	Metropolitan Cebu Water District <b>Quality Management System Procedures Manual</b>	Index No.	OP-PDM-003
		Page No.	1 of 9
		Issue No.	2
	Section	Water Production and Distribution Monitoring and Control	Revision No. 2
	Subject	Project Turn-Over	Effective Date March 2009

**1.0 OBJECTIVE:**

To develop a standard operating procedure in commissioning a pipeline to ensure the following very critical aspects:

- Pipeline projects are done in accordance with standard plans and specs.
- The same are well documented and filed
- General Systems Map is updated before a new pipeline is commissioned

**2.0 SCOPE:**

From request for inspection by the PI to the acceptance of the project & commissioning of the same and filing of its pertinent documents.


**3.0 DEFINITION OF TERMS:**

- **CI** - Critical Items; This refers to work items w/c can affect the proper & safe operation of the new pipelines which includes the following:
  - a. Defective appurtenances such as valves, hydrants, air release /relief valves, blow-off valves and stub-outs.
  - b. Quantity of appurtenances per design not followed.
  - c. Stub-out construction not as designed.
  - d. Leakages in the pipeline and appurtenances.
  - e. Absence of valve box covers with concrete pads.
  - f. Potability test failure.
- **PDD** - Production & Distribution Department
- **IRF** - Inspection Report Form
- **IARF** - Inspection Attendance & Report Form
- **JIT** - Joint Inspectorate Team
- **NCI** - Non-Critical Items
- **GISCM** - Geographical Information System Common Map
- **NIF** - Notice of Inspection Form
- **PI** - Project Implementor
- **PTF** - Project Turn-over Form
- **PTD** - Project Turn-over Documents
- **RIF** - Request for Inspection Form
- **PHTR** - Pipe Hydro Test Result
- **CR** - Commissioning Report
- **SCID** - Service Connection Installation Department
- **GIS** - Geographical Information System

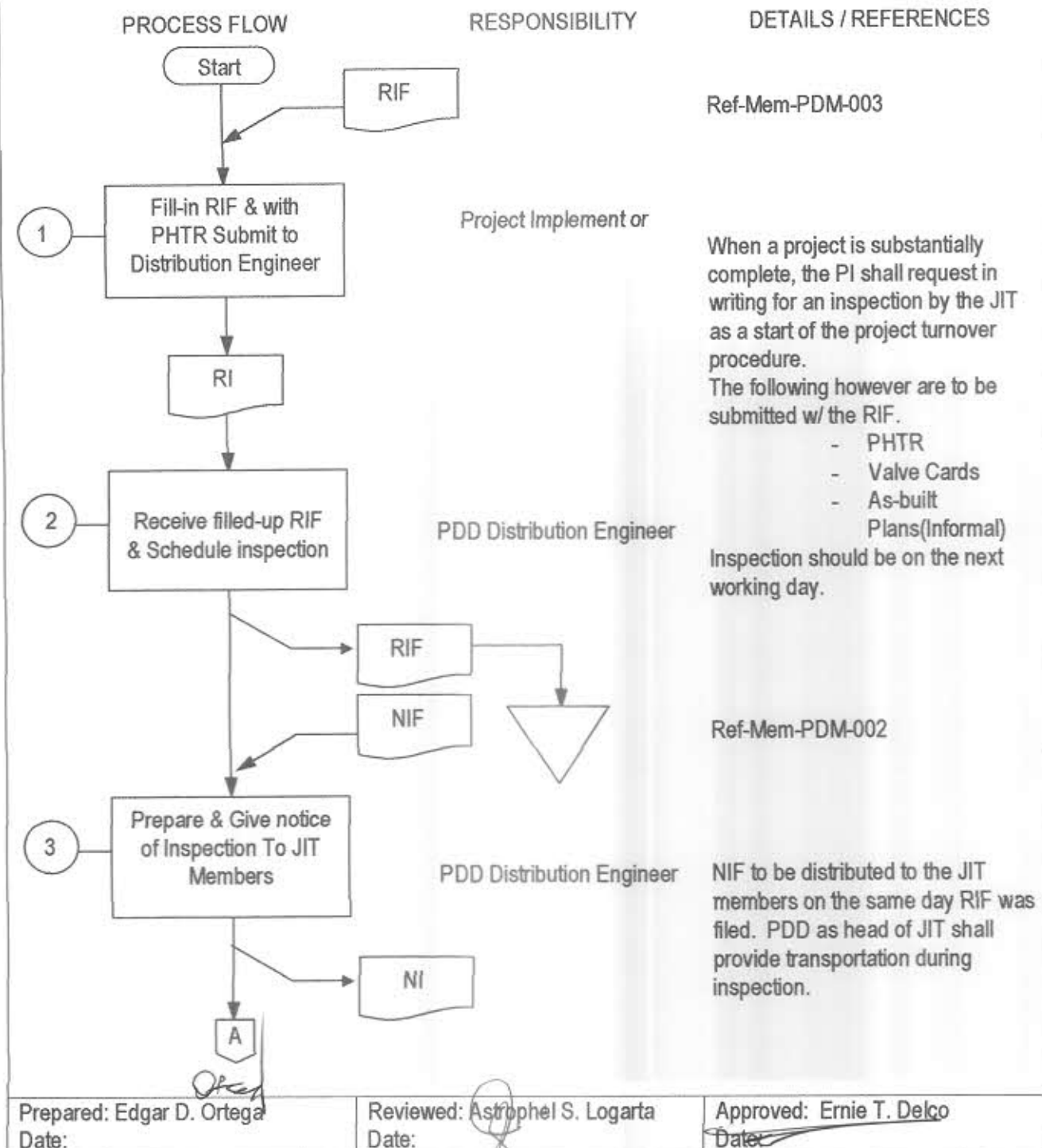
Prepared: Edgar D. Ortega  
Date:

Reviewed: Astrophel S. Logarta  
Date:

Approved: Ernie T. Delco  
Date:

	Metropolitan Cebu Water District <b>Quality Management System Procedures Manual</b>	Index No.	OP-PDM-003
		Page No.	2 of 9
		Issue No.	2
	Section	Water Production and Distribution Monitoring and Control	
	Subject	Project Turn-Over	Effective Date March 2009


## 4.0 PROCEDURE



Prepared: Edgar D. Ortega  
Date:

Reviewed: Astrophel S. Logarta  
Date:

Approved: Ernie T. Delco  
Date:

	Metropolitan Cebu Water District <b>Quality Management System Procedures Manual</b>		Index No.	OP-PDM-003
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			Issue No.	2
	Section	Water Production and Distribution Monitoring and Control	Revision No.	2
Subject	Project Turn-Over	Effective Date	March 2009	

#### 4.0 PROCEDURE

PROCESS FLOW	RESPONSIBILITY	DETAILS / REFERENCES
<p>A</p> <p>4 Conduct Inspection</p> <p>IARF</p>	JIT	<p>Eng'g. Dept. representative shall bring the project's working drawings.</p> <p>Ref-Rep-PDM-003</p>
<p>5 Inspectors make official their individual findings on the IAR</p> <p>IAR</p> <p>IRF</p>	JIT	<p>Individual findings logged on IAR shall be signed by individual inspectors &amp; their Department Managers.</p> <p>IAR will now be collated &amp; made into a formal Inspection Report.</p>
<p>6 Collate Inspection Reports &amp; submit to Dist. Div. Manager</p> <p>IR</p> <p>B</p>	PDD Distribution Engineer	<p>The PDD Distribution Engineer shall classify comments as to critical &amp; non-critical items unaccomplished</p> <p>Ref-Rep-PDM-004 Ref-Rep-PDM-005</p>

Prepared: Edgar D. Omega Date:	Reviewed: Astrophel S. Logarta Date:	Approved: Ernie T. Delco Date:
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Issue No.	2
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Revision No. 2

Effective Date	March 2009
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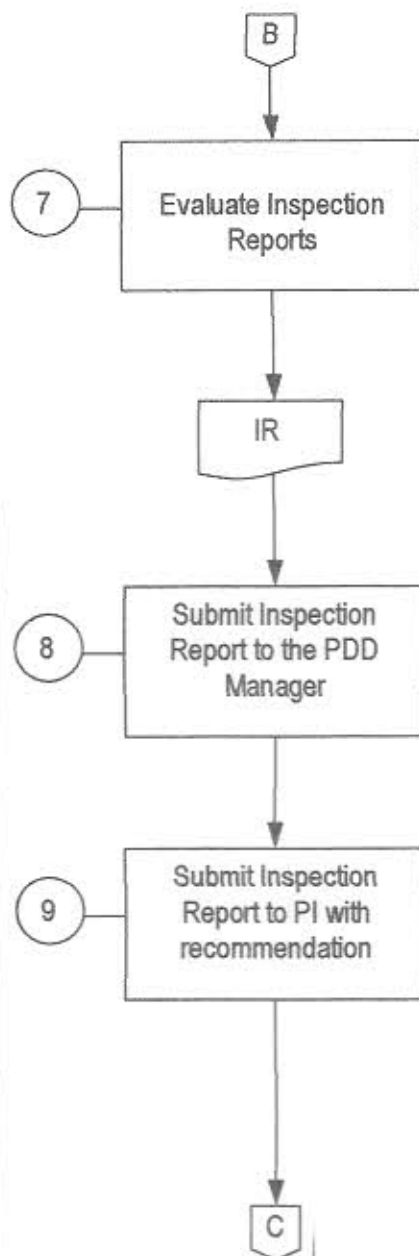
Section	Water Production and Distribution Monitoring and Control
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Subject	Project Turn-Over
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## PROCESS FLOW

## RESPONSIBILITY

## DETAILS / REFERENCES



Distribution  
Division Manager

To check if the work items left unaccomplished are classified correctly.

