APGA SECURITY AND INTEGRITY FOUNDATION

2015 South Dakota/North Dakota
Pipeline Safety Operator Training
Sioux Falls, SD
April 16, 2015

Gerry Lee
APGA

Making Systems Safer

About the SIF

- 501(c)3 educational foundation – est. 2004

- Partially funded by Cooperative Agreement with U.S. Department of Transportation, Pipeline and Hazardous Materials Safety Administration (PHMSA)

- Works closely with federal, state and industry regulatory agencies and experts

About the SIF

□ Independent of APGA

□ Assist small operators to:
  ▫ operate safe gas distribution systems
  ▫ meet compliance requirements

□ "Small operators" include—
  ▫ Small utilities
  ▫ Master meter, and
  ▫ Propane piping systems

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OQ Project Manager

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Staff Executive

State Pipeline Safety Programs

Partnership with Industry Associations

What I'll Talk About Today

- Operation Qualification
- O & M Plans/Procedures
- SHRIMP
- Compliance Training
- Drug and Alcohol Plans
- Smart Tablet Applications
- PHMSA Guidance Documents

Operator Qualification

- ASME B31Q Covered tasks

- Written and Performance Testing

- Integrates with currently available OQ material from multiple providers

- Training consistent with OQ program and O&M manual

OQ Evaluations

- Evaluations offered in ~63 covered tasks

- Instructor led sessions held locally

- Material available for systems to use

- Target small utilities and master meters

- ~4000 people qualified-to-date

- Sessions scheduled across the country

SIF Covered Tasks KSA

- B31Q Covered Tasks

- Industry Wide SME Team

- Including State Program Managers

- Unique to SIF

Task 1261 Walking Gas Leakage Survey

From ASME B31Q:

Includes conducting a walking gas leak survey utilizing gas detection survey equipment, documentation, and reporting an emergency condition.

(1) Identify requirements
(2) Perform test equipment check
(3) Perform survey
(4) Recognize and react to Abnormal Operating Conditions
(5) Complete necessary documentation

Knowledge, skills, abilities and abnormal operating conditions for this task:

Knowledge of the properties of gas and other hydrocarbons
Knowledge of ignition sources
Knowledge of the use and care of personal protective equipment
Knowledge of gas migration
Knowledge of documentation and requirements for reporting an emergency condition
Knowledge to recognize the presence of other underground utilities
Knowledge of leak classification criteria
Knowledge of leak detection equipment used including calibration and maintenance
Knowledge and skills to perform a gas leak survey to include understanding usage of leak detection equipment, gas in sewer, gas in duct and pinpointing
Knowledge of pipeline location and marking requirement
Knowledge of make safe procedures
Knowledge of visual leak indicators
Ability to use leak detection equipment
Ability to conduct a barhole leak investigation
Ability to conduct a leakage survey utilizing available openings and pinpoint leak sources
Ability to read gas system pipeline drawings and maps
Ability to recognize and react to the following abnormal operating conditions:
Flammable gas atmosphere
Blowing/escaping/grade one leak
Fire on a pipeline
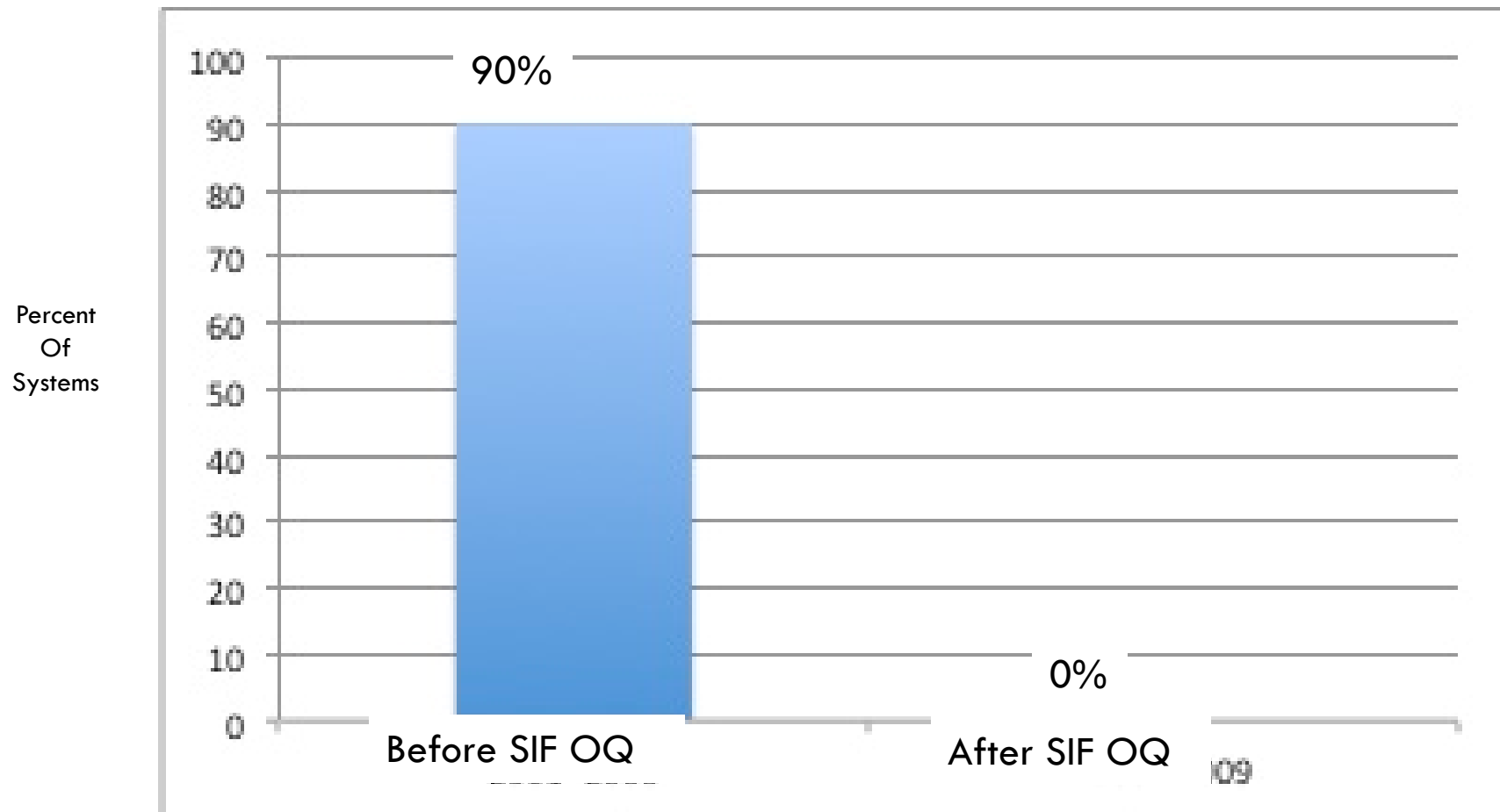Inoperability/failure of a pipeline component

Adopted: February 13, 2008

SIF OQ Modules

- Corrosion Control

- Leak Investigation

- Odorization

- Damage Prevention

- Tapping

- Pressure Testing

- Pipeline Repair

- Pipeline Installation

- Meter Installation

- Regulating Devices

- Valves

- Purging/Abandonment

Illinois Operators with 1 or More NOPV

APGA SECURITY AND INTEGRITY FOUNDATION

About SIF | SIF Event Calendar | O&M Procedures | SHRIMP (DIMP) | Drug & Alcohol Tool | Operator Qualification | Compliance Training | CRM Procedures

Qualifications Review

Hello

Category:	Pipeline Repair (FD) ▾			Change Filter
Task:	--		▾	Generate PDF of Results
	Corrosion Control (FD)			
City:	Damage Prevention (FD)	State:	-- ▾	
	Leak Investigation (FD)			
Individual:	Meter Sets (FD)			
	Odorization (HD)			
Exam Date:	Pipeline Installation (FD)	Result:	-- ▾	
	Pipeline Repair (FD)			

Pipeline Re | Pressure Testing (HD)

