

Operations & Maintenance Plan



Emergency Plan & Procedures

CITY OF BLOOMFIELD, IOWA

GAS SYSTEM

OPERATING AND MAINTENANCE PLAN

A Model Plan from the

IOWA ASSOCIATION OF MUNICIPAL UTILITIES

1735 NE 70th Avenue

Ankeny, Iowa 50021-9353

515/289-1999

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TABLE OF CONTENTS

ANNUAL REVIEW OF EMERGENCY PLAN & PROCEDURES	9
 PART 1 – EMERGENCY PROCEDURES	
EMERGENCY CONDITIONS	3
DESIGNATED EMERGENCY RESPONSE COORDINATOR	5
AVAILABILITY OF EMERGENCY PLAN & PROCEDURES	5
PROCEDURES FOR RECEIVING, IDENTIFYING & CLASSIFYING NOTICES THAT REQUIRE IMMEDIATE RESPONSE	6
WORKING HOURS EMERGENCY NOTIFICATION PROCEDURE	7
AFTER HOURS EMERGENCY NOTIFICATION PROCEDURE	8
NOTIFICATION OF EMERGENCY LOCATE REQUESTS	9
PROCEDURES FOR DISPATCH PERSONNEL RECEIVING NOTIFICATIONS	10
PROCEDURES FOR ESTABLISHING & MAINTAINING ADEQUATE MEANS OF COMMUNICATION	11
EMERGENCY NOTIFICATION CONTACT LIST	12
AVAILABILITY OF EMERGENCY PERSONNEL, EQUIPMENT, TOOLS & MATERIALS	15
AVAILABILITY OF SYSTEM MAPS & RECORDS	16
RESPONDING TO REPORTS OF POTENTIAL GAS LEAKS OR ODORS	17
INSIDE LEAK INVESTIGATION PROCEDURES	20
INSIDE EMERGENCY PROCEDURES	23
OUTSIDE LEAK INVESTIGATION PROCEDURES	24
OUTSIDE EMERGENCY PROCEDURES FOR LARGE LEAKS	26
EMERGENCY PROCEDURE FOR EXCAVATION DAMAGES RESULTING IN ESCAPING GAS	27
EMERGENCY PROCEDURE FOR FIRE OR EXPLOSION	28
EMERGENCY PROCEDURE FOR INTERRUPTIONS IN GAS SUPPLY	29
EMERGENCY PROCEDURE FOR POTENTIAL FLOODING OF GAS FACILITIES	31
EMERGENCY PROCEDURE FOR SHUT-DOWN & PRESSURE REDUCTION	32
MAKING SAFE ANY ACTUAL OR POTENTIAL HAZARD	33
EMERGENCY PROCEDURE CHECKLIST	34
INVESTIGATION OF FAILURES	35
REVIEW OF EMPLOYEE ACTIVITIES	36
EXCAVATION DAMAGE FOLLOW-UP REPORT	36
 PART 2 – PROCEDURES FOR REPORTING INCIDENTS	
STATE INCIDENT REPORTING	3
FEDERAL INCIDENT REPORTING	6
RETRACTING A 30-DAY WRITTEN REPORT	9
SAFETY RELATED CONDITION REPORTS	10
DISTRIBUTION SYSTEM MAOP EXCEEDANCE	13

TRANSMISSION MAOP EXCEEDANCE	13
RAILROAD & UTILITY EMERGENCY CONTACT INFORMATION	14

PART 3 – EMERGENCY TRAINING

LIAISON & EMERGENCY TRAINING WITH FIRST RESPONDERS & PUBLIC OFFICIALS	3
EMERGENCY TRAINING FOR EMPLOYEES (GAS PERSONNEL)	5

PART 4 – RECORD KEEPING DOCUMENTS

EMPLOYEE EMERGENCY TRAINING RECORD	3
EMERGENCY TRAINING & LIAISON RECORD FOR FIRST RESPONDERS & PUBLIC OFFICIALS	5
EVALUATION OF EMPLOYEE EMERGENCY TRAINING EFFECTIVENESS	7
LEAK RECORD	9
REVIEW OF EMPLOYEE ACTIVITIES	11
EXCAVATION DAMAGE FOLLOW-UP REPORT	12

Annual Review of Emergency Plan & Procedures

At least once each calendar year with intervals NOT exceeding 15 months, the Emergency Response Coordinator must review and, if necessary, update this Plan. It is also recommended that all personnel who are qualified to respond to emergencies and any additional personnel who may be involved with emergency response should complete an annual review.