Ref-Rep-PDM-04  
Ref-Rep-PDM-05

Distribution  
Division Manager


For review & signature by the PDD  
Manager as JIT Chairman

PDD Manager /  
(JIT Chairman)

Prepared: Edgar D. Ortega  
Date:

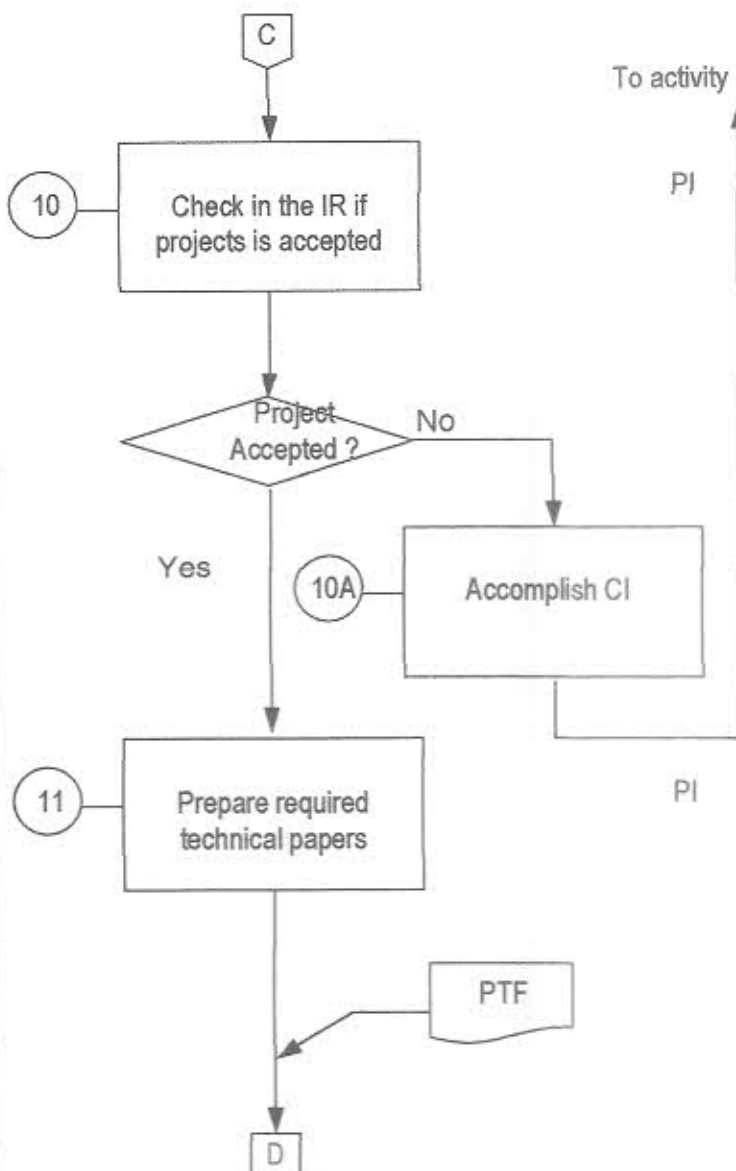
Reviewed: Astrophel S. Logarta  
Date:

Approved: Ernie T. Delco  
Date: 7


	Metropolitan Cebu Water District <b>Quality Management System Procedures Manual</b>		Index No.	OP-PDM-003
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Subject	Project Turn-Over	Effective Date	March 2009	

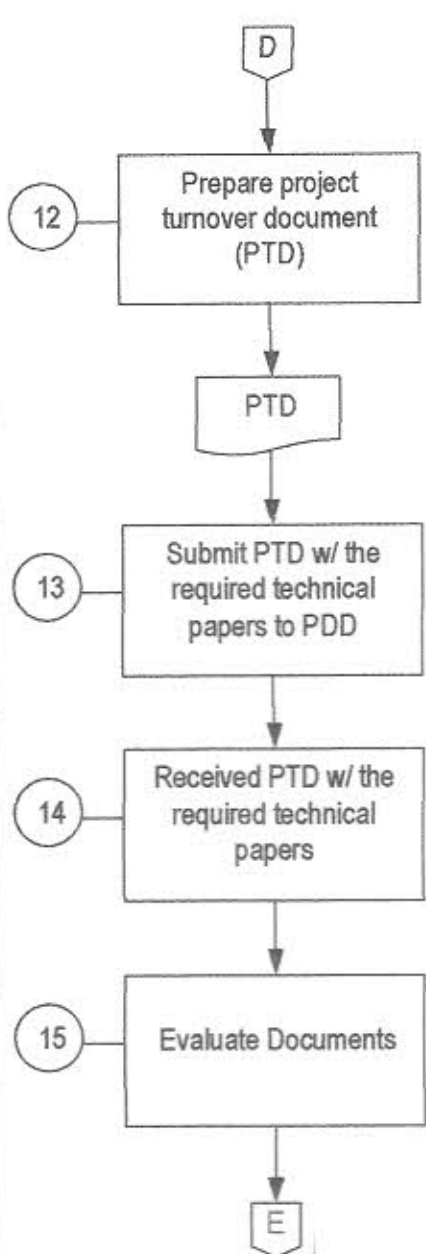
#### 4.0 PROCEDURE

PROCESS FLOW	RESPONSIBILITY	DETAILS / REFERENCES
 <pre> graph TD     C[Connector C] --&gt; 10[10 Check in the IR if projects is accepted]     10 --&gt; DA{Project Accepted?}     DA -- No --&gt; 10A[10A Accomplish CI]     10A --&gt; PI[PI]     PI --&gt; 10     DA -- Yes --&gt; 11[11 Prepare required technical papers]     11 --&gt; D[Connector D]     PTF[PTF] --&gt; 11           </pre>	<p>To activity 1</p> <p>PI</p> <p>PI</p>	<p>The project is accepted if there are no critical items left unaccomplished.</p> <p>If NO, the inspection report therefore advises PI to complete the unaccomplished CI first.</p> <p>IF YES, there are no critical items listed in the inspection report. Project is substantially complete &amp; ready for turnover.</p> <p>Ref-Rep-PDM-6 Technical papers include the ff:</p> <ol style="list-style-type: none"> <li>1. Valve cards(corrected)</li> <li>2. As-built Plans</li> <li>3. Potability test result</li> <li>4. Pipeline hydrotesting result (submitted earlier)</li> </ol>

Prepared: Edgar D. Ortega Date:	Reviewed: Astrophel S. Logarta Date:	Approved: Ernie T. Delco Date:
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	Metropolitan Cebu Water District <b>Quality Management System Procedures Manual</b>	Index No.	OP-PDM-003
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	Section	Water Production and Distribution Monitoring and Control	
	Subject	Project Turn-Over	Effective Date March 2009

## 4.0 PROCEDURE

PROCESS FLOW	RESPONSIBILITY	DETAILS / REFERENCES
 <pre> graph TD     D[D] --&gt; 12[12 Prepare project turnover document (PTD)]     12 --&gt; PTD[PTD]     PTD --&gt; 13[13 Submit PTD w/ the required technical papers to PDD]     13 --&gt; 14[14 Received PTD w/ the required technical papers]     14 --&gt; 15[15 Evaluate Documents]     15 --&gt; E[E]           </pre>	<p>PI</p> <p>PI</p> <p>PDD Distribution Engineer</p> <p>Distribution Division Manager</p>	<p>Ref-Rep-PDM-8 Ref-Rep-PDM-9</p> <p>Primarily to be checked include: - Valve Cards - As-built Plans</p>
Prepared: <u>Edgar D. Ortega</u> Date: _____	Reviewed: <u>Astrophel S. Logarta</u> Date: _____	Approved: <u>Ernie T. Delco</u> Date: _____



Metropolitan Cebu Water District  
**Quality Management System  
 Procedures Manual**

