



VICTORIAS CITY WATER DISTRICT

Procedures Manual

DESIGN AND DEVELOPMENT

Document No. : PM-OM-01

Effectivity Date :

Revision No. :

Pages : 1 of 3

I. OBJECTIVE

This procedure describes the process of creating the effective design for the desired project of Victorias City Water District.

II. SCOPE

The scope involves the flow of water system design by Victorias City Water District

III. RESPONSIBILITY AND RESOURCES

Commercial Division
Draftsman
Head personnel of Engineering Division
General Manager
VCWD Board of Directors

IV. DEFINITION OF TERMS

Local Water Utilities Administration (LWUA) – a government-owned and controlled corporation (GOOC) who are responsible to supervise the development of cities and municipalities water district outside Metro Manila.

Philippine Statistics Authority (PSA)– is the central statistical authority of the Philippine government on primary data collection.

Program of Works (POW) –a document that consist the details of the project.

Auto-CAD – a computer-aided design program used for 2D AND 3D design and drafting.

Water Gem – a software that serve as a tool for water distribution networks.

Epanet Software – is a Windows 95/98/NT program that performs extended period simulation of hydraulic and water-quality behavior within pressurized pipe networks.

V. REFERENCE DOCUMENTS

Previous Complete Projects
LWUA Design Handbook

VI. RECORDS GENERATED

Commercial Record
Data gathered and photos of the location
Auto-CAD file
Data Files
Plans and Drawings
Program of Works

Prepared by:

Approved by:

DANILO ESPERA
Process Owner

ENGR. ABRAHAM J. DE DIOS, JR.
General Manager

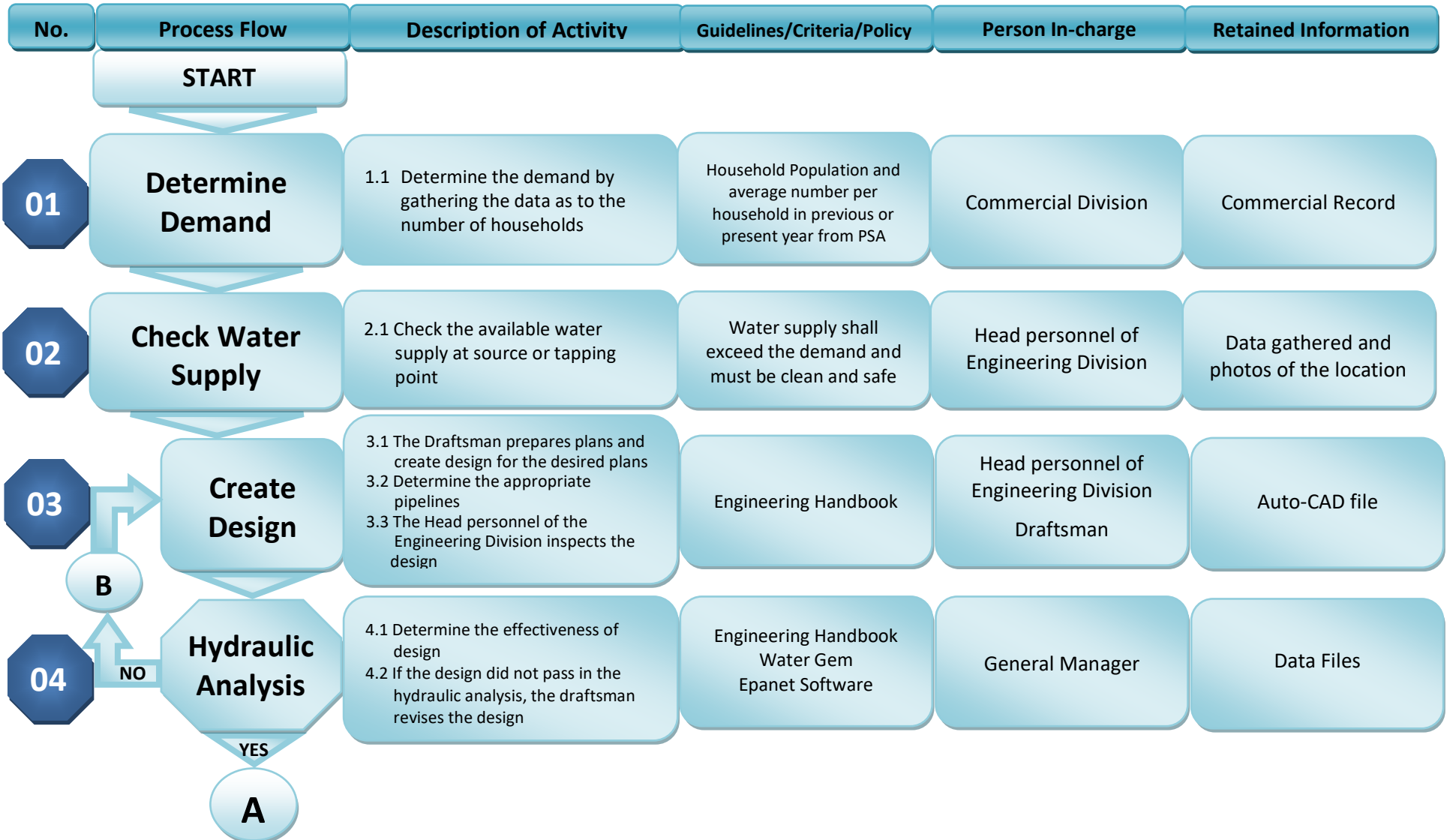


VICTORIAS CITY WATER DISTRICT

Procedures Manual

DESIGN AND DEVELOPMENT

VII. PROCEDURE DETAIL AND FLOW

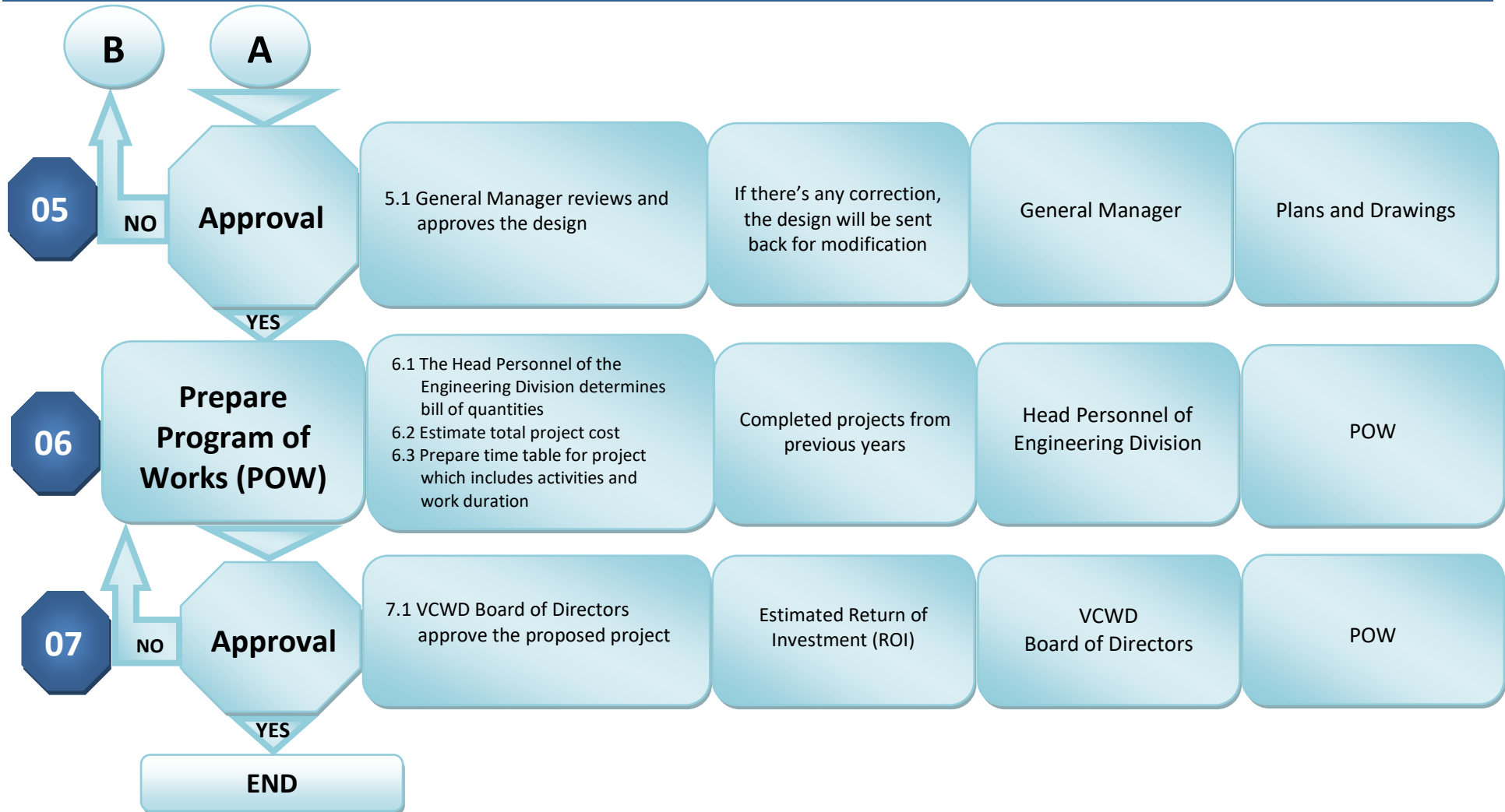




VICTORIAS CITY WATER DISTRICT

Procedures Manual

DESIGN AND DEVELOPMENT





VICTORIAS CITY WATER DISTRICT

Procedures Manual

INSTALLATION OF PIPELINES

Document No. : PM-OM-02

Effectivity Date :

Revision No. :

Pages : 1 of 3

I. OBJECTIVE

This procedure describes the process of pipelines installation.

II. SCOPE

The scope involves the flow of installing Victorias City Water District's pipelines

III. RESPONSIBILITY AND RESOURCES

Operation and Maintenance Personnel
Head personnel of Engineering Division
Draftsman
General Manager
Maintenance Team

IV. DEFINITION OF TERMS

Agreement of Right of Way—a written agreement allowing someone to pass along a specific route through grounds belonging to another person.
Department of Public Works and Highways - a government agency who are responsible on infrastructure activities in entire Philippines.

V. REFERENCE DOCUMENTS

Victorias City Water District Operations Manual

VI. RECORDS GENERATED

Agreement of Right of Way
Drawings and Program of Work
Certificate of Excavation Permit
Activity/ accomplishment monitoring form

Prepared by:

Approved by:

DANILO ESPERA

Process Owner

ENGR. ABRAHAM J. DE DIOS, JR.