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PART 1

CITY OF BLOOMFIELD , IOWA

Emergency Procedures



The Emergency Plan & Procedures is designed to establish procedures for preventing accidents, incidents and responding quickly and effectively should any emergency conditions exist. Each call or report of a condition that presents the potential for an emergency will be treated as an emergency until company personnel determine otherwise.

The first priority in all emergency conditions is to protect life first and then property.

1.0 - Emergency Conditions

- 1) Emergency conditions exist when the Emergency Response Coordinator (ERC) or another designated company employee determines that extraordinary procedures, equipment, manpower, and supplies are necessary to protect the public from existing or potential hazards. These hazards may include, but are not limited to the following:
 - a) Facility failures that result in the following:
 - i) Over pressure of the system.
 - ii) Under pressure of the system.
 - iii) Uncontrolled escaping gas.
 - iv) Fire or explosion.
 - v) Danger to major segment(s) of the system.
 - b) Any leak that is classified as a Grade 1 leak at the time of detection, however, all reports of leaks are considered emergency situations until deemed otherwise.
 - c) Load reduction conditions where it is necessary to meet exceptional load conditions by the voluntary or mandatory reduction of gas usage by select customers.
 - d) Natural disasters, such as flooding, tornados, earthquakes, or other forces of nature with severe enough conditions to make emergency provisions necessary.
 - e) Civil disturbances or riots that may require special procedures.
 - i) Guarding company facilities
 - ii) Dedicated person in charge of obtaining additional resources (State Police, National Guard, etc.)
 - f) National or State Emergencies (declared by President or Governor)

(continued on next page)

- 2) Each call or report of a condition that presents the potential for an emergency will be treated as an emergency until it is determined otherwise. Prompt and effective response to the following conditions shall be made in accordance with procedures found in this Plan:
 - a) Report of gas odor or leaks
 - b) Report of suspicion of carbon monoxide
 - c) Fire or explosion near or directly involving gas facilities
 - d) Interruptions of service
 - e) Interruption in gas supply
 - f) Excavation damages (line hits)
 - g) Natural disasters such as tornadoes or flooding
- 3) Response to other emergency conditions or abnormal operating conditions shall be made in a manner consistent with procedures that are included in this Plan and that are intended to protect people first, then property. Examples of these other conditions include:
 - a) The unintended closure of a valve or a shutdown
 - b) An increase or decrease in pressure or flow rate outside normal operating perimeters
 - c) MAOP exceedance
 - d) A loss of communications
 - e) Failure of safety devices or any other malfunction of a component
 - f) Deviation from normal operation
 - g) Personnel error
- 4) At a minimum, procedures for response to such conditions shall include:
 - a) Prompt reporting to appropriate operating personnel.
 - b) Continuous action to correct any condition that may pose a hazard to persons or property.
 - c) Where appropriate, coordination of the response with appropriate outside agencies and the public.
 - d) Where appropriate, checking variations from normal operation after abnormal operation has ended at sufficient critical locations in the system to determine continued integrity and safe operation: and
 - e) Investigation of the circumstances surrounding the incident, including the date and time it occurred or was first observed and reported, as well as a summary of actions taken to correct the condition, determine the cause, and prevent recurrence.

1.1 - Designated Emergency Response Coordinator (ERC)

The Utility shall designate a company employee who will be responsible for the overall implementation of this Plan as well as coordinating additional emergency response if an emergency condition exists.

Individual Name &/or Job Title

GAS SUPERINTENDENT

1.2 – Availability of Emergency Plan and Procedures: Locations

A copy of the Emergency Plan & Procedures is kept at the following locations in order to provide timely access to Plan procedures if an emergency condition were to arise. If changes and/or modifications are made to the Plan, the ERC shall maintain and update copies of the Plan at all of the following locations.

NOTE: It is recommended that the Plan be placed and maintained in all gas operations vehicles, in the operations office, and at places where dispatch personnel can quickly gain access to the information.

Locations of Emergency Plan and Procedures
GAS DISTRIBUTION ONE DRIVE- ELECTRONIC VERSION
HARD COPY IN GAS OFFICE
HARD COPY IN DPW OFFICE

1.3 – Procedures for Receiving, Identifying and Classifying Notices That Require Immediate Response

- 1) The Utility shall provide a means of adequately handling all reports or indications concerning emergencies from customers, the public, employees, or other sources. The Utility must make provisions for the following:
 - a) A 24-hour contact number for receiving notifications.
 - i) Working hours and after-hours contacts may be different.
 - ii) This may include a local 911 dispatch center, an after-hours pager number, or an answering system that forwards incoming notifications to qualified on-call personnel.
 - iii) If a local 911 dispatch center is used for receiving after-hour notifications, they must be provided with updated call-out lists of personnel who could respond.
 - b) Setting up an after-hours, on-call rotation schedule of qualified individuals who could respond to notifications.
 - c) Provide Iowa One-Call with telephone numbers or email addresses of qualified personnel who could respond to an after-hours emergency locate request.
- 2) All notifications of potential emergency conditions received by operating personnel must be responded to within a maximum of 60 minutes.
 - a) Notifications of potential emergency conditions take priority over all other work being conducted.