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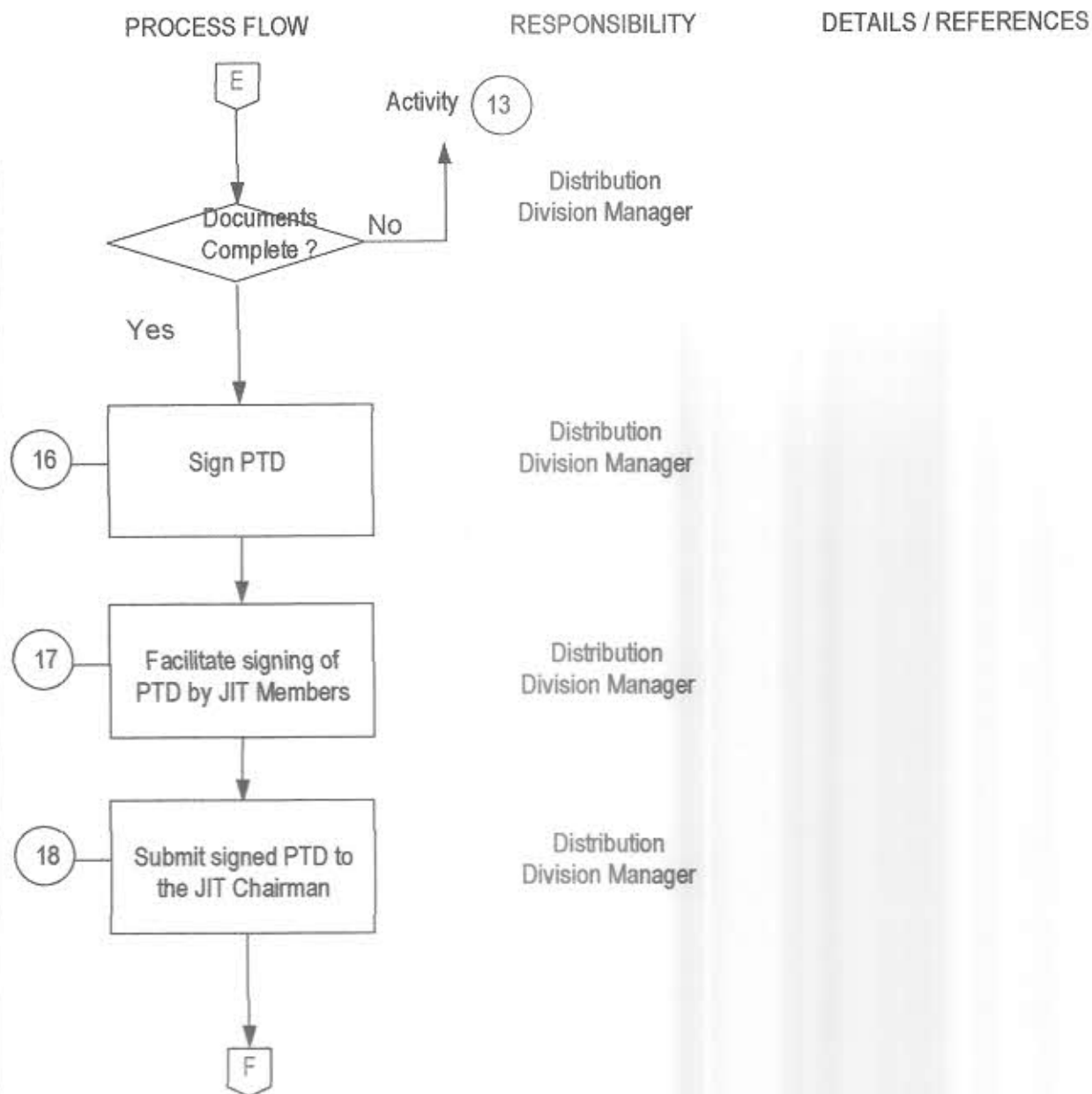
Revision No. 2

Section Water Production and Distribution  
Monitoring and Control

Subject Project Turn-Over

Effective Date March 2009


## 4.0 PROCEDURE



Prepared: Edgar D. Ortega  
 Date:

Reviewed: Astrophel S. Logarta  
 Date:


Approved: Ernie T. Delco  
 Date:

	Metropolitan Cebu Water District <b>Quality Management System Procedures Manual</b>	Index No.	OP-PDM-003
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	Subject	Project Turn-Over	Revision No. 2
		Effective Date	March 2009

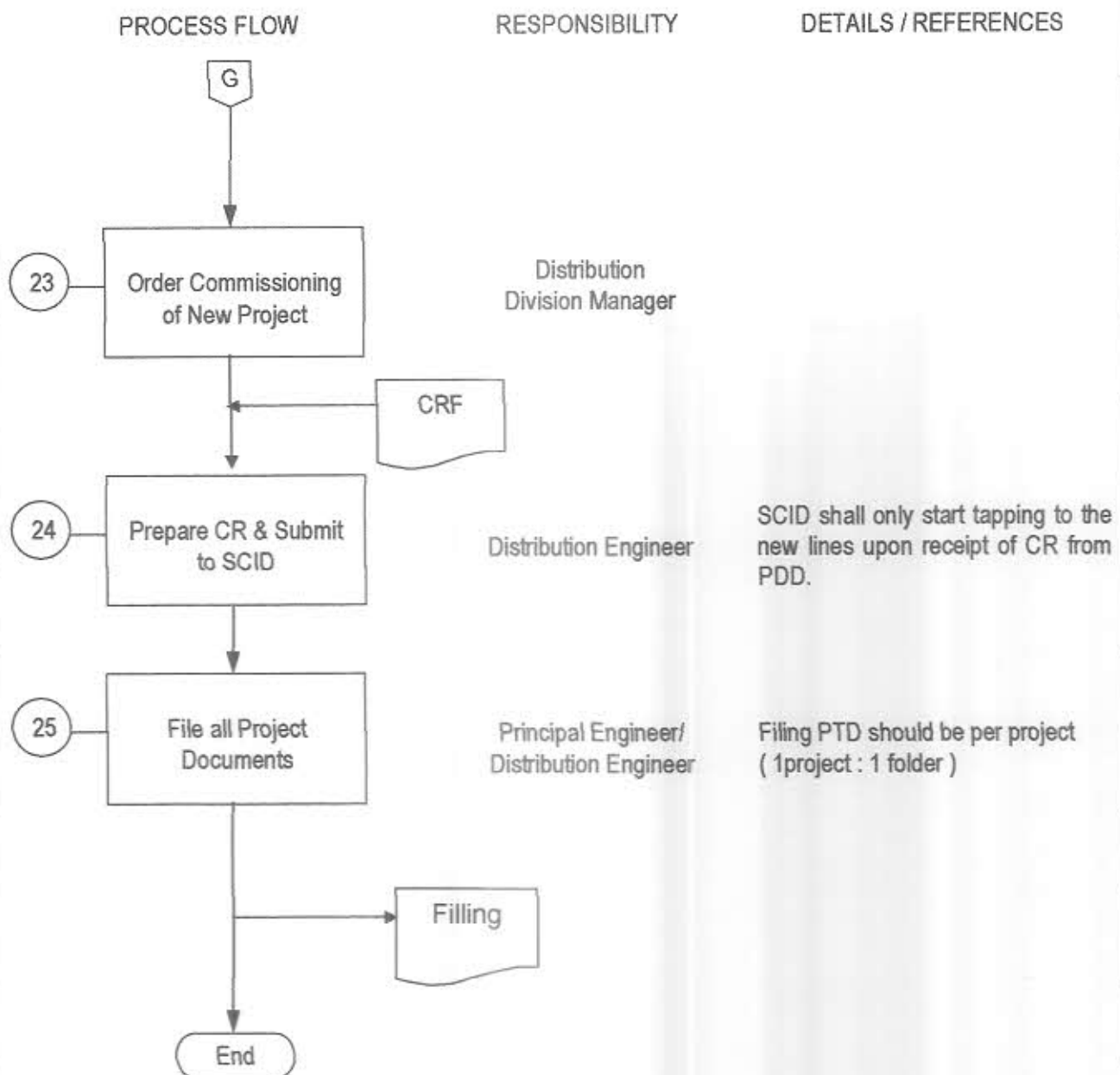
## 4.0 PROCEDURE

PROCESS FLOW	RESPONSIBILITY	DETAILS / REFERENCES
<p style="text-align: center;">F</p> <p>19 Facilitate the dist. Of the signed PTD to the PI &amp; JIT members</p> <p>20 Update respective layer for GSM (by plotting the assign layer dept)</p> <p>21 Verify new entry and download same to GSM inform JIT</p> <p>22 Check GSM at G.I.S (plotted accomplished project)</p> <p style="text-align: center;">G</p>	<p>Distribution Division Manager</p> <p>CD, SCID, PMD, PDD, Principal Engineer</p> <p>GIS</p> <p>Distribution Division Manager</p>	<p>Each JIT member department is given copy of the PTD</p> <p>Based on the submitted as-build plan of the turn-over projects:</p> <ol style="list-style-type: none"> <li>1. In-house pipeline Projects</li> <li>2. Contracted Pipeline Project</li> <li>3. Rehab Pipeline Projects</li> <li>4. Extension Stub-outs</li> <li>5. Rehab Stub-outs</li> </ol> <p>Check Updated GSM and Folder containing the project's inspection &amp; turnover documents. Documents of each project completed to be filed separately on a single folder.</p>
Prepared: Edgar D. Ortega Date:	Reviewed: Astrophel S. Logarta Date:	Approved: <u>Emie T. Dela</u> Date:



	Metropolitan Cebu Water District <b>Quality Management System Procedures Manual</b>	Index No.	OP-PDM-003
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	Subject	Project Turn-Over	Revision No. 2
		Effective Date	March 2009


## 4.0 PROCEDURE



Prepared: Edgar D. Ortega  
Date:

Reviewed: Astrophel S. Logarta  
Date:

Approved: Ernie T. Delco  
Date:

	Metropolitan Cebu Water District <b>Quality Management System Procedures Manual</b>	Index No.	OP-PDM-004
		Page No.	1 of 3
		Issue No.	1
	Section	Water Production and Distribution Monitoring and Control	
	Subject	Confirming a Fire Alarm	Effective Date August 13, 2003

## 1.0 OBJECTIVE:


To provide a strict guideline to valve operators on what to do whenever they suspect of any fire alarm and not just ignore such outright.

## 2.0 SCOPE:


From the time the Valve Operator senses the possibility of a fire alarm to the confirmation of the same whether or not there really is one.

## 3.0 DEFINITION OF TERMS:

V.O. - Valve Operator (24 hours operation)  
Radio Room - MCWD's Radio Communications Center which also has a hotline with the Fire Department and manned 24 hours daily the whole week.

