**Purpose**
The purpose of identifying and reducing illegal connections is to reduce unaccounted treated Water and increase revenues, prevent cross contamination from poor sources and improve service level. A systematic follow up on disconnected accounts is necessary.

**Scope**
This SOP describes the procedures of identifying, disconnecting and following up illegal connections in the water supply network.

**General Responsibilities:**
The Customer Services Manager is responsible for the performance of the whole process „Illegal connections“.
The Customer Services Manager is the spin in the web between all involved departments and units and, therefore, responsible that the workflow is efficient and effective, and that everybody is supporting the process.

The Senior Credit Control Supervisor is responsible for implementation of the process, i.e. organizing and managing the resources and the delivered quality.

Staff is responsible that the procedure is implemented as described in this SOP and to suggest improvements.

**Activities**
The activities in the SOP are described below and schematically presented in the flowchart in figure 1 below.

<table>
<thead>
<tr>
<th>Step</th>
<th>Action</th>
<th>Responsible</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Based on information received from various sources, a request for illegal verification is prepared by the Credit Control Clerk on the Illegal Verification Form (IVF). A list of Disconnected Accounts is also generated and issued to the Disconnection Supervisor.</td>
<td>Credit Control Clerk</td>
</tr>
<tr>
<td>2</td>
<td>The IVF is received by the Disconnection Crew Supervisor, who will locate the area, organize the tools and plumber and, if needed the police.</td>
<td>Disconnection Crew Supervisor</td>
</tr>
<tr>
<td>3</td>
<td>The illegal connection will be investigated, and the connection point/water source will be identified. Pictures will be taken.</td>
<td>Disconnection Crew Supervisor</td>
</tr>
<tr>
<td>4</td>
<td>If further assistance is required a mail will be sent to the Control Room to generate a Work Order Form (WOF).</td>
<td>Disconnection Crew Supervisor</td>
</tr>
<tr>
<td>5</td>
<td>If a WOF has been created, the Sr. Technician Water Services will review the WOF and provide feedback to the Disconnection Crew Supervisor.</td>
<td>Sr. Technician Water Services</td>
</tr>
<tr>
<td>6</td>
<td>The illegal structure will be removed.</td>
<td>Disconnection Crew Supervisor</td>
</tr>
<tr>
<td>Step</td>
<td>Activity Description</td>
<td>Actor</td>
</tr>
<tr>
<td>------</td>
<td>---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
<td>--------------------------------------------</td>
</tr>
<tr>
<td>7</td>
<td>The customer will be informed about the disconnection and related consequences. The Illegal Connection Notice Form will be prepared and the customer will sign and then receive the white copy. The yellow copy of the form will be submitted to the Credit Control Clerk. The pink copy remains with the Disconnection Supervisor (DS). If the customer refuses to sign or accept the form the DS will indicate this on the form. The IVF form is also submitted by the DS to the Credit Control Clerk.</td>
<td>Disconnection Crew Supervisor</td>
</tr>
<tr>
<td>8</td>
<td>The Disconnection Supervisor will prepare a drawing and/or picture of the situation on the GIS App.</td>
<td>Disconnection Crew Supervisor</td>
</tr>
<tr>
<td>9</td>
<td>The GIS Coordinator will attach scan of the forms and compile the information in the GIS.</td>
<td>GIS Coordinator</td>
</tr>
<tr>
<td>11</td>
<td>The information from the yellow copy of the Illegal Connection Notice Form is recorded in the notes field of the customer’s account in the Abecas system. The pictures will be uploaded in the “W” drive of the Network.</td>
<td>Credit Control Clerk</td>
</tr>
<tr>
<td>12</td>
<td>The Credit control clerk will complete the debit adjustment form with the illegal charges and submit to the Credit Control Supervisor for approval.</td>
<td>Credit Control Clerk</td>
</tr>
<tr>
<td>13</td>
<td>The Credit Control Supervisor will review and if correct approve the illegal charges and forward it to the CSM for signature. It will then be sent to the Billing Section for application onto the customer’s account. A copy of all relevant Documents will be sent to the legal Officer.</td>
<td>Credit Control Supervisor CSM</td>
</tr>
<tr>
<td>14</td>
<td>The Legal Officer will issue a letter to (each) customer and inform the Customer Services Manager.</td>
<td>Legal Officer</td>
</tr>
<tr>
<td>15</td>
<td>The Credit Control Supervisor will evaluate the status of the illegal connection on the IVF and enter the information in the M&amp; E system.</td>
<td>Credit Control Supervisor</td>
</tr>
</tbody>
</table>
Figure 1: Flowchart of the SOP Illegal Connections

Credit Control Clerk
- When no source of information is found, issue Illegal Verification Form.
- Review copy of Illegal Connection Notes Form.
- Forward to Billing Section.
- Approve adjustment and forward to Credit Control Supervisor.
- Enter Status Information.
- Legal Officer:
  - Issue a letter to each customer.
  - Feedback to Credit Control Supervisor.
- GIS Coordinator:
  - Enter Status Information.
- Senior Technician Water Services:
  - Feedback on the WOF.
- Documentation:
  - Enter Info in ABACAS-CIS.
  - Data export.
  - GIS Assessment App.
  - GIS Coordinator.