Task		Purge and Abandon (HD)	Date	Description	Location	Result
0201		Regulating Devices (FD)	10/12/2012	October 12 Pipeline Repair	Sullivan, IL	Passed
0681		Tapping (HD)	10/12/2012	October 12 Pipeline Repair	Sullivan, IL	Passed
0711		Valves (HD)	10/12/2012	October 12 Pipeline Repair	Sullivan, IL	Passed
0991	Mike Bennett		10/12/2012	October 12 Pipeline Repair	Sullivan, IL	Passed
1011	Mike Bennett		10/12/2012	October 12 Pipeline Repair	Sullivan, IL	Passed
1041	Mike Bennett		10/12/2012	October 12 Pipeline Repair	Sullivan, IL	Passed
1141	Mike Bennett		10/12/2012	October 12 Pipeline Repair	Sullivan, IL	Passed

SHRIMP Registration and Refund Policy

Workshop Registration & Refund Policy

D&A Tool Registration & Refund Policy

Website Privacy Policy

Site Map

Contact US

OQ Plan Template

- Simple, Straight-forward

- SIF Evaluation Focused

- Accepted by State Program Managers

- Included in PHMSA OQ Guidance Manuals

- Available on website – www.apgasif.org

{INSERT OPERATOR NAME}

Operator Qualification Plan

{INSERT EFFECTIVE DATE}

SIF OQ Plan Generator

- SHRIMP like program

- Create a customized OQ Plan

- Targeting small operators

- Consistent with other SIF generated plans

- SIF OQ plan template already exists

- Advisory group has been formed

O & M Procedures

- FREE! – download from the SIF website www.apgasif.org

- Over 100 procedures available; written for all ASME B31Q distribution covered tasks

- Integrates with other SIF plans and programs

- Easily customized MS Word (.doc) files

- Update to date with current standards and regulations

O & M Procedures

- Each procedure includes:
  - List of equipment and materials required
  - Potential worker safety issues
  - Step-by-step instructions and more
  - AOCs

- Instructions match SIF OQ evaluations

SIF O & M Plan Generator

- SHRIMP like program

- Create a customized O & M Manual

- Targeting small gas systems, master meter operators and LP Gas piping systems

- Incorporating current SIF task specific O & M Procedures

- Boilerplate language, customizable language, original language

- Will seamlessly link with SHRIMP and SIF OQ

- Advisory group has been formed

7 Elements of a DIMP Plan
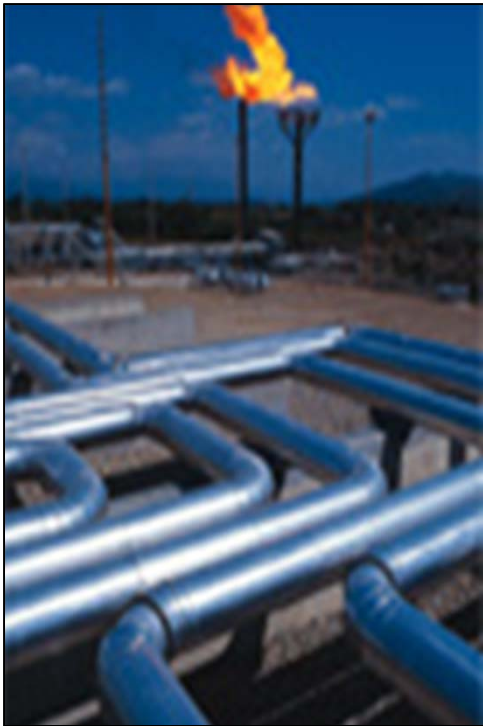
1. Develop a written integrity management plan
2. Know your infrastructure
3. Identify threats (existing and potential)
4. Assess and prioritize risk
5. Identify and implement measures to reduce risks
6. Measure and monitor performance, and
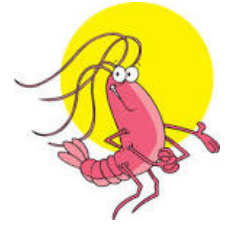7. Report results

Introducing SHRIMP!

