cancel**

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 E-mail: [contact@dnr.mo.gov](mailto:contact@dnr.mo.gov)

Figure 9 - Citizens Application Gateway User Account Maintenance Screen

Enter and confirm your new password, and then click on the “Update” button.

If the password is forgotten, navigate to the [Citizens Application Gateway](#), and then click on “Forgot your Password?” to re-establish log on credentials. See Figure 1, above. The gateway will open a screen to request your e-mail address.

**Missouri Department of Natural Resources  
Citizens Application Gateway**

**Forgot your password?**

You forgot your password?

- Give us your email address (the one you registered with).
- Answer your security question.
- Check your inbox for a note from us (we'll send it right now).
- Click the link in the email to reset your password.

*Fields labeled with \* are required.*

\*E-mail Address

**Submit** **Cancel**

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P. O. Box 176, Jefferson City, MO 65102  
1-800-361-4827 / (573) 751-3443  
E-mail: [contact@dnr.mo.gov](mailto:contact@dnr.mo.gov)

Figure 10 - Citizens Application Gateway Forgotten Password Screen

Enter the e-mail address that was used to establish user credentials, and then click on the “Submit” button. The gateway will ask a security question. Answer the question and click the “Submit” button again.

**Missouri Department of Natural Resources  
Citizens Application Gateway**

**Forgot your password?**

You forgot your password?

- Give us your email address (the one you registered with).
- Answer your security question.
- Check your inbox for a note from us (we'll send it right now).
- Click the link in the email to reset your password.

*Fields labeled with \* are required.*

\*E-mail Address |  @gmail.com

Security question: What is your mother's maiden name?

\* Answer:

**Submit** **Cancel**

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1-800-361-4827 / (573) 751-3443  
E-mail: [contact@dnr.mo.gov](mailto:contact@dnr.mo.gov)

Figure 11 - Citizens Application Gateway Forgotten Password Screen with Security Question

The gateway will send a message to the indicated e-mail address and will display a notification that the message was sent.

-----Original Message-----  
From: [contact@dnr.mo.gov](mailto:contact@dnr.mo.gov)  
To: [redacted]@gmail.com  
Subject: Temporary Account Password  
Sent: Dec 14, 2012 11:05 AM

Follow this link to set your password:  
<https://www.dnr.mo.gov/modnrcag/ucp.do?key=8wXvGJW0vtTuWJcmAcCOgQ>

Figure 12 - Citizens Application Gateway with Link to Reset Password

**Missouri Department of Natural Resources  
Citizens Application Gateway**

**Forgot your password?**

- Sent request for: nr.berk2

You forgot your password?

- Give us your email address (the one you registered with).
- Answer your security question.
- Check your inbox for a note from us (we'll send it right now).
- Click the link in the email to reset your password.

*Fields labeled with \* are required.*

\*E-mail Address: [redacted]@gmail.com

Security question: What is your mother's maiden name?

\* Answer: [redacted]

**Submit** **Cancel**

 Missouri Department of Natural Resources  
P. O. Box 176, Jefferson City, MO 65102

1-800-361-4827 / (573) 751-3443  
E-mail: [contact@dnr.mo.gov](mailto:contact@dnr.mo.gov)

Figure 13 - Citizens Application Gateway Forgotten Password Screen with Notification Message

Follow the link in the e-mail message to the Reset Password screen.

**Missouri Department of Natural Resources  
Citizens Application Gateway**

### Reset Password

*Fields labeled with \* are required.*

\*Email Address

Password must contain seven to forty characters and contain at least one digit, one upper case letter, one lower case letter and one [non-alphanumeric](#) (for example: !, \$,#, or %) character. Do not use your first name, last name or user id in your password.

\* Password

\* Confirm Password

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E-mail: [contact@dnr.mo.gov](mailto:contact@dnr.mo.gov)

Figure 14 - Citizens Application Gateway Password Reset Screen

Enter the e-mail address that was used to establish user credentials. Enter and confirm the new password, and then click on the “Submit” button. The gateway will display a notification that the password has been reset.

**Missouri Department of Natural Resources  
Citizens Application Gateway**

### Reset Password

**• Your password has been reset**

*Fields labeled with \* are required.*

\*Email Address

Password must contain seven to forty characters and contain at least one digit, one upper case letter, one lower case letter and one [non-alphanumeric](#) (for example: !, \$,#, or %) character. Do not use your first name, last name or user id in your password.

\* Password

\* Confirm Password

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E-mail: [contact@dnr.mo.gov](mailto:contact@dnr.mo.gov)

Figure 15 - Citizens Application Gateway Password Reset Screen with Notification Message

## SSO Bypass Application

The SSO Bypass application can both ease the reporting of and meet Missouri’s reporting requirement for reporting sanitary sewer overflows and wastewater facility bypasses. When an event record is created or modified, notification is sent to appropriate staff at the Missouri Department of Natural Resources.