General Manager

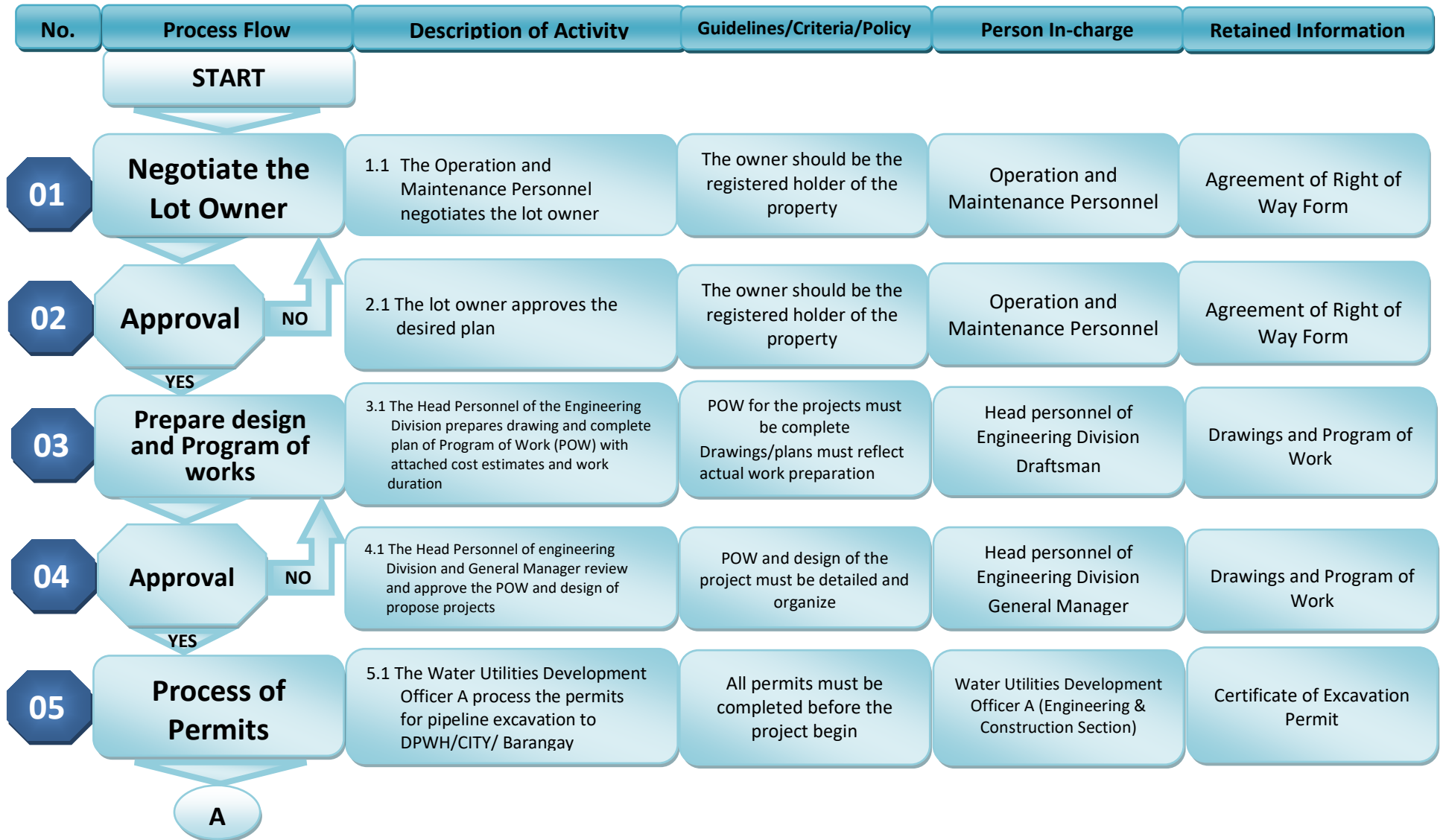


VICTORIAS CITY WATER DISTRICT

Procedures Manual

INSTALLATION OF PIPELINES

VII. PROCEDURE DETAIL AND FLOW

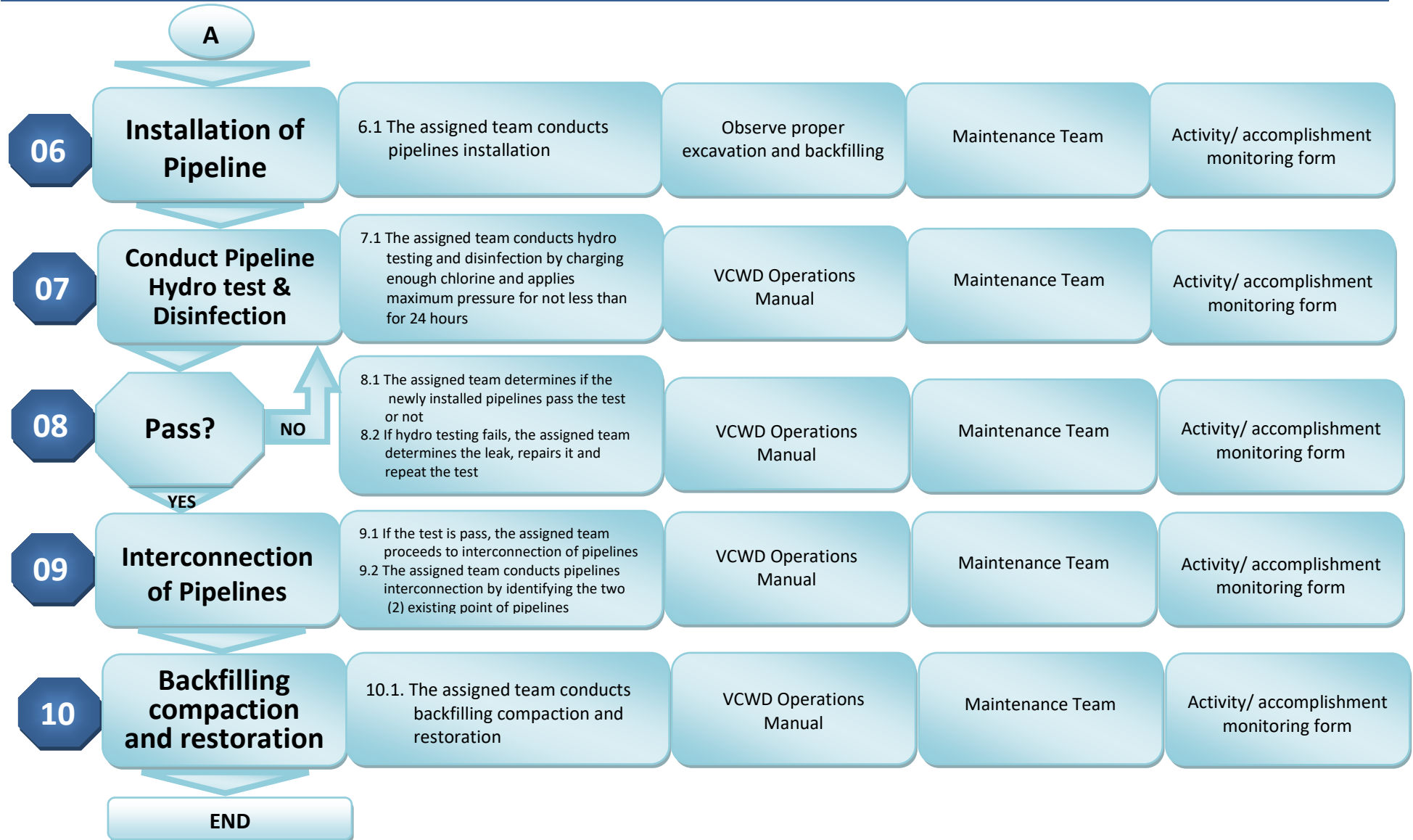




VICTORIAS CITY WATER DISTRICT

Procedures Manual

INSTALLATION OF PIPELINES





VICTORIAS CITY WATER DISTRICT

Procedures Manual

MAINTENANCE OF PIPELINES

Document No. : PM-OM-03

Effectivity Date :

Revision No. :

Pages : 1 of 3

I. OBJECTIVE

This procedure describes the process of maintaining the quality of pipelines to minimize the risks of contamination, water supply interruption and property damage.

II. SCOPE

The scope involves the preventive maintenance of the pipelines.

III. RESPONSIBILITY AND RESOURCES

Operations and Maintenance Personnel
Maintenance Team

IV. DEFINITION OF TERMS

Leak Detection Activity – is to determine where the leak in pipelines has occurred by using leak detector equipment.

Victorias City Water District Pipe Network – contains all the pipelines of VCWD with specific location and sizes

V. REFERENCE DOCUMENTS

Victorias City Water District Pipe Network

VI. RECORDS GENERATED

Leak Detection Schedule
Memorandum Receipt of Tools and Equipment
Leak Detection Logbook

Prepared by:

Approved by:

DANILO ESPERA

Process Owner

ENGR. ABRAHAM J. DE DIOS, JR.