Prepared: Raul Tabasa  
Date: 

Reviewed: Noel R. Dalena  
Date: 

Approved: Ernie T. Delco  
Date: 



Metropolitan Cebu Water District  
**Quality Management System  
 Procedures Manual**

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Revision No.	1
Effective Date	August 13, 2003

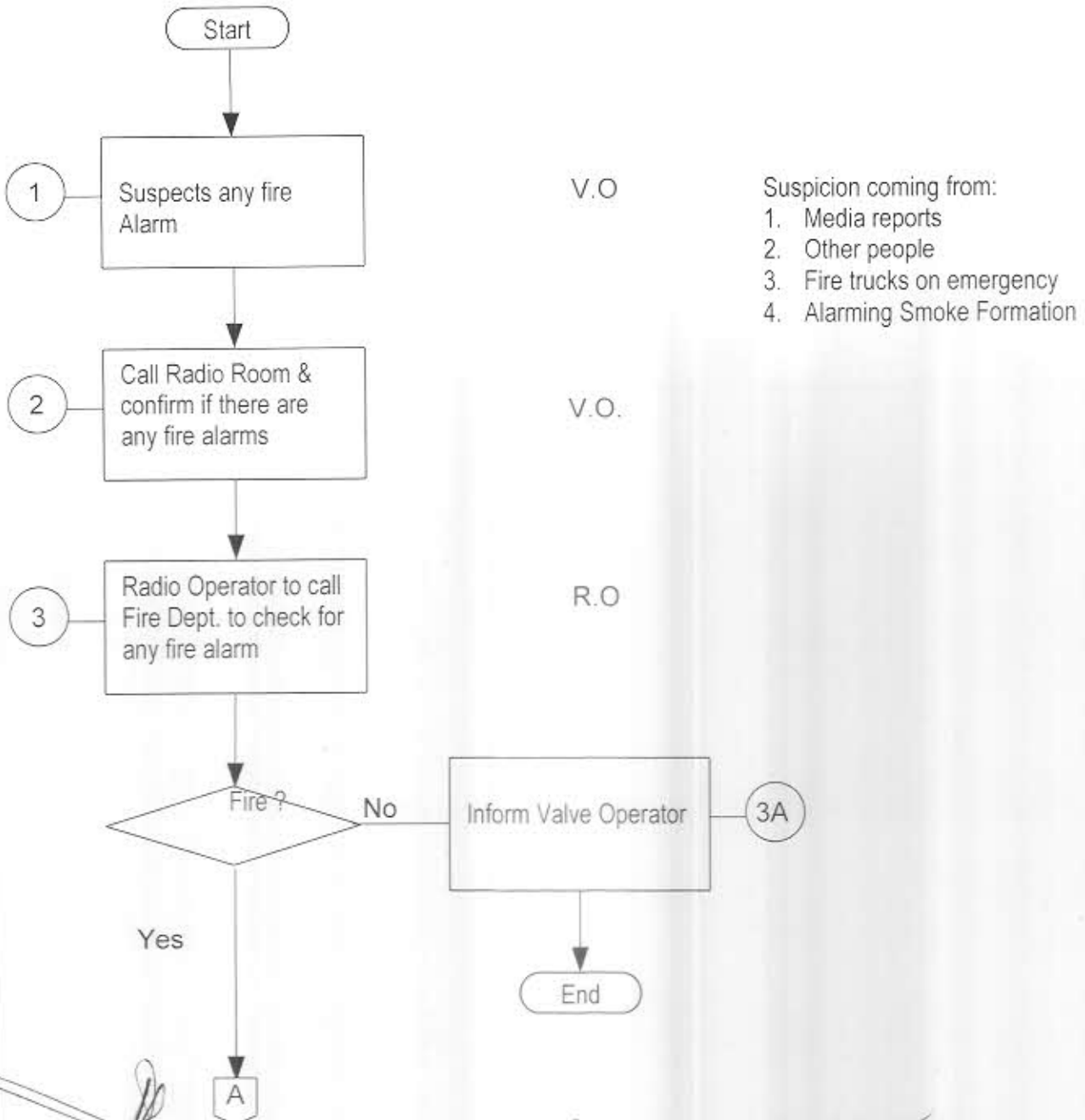
Section	Water Production and Distribution Monitoring and Control
Subject	Confirming a Fire Alarm

4.0 PROCEDURE

PROCESS FLOW

RESPONSIBILITY

DETAILS / REFERENCES



Prepared: Raul Tabasa  
 Date:

Reviewed: Noel R. Dalena  
 Date:

Approved: Ernie T. Delco  
 Date:



Metropolitan Cebu Water District  
**Quality Management System  
 Procedures Manual**

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**Water Production and Distribution  
 Monitoring and Control**

Subject

**Confirming a Fire Alarm**

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1

Revision No.

1

Effective Date

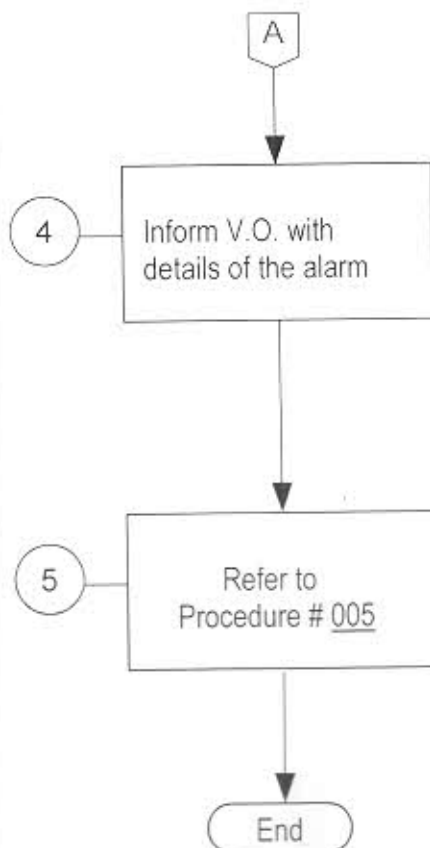
August 13, 2003

## 4.0 PROCEDURE

## PROCESS FLOW

## RESPONSIBILITY

## DETAILS / REFERENCES



R.O

Details include :

1. Alarm Level
2. Location
3. Any request for water supply
4. Any inquires from firemen for hydrant locations.


V.O.

Procedure # 005 refers to  
 procedure on responding to Fire  
 Alarms.

Prepared: Raul Tabasa  
 Date:

Reviewed: Noel R. Dalena  
 Date:

Approved: Ernie T. Delco  
 Date:

	Metropolitan Cebu Water District <b>Quality Management System Procedures Manual</b>		Index No.	OP-PDM-005
			Page No.	1 of 7
	Section		Issue No.	1
	Subject	Responding to Fire Alarm	Revision No.	0
			Effective Date	Jan. 01, 01

## 1.0 OBJECTIVE:

To define clearly what our valve operator shall do in case of fire alarms so as to deliver water supply, if necessary, to where and when it is needed most but at a controlled level.

## 2.0 SCOPE:

From receipt of notice of alarm to site evaluation of the situation and possible introduction of needed water supply & pressure. Ends with the normalization of water supply situation of areas affected & submission of report by the valve operator to the PDD office. It must be noted that fire hydrants are not firefighting equipment. They are just to refill firetrucks and therefore need not be subjected to a firefighting pressure of 100-200 psi. Fifty to seventy (50-70) psi is enough.

## 3.0 DEFINITION OF TERMS:

- |                    |                                                        |
|--------------------|--------------------------------------------------------|
| <b>PSI</b>         | - Pounds per square inch, a unit of pressure           |
| <b>VO</b>          | - Valve Operator                                       |
| <b>Alarm Level</b> | - Defines the magnitude & extent of the fire going on. |
| <b>FARF</b>        | - Fire Alarm Report Form                               |
| <b>DDM</b>         | - Distribution Division Manager, PDD                   |
| <b>PDD</b>         | - Production & Distribution Department                 |



Prepared  
Date:

6/29/01

Reviewed  
Date:

7/02/01

Approved:  
Date:

7/20/01



Metropolitan Cebu Water District  
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1

Revision No.

0

Effective Date

Jan. 01, 01

Section

Subject

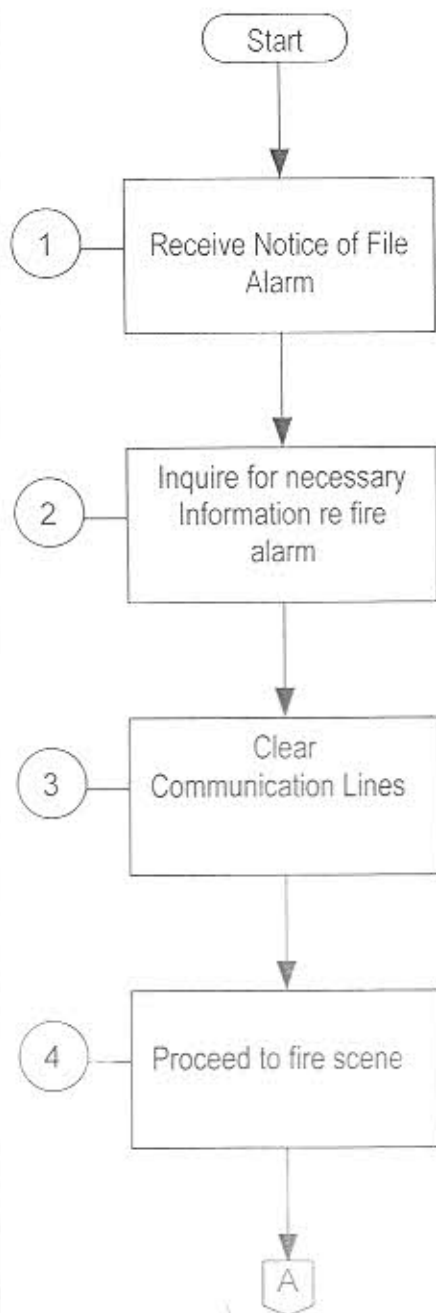
Responding to Fire Alarm

## 4.0 PROCEDURE

## PROCESS FLOW

## RESPONSIBILITY

## DETAILS / REFERENCES



V.O.