NOTE: Procedure documents may be found on the next three pages of this Plan. These procedures provide an outline for responding to certain notifications. If an Operator follows a different procedure than what is provided, it should be inserted into this Plan.

Working Hours Emergency Notification Procedure

NOTE: To be used for receiving, identifying and classifying notices that require immediate response by utility personnel.

How Is the Emergency Contact Number Distributed to The Public? (check all that apply)

Public Awareness ☒ Utility Newsletter ☐ Utility Website ☐
Television ☐ Radio ☐ Signage & Pipeline Markers ☒

Other: LOCAL NEWSPAPER- BLOOMFIELD DEMOCRAT

Procedure for During Working Hours

Emergency Contact Phone Number: 911

Incoming Calls Are Received By:

List by name of dispatch center or by name &/or job title
DAVIS COUNTY LAW CENTER

Information May Be Dispatched to The Following Qualified Responding Personnel:

Name	Contact Number
TODD SCHUMAKER	641-208-1005
KHALED AL-KHANFAR	641-799-9106
MICAH ELAM	641-242-0294
JARED FRYMOYER	641-208-4431
ADAM BRIDGMAN	641-208-3200

After Hours Emergency Notification Procedure

NOTE: To be used for receiving, identifying and classifying notices that require immediate response by utility personnel.

How Is the Emergency Contact Number Distributed to The Public? *(check all that apply)*

Public Awareness ☒ Utility Newsletter ☐ Utility Website ☐
Television ☐ Radio ☐ Signage & Pipeline Markers ☒

Other: LOCAL NEWSPAPER - BLOOMFIELD DEMOCRAT

Procedure for After Working Hours

Emergency Contact Phone Number: 911

Note: If the emergency contact phone number directs caller to dial additional numbers or forwards call to regional 911 dispatch center, list all relevant contacts and phone numbers below:

Name/Place	Contact Number
IF THE CITY # 641-66402260 IS DIALED IT DIRECTS THE CALLER TO DIAL 1	
IN AN EMERGENCY WHICH TRANSFERS TO THE	
DAVIS COUNTY LAW CENTER	

Incoming Calls Are Received By:

List by name of dispatch center or by name &/or job title
DAVIS COUNTY LAW CENTER

Information May Be Dispatched to The Following Qualified Responding Personnel:

Name	Contact Number
TODD SCHUMAKER	641-208-1005
KHALED AL-KHANFAR	641-799-9106
MICAH ELAM	641-242-0294
JARED FRYMOYER	641-208-4431
ADAM BRIDGMAN	641-208-3200

Notification of Locate Requests

NOTE: To be used for receiving, identifying and classifying locate requests that require immediate response by utility personnel.

List all contact numbers provided to Iowa One-Call for locate requests.

641-664-9652 GAS OFFICE & FORWARDS TO GAS SUPERINTENDENT

CITY HALL 641-664-2260

DAVIS COUNTY LAW CENTER 641-664-2734

Does the contact number direct Iowa One-Call to a dispatch center, a pager, or directly to responding personnel? GAS SUPERINTENDENT & DAVIS COUNTY LAW CENTER

If email is used to receive locate requests, list all email addresses that have been provided to Iowa One-Call.

blfdgas@cityofbloomfield.org

dclaw@netins.net

iowaonecall@cityofbloomfield.org

List of all individuals and contact information for personnel that are qualified to complete a locate request.

Name	Contact Number
TODD SCHUMAKER	641-208-1005
MICAH ELAM	641-242-0294
KHALED AL-KHANFAR	641-799-9106
JARED FRYMOYER	641-208-4431
ADAM BRIDGMAN	641-208-3200

1.4 – Procedures for Dispatch Personnel Receiving Notifications

NOTE: All Utility personnel receiving notifications of potential emergencies must be trained in how to effectively recognize emergency situations and to communicate those conditions to appropriate qualified responding personnel.

- 1) Information received should be assessed in order for the operator to react properly to the call and to inform the caller of potential precautionary actions to be taken before operating personnel arrive on the scene.