General Manager



VICTORIAS CITY WATER DISTRICT

Procedures Manual

MAINTENANCE OF PIPELINES

VII. PROCEDURE DETAIL AND FLOW

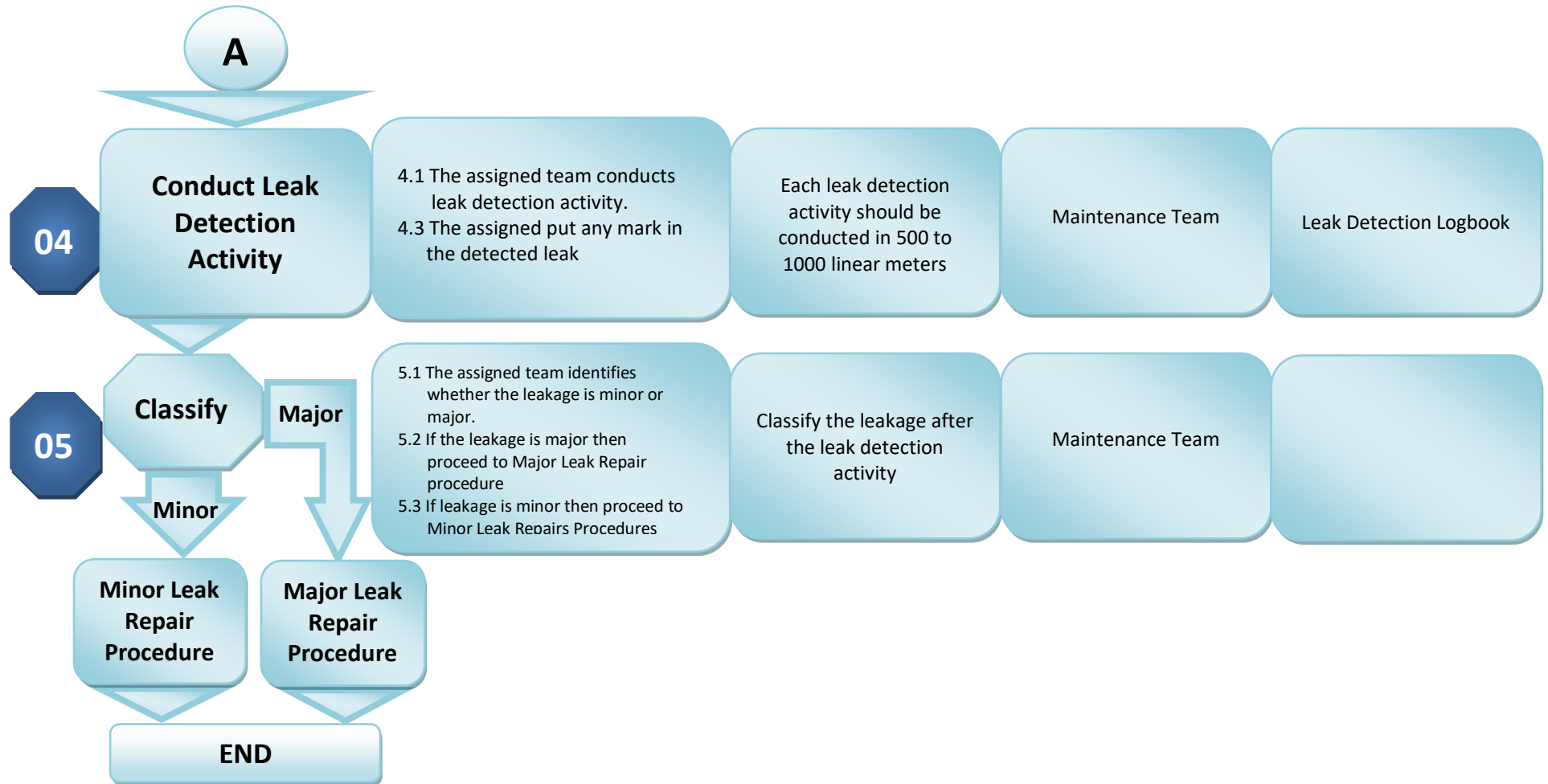
No.	Process Flow	Description of Activity	Guidelines/Criteria/Policy	Person In-charge	Retained Information
	START				
01	Create Maintenance of Pipelines Schedule	1.1 The Operation and Maintenance personnel creates a schedule for maintenance of pipelines	Maintenance of Pipelines Schedule prepared before the leak detection activity	Operation and Maintenance Personnel	Leak Detection Schedule
02	Tools and Equipment Preparation	2.1 The assigned team prepares the tools and equipment necessary for leak detection activity	Tools and equipment must be complete	Maintenance Team	Memorandum Receipt of Tools and Equipment
03	Proceed to Specific Location for Leak Detection	2.1 The assigned team proceeds to the location	Must inform the barangay chairman or any barangay representative about the leak detection activity	Maintenance Team	Leak Detection Logbook
	A				



VICTORIAS CITY WATER DISTRICT

Procedures Manual

MAINTENANCE OF PIPELINES





VICTORIAS CITY WATER DISTRICT

Procedures Manual

MAJOR LEAK REPAIR

Document No. : PM-OM-04

Effectivity Date :

Revision No. :

Pages : 1 of 3

I. OBJECTIVE

This procedure describes the process of repairing major leak to prevent water contamination and interruption.

II. SCOPE

The scope involves the flow of conducting leakage repair classify as major.

III. RESPONSIBILITY AND RESOURCES

Customer Service Assistant C
Maintenance Team
Storekeeper

IV. DEFINITION OF TERMS

Gate Valve – a flat or wedge-shaped valve in a pipeline with sliding part that can be lowered into a seat to seal off the line or raised into an external recess so that the full area of the line is open.

Requisition and Issuance Slip (RIS) – form needed to request and order materials from stockroom.

V. REFERENCE DOCUMENTS

Victorias City Water District Operations Manual
Victorias City Water District Citizen's Charter

VI. RECORDS GENERATED

Maintenance Order Form
Tools and Equipment Logbook
Victorias City Water District Pipe Network/ Gate Valve Location Files
Gate Pass
Requisition Issuance Slip
Minutes of Operations' Coordination Meeting
VCWD Repair Leak Checklist

Prepared by:

Approved by:

DANILO ESPERA

Process Owner

ENGR. ABRAHAM J. DE DIOS, JR.

General Manager

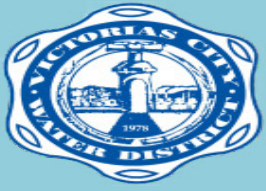


VICTORIAS CITY WATER DISTRICT

Procedures Manual MAJOR LEAK REPAIR

VII. PROCEDURE DETAIL AND FLOW

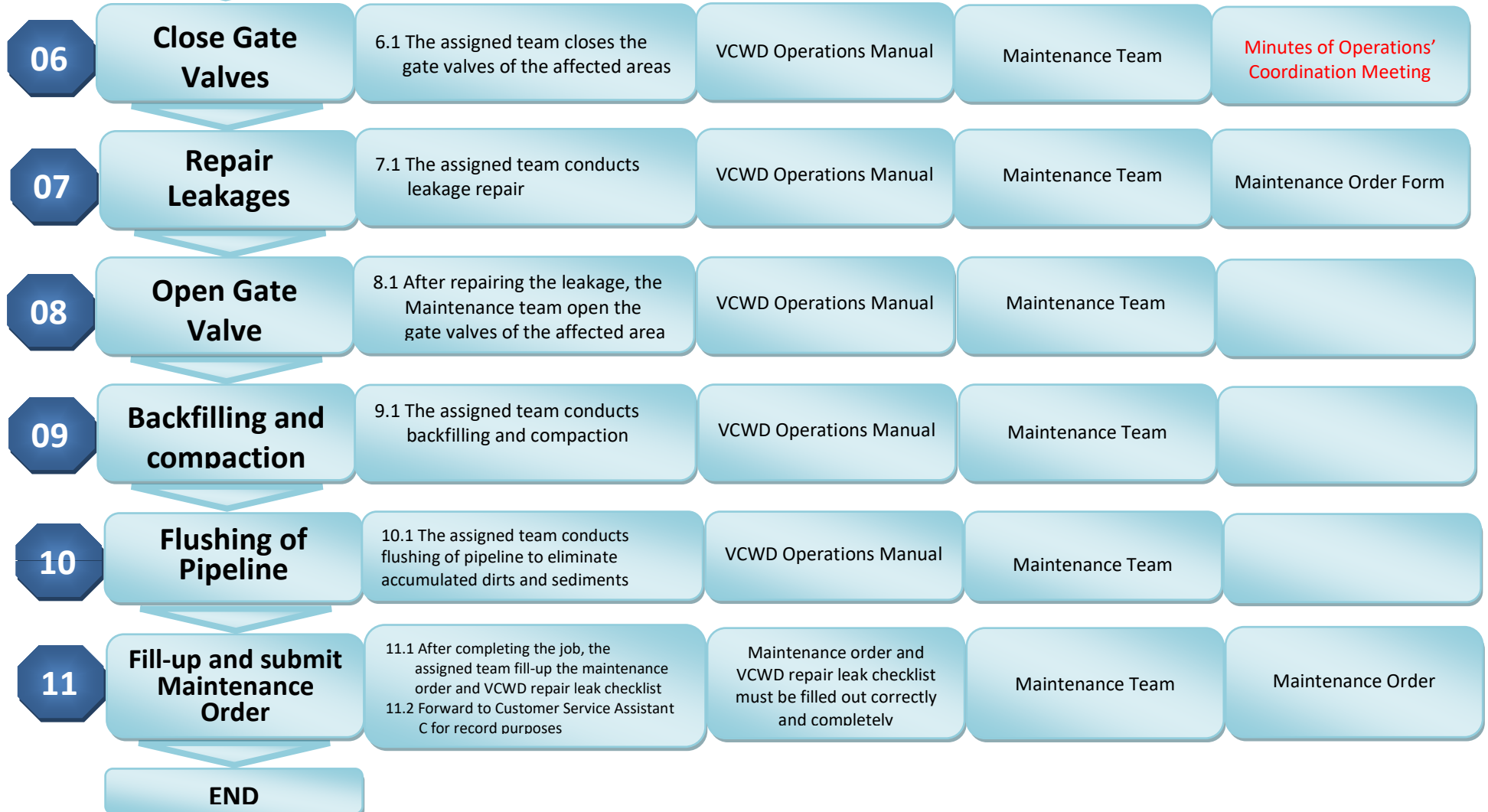
No.	Process Flow	Description of Activity	Guidelines/Criteria/Policy	Person In-charge	Retained Information
	START				
01	Prepare Maintenance Order	1.1 Customer Service Assistant C prepares Maintenance Order and forwards to Maintenance team	All maintenance order are prepared and forwarded within the day	Customer Service Assistant C	Maintenance Order Form
02	Prepare Tools and Equipment	2.1 Maintenance team receives the maintenance order then prepare the tools and equipment needed for the leak repair	VCWD Operations Manual	Maintenance Team	Tools and Equipment Logbook
03	Isolate the Area	3.1 The assigned team isolates the area and identify the gate valves in affected area 3.2 Customer Service Assistant C informs affected customers for possible low pressure/ water interruption	Affected customers should be informed at least 2 hours if there are interruptions of supply	Maintenance Team Customer Service Assistant C	VCWD Pipe Network/ Gate Valve Location Files
04	Install Barricade	4.1 The assigned team installs barricade for safety purposes before proceeding to the excavation	VCWD Operations Manual	Maintenance Team	
05	Request Appropriate Fittings	5.1 The assigned team requests appropriate fitting for leakage repair	Request of the materials must be accurate	Maintenance Team Storekeeper	Requisition Issuance Slip
	A				



VICTORIAS CITY WATER DISTRICT

Procedures Manual MAJOR LEAK REPAIR

A





VICTORIAS CITY WATER DISTRICT

Procedures Manual

MINOR LEAK REPAIR

Document No. : PM-OM-05

Effectivity Date :

Revision No. :

Pages : 1 of 3

I. OBJECTIVE

This procedure describes the process of repairing minor leak to prevent water contamination and interruption.

II. SCOPE

The scope involves the flow of conducting leakage repair classify as minor.

III. RESPONSIBILITY AND RESOURCES

Customer Service Assistant C
Maintenance Team
Storekeeper

IV. DEFINITION OF TERMS

Requisition and Issuance Slip (RIS) – form needed to request and order materials from stockroom

V. REFERENCE DOCUMENTS

Victorias City Water District Operations Manual
Victorias City Water District Citizen's Charter

VI. RECORDS GENERATED

Maintenance Order Form
Tools and Equipment Logbook
Victorias City Water District Pipe Network/ Gate Valve Location Files
Gate Pass
Requisition Issuance Slip
Minutes of Operations' Coordination Meeting
VCWD Repair Leak Checklist

Prepared by:

Approved by:

DANILO ESPERA

Process Owner

ENGR. ABRAHAM J. DE DIOS, JR.