Simple, **H**andy, **R**isk-based **I**ntegrity **M**anagement **P**lan

SHRIMP Development

- Funded through a cooperative agreement with PHMSA
- Advisory Group made up of state regulators, federal regulators and industry
- Technical Toolboxes, Software developer
- Heath and Associates, Technical Consultant
- Viadata, Technical Consultant

SHRIMP
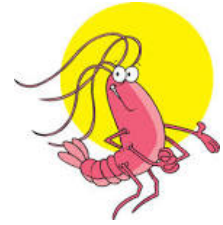
- Software product similar to tax preparation software (TurboTax)

- SHRIMP asks the user a series of questions about the system and its inspection and maintenance history

- Questions change based on answers

- Output is a customized DIMP Plan addressing all the elements and any other provisions in the rule

SHRIMP
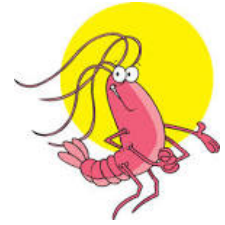
- Compliant with Federal Distribution Integrity Management Program regulation

- Used by systems of all types and sizes (master meter, municipal, natural gas, propane, investor owned)

- Pre-audited and updated based on results

- More than1,192 users representing over 6,600,000 meters nationally

SHRIMP
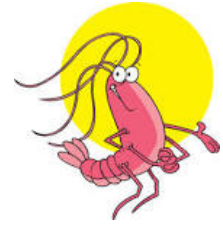
- Users Guide available for basic program questions

- Use <u>Contact Support</u> and <u>Technical Notes</u> for most technical questions
  - Emails are documented so program changes can be made if needed
  - A copy of the SHRIMP page is emailed with your question

SHRIMP Enhancements
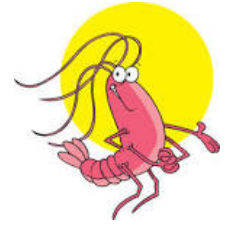
- Major revision in 2012 – Manage plan revision and track changes

- If users have not updated your SHRIMP plan since Version 1, please read the Technical Note

- Regularly updated based on feedback from state inspections and users

- Cross reference to inspection form available – read it!

SHRIMP Enhancements
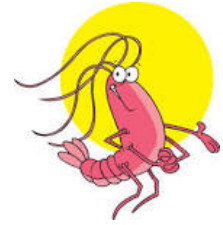
- We are still making adjustments to the threat questions and to the risk ranking model

- We are making every attempt to ensure no data is lost in the process

- Some changes may change relative risk ranks for one or more threat-sections

- We alert users to changes via the alert feature in SHRIMP and on the bulletin board at: http://www.apgasif.org

Coming Enhancements
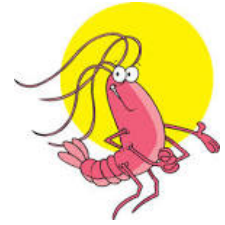
- Major revisions to threat assessment and risk ranking sections

- All system segments for all threats will now appear in the risk ranking section, regardless of relative risk score

- Consequence questions will be asked of all system segments

- Users will be able to re-rank relative risk and assign AAs and PMs to any threat-segment

- Benchmarking capabilities

Compliance Training

- A one-day seminar on what to expect from and how to prepare for a compliance inspection

- Customizable curriculum with focus on priority areas

- Designed for small and large audiences

- Add-on meeting format

Compliance Training

- The workshops have 3 primary goals:

  - Heighten regulatory awareness

  - Reduce safety risk, both public safety and non-compliance

  - Streamline and improve the actual inspection process

Anti-Drug and Alcohol Plan Development Tool (DA)

- Creates a compliant Drug & Alcohol plan step-by-step online
- Deliverable
  - Web Based Development Tool
  - Similar to SHRIMP
  - Downloadable Written Plan
- Targeted Users
  - LDC
  - Contractors
- Industry wide subject matter expert team

Anti-Drug and Alcohol Plan Development Tool (DA)

- Available since 2011
- Works just like SHRIMP
- Automatically kept up to date with rule changes
- ~ 70 operators are using
- Can be found at www.apgasif.org

Anti-Drug and Alcohol Plan Development Tool (DA)