The following information should be obtained from the caller:

- 1) Name
- 2) Address
- 3) Telephone number
- 4) Reason for call
- 5) If call is for potential gas odor or leak, ask the following:
 - a) Location of the odor, is it inside or outside?
 - b) Amount of time the odor has been present?
 - c) Any evidence of escaping gas (a hissing sound)?
 - d) Has anyone recently worked on gas appliances or indoor gas piping?
 - e) Is there any construction activity in the area?
- 6) If call is for potential carbon monoxide leak, ask the following:
 - a) Are you feeling any signs or symptoms of CO poisoning such as a headache, dizziness, nausea or shortness of breath?
 - b) How were you made aware of the potential problem?
 - c) Any specific area in which the problem was noticed?

Additional safety instructions to convey to the caller:

- 1) If call is for potential gas odor or leak, state the following:
 - a) DO NOT smoke.
 - b) DO NOT create a source of ignition by operating electrical switches or telephones.
 - c) Evacuate the area and wait at a safe distance until operating personnel arrive. Remember to ensure that the door remains unlocked to allow for operator entry.
 - d) If access to the premises is not gained or allowed, the gas meter will be shut off and locked.
 - e) If necessary to call back with additional information, do so from a safe distance.
- 2) If call is for potential carbon monoxide leak, state the following:
 - a) If possible, open doors and windows to ventilate.
 - b) Evacuate and breathe fresh air.
 - c) If necessary, due to caller showing signs of CO poisoning, ask if you can have their permission to call 911 to receive medical attention.

Reminder: All incoming calls involving line hits with escaping gas, fire or explosion, potential damage to structures or utilities, or any potential injuries or deaths, IMMEDIATELY notify 911.

1.5 – Procedures for Establishing and Maintaining Adequate Means of Communication

Establishing and Maintaining Communications:

- 1) An adequate means of communication must be established and maintained with appropriate fire, police, and other public officials.
- 2) Consideration should be given to providing the following means of communication, if applicable:
 - a) Continuously updated operator and public emergency call lists that will show how to contact personnel that may be required to respond.
 - b) Multiple cellular telephone numbers or land lines.
 - c) Fixed and mobile radio equipment.
 - d) Standby electrical generating equipment for communications power supply.
 - e) A social media platform or website to gather and disseminate information.

Effectively Communicating with a Local Incident Command Scene (ICS):

- 1) When local emergency responders have set up an Incident Command prior to the arrival of operator personnel:
 - a) The first operator to arrive at the scene should introduce themselves to the Incident Commander as the representative from the gas utility.
 - b) That person remains the point of contact until the incident has been made safe or until relieved of that duty by another representative from the gas utility.
- 2) When local emergency responders are not yet on the scene:
 - a) The first person representing the operator to arrive on the scene will serve as Command.
 - b) That person should assess the situation and take, or direct, all necessary actions to protect people, then property, and secure the flow of gas if necessary.
- 3) If local emergency responders arrive later and set up an ICS:
 - a) Once on scene, the first responder in charge, or the Incident Commander takes charge of the scene.
 - b) The Command for the pipeline operator should introduce themselves as the point of contact for the operator and brief the Incident Commander of the situation.

NOTE: The contact lists contained in Division 1.6 of this Plan should be reviewed and updated at least annually to ensure that the information contained in the lists is accurate.

1.6 - Emergency Notification Contact List

The following personnel, agencies, departments, and businesses may be called upon in response to an emergency that presents potential harm to life or property.

Emergency Response Coordinator *(person responsible for coordinating response)*

Name or Job Title	Contact Number
GAS SUPERINTENDENT	641-208-1005

Qualified Personnel Who Could Respond or Provide Additional Support

Name or Job Title	Contact Number
TODD SCHUMAKER	641-208-1005
MICAH ELAM	641-242-0294
KHALED AL-KHANFAR	641-799-9106
JARED FRYMOYER	641-208-4431
ADAM BRIDGMAN	641-208-3200

Mutual Aid Information

If the situation requires support beyond the Utilities resources, Mutual Aid may be called upon to provide additional assistance. See IAMU Mutual Aid Program for additional information.