General Manager



VICTORIAS CITY WATER DISTRICT

Procedures Manual

MINOR LEAK REPAIR

VIII. PROCEDURE DETAIL AND FLOW

No.	Process Flow	Description of Activity	Guidelines/Criteria/Policy	Person In-charge	Retained Information
	START				
01	Prepare Maintenance Order	1.1 Customer Service Assistant C prepares maintenance order form and forward to Maintenance team	All maintenance order are prepared and forwarded within the day	Customer Service Assistant C	Maintenance Order
02	Prepare Tools and Equipment	2.1 After receiving the maintenance order, the maintenance team prepares the tools and equipment needed for the leak repairs	VCWD Operations Manual	Maintenance Team	Tools and Equipment Logbook
03	Excavation	3.1 The assigned team commences the excavation in the affected area	VCWD Operations Manual	Maintenance Team	
04	Request Appropriate Fittings	4.1 The assigned team requests appropriate fitting for leakage repair	Request of the materials must be accurate	Maintenance Team	Requisition Issuance Slip
05	Close Gate Valves	5.1 The assigned team closes the gate valves of the affected areas	VCWD Operations Manual	Maintenance Team	
	A				

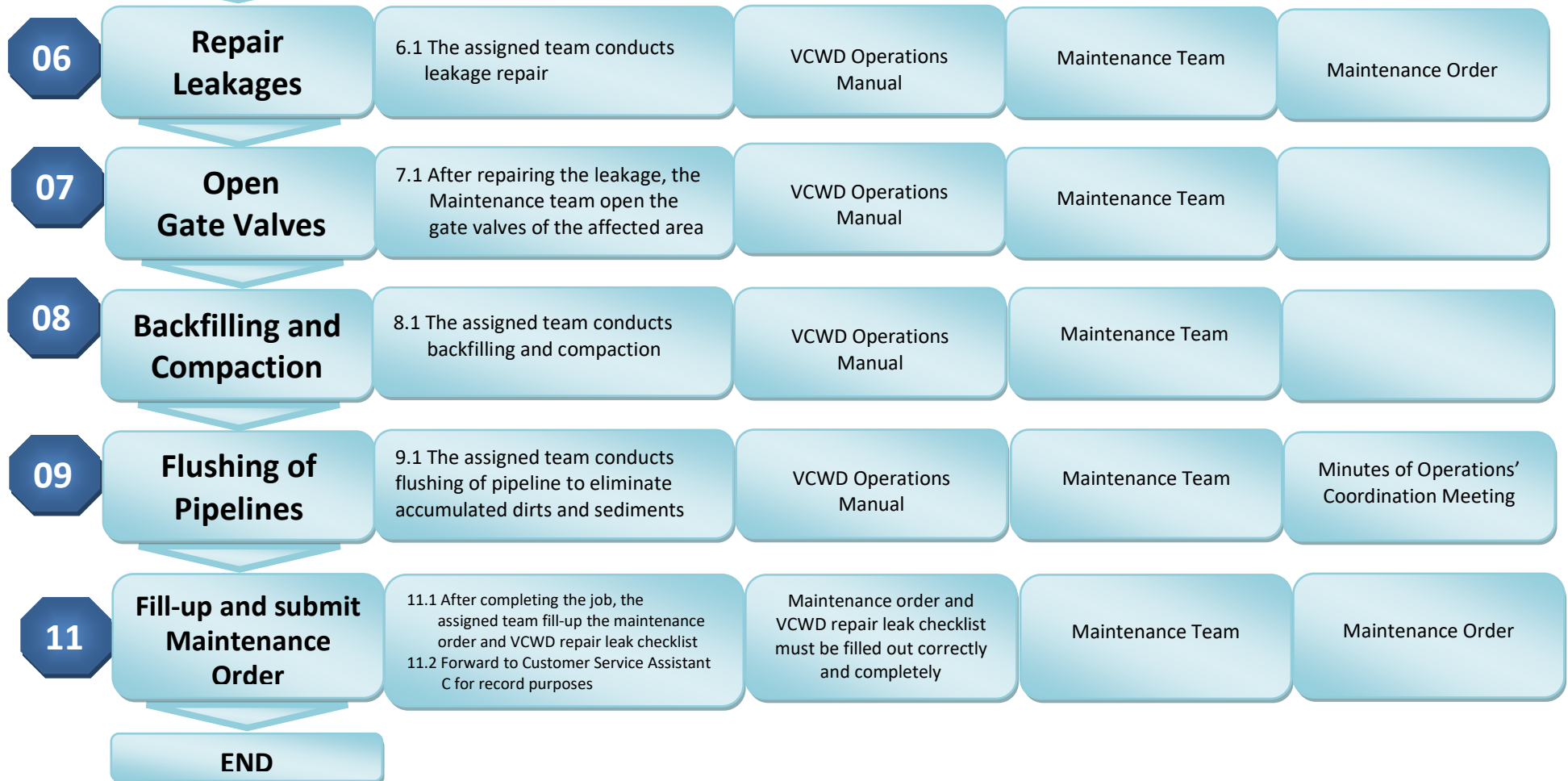


VICTORIAS CITY WATER DISTRICT

Procedures Manual

MINOR LEAK REPAIR

A





VICTORIAS CITY WATER DISTRICT

Procedures Manual

WATER PRODUCTION

Document No. : PM-OM-06

Effectivity Date :

Revision No. :

Pages : 1 of 3

I. OBJECTIVE

This procedure describes the process of producing potable and safe water supply to all customers of Victorias City Water District.

II. SCOPE

The scope involves the flow of water production from wells and pump stations of VCWD.

III. RESPONSIBILITY AND RESOURCES

Water Utilities Officer A (Production and Water Quality Section)
Water Resources Facilities Operator B

IV. DEFINITION OF TERMS

Flow Meter – equipment used to measure the rate of water flow, especially through a pipe.

PSI – a unit of pressure expressed in pounds of force per square inch of area.

V. REFERENCE DOCUMENTS

Victorias City Water District Operations Manual

VI. RECORDS GENERATED

Wells and pump stations record
Pump operation logbook
Flow rate record
Daily Record of Flow Meter Reading
Monthly Production Report

Prepared by:

Approved by:

DANILO BAUYA, SR.

Process Owner

ENGR. ABRAHAM J. DE DIOS, JR.

General Manager



VICTORIAS CITY WATER DISTRICT

Procedures Manual WATER PRODUCTION

VIII. PROCEDURE DETAIL AND FLOW

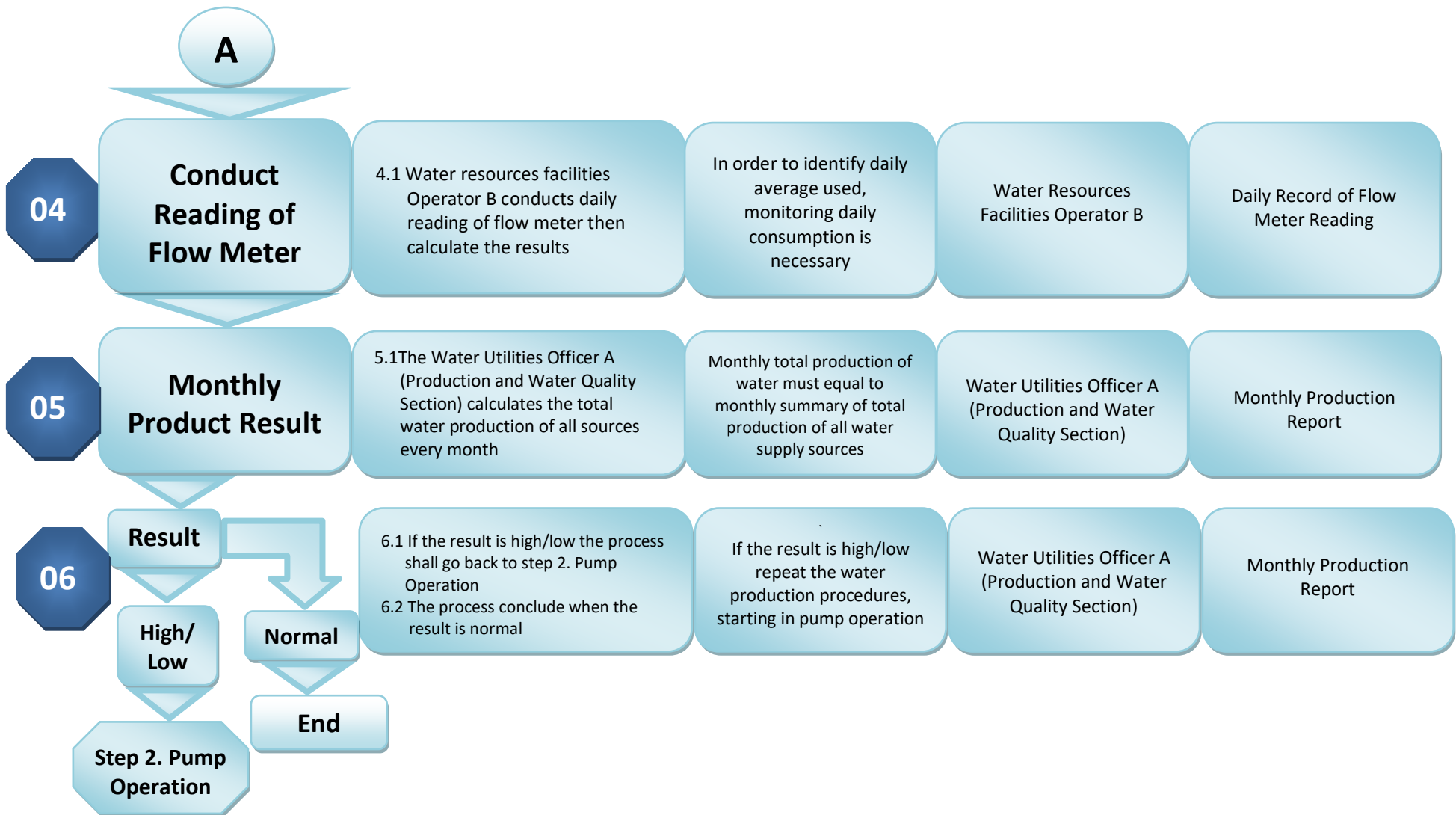
No.	Process Flow	Description of Activity	Guidelines/Criteria/Policy	Person In-charge	Retained Information
	START				
01	Identify Sources and Flow Meter	1.1 VCWD sources of water supply are pumps and wells which are run by pumps	Pumps based on demand time	Water Utilities Officer A (Production and Water Quality Section)	Wells and pump stations record
02	Pump Operation	2.1 Water resources facilities operator B is responsible to run and stop the pump, check pressure and water level	Checking of pressure gauges must be based on pressure monitoring with not less than 10 psi for the highest elevation	Water Resources Facilities Operator B	Pump operation logbook
03	Check status of Flow Meter	3.1 Water resources facilities operator B and Water Utilities Officer A inspect the flow meters weekly and measure flow rate	Flow rate measurement should be based on pump and wells previous data Calibration result should be the basis of flow meter inspection	Water Resources Facilities Operator B Water Utilities Officer A (Production and Water Quality Section)	Flow rate record
	A				



VICTORIAS CITY WATER DISTRICT

Procedures Manual WATER PRODUCTION

A





VICTORIAS CITY WATER DISTRICT

Procedures Manual

PHYSICAL-CHEMICAL TEST FOR WATER

Document No. : PM-OM-07

Effectivity Date :

Revision No. :

Pages : 1 of 2

I. OBJECTIVE

This procedure describes the process of testing the quality of water provided by Victorias City Water District to their customers for physical-chemical.