MCWD Radio Operator receives alarm call from the Fire Dept. thru the hotline and relays message to the Valve Operator.

V.O.

Necessary information includes but not limited to the following:

1. Alarm level
2. Location
3. Any request for water supply
4. Any inquiries from fireman for hydrant locations.

Radio Operator

This means asking other users (modulators) to minimize usage & give an open line between the R.O. and the V.O.

V.O.

Proceed to site regardless of alarm level.



Prepared:

Date:

6/29/01

Reviewed:

Date:

7/02/01

Approved:

Date:

7/20/01



Metropolitan Cebu Water District  
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Revision No.	0
Effective Date	Jan. 01, 01

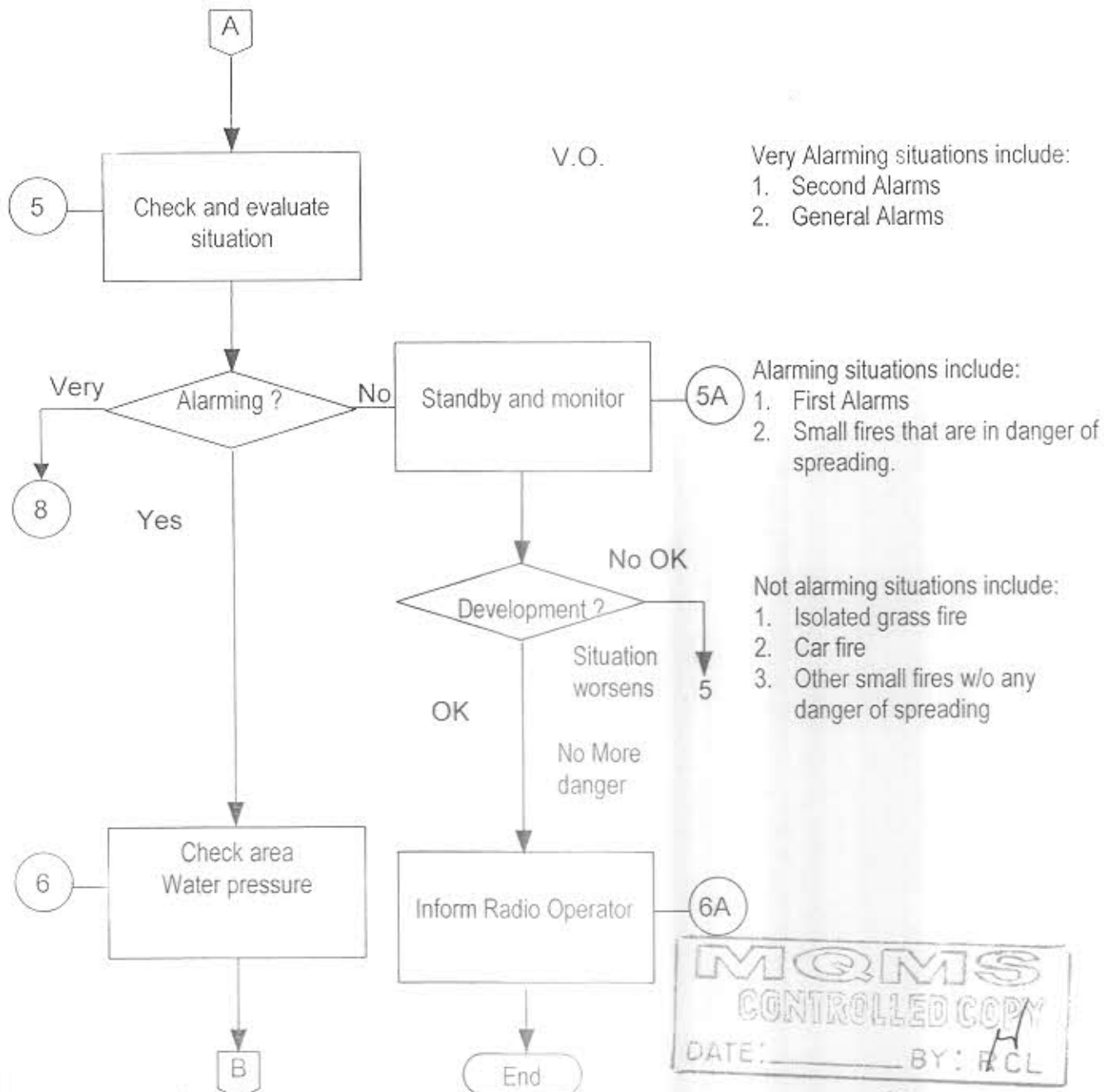
Section  
Subject **Responding to Fire Alarm**

4.0 PROCEDURE

PROCESS FLOW

RESPONSIBILITY

DETAILS / REFERENCES



Prepared:  
Date:

02/29/01

Reviewed:  
Date:

7/02/01

Approved:  
Date:

7/20/01



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1

Revision No.

0

Effective Date

Jan. 01, 01

Section

Subject

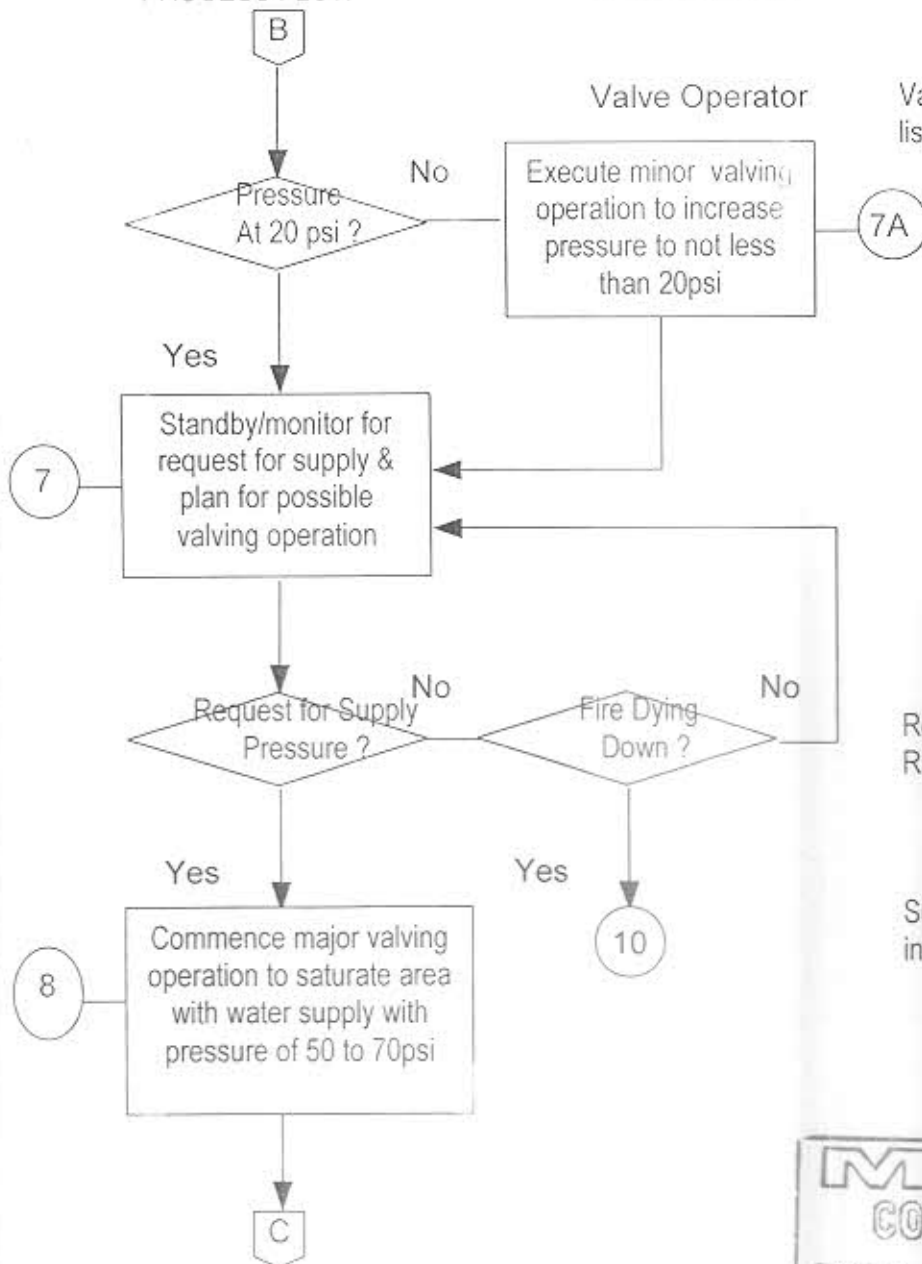
Responding to Fire Alarm

## 4.0 PROCEDURE

## PROCESS FLOW

## RESPONSIBILITY

## DETAILS / REFERENCES



Valve operator to be ready also with list of nearest fire hydrants.

Request is from the Fire Dept. thru Radio Operator

Supply from other wellfields may be introduced to area.