- **Not a Model Plan – It is a Development Tool**
- Unique for your system
- Question/Answer Inquiries
- Meets all requirement of Part 40 and 199
- Complies to PHMSA Inspection Protocol
- Access/Links to Forms
- Appendix of Supporting Documentation
- User Manual Provided

SMART Tablet Apps



- Create a web-based real time data collection system

- Capture, store and manage data
  - Materials Management
  - Construction/Maintenance
  - Operations and Maintenance Inspections

- Utilized smart phone and/or tablets

- Satisfy compliance reporting

- Advisory group was formed

PHMSA Guidance Documents

- Small Operators Guide

- OQ Guide for Small Operators

- LP Operators Guide

- OQ Guide for Small LP Operators
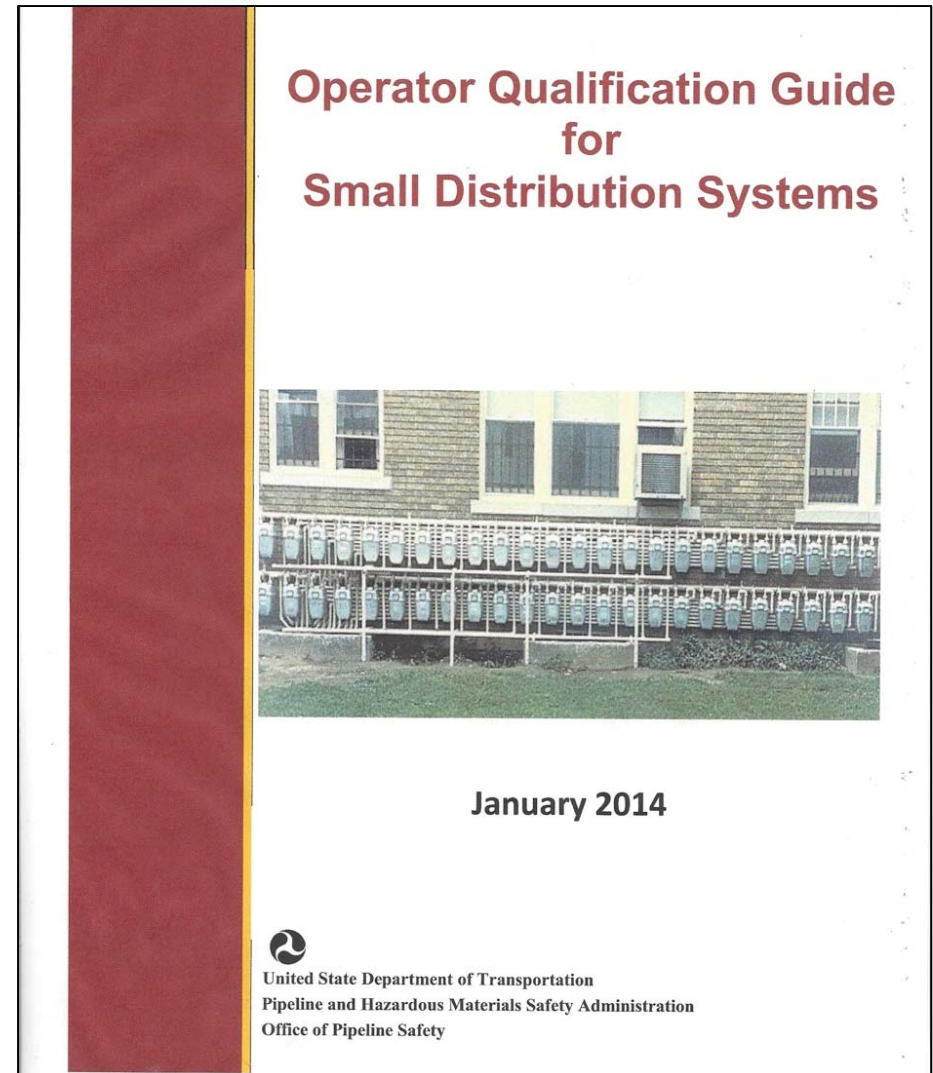
SIF Compliance Services