II. SCOPE

The scope involves the flow of ensuring the quality of water in conformance to the Philippines National Standards for Drinking Water 2007

III. RESPONSIBILITY AND RESOURCES

VCWD Assigned Personnel
General Manager
Accredited Laboratory

IV. DEFINITION OF TERMS

Purchase Request – document use by a department to request an order of materials and supplies with quantity and timeframe.
Physical - Chemical Test for Water—a test used to analyze or examine the quality of water.
RCL – Recommended Contaminant Level
MDL – Method Detection Limit
IDL – Instrument Detection Limit
ND – Contamination

V. REFERENCE DOCUMENTS

Philippine National Standards for Drinking Water (PNSDW) 2007

VI. RECORDS GENERATED

Purchase Request
Physical – Chemical Test Result for Water

Prepared by:

Approved by:

DANILO BAUYA, SR.

Process Owner

ENGR. ABRAHAM J. DE DIOS, JR.

General Manager

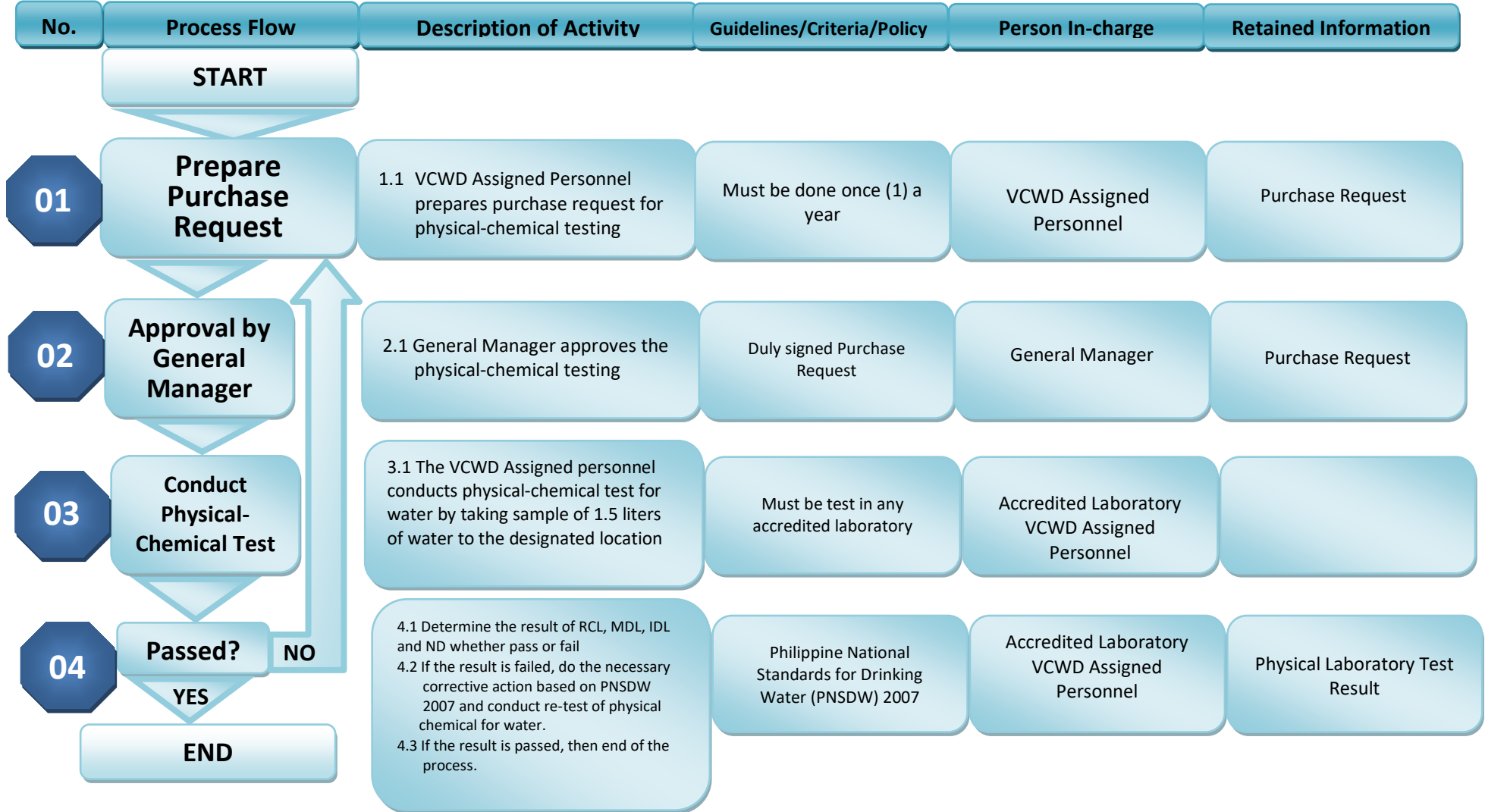


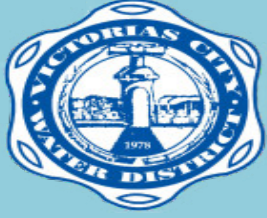
VICTORIAS CITY WATER DISTRICT

Procedures Manual

PHYSICAL-CHEMICAL TEST FOR WATER

VII. PROCEDURE DETAIL AND FLOW





VICTORIAS CITY WATER DISTRICT

Procedures Manual

WATER TREATMENT (LIQUID CHLORINE)

Document No. : PM-OM-08

Effectivity Date :

Revision No. :

Pages : 1 of 2

I. OBJECTIVE

This procedure describes the process of water treatment to ensure that the amount of liquid chlorine in the water is at safe level

II. SCOPE

The scope involves the flow of regulating the amount of liquid chlorine in the water used by the customers.

III. RESPONSIBILITY AND RESOURCES

Water Resources Facilities Operator B

IV. DEFINITION OF TERMS

Disinfection/Chlorination - a treatment method of adding chlorine in the water to disinfect it and kill harmful bacteria.

Liquid Chlorine – is a chemical element in liquid form use for disinfection

Chlorinator – a device that adds chlorine, in gas or liquid form, in water to kill harmful bacteria

PPM – an abbreviation parts per million that usually describes the concentration of something in water or soil.

V. REFERENCE DOCUMENTS

Philippine National Standards for Drinking Water (PNSDW) 2007

VI. RECORDS GENERATED

Requisition Issuance Slip

Daily Chlorine Residual Form

Preventive Maintenance Logbook

Daily Chlorine Residual Logbook

Prepared by:

Approved by:

DANILO BAUYA, SR.

Process Owner

ENGR. ABRAHAM J. DE DIOS, JR.

General Manager

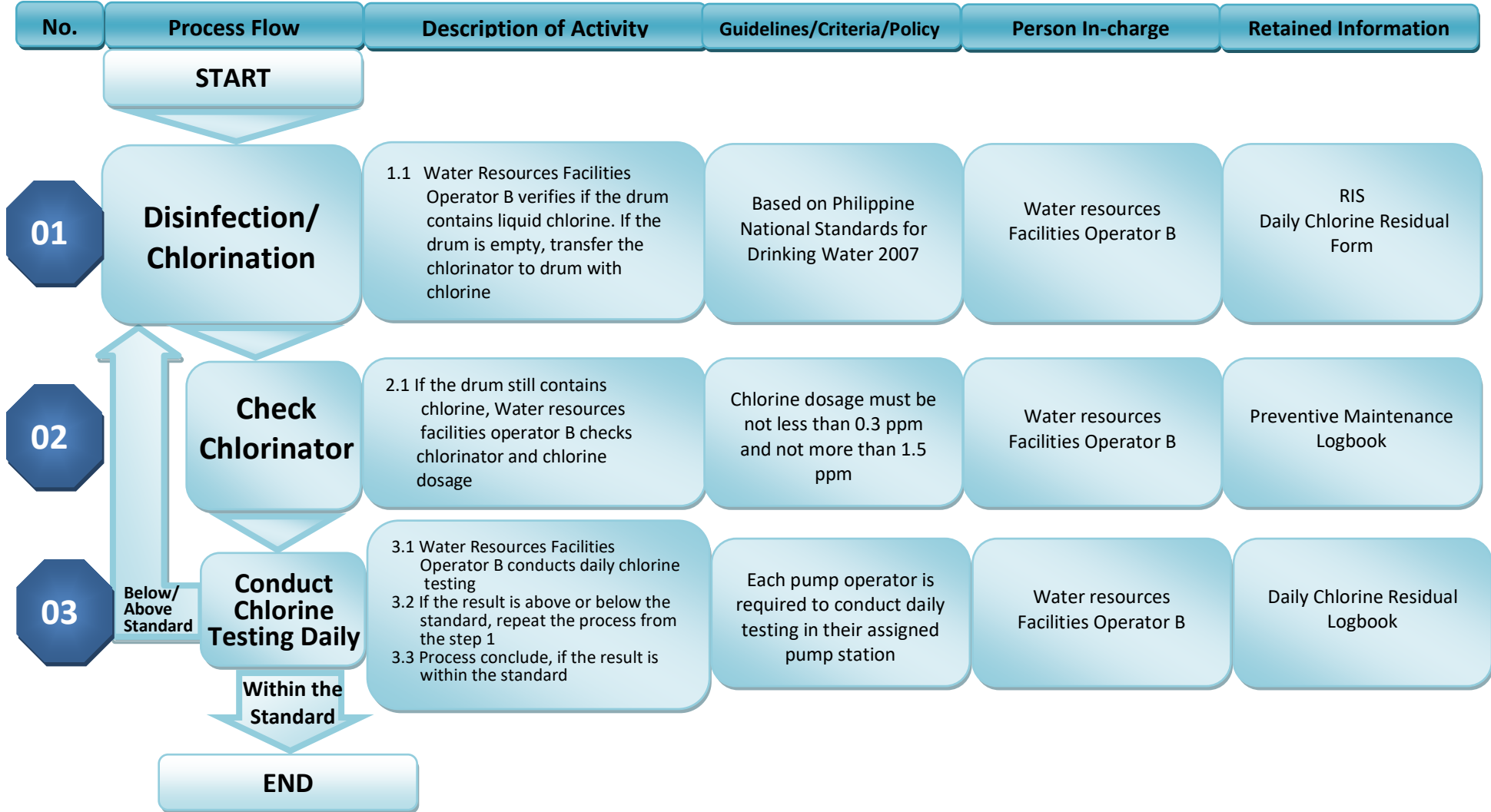


VICTORIAS CITY WATER DISTRICT

Procedures Manual

WATER TREATMENT (LIQUID CHLORINE)

VII. PROCEDURE DETAIL AND FLOW





VICTORIAS CITY WATER DISTRICT

Procedures Manual

WATER TREATMENT (CHLORINE DIOXIDE)

Document No. : PM-OM-09

Effectivity Date :

Revision No. :

Pages : 1 of 2

I. OBJECTIVE

This procedure describes the process of water treatment to ensure that the amount of chlorine dioxide in the water is at safe level.