Prepared:

Date:

Reviewed:

Date:

Approved:


Date:

3/23/01

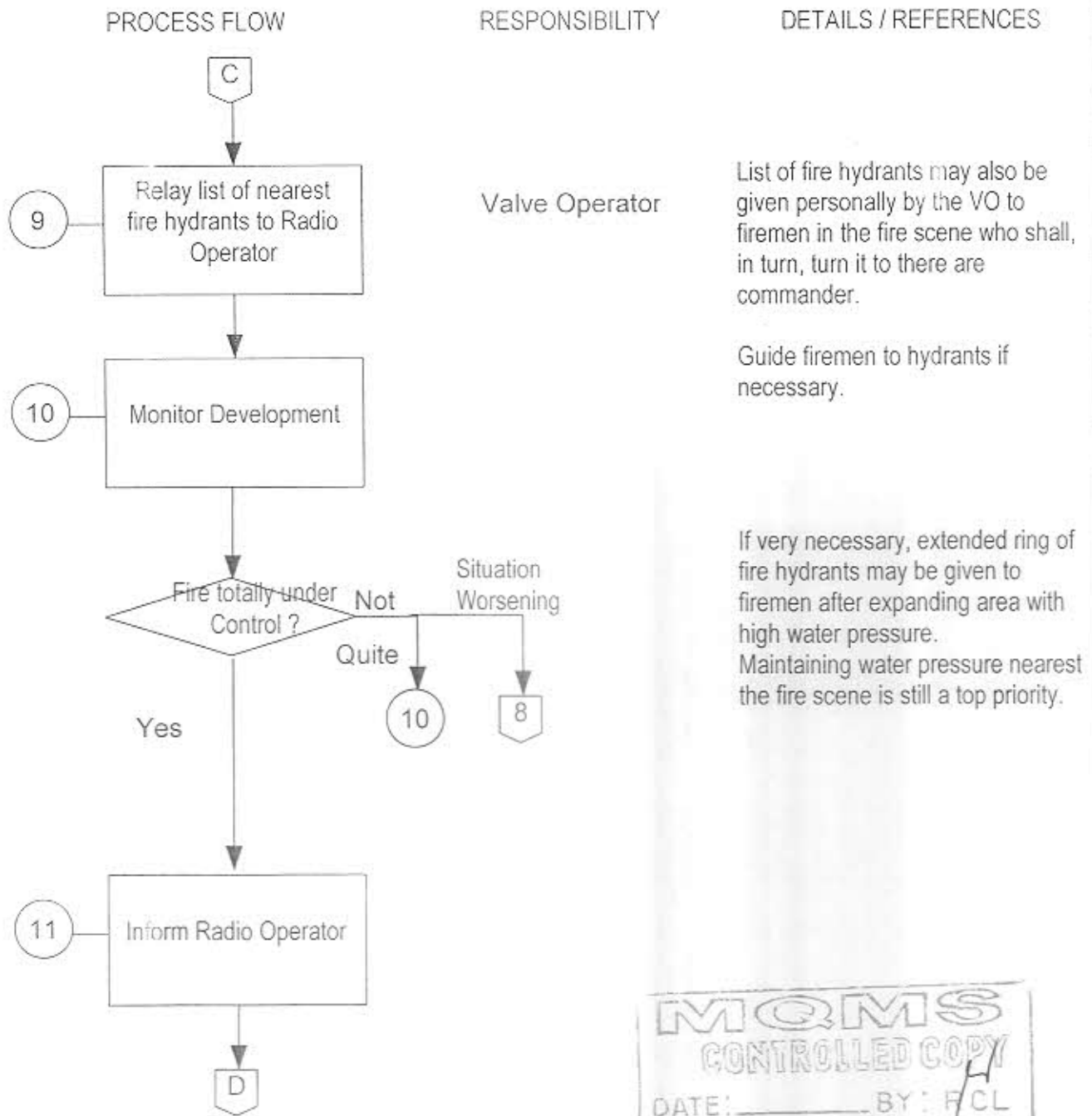
7/02/01

7/20/01




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	Subject	Revision No.	0
		Effective Date	Jan. 01, 01

## 4.0 PROCEDURE



Prepared: Date: <i>6/29/01</i>	Reviewed: <i>mdalera</i> Date: <i>7/02/01</i>	Approved: <i>[Signature]</i> Date: <i>7/20/01</i>
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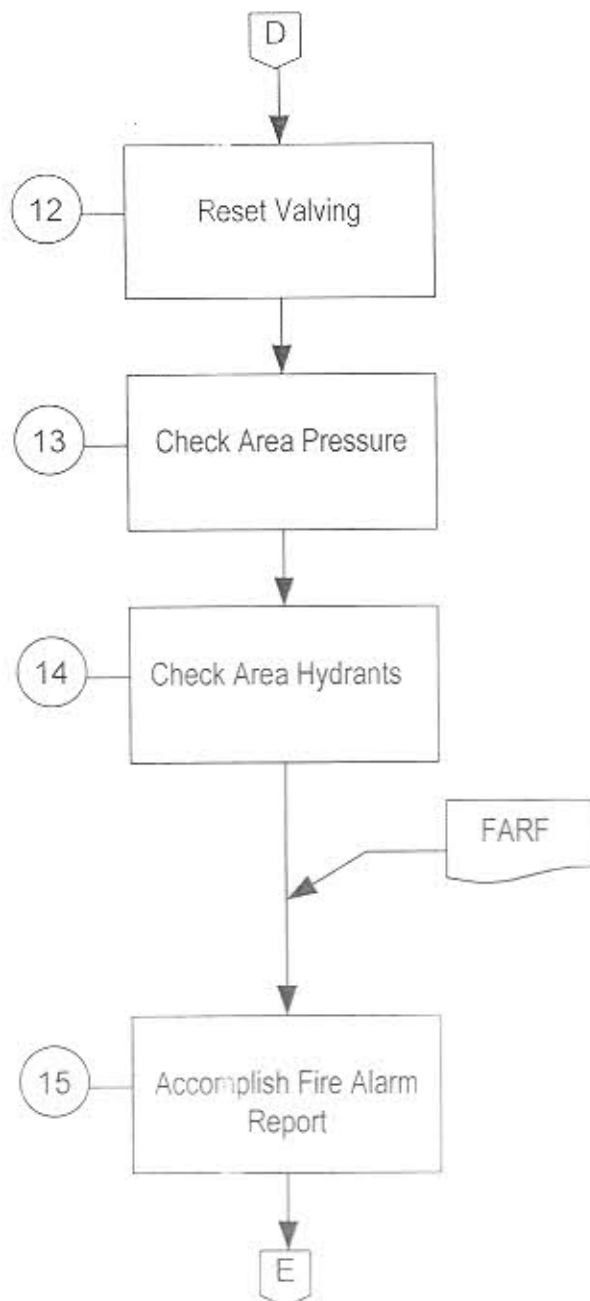
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	Subject	Revision No.	0
		Effective Date	Jan. 01, 01

## 4.0 PROCEDURE

## PROCESS FLOW

## RESPONSIBILITY

## DETAILS / REFERENCES



Inform operators of well field used in supplying water to fire scene on the resetting of valves for them, too. To reset their valves to normal status at their reservoirs.

Normal Water Pressure in the area must be restored

Check if Hydrants used by the Firemen are totally closed & recapped.

V.O.

FRM-PDM-001



Prepared:

Date:

6/29/01

Reviewed:

Date:

7/02/01

Approved:

Date:

7/20/01



Metropolitan Cebu Water District  
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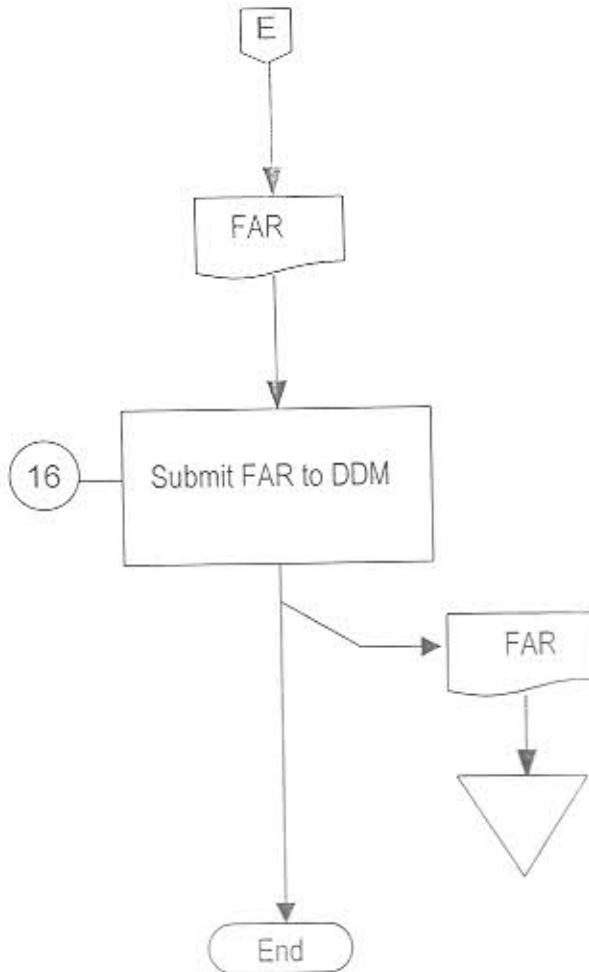
Section  
Subject Responding to Fire Alarm

4.0 PROCEDURE

PROCESS FLOW

RESPONSIBILITY

DETAILS / REFERENCES



V.O.

