



**Standard Operation Guideline**

**Asset ID and Documentation**

ASSET IDENTIFICATION AND DOCUMENTATION

District Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Date Prepared: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date Revised: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

OBJECTIVE

Asset identification and documentation is the foundation of a system maintenance and management system known as asset management. The objective of this standard operating guideline is to outline key areas that should be identified, to establish a comprehensive Asset Management Program. If you do not know where an asset is, you cannot maintain it, shut it down in an emergency, or know if it works.

RATIONALE/PURPOSE

The purpose of this standard operating guideline is to promote the implementation of preventive and predictive maintenance programs and to provide members with information and a methodology used by other water agencies. As statistics show, asset management and preventive and predictive maintenance programs are essential when reducing overall operating costs, liability, and property losses. An accurate account of water distribution system assets is essential to:

* Improve customer service.
* Ensure mission capability.
* Improve emergency response actions.
* Ensure firefighting capability.
* Reduce liability and property losses.
* Determine capital improvement budgeting.
* Develop agency master plans.
* Facilitate dig locations (USA North 811/DigAlert).
* Develop material standards.
* Develop preventive and predictive maintenance programs.
* Develop loss trend analysis.
* Facilitate water loss calculations.

METHODS/PROCEDURES

The following methods and procedures are recommendations and illustrate methods used by other member agencies to collect and document system assets. Documentation is essential, and procedures need to be developed to ensure asset

**This model form/template must be customized to meet your Agency’s needs.**

information is collected consistently. This may require the development of new communications channels between departments (for example Engineering and Distribution Maintenance).

* GPS surveys to pinpoint resources.
* GIS computerized system data logging and information access.
* Periodic inspections/documentation during scheduled maintenance.
* Condition inspection and documentation following repairs.

**Procedures**

The following asset identification and documentation best practices would apply for both normal operations and following a loss:

1. **Identify assets related to water operations and maintenance (distribution pipelines, pumps, valves, wells, treatment systems, reservoirs, emergency generators, electrical control systems, tanks, etc.).**

* What is it?
  + Nameplate Data
  + Manufacture
  + Model
  + Type (Example: butterfly or gate valve)
  + Size
* Where is it?
  + Physical location
  + Soil concerns
  + Easement (Encroachments)
  + Confined space
  + Traffic concerns
  + Trenching requirements
* When?
  + Was it installed (methods used)?
  + Was it operated (if applicable)?
  + Was it inspected?
  + Was it maintained?
  + Was it replaced or removed?
* Why was it installed?
  + Safety device (Example: pressure relief valve)
  + System protection (Example: air/vacuum breaker)
  + Isolation
  + Regulation
  + Required by standards
  + Ensure mission capability (critical resource)

1. **Develop record drawing/mapping procedures.**

* Establish standards:
  + Symbology (size, horsepower, etc.)
  + Markings
  + Color codes
  + Abbreviations
* Include details of assets
  + Top of pipe
  + Pipe material/outside diameter
  + Fittings used
  + Valves

1. **Update asset information from reactive and scheduled work order/repair order procedures.**

* Identify the asset information that should be collected on a work order
  + A detailed description of the problem
  + Detailed log of corrective action
  + Materials used
  + Field observations
  + Tie-marks

1. **Identify where asset information is kept and who needs a copy.**

* Who needs the work order
  + Maintenance
  + Customer Service
  + Engineering
  + Information Systems
  + Accounting
  + Risk Manager

1. **Develop a usable record repository.**

* Asset database
  + Map posting
  + Asset management budgeting
  + Material review committee

1. **Establish an asset loss trend analysis process.**

* What is failing?
  + Why is it failing?
  + Do we have other similar assets?
  + Are there new methods?
  + Identification of physical trouble areas.

SAFETY CONSIDERATIONS

Precise asset locations can help to prevent damage to property, the environment, injury to the public, and employees by:

* Precluding dig damage (USA North 811/DigAlert)
* Facilitating emergency response actions
* Facilitating operations and maintenance personnel safety
* Identify safe work practices
* Job Hazard Analysis
* Lockout/Tagout
* ACP procedures
* Traffic control
* Trenching and shoring
* Confined spaces
* Adjacent underground services

COST BENEFIT

* Reduce adverse mission impact from inaccurate underground line location.
* System failure prediction would reduce water loss system degradation.
* Avoid costly liability and property losses.
* Create a manageable capital improvement budget.

INSPECTION FORMS/CHECKLISTS/DOCUMENTATION

* Water Operations and Maintenance Self-Audit Checklist
* Leak/Break/Damage Checklist
* Valve Maintenance Report
  + *District: Mission Springs WD*
* Damage Information Reporting Tool (Dirt) – Field Form
* Sweetwater Authority Water Leak Report
  + *District: Sweetwater Authority; Mark Molsberry (619) 409-6880)*
* Bella Vista Water District – Permanent Valve Record
  + *District:* *Bella Vista Water District*
* Bella Vista Water District – Permanent Hydrant Master Record
  + *District:* *Bella Vista Water District*