II. SCOPE

The scope involves the flow of regulating the amount of chlorine dioxide in the water used by the customers.

III. RESPONSIBILITY AND RESOURCES

Water Resources Facilities Operator B

IV. DEFINITION OF TERMS

Disinfection/Chlorination - a treatment method of adding chlorine in the water to disinfect it and kill harmful bacteria.

Chlorine Dioxide – a heavy reddish-yellow gas ClO_2 used commonly as a bleach and disinfectant.

Chlorinator – a device that adds chlorine, in gas or liquid form, to water to kill harmful bacteria.

PPM – parts per million that usually describes the concentration of something in water or soil.

Requisition and Issuance Slip (RIS) – form needed to request and order materials from stockroom.

V. REFERENCE DOCUMENTS

Philippine National Standards for Drinking Water (PNSDW) 2007

VI. RECORDS GENERATED

Requisition Issuance Slip

Daily Chlorine Residual Form

Preventive Maintenance Logbook

Daily Chlorine Residual Logbook

Prepared by:

Approved by:

DANILO BAUYA, SR.

Process Owner

ENGR. ABRAHAM J. DE DIOS, JR.

General Manager

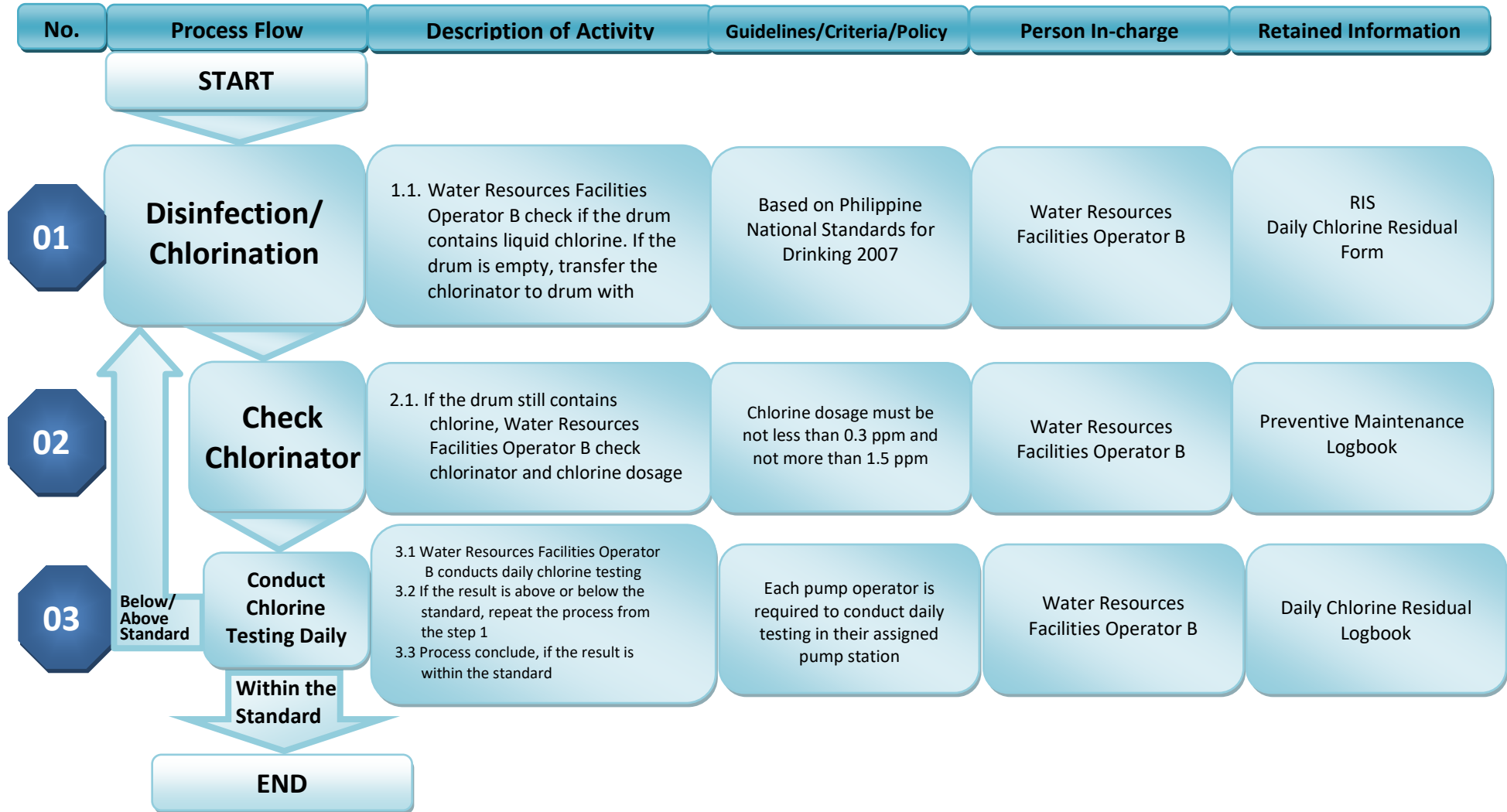


VICTORIAS CITY WATER DISTRICT

Procedures Manual

WATER TREATMENT (CHLORINE DIOXIDE)

VII. PROCEDURE DETAIL AND FLOW





VICTORIAS CITY WATER DISTRICT

Procedures Manual

CLEANING OF RESERVOIR

Document No. : PM-OM-09

Effectivity Date :

Revision No. :

Pages : 1 of 3

I. OBJECTIVE

This procedure describes the process of ensuring that the supply of water delivered to every customer is clean and safe.

II. SCOPE

The scope involves the flow of cleaning water reservoir to avoid contamination of water source in compliance with the standards set by the Philippine National Standards for Drinking Water (PNSDW).

III. RESPONSIBILITY AND RESOURCES

Customer Service Assistant C
Maintenance Team

IV. DEFINITION OF TERMS

Reservoir – a large storage space used as a source of water supply.

Inlet Valve – a valve through which serve as an entrance or opening of reservoir where water pass through.

Drain Valve – a valve use to drain off unwanted particles or sediment from a storage tank or reservoir.

V. REFERENCE DOCUMENTS

Victorias City Water District Operations Manual
Philippine National Standards for Drinking Water (PNSDW) 2007

VI. RECORDS GENERATED

Reservoir Cleaning Logbook

Prepared by:

Approved by:

DANILO ESPERA

Process Owner

ENGR. ABRAHAM J. DE DIOS, JR.

General Manager



VICTORIAS CITY WATER DISTRICT

Procedures Manual

CLEANING OF RESERVOIR

VII. PROCEDURE DETAIL AND FLOW

No.	Process Flow	Description of Activity	Guidelines/Criteria/Policy	Person In-charge	Retained Information
	START				
01	Inform Public	1.1 Customer Service Assistant C informs the public for possible water interruption	Notice of Interruption disseminated through Facebook, VCWD website, bulletin posting and personal	Customer Service Assistant C	Reservoir Cleaning Logbook
02	Prepare tools and Equipment	2.1 The Maintenance Team prepares the necessary tools and equipment	Complete tools and equipment	Maintenance Team	Reservoir Cleaning Logbook
03	Monitor Reservoir Water Level	3.1 The Maintenance Team check the status of the reservoir after peak hour in order to calculate the amount of water loss	VCWD Operations Manual	Maintenance Team	Reservoir Cleaning Logbook
	A				

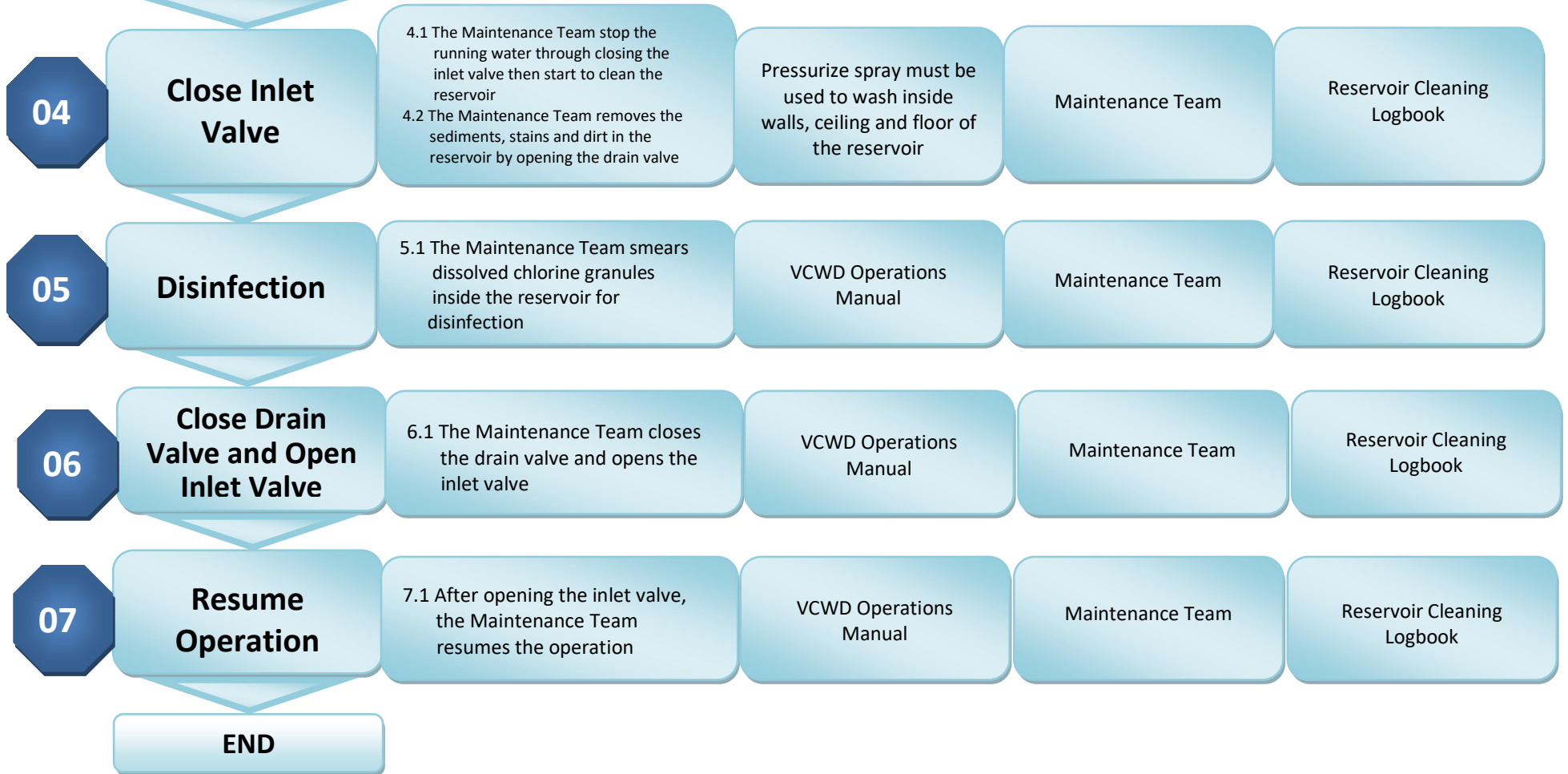


VICTORIAS CITY WATER DISTRICT

Procedures Manual

CLEANING OF RESERVOIR

A





VICTORIAS CITY WATER DISTRICT

Procedures Manual

REPLACEMENT OF PIPELINES

Document No. : PM-OM-10

Effectivity Date :

Revision No. :

Pages : 1 of 3

I. OBJECTIVE

This procedure describes the process of evaluating whether the existing pipelines of VCWD need to be replace or not.