www.apgasif.org

APGA Security and Integrity Foundation
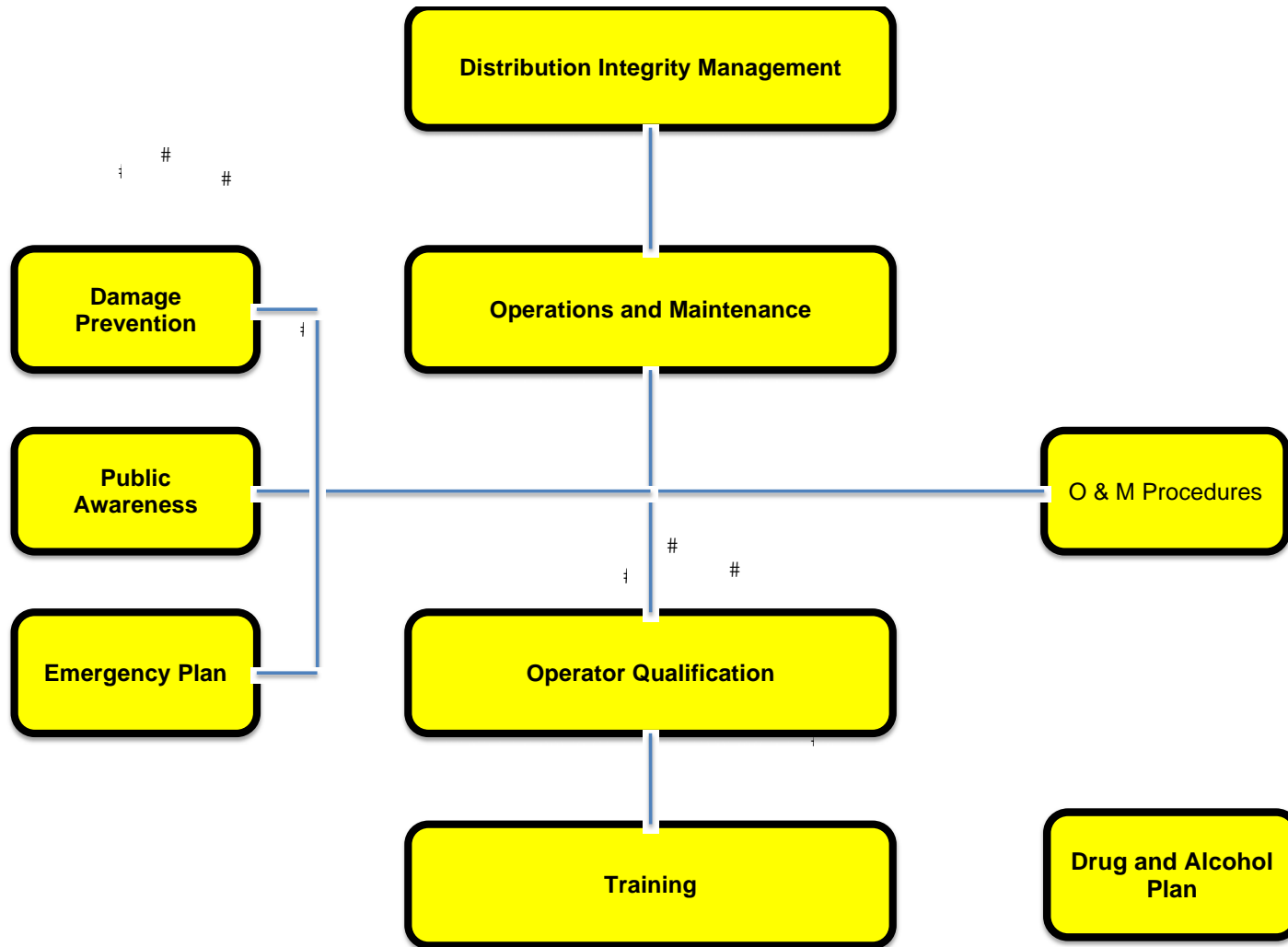
- Online information source
- Register for meetings
- Subscribe/Renew online tool subscriptions
- Search users (shrimp)
- View OQ histories
- Download O&M Procedures
- View upcoming events

Contact Information

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Questions?