Details screen, which is divided into four parts: Event Details, Wet Event Details, Location Information, and 5-Day Report. [Appendix 1](#) provides definitions for each of the fields in the Event Details screen.

Figure 18 - SSO Bypass Application Event Details Screen

Some special characters may not be used in the fields of the Event Details screen because they prevent the proper function of the SSO Bypass application. [Appendix 2](#) provides a list of the prohibited special characters.

The Event Details section allows entry of basic event information, such as when the event occurred, when it was reported and by whom, is the size of the event, what caused it, etc. The event details screen will be different for wet weather and dry weather reports.

Figure 19 - SSO Bypass Application Event Details Screen, Event Details Section

Items with a single asterisk are required in order to save and submit a record. Gathering this information ahead of time will help speed entry of the event into the application.

Items with a double asterisk are required for the 5-day report. If you enter the Event End Date and Time, the SSO Bypass application will require completion of the 5-Day Report section, which is described below. You may initially enter and submit an event without completing the 5-Day Report section. This will result in an ongoing event. The 5-Day Report section must be completed to end an event record.

To choose multiple items in the “Additional Impact” box, hold the “Control” key and click on the items. This approach can also be used to remove a selection.

The Wet Event Details section will only show up on the page if you click “Wet” under the “Wet or Dry” dropdown box in the Event Details section, as seen above. If the event was a “Wet” event, then information about the precipitation that caused the event must be entered in order to save the record.

The screenshot shows a form titled "Wet Event Details" with the following fields:

- \*Wet Event Start Date:  (MM/DD/YYYY)
- \*\*Wet Event End Date:  (MM/DD/YYYY)
- \*Precipitation Type:  (dropdown menu)
- \*\*Precipitation Amount (inches):
- \*Soil Conditions:  (text area)

**Figure 20 - SSO Bypass Application Event Details Screen, Wet Event Details Section**

The SSO Bypass application uses a map in the Location Information section to collect required information for the SSO or bypass event. Location information is needed to save the event record. Use the zoom and navigation buttons to locate the event. Zoom in to allow marker placement. The marker is available for placement only in the higher-resolution maps. Click on the marker, which is the red dot in the upper left corner, and then click on the event location.

**Location Information**

County:

UTM Easting:

UTM Northing:

\* Location Description:

---

Double click on the map to zoom in. The mouse wheel or the slider may be used to zoom in or out. Use the pan buttons or hold down the left mouse button and drag the map to pan to another location. Select a county from the drop down to zoom to that county.

County:

Scale 1:12,000 Easting: 482,007 Northing: 4,325,632 NAD83 UTM 15N

● Select the red indicator to activate the marking tool then single click on the map to mark the location of your event.

**Figure 21 - SSO Bypass Application Event Details Screen, Location Information Section**

The initial report and 5-day report may be entered together if the event has ended. If the “Event End” fields are entered in the Event Details section above, then the 5-day report fields at the bottom are required. If the 5-day report information is entered and submitted, the facility user cannot change the information. The facility may contact the Department to provide additional information or change information.

**5 - Day Report**

\*\*Estimated Final Total Volume (gallons):

Did bypass reach Waters of the State?

\*\*Response:

**Add Event**

---

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 E-mail: [cleanwater@dnr.mo.gov](mailto:cleanwater@dnr.mo.gov)

**Figure 22 - SSO Bypass Application Event Details Screen, 5-Day Report Section**

When you are ready to save the event record, click on the “Add Event” button in the lower right corner of the screen to save the updated information. You will receive a confirmation number at the top of the form. Facility users should save a copy of the record. If the event is not submitted it will not be saved and no record will be maintained.

When ready to leave the Sanitary Sewer Overflow system, click on the “Logout” link in the upper right corner of the screen.



Figure 23 - SSO Bypass Application Banner with Logout Link

**Searching for an Existing Event**

When a wastewater official has logged in through the Citizen’s Application Gateway and chosen the Sanitary Sewer Overflow system, the SSO Event Search screen displays.

The screen allows a search by permit number, city, facility name, and county. It searches for facilities, whether or not they have associated SSO or Bypass events.



Figure 24 - SSO Bypass Application Event Search Screen with Event Search Results

Fill in some of the fields and click on “Search”. Completing only one or two fields yields better search results. The results display at the bottom of the screen and allow creation of a new event or update of an existing event.

The page is designed to show only “open” events, but it can display all events if the “Show All” box in the top right corner of the screen is checked.