Mutual Aid Region:		
	Name	Phone
Primary Coordinator	KEVIN KUDART MONTEZUMA	515-372-0062
Secondary Coordinator	NATE SPURGEON PELLA	641-629-0205
Primary State Coordinator	NICK VANDEGRIFF IAMU	641-919-8411
Secondary State Coordinator	ROD PARCEL IAMU	515-291-7727

TC ENERGY , LINEVILLE IOWA

Gas Supplier or Pipeline Operator Information

Name, Job Title, or Response Center	Contact Number
NATHANIEL HERVEY	920-979-3228
TRACY HENLEY	319-677-6241
COLTON HARTLEY	563-232-9838
JASON STARK	281-755-9174

Law Enforcement Agencies (Police, Sheriff, State Patrol)

Name of Agency	Contact Number
DAVIS COUNTY LAW CENTER	911
BLOOMFIELD POLICE DEPT	911

Local First Responders (Fire Department, EMS)

Name of Agency or Dept. Chief	Contact Number
JEFF MCCLURE	641-208-0269
BLOOMFIELD VOL FIRE DEPARTMENT	911
DAVIS COUNTY EMS	911

County Emergency Management Coordinator

Name	Contact Number
MIKE LAMB	641-895-0407

Local/Regional Medical Facilities and Ambulance Services

Facility Name	Contact Number
DAVIS COUNTY EMS	911
DAVIS COUNTY HOSPITAL	641-664-2145
OTTUMWA REGIONAL HOSPITAL	641-684-2300

LEVEL 1 TRAUMA CENTER
 UNIVERSITY OF IOWA HOSPITALS , IOWA CITY
 MERCY ONE DES MOINES TRAUMA CENTER
 UNIVERSITY OF IOWA HOSPITAL & CLINICS

515-241-5080
 800-777-8442
 515-643-2084
 319-356-1616

Local/Regional Burn and Trauma Centers

Facility Name	Contact Number
IOWA METHODIST MEDICAL CENTER	515-241-6212
MYRTUE MEDICAL CENTER EMERGENCY	712-755-5161

Local/Regional Licensed Plumbers and Gas Appliance Dealers

Company Name	Contact Number
MINCKS HEATING & AIR CONDITIONING	641-208-3766
DAY'S HEATING & AIR	641-208-5788
CHARLIES REPAIR, BRIAN ARMSTRONG	641-208-6285
A+ SERVICES, OTTUMWA IOWA	641-208-6466

Third Party Excavators & Gas Contractors

Company Name	Contact Number
USDI UNIONVILLE MISSOURI	660-947-3316
IAMU ANKENY IOWA	515-289-1999

Local Additional Resources

These resources include local television and radio stations, gas stations and restaurants that may provide communication support.

Facility/Company Name	Contact Number
KTVO KIRKSVILLE MO	660-627-3333
KYOU OTTUMWA IOWA	641-684-5415
KUDV 106.9 FM	800-748-7875
OTTUMWA RADIO	641-684-5563
KMGO RADIO OTTUMWA IOWA	800-373-4930

1.7 – Availability of Emergency Personnel, Equipment, Tools, & Materials

- 1) The Utility must ensure that at least one qualified individual is available at all times who is capable of responding to potential emergency situations and reporting conditions to the ERC.
 - a) If qualified operator personnel are NOT available for any reason, provisions must be made through the Mutual Aid Program or a 3rd Party Contractor to ensure the availability of qualified personnel at all times.
- 2) It is the responsibility of the Utility and the ERC, to ensure that an adequate inventory of materials and equipment necessary to respond and repair potential emergency conditions is available and maintained at all times.
- 3) If additional materials and/or equipment is necessary to respond or repair an existing emergency condition, Mutual Aid or a 3rd Party Contractor should be contacted to provide assistance.
 - a) The most recent edition of the IAMU Mutual Aid Program should be kept on file at all times. The ERC should be familiar with resources that are available throughout their own specific Mutual Aid Region.
 - b) The following information (if available) is provided for each Utility in the IAMU Mutual Aid Program that could potentially provide assistance with an emergency condition;
 - i) Total number of employees that are qualified to perform welding, pipe joining, service restoration and leak investigation.
 - ii) The equipment that is available such as CGI's, squeeze-off tools, stopping equipment, portable welders and portable generators.
 - iii) The type of joining equipment that is available such as heat fusion equipment and mechanical couplings.
 - iv) The type, size, grade and amount of pipe typically on hand.

1.8 – Availability of System Maps and Records

- 1) All operating personnel capable of responding to potential emergency situations must have access to the following to provide additional pertinent information:
 - a) Complete system maps with emergency valve locations.
 - b) Construction records.
 - c) Operation and maintenance records.
 - d) Historical records.
- 2) Records and maps may be provided through electronic/digital means or by paper.
- 3) System maps should be updated as often as necessary to ensure that newly installed or altered facilities can be found and identified.

System Maps and Records Can be Found at the Following Locations:

Locations:
GAS TRUCK
GAS VAN
GAS OFFICE

1.9 – Responding to Reports of Potential Gas Leaks or Odors

NOTE: The first priority when responding to a report of a gas leak or odor is to protect life and then property. In general, all leaks should be repaired as soon as practical after discovery.