DDM to check on the overall support the VO had given to the situation.

Like:

- Water pressure
- Reaction time
- Hydrants



Prepared:  
Date:

*[Signature]*  
6/29/01

Reviewed:  
Date:

*[Signature]*  
7/02/01

Approved:  
Date:

*[Signature]*  
7/20/01



Metropolitan Cebu Water District  
**Quality Management System  
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Issue No.	1
Revision No.	0
Effective Date	March, 2003

Section	Distribution Division
Subject	Operating The Booster Pump

### 1.0 OBJECTIVE :

To outline the procedure to do in operating the booster pumps under all possible conditions.

### 2.0 SCOPE:

From arrival at the station when pump is still idle to starting such, operating, monitoring and effecting actions for respective situations occurring during operations.

### 3.0 DEFINITION OF TERMS:

**Under / Over Voltage** – Voltage level situations in the electrical power supply which are below / beyond what is necessary for the booster station.

**Open Cut-out** – a situation where the tapping rod at the electrical power supply is disconnected from its source.

Prepared: Raul Tabasa  
Date:

Reviewed: Noel R. Dalena  
Date:

Approved: Dulce M. Abanilla  
Date:



Metropolitan Cebu Water District  
**Quality Management System  
Procedures Manual**

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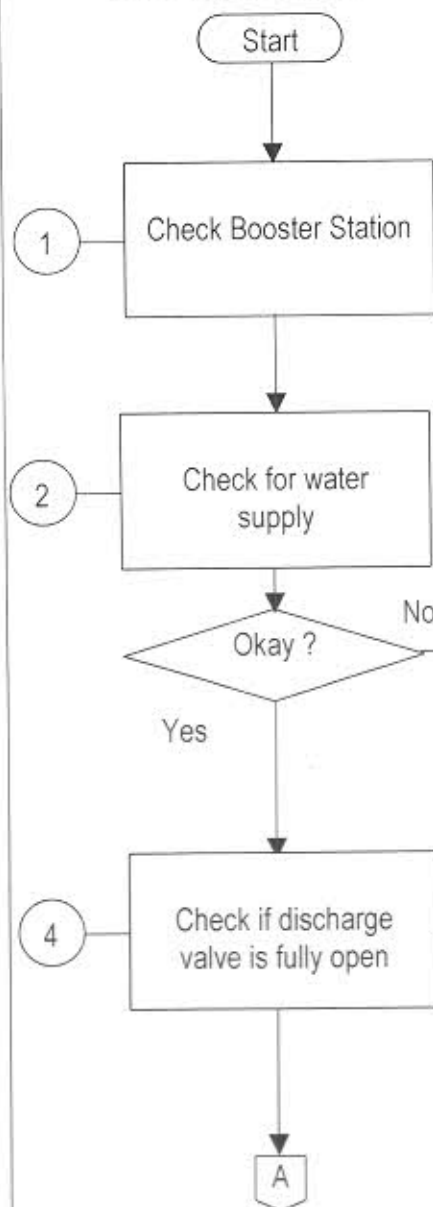
Section	Distribution Division
Subject	Operating The Booster Pump

#### 4.0 PROCEDURE

##### PROCESS FLOW

##### RESPONSIBILITY

##### DETAILS/REFERENCES



Operator

Check Booster Station for

- Tools
- Radio (if any)
- Other Contents

If there are problems, report later to the office.

If water supply is really short, pump operator may just have to wait for the minimum supply pressure level required.

Valve operators to check situation on water supply.

Discharge valves must be totally open and must be checked before starting the pump.

Prepared: Raul Tabasa  
Date:

Reviewed: Noel R. Dalena  
Date:

Approved: Dulce M. Abanilla  
Date:



Metropolitan Cebu Water District  
**Quality Management System  
Procedures Manual**

Section

Distribution Division

Subject

Operating The Booster Pump

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Revision No. 0

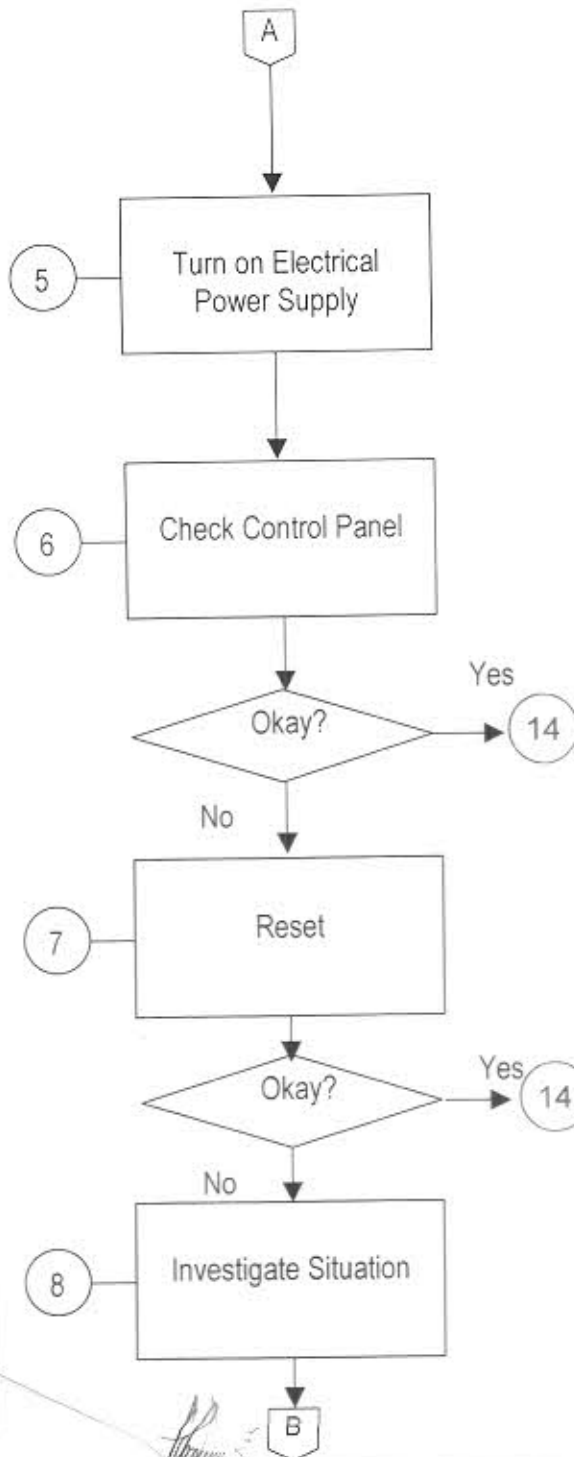
Effective Date March, 2003

#### 4.0 PROCEDURE

##### PROCESS FLOW

##### RESPONSIBILITY

##### DETAILS/REFERENCES



Operator

Operator

Control Panel Buttons will turn on (red light) when something is wrong.

Resetting control panel after a few seconds usually results to a normalized situation. If not, proceed to step 8.

Operator

Check thoroughly but carefully. Never attempt to fix the panel board system. Check for open cut-outs, voltage fluctuations.

Prepared: Raul Tabasa  
Date:

Reviewed: Noel R. Dalena  
Date:

Approved: Dulce M. Abanilla  
Date:



Metropolitan Cebu Water District  
**Quality Management System  
Procedures Manual**

Section

Distribution Division

Subject

Operating The Booster Pump

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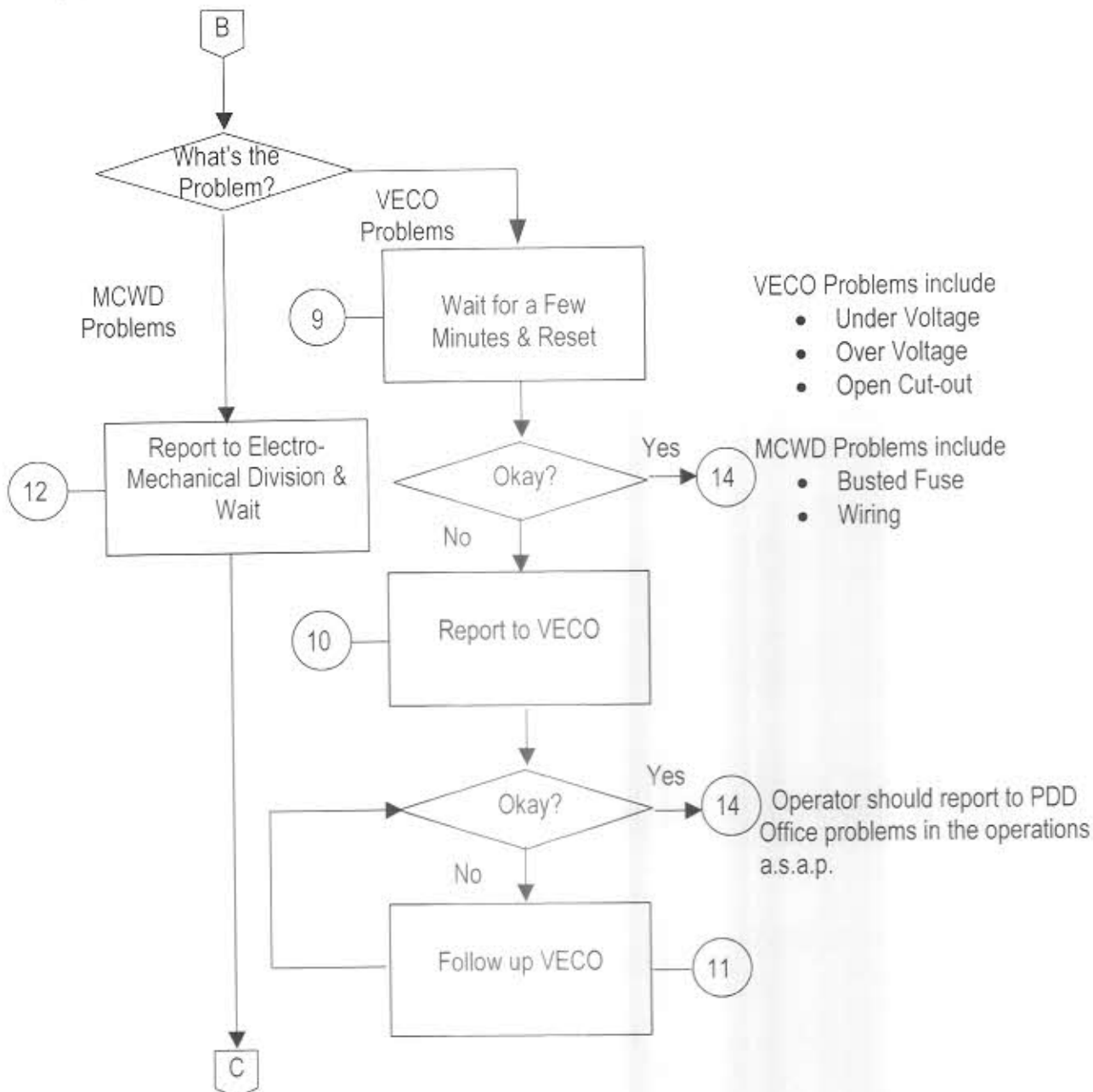
March, 2003