II. SCOPE

The scope involves the flow of analyzing the status of the pipelines which includes types, sizes and date of installation. It also involves the process of replacing old and defective pipelines of VCWD.

III. RESPONSIBILITY AND RESOURCES

Maintenance Team
Draftsman
Head Personnel of the Engineering Division
General Manager

IV. DEFINITION OF TERMS

Pipelines – a long pipe use to transfer water from wells and pump stations to commercial and residential area.

Galvanized Iron (G.I) – steel or iron coated with zinc to prevent rust.

Hydro Testing – process of checking pipelines in term of strength, pressure tightness and leakage.

Disinfection/Chlorination - a treatment method of adding chlorine in the water to disinfect it and kill harmful bacteria.

V. REFERENCE DOCUMENTS

Victorias City Water District Pipe Network

VI. RECORDS GENERATED

Completion Report
Data Files
Drawings and Program of Works
Certification of Excavation Permit
Daily Pipe Laying Record Logbook
Hydro Testing Record Logbook

Prepared by:

Approved by:

DANILO ESPERA

Process Owner

ENGR. ABRAHAM J. DE DIOS, JR.

General Manager



VICTORIAS CITY WATER DISTRICT

Procedures Manual

REPLACEMENT OF PIPELINES

VII. PROCEDURE DETAIL AND FLOW

No.	Process Flow	Description of Activity	Guidelines/Criteria/Policy	Person In-charge	Retained Information
	START				
01	Evaluation of Pipelines	1.1 The Maintenance Team evaluates the status of the pipe in terms of the types, sizes and date of installation	Done at least once a year G.I/ Steels pipes who are 20 years and more must be replace	Maintenance Team	Completion Report
02	Conduct Pipeline Survey	2.1 The Maintenance Team conducts pipeline survey 2.2 Determine the location, sizes and the length of the pipes to be replace	Project design and program are based on the pipeline survey	Maintenance Team	Data Flies
03	Prepare Drawing and Program of Works	3.1 The Draftsman prepares the propose drawings and program of works (POW) including the estimated cost and work duration	POW for the projects must be complete Drawings/plans must reflect actual work preparation	Draftsman	Drawings and Programs of Works
04	Design	4.1 The Head Personnel of the Engineering Division and the General Manager review and approve the propose design and program of work	POW and design of the project must be detailed and organize	Head personnel of the Engineering Division General Manager	Drawings and Programs of Works
05	Processing of Permits	5.1 The Water Utilities Development Officer A process the necessary permits for pipeline excavation to DPWH, City or Barangay	All permits must be completed before the project begin	Water Utilities Development Officer A (Engineering & Construction Section)	Certification of Excavation Permit
	A				

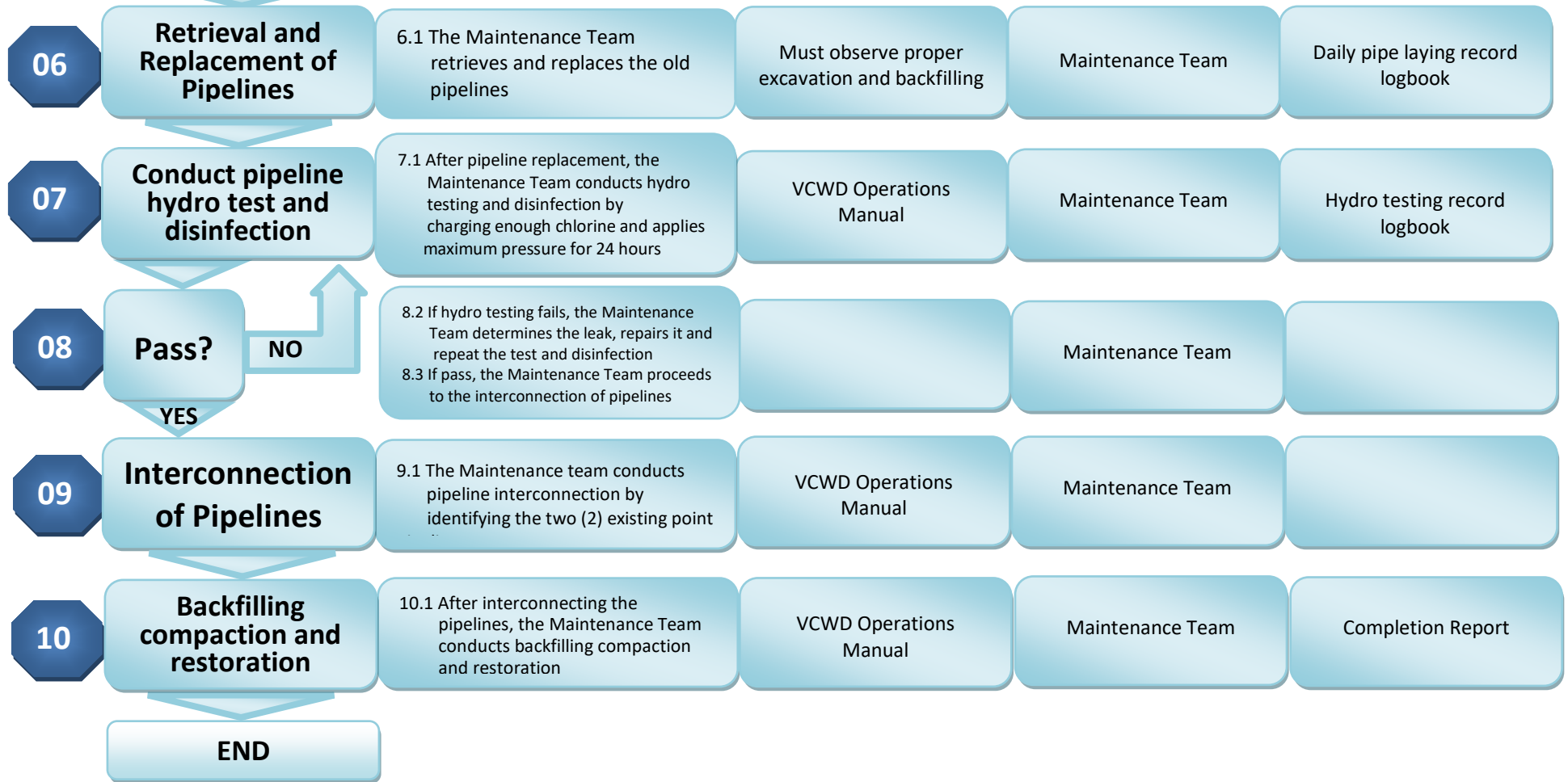


VICTORIAS CITY WATER DISTRICT

Procedures Manual

REPLACEMENT OF PIPELINES

A





VICTORIAS CITY WATER DISTRICT

Procedures Manual

CALIBRATION OF WATER METER

Document No. : PM-OM-11

Effectivity Date :

Revision No. :

Pages : 1 of 4

I. OBJECTIVE

This procedure describes the process of calibrating water meter to ensure that the monthly water meter reading of the customer's consumption is accurate and correct.

II. SCOPE

The scope involves the flow of conducting calibration of old and new water meter of Victorias City Water District.

III. Responsibility and Resources

Customer Service Assistant C
Maintenance Team
Computer Operator
Officer in Charge for the Commercial Division

IV. DEFINITION OF TERMS

Calibration - is the process of testing the accuracy and durability of the water meter.

V. REFERENCE DOCUMENTS

Victorias City Water District Operations Manual

VI. RECORDS GENERATED

Service Request
Maintenance Order
VWCD MIS Database
Calibration Form
Calibration Logbook
Change Meter Logbook

Prepared by:

Approved by:

DANILO ESPERA

Process Owner

ENGR. ABRAHAM J. DE DIOS, JR.