- 1) All reports of gas leaks or odors must:
 - a) Take priority over all other types of work.
 - b) Be responded to immediately, arriving on-site within a maximum of 60 minutes.
 - c) Be investigated and documented.
- 2) All reports of gas leaks or odors must be documented whether the presence of gas was discovered or not.
 - a) Documentation may be completed on the Leak Record or other company approved document and must be kept and maintained for a minimum of 10 years.

1. Leak Classification and Action Criteria:

Grade 1 Leak: A leak that represents an existing or probable hazard to persons or property, and requires immediate repair or continuous action until the conditions are no longer hazardous.

- 1) Once it has been determined that a Grade 1 leak exists, operating personnel or emergency response personnel must remain on site to ensure the safety of people and property.

Examples of Grade 1 Leaks	Action Criteria
1. Any leak, which in the judgement of the operating personnel on the scene, is regarded as an immediate hazard.	1. Provide prompt and continuous action to protect life and property until the condition is no longer hazardous.
2. Any leak that can be seen, heard, or felt, and which is in a location that may endanger the general public or property.	2. Implement the Emergency Plan and Procedures.
3. Escaping gas that has ignited.	3. Stop the flow of gas by closing valves or by other means.
4. Any indication that gas migrated into or under a building or tunnel.	4. Eliminate ignition sources.
5. Any reading of gas at the outside wall of a building, or where gas would likely migrate to an outside wall of a building.	5. Notify emergency responders.
6. Any reading of 80% LEL or greater in a confined space.	6. Evacuate premises.
7. Any reading of 80% LEL or greater in small substructure (other than gas associated substructures) from which gas would likely migrate to the outside wall of a building.	7. Block off the area.
	8. Reroute traffic.
	9. Vent the area by removing manhole covers, bar-hole venting, or by other means.

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Grade 2 Leak: A leak that is recognized as being non-hazardous at the time of detection, but could become hazardous, and requires scheduled repair.

- 1) In general, all leaks, regardless of Grade, should be repaired as soon as practical after discovery. If not repaired when found, Grade 2 leaks must be re-evaluated every 6 months and repaired or eliminated within one calendar year, but no later than 15 months from the date it was discovered.

Examples of Grade 2 Leaks	Action Criteria
<ol style="list-style-type: none"> 1. Any leak which, in the judgement of operating personnel at the scene, is of sufficient magnitude to justify scheduled repair. 2. Any leak which, under frozen or other adverse soil conditions, would likely migrate to the outside wall of a building. 3. Any reading of 40% LEL, or greater, under a sidewalk in a wall-to-wall paved area that does NOT qualify as a Grade 1 leak. 4. Any reading of 100% LEL, or greater, under a street in a wall-to-wall paved area that has significant gas migration and does NOT qualify as a Grade 1 leak. 5. Any reading less than 80% LEL in small substructures (other than gas associated substructures) from which gas would likely migrate creating a probable future hazard. 6. Any reading between 20% LEL and 80% LEL in a confined space. 7. Any reading on a pipeline operating at 30% SMYS, or greater, in a Class 3 or 4 location, which does NOT qualify as a Grade 1 leak. 8. Any reading of 80% LEL, or greater, in a gas associated substructure. 	<ol style="list-style-type: none"> 1. In determining repair priority, criteria such as the following should be considered: <ol style="list-style-type: none"> a) Amount and migration of gas. b) Proximity of gas to buildings and subsurface structures. c) Extent of pavement. d) Soil type and soil conditions, such as frost cap, moisture, and natural ability to vent. 2. If not repaired immediately, Grade 2 leaks must be re-evaluated at least once every 6 months until cleared or reclassified. The frequency of re-evaluation should be determined by the location and magnitude of the leakage condition. 3. Grade 2 leaks may vary greatly in degree of potential hazard. Some Grade 2 leaks, when evaluated by the above criteria, may justify scheduled repair within the next 5 working days. Others will justify repair within 30 days. 4. On the other hand, many Grade 2 leaks, because of their location and magnitude, can be scheduled for repair on a normal routine basis with periodic reinspection as necessary. 5. If during re-evaluation it is determined that the leak should be upgraded to a Grade 1 leak, prompt and continuous action must now take place to protect life and property until the leak is repaired or conditions are no longer hazardous.

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Grade 3 Leak: A leak that is not hazardous at the time of detection and can reasonably be expected to remain non-hazardous.