#### 4.0 PROCEDURE

##### PROCESS FLOW

##### RESPONSIBILITY

##### DETAILS/REFERENCES



Prepared: Raul Tabasa  
Date:

Reviewed: Noel R. Dalena  
Date:

Approved: Dulce M. Abanilla  
Date:

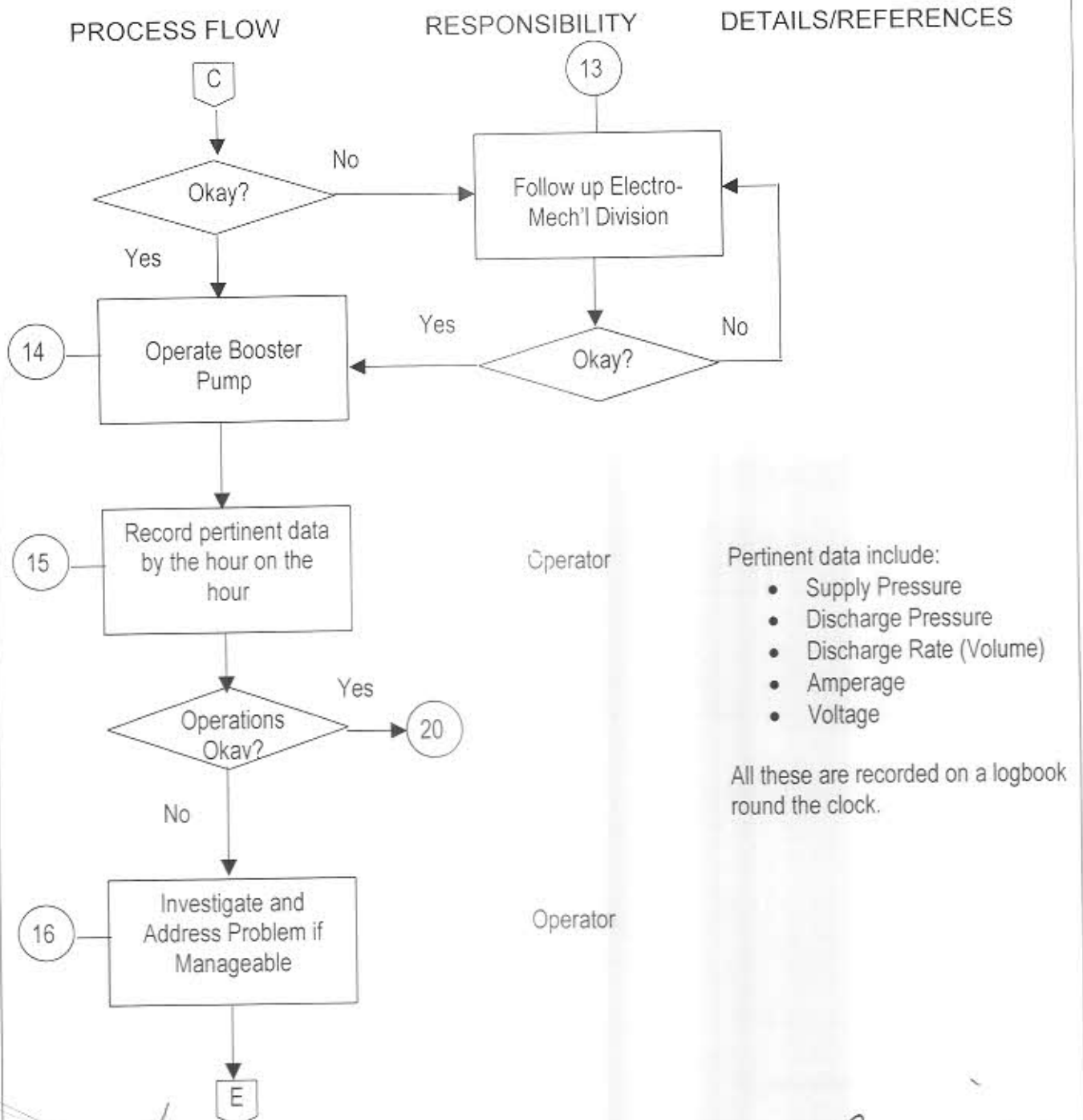


Metropolitan Cebu Water District  
**Quality Management System  
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Subject	Operating The Booster Pump

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Revision No.	0
Effective Date	March, 2003

#### 4.0 PROCEDURE



Prepared: Raul Tabasa  
 Date:

Reviewed: Noel R. Dalena  
 Date:

Approved: Dulce M. Abanilla  
 Date:





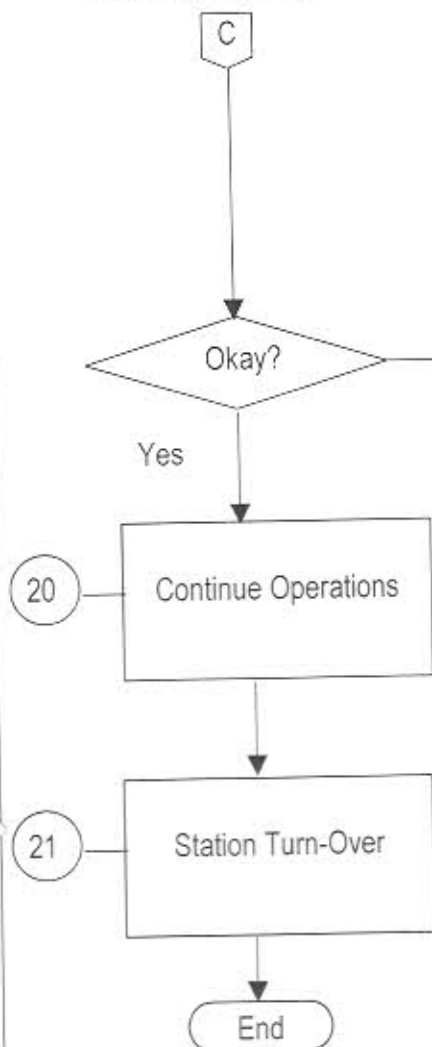
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Procedures Manual**

Section Distribution Division  
Subject Operating The Booster Pump

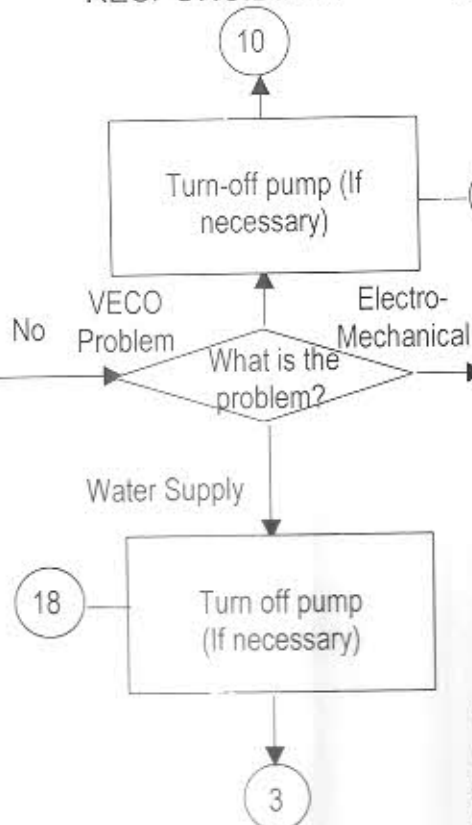
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Revision No.	0
Effective Date	March, 2003

#### 4.0 PROCEDURE

##### PROCESS FLOW



##### RESPONSIBILITY



##### DETAILS/REFERENCES

It is necessary to turn off pump when continued operation endangers the pump itself and the electrical system.

Warning signs include:

- Unusual mechanical sounds.
- Excessive pump/line heat / temperature.
- Low to zero discharge
- High amperage
- High voltage

Reference: Booster Pump  
Operating Table  
Ref: OP-PDM-001

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