If a facility has associated SSO or Bypass events, those are displayed in the Event Start Date and Event Location columns. To open an event record, click on the Event Start Date; this is a link to the event record.

**Editing an Event**

Access the Event Details screen through the SSO Event Search screen. On the search screen, click on the event start date listed on the right side of the screen to access an existing event record.

The guidance for editing an existing SSO or Bypass event is similar to the guidance for [Entering a New Event](#). Information about field definitions and prohibited characters can be found in [Appendix 1](#) and [Appendix 2](#), respectively.

The initial report and 5-day report can be entered together if the event has ended. If the “Event End” fields are entered, then the 5-day report fields at the bottom are required. **When the 5-Day Report**

**section has been completed and saved, only a Department of Natural Resources user can make further edits.**

When ready to leave the SSO Bypass application, click on “Logout” in the upper right corner of the screen.

## Appendices

### Appendix 1 - Definitions

#### Event Details

##### Type of Event

- Bypass = at the wastewater treatment plant
- Overflow = in the collection system

##### Wet or Dry Event

- Wet = caused by precipitation event (inflow and infiltration). If Wet is selected, a Wet Event Details section will appear on the report and must be completed).
- Dry = caused by other than precipitation event (plugged line, electrical outage).

Event Begin Date = Date when bypass or overflow was discovered or the facility was notified by a third party.

Event Begin Time = Time when bypass or overflow was discovered or the facility was notified by a third party.

Event End Date = Date when bypass or overflow ceased (If a date is entered into the Event End Date, the facility must complete all required fields including the 5-Day Report).

Event End Time = Time when bypass or overflow ceased.

Initial Report Date = Date when initially reporting the bypass or overflow. All bypasses and SSO's are required to be reported to the Department within 24 hours.

Reported By = Name of person initially reporting the bypass or overflow.

Immediate Contact = Phone number where someone familiar with the situation can be contacted immediately in case the department needs further information. This should be a cell number or another phone number where someone is readily available.

Ongoing = Check if the bypass or overflow is ongoing at the time of the initial report.

Estimated Volume at time of Initial Report (gallons) = Estimated total volume at the time of initial report. A volume must be reported to submit an event record.

Is bypass reaching Waters of the State = Check if the bypass reached Waters of the State. (Waters of the State is any drainage or waterbody that is not totally confined to the property).

Discharged To = Pick the one that best describes the place that the bypass or overflow discharged to.

Cause of Event = Pick the one that best describes the cause of event.

Cause of Event Comments = Comments can be added to further describe the cause. The comments are limited to 1,000 characters.

Event Type = Pick the one that best describes the event type.

Additional Impact = Pick the impacted area(s) that best describe the impact. (Hold down the control key on the keyboard to choose more than one. If an Additional Impact was chosen by error, hold down the control key on the keyboard to deselect).

### **Wet Event Details**

Wet Event Start Date = Date of when the precipitation event started that caused the bypass or overflow.

Wet Event End Date = Date of when the precipitation event ended that caused the bypass or overflow.

Precipitation Type = Pick the precipitation type that caused the bypass or overflow.

Precipitation Amount (inches) = How much precipitation occurred that caused the bypass or overflow. If Snow is selected in the Precipitation Type, list the amount of snow in inches.

Soil Conditions = Describe the soil conditions at the time of the bypass or overflow. (Examples are Dry for dry soil conditions, Moderate for moist soil conditions, and Saturated for wet soil conditions).

### **Location Information**

County = Pick the county where the bypass or overflow occurred.

Location Description = Describe the location of the overflow. Manhole number, street address, landmark, etc.

UTM Easting = If the UTM is known, please fill in,

UTM Northing = If the UTM is known, please fill in,

### **5-Day Report**

Estimated Final Total Volume (gallons) = Final total volume of the bypass or overflow.

Did bypass reach Waters of the State = Check if bypass or overflow entered Waters of the State after the initial report was submitted.

Effectuated Waterbody = Name of the Waters of the State that the bypass or overflow entered.

Response = What did the facility do to clean up the bypass or overflow (unplugged line, jetted line, limed area, pumped wastewater back to sanitary sewer, placed warning signs, etc.)

## Appendix 2 – Prohibited Characters

The following special characters are prohibited from use in the SSO Bypass application, because they prevent the proper function of the application.

# (pound or number)\	( (open parenthesis)
: (colon)	) (closed parenthesis)
! (exclamation point)	_ (underscore)
@ (at sign)	+ (plus sign)
' (tick mark)	? (question mark)
– (dash)	; (semicolon)
. (period)	, (comma)
/ (back slash)	~ (tilde)
\ (forward slash)	TAB
\$ (dollar sign)	Carriage Return
% (percentage)	New Line
* (asterisk)	