- 1) In general, all leaks, regardless of Grade, should be repaired as soon as practical after discovery. If not repaired when found, Grade 3 leaks must be re-evaluated during the next scheduled survey, or within 15 months of the date reported, whichever occurs first, until the leak is regraded or no longer results in a reading.

Examples of Grade 3 Leaks	Action Criteria
<ol style="list-style-type: none">1. Any reading of less than 80% LEL in a small gas associated substructure.2. Any reading under a street without wall-to-wall paving where it is unlikely the gas could migrate to the outside wall of a building.3. Any reading of less than 20% LEL in a confined space.	<ol style="list-style-type: none">1. If not repaired immediately, Grade 3 leaks must be re-evaluated during the next scheduled survey, or within 15 months of the date reported, whichever occurs first.2. If during re-evaluation, it is determined that the leak should be upgraded to a Grade 2 leak, the Grade 2 leak classification and action criteria will now apply.

1.10 – Inside Leak Investigation Procedures

Requirements:

- 1) During any emergency situation, the first priority is to protect life and then property.
- 2) All reports of leaks must take priority over all other work.
- 3) All reports of leaks must be investigated using a calibrated combustible gas indicator.

Calibration Requirements and Documentation:

- 1) All combustible gas indicators must be calibrated periodically not exceeding manufacturers' recommendations.
- 2) Documentation of calibration may be kept on the Combustible Gas Indicator Calibration Record or other company approved document and must be kept and maintained for 10 years.

Documentation and Record Retention Requirements:

- 1) All reports of leaks and leak investigation results must be documented whether the presence of gas was found or not.
- 2) Documentation may be completed on the Leak Record or other company approved document and must be kept and maintained for 10 years.
- 3) Documentation must include time the leak was reported, time personnel were dispatched, and time of arrival at leak location.

Inside Leak Investigation Procedure:

The following steps should generally be followed in the order listed until the leak is identified. The investigation may stop at that point ONLY if the investigator is satisfied that there are no more leaks.

- 1) When arriving at leak location, if possible, park vehicle in a location upwind of suspected leak area. Ensure that vehicle is NOT parked on top of storm drains, sanitary sewer manholes, or other locations where gas could be accumulating or escaping.
- 2) Leave cell phones, pagers, and other unsafe devices that may cause sparks in the vehicle.
- 3) Turn on combustible gas indicator outdoors and allow the unit to zero in a gas free atmosphere before entering the building.
- 4) KNOCK on the door. DO NOT use the doorbell.
- 5) Upon admittance to the premises, test free air immediately (first test near the ceiling).
NOTE: "Free air" is considered any location not directly on the source of the leak.
- 6) If a reading of 20% LEL or higher is obtained at any time while testing free air, all occupants must be evacuated before proceeding to the next step.
- 7) If at any time, a free air reading is obtained at or above 5% N, immediately evacuate, shut-off the meter set, eliminate ignition source (have electric provider cut the power to building), and from a safe distance dial 911 and allow emergency responders to ventilate.

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- 8) Speak with customer and ask of probable location of leak and probable locations of gas piping and appliances.
 - a) Remind customer to not turn on lights, switches, appliances, use the telephone, etc., until a determination has been made that there is no explosive condition.
- 9) If applicable, test air at top of basement stairwell. This check should be made as soon as possible after gaining admittance as this is an area for potential collection.
- 10) If customer provides the specific location of the source of the gas smell, proceed directly to that area.
- 11) Using combustible gas indicator, continually take samples of free air throughout the building and at the following locations:
 - a) All gas piping, pipe joints, valves, appliances, appliance piping, and appliance vents.
 - b) Cracks in basement walls, crawl spaces, floor joists, and dead air spaces.
 - c) Sewer openings and floor drains.
 - d) All underground entrances of utilities (gas, water, electricity, telephone, TV, internet, etc.).
 - e) All other locations where gas might accumulate.
- 12) If at any time, a gas leak is found indoors on customer piping or appliances, the leak location should be "Red Tagged", the customer notified of the condition, and if applicable isolated by turning off an individual appliance valve. If, determined by the operator, an unsafe condition could develop due to the severity of the leak and it cannot be isolated by shutting of an appliance valve, the gas meter may be shut-off and locked until the leak has been repaired.
- 13) If the gas meter is outside, take samples at the following locations.
 - a) The meter set, components, piping and pipe joints, including any customer owned piping accessible downstream of the meter set.
 - b) Bar-hole by the gas riser within 1 foot of the basement wall and twice on every wall around the building to ensure that gas is NOT migrating into or near the building from an underground source.
 - c) It may be necessary to check meter sets and piping of adjacent buildings for the source of the leak.
 - d) If any presence of gas is found below ground at the foundation wall during bar-hole testing, bar-hole testing must continue at a maximum of 10-foot intervals in all directions until 0% gas is found to find the spread boundary of the leak.
- 14) If a leak is still not evident, perform a "No-Flow" test through the meter on customer owned piping and appliances.
 - a) If the "No-Flow" test fails, go back inside and re-sample all accessible customer owned piping and appliances to find the source of the leak.
 - b) If the "No-Flow" test is successful and all other steps included in this procedure have been completed, attempt to identify any sources of related odors.
- 15) When leaving the customer's premises, assure the customer that their complaint has not been a nuisance and that any future indication of a gas odor should be reported immediately.