General Manager



VICTORIAS CITY WATER DISTRICT

Procedures Manual

Calibration of Water Meter

I. PROCEDURE DETAIL AND FLOW

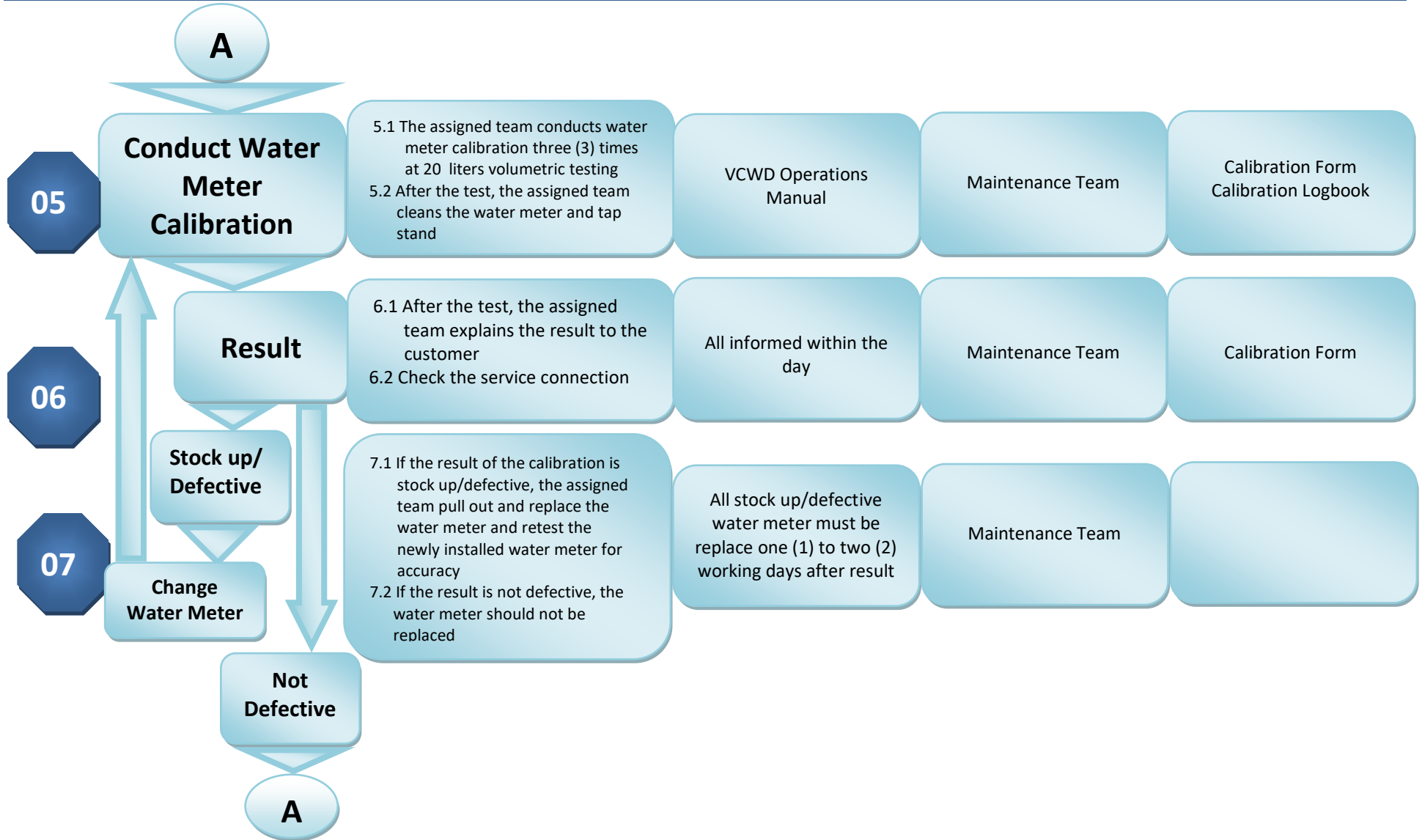
No.	Process Flow	Description of Activity	Guidelines/Criteria/Policy	Person In-charge	Retained Information
	START				
01	Prepare Service Request/ Maintenance Order	1.1 Customer Service Officer C prepares service request if the calibration of water meter is requested by the customer and maintenance order if initiated by VCWD 1.2 Forward service request/maintenance order to the Maintenance Team	If the water meter calibration were requested by the customer, the process should proceed to step 4 (Inform Customer)	Customer Service Officer C	Service Request Maintenance Order
02	Zone Monitoring	2.1 The Maintenance Team identifies the accounts in each zone who have decreasing average consumption in the past 3 months	Succeeding 3 months below the average consumption must be calibrated	Commercial Department	VCWD MIS Database
03	Generate Listing	3.1 Computer Operator generates the list of accounts that will serve as a guide for water meter calibration	Generate list within the day	Computer Operator	VCWD MIS Database
04	Inform Customer	4.1 The Maintenance team proceeds to the location and inform the customer before conducting the calibration	Must informed the customer before the calibration	Maintenance Team	
	A				



VICTORIAS CITY WATER DISTRICT

Procedures Manual

Calibration of Water Meter





VICTORIAS CITY WATER DISTRICT

Procedures Manual

Calibration of Water Meter

A

08

Record Calibration Result

8.1 The assigned team records the result of the calibration of water meter on the calibration form and have it signed by the customer or witness

All calibration form must signed by the customer

Maintenance team

Calibration Form

09

Report to the VCWD Office

9.1 The assigned team reports the results and all changed water to the VCWD office
9.2 Reports are duly signed and acknowledged by the Officer in Charge for the Commercial Division

All reported within the day or within the morning of the next working day

Maintenance Team

Calibration Form Change Meter Logbook

10

Forward Reports

10.1 The Officer in Charge forwards the report to the Commercial and Engineering Division

One copy of report to each division

Officer in charge

Calibration Form Change Meter Logbook

END



VICTORIAS CITY WATER DISTRICT

Procedures Manual

BACTERIOLOGICAL TESTING

Document No. : PM-OM-12

Effectivity Date :

Revision No. :

Pages : 1 of 2

I. OBJECTIVE

This procedure describes the process of testing the water supply of VCWD to guarantee that the water delivered to every household in Victorias City is safe, clean and potable.

II. SCOPE

The scope involves the flow of analyzing the water supply to determine the presence of harmful bacteria to avoid contamination.

III. RESPONSIBILITY AND RESOURCES

VCWD Assigned Personnel
Accredited Laboratory

IV. DEFINITION OF TERMS

Bacteriological Testing – a method of analysing the types and numbers of bacteria present in the water to determine if the water is contaminated and not suitable for drinking.

Purchase Request – document use by a department to request an order of materials and supplies with quantity and timeframe.

Accredited Laboratory – certified to perform testing and measurement.

V. REFERENCE DOCUMENTS

Philippine National Standards for Drinking Water (PNSDW) 2007

VI. RECORDS GENERATED

Purchase Request
Bacteriological Testing Result
Bacteriology Test Data

Prepared by:

Approved by:

DANILO BAUYA, SR.

Process Owner

ENGR. ABRAHAM J. DE DIOS, JR.

General Manager

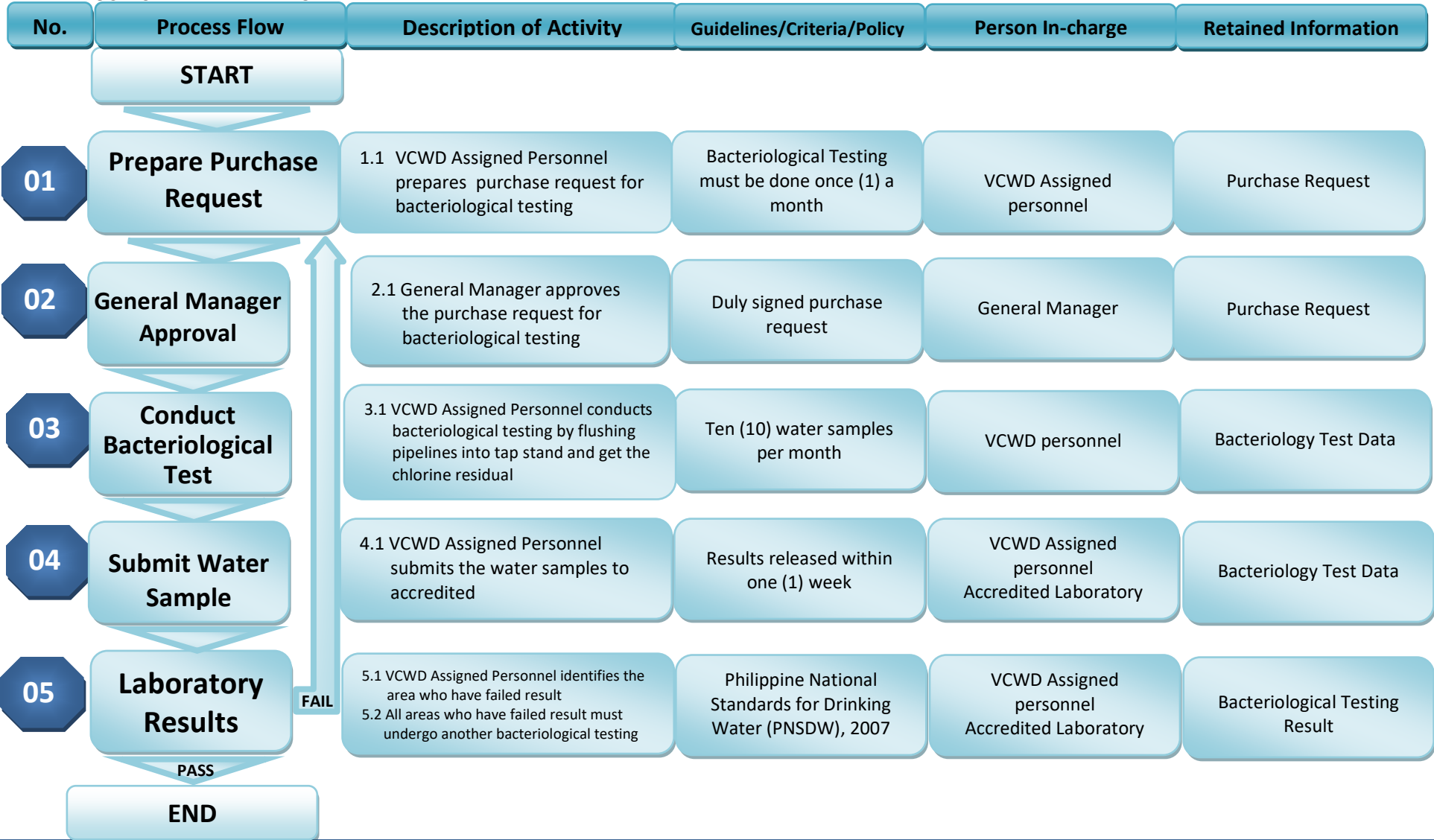


VICTORIAS CITY WATER DISTRICT

Procedures Manual

BACTERIOLOGICAL TESTING

VII. PROCEDURE DETAIL AND FLOW





VICTORIAS CITY WATER DISTRICT

Procedures Manual

FLUSHING OF PIPELINES

Document No. : PM-OM-13

Effectivity Date :

Revision No. :

Pages : 1 of 3

I. OBJECTIVE

This procedure describes the process of cleaning the pipeline to eliminate accumulated sediment, dirt and stagnant water; and to ensure the quality and safety of water supply

II. SCOPE

The scope involves the flow of conducting pipeline flushing by Victorias City Water District.

III. RESPONSIBILITY AND RESOURCES

Maintenance Team

IV. DEFINITION OF TERMS

V. REFERENCE DOCUMENTS

Victorias City Water District Operations Manual

VI. RECORDS GENERATED

Flushing of Pipeline Schedule
Memorandum receipt of tools and equipment
Flushing of Pipeline Form
Flushing Summary Report
Flushing Report

Prepared by:

Approved by:

DANILO ESPERA

Process Owner

ENGR. ABRAHAM J. DE DIOS, JR.

General Manager



VICTORIAS CITY WATER DISTRICT

Procedures Manual

FLUSHING OF PIPELINES

VII. PROCEDURE DETAIL AND FLOW

No.	Process Flow	Description of Activity	Guidelines/Criteria/Policy	Person In-charge	Retained Information
	START				
01	Prepare Pipeline Flushing Schedule	1.1 The Maintenance team prepares the schedule for irregular flushing activity 1.2 The Head Personnel of the Engineering Division approves the schedule	Must be done once a month and approved by the Head Personnel of the Engineering Division	Water Utilities Development Officer A (Engineering & Construction Section)	Flushing of Pipeline Schedule
02	Prepare Tools and Equipment	2.1 The Maintenance Team prepares the necessary tools and equipment for pipeline flushing	Check all tools and equipment before proceeding to the site	Maintenance Team	
03	Proceed to Location	3.1 The Maintenance Team proceeds to the designated location for flushing		Maintenance Team	
	A				



VICTORIAS CITY WATER DISTRICT

Procedures Manual

FLUSHING OF PIPELINES

A