Disconnection Crew Supervisor
- Locate area, organize tools and plumber if needed (police, CS, etc). Take photos.
- Investigation and Identification of Connection Point / Water Source.
- Remove illegal structure, disconnect connection (if account exists).
- Inform Customer if present.
- Fill in Illegal Connection Notes Form, white copy to customer.
- Drawing or Photo of the situation.
- Email to Control room to generate WOF.
- Illegal Verification Form.
- Enter ID of all identified illegal connections.
- GIS:
  - Compile Info in GIS.
  - Enter Info in ABACAS-CIS.
  - Attach scan of FORMS in GIS.
  - M + E.
Responsibilities within the process

Credit Control Clerk:

1. Prepares a request for illegal verification with information received from various sources:
   a. calls from customer with a hint (neighbors, anonymous, etc.)
   b. Meter Readers (as eyes of the company)
   c. Billing Officers (after data entry of reading and verification)
   d. List of disconnect accounts is generated to follow up (updated list each week and specific routes) Enter information in database
   e. Call from Distribution Crew when they identify a suspicious connection
   f. Information from any Employee or person
2. Issues the IVF to the DS
3. Receives from the DS the completed IVF and ILLEGAL CONNECTION NOTICE FORM
4. Uploads pictures and enters all information about the illegal findings on the Customer’s account in the ABECAS database
5. If customer was not present, call the customer to inform them of the illegal connection discovered.
6. Calculate the illegal charges (Customer Services Internal Procedures Manual)
7. Complete the debit adjustment form with the illegal charges and submit to the Credit Control Supervisor for approval.

Disconnection Crew Supervisor:

1. Receive IVF Form or List of Disconnected accounts from Credit Control Clerk
2. Go to the area and locate the site
3. Organize tools with assistance of plumber
4. If the assistance of the Police is required, call the Credit Control Supervisor who would make a request to the Customer Services Manager, and s/he informs police
5. If action is needed on the main line (valve closure, etc.): Request distribution crew through a mail to the Control room where a WOF is generated
6. Take pictures before and after
7. Investigate and identify water source/connection point through
   • visual confirmation
   • physical test
   • digging
8. If the customer is supplied from an active account - disconnect the connection according to the following procedure
   a) Notify owner of active account that they are to sever the disconnected customer’s service line
   b) Give a disconnection notice for the removal of the disconnected customer’s service line within 3 days (max)
   c) Disconnect active account in case of failure to adhere
   d) Remove illegal structure and store the evidence
e) Inform the customer of the illegal connection if present
f) Fill in on site: ILLEGAL CONNECTION NOTICE FORM and give the white copy to the Customer available
g) Deliver the 2nd Copy (yellow) to Credit Control Clerk
h) Keep the pink copy in the Supervisors Illegal Connection Notice Book
i) Draw the situation found in the field if pictures can’t reflect the illegal situation and add a picture of the schematic drawing
j) Mark the location in the app [NAME] and update the status if a connection already exists

Credit Control Supervisor

1. Conduct 1st Approval of the adjustment and forward to the CS Manager for final approval
2. Submit approved adjustment to the Billing Section
3. Monitor the status in the database (NAME)
4. Undertake site visits based on the nature of the illegal connection
5. Submit illegal connection information to the CS Manager for onward submission to the Legal Officer

Customer Services Manager

1. Approve Adjustment debit to customers account
2. Call the Police if requested by DS
3. Undertake site visits based on the nature of the illegal connection

Billing Supervisor

1. Debit Customer Account with the relevant charges

Legal Officer

1. Issue a letter to the customer
2. Issue a letter to the police in case of non-compliance by the customer
3. Feedback to the Customer Service Manager

Senior Technician Water Services:

1. Feedback on the WOF to the Credit Control Supervisor

GIS - Office

1. Import information from App [NAME] and CIS into the feature class for illegal connections
Indicators:
The Manager of the Customer Services Department will set regular targets for the various categories of indicators mentioned below, with a view to monitor progress.

1. To measure if the process “Illegal Connections” is performing well, the database [NAME] will provide information and produce reports about
   - The number of cases reported for investigation
   - The number of identified illegal connections
   - The number of solved cases

2. Regarding unaccounted for Water:
   - The estimated volume of unaccounted water lost, which was identified

Accompanying FORMS and Guidelines

<table>
<thead>
<tr>
<th>CF01</th>
<th>Illegal Connection Notice Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>CF02</td>
<td>Work Order Form (WOF)</td>
</tr>
<tr>
<td>CF03</td>
<td>Illegal Verification Form (IVF)</td>
</tr>
<tr>
<td>CCH01</td>
<td>Customer Service Procedures Manual</td>
</tr>
</tbody>
</table>

Links to other SOPs:
- SOP for GIS (which regulates entry of data into the GIS.)

Abbreviations

<table>
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<tr>
<th>WOF</th>
<th>Work Order Form</th>
</tr>
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<tbody>
<tr>
<td>IVF</td>
<td>Illegal Verification Form</td>
</tr>
<tr>
<td>CS</td>
<td>Customer Services</td>
</tr>
<tr>
<td>DS</td>
<td>Disconnection Supervisor</td>
</tr>
<tr>
<td>CSM</td>
<td>Customer Services Manager</td>
</tr>
<tr>
<td>GIS</td>
<td>Geographic Information System</td>
</tr>
<tr>
<td>SOP</td>
<td>Standard Operating Procedure</td>
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</table>

Revision of the SOP:

<table>
<thead>
<tr>
<th>Revision</th>
<th>date</th>
<th>Signature by CS Manager and GM</th>
</tr>
</thead>
</table>