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Additional Procedures for Investigating a Report of Carbon Monoxide:

NOTE: Investigating for the presence of carbon monoxide must be conducting using a combustible gas indicator or other device capable of measuring concentrations of carbon monoxide in parts per million (PPM)

- 1) Ensure that the sampling device is calibrated, turned on, and zeroed in free air before entering premises.
- 2) KNOCK on the door, DO NOT ring the doorbell.
- 3) Speak with the customer and ask them if they are feeling any symptoms of CO poisoning such as a headache, nausea, dizziness, tiredness, etc.
 - a) If the customer is feeling symptoms or shows signs of CO poisoning, ask them to please step outside at a safe distance and if they would like you to call 911 for emergency assistance.
 - b) If not feeling or showing signs of CO poisoning ask them if they know the specific area in which they suspect a CO leak or if a CO detector has gone off alerting them of the situation.
- 4) Since carbon monoxide is relatively the same specific gravity as air, it will be necessary to take samples at all levels (floor, head height, and ceiling height) throughout the premises.
 - a) If CO levels of 10-35 PPM are discovered, while testing free air, recommend that the occupants leave the building until the problem has been corrected and the atmosphere has been rechecked and found clear.
 - b) If CO levels over 35 PPM are discovered, while testing free air, the occupants will be required to leave the building until the problem has been corrected and the atmosphere has been rechecked and found clear. If occupants refuse to leave the building, shut-off the gas, lock the meter, and Red Tag any known offending appliances.
 - c) If no CO is detected, start gas appliances and recheck atmosphere. It is also necessary to check flue conditions for proper ventilation.
 - i) If any appliance or appliance flue is found to be source of the excessive CO, shut off and Red Tag the specific appliance.
- 5) When leaving the customer's premises, assure the customer that their complaint has not been a nuisance and that any future indication of carbon monoxide should be reported immediately.

1.11 – Inside Emergency Procedures

NOTE: The following procedure is to be used anytime the operator is performing an inside leak investigation according to Division 1.10 and discovers gas concentrations at or above the lower explosive limit or if a fire or explosion has occurred.

- 1) Immediately evacuate the premises and get a head count of all occupants to ensure complete evacuation has been accomplished.
- 2) Shut-off the flow of gas by closing the service valve found at the meter set or, if applicable, the curb valve.
- 3) From a safe distance call 911 and notify appropriate first responders.
- 4) From a safe distance call appropriate personnel so that the electricity may be disconnected eliminating the potential for accidental ignition.
- 5) DO NOT attempt to ventilate premises yourself. Wait for first responders to arrive so that they can safely ventilate.
- 6) When first responders or additional operating personnel arrive at the scene, continue to investigate the surrounding buildings, utility manholes, storm sewer drains, etc., to determine the spread boundary of the leak.
- 7) If spread boundary of the leak is widespread and not limited to the immediate scene, evacuate all buildings in the affected area.
- 8) If the leak cannot be isolated by closing the service valve, it may be necessary to shut off the flow of gas to the affected area by closing an emergency valve that isolates the affected area.
- 9) If it is determined that the affected area cannot be isolated from unaffected segments of the system, it may be necessary to shut off the flow of gas at the regulator station essentially eliminating the flow of gas throughout the system causing a system wide outage.

REMINDER: If shutting off the flow of gas to the affected area results in the discontinuation of service to 50 or more customers, the Iowa Utilities Board Duty Officer must be notified at 515-745-2332 as soon as practical (preferably within 1 hour of discovery).

- 10) Continue investigating to identify the source of the leak.
- 11) Once the source of the leak has been identified, repairs must be made.
- 12) If necessary, restore service to all affected customers.
- 13) Ensure that all record keeping documentation has been completed and filed.
- 14) After the emergency situation has ended, repairs have been made, and the system is back to normal operating status, the operator must review the activities of all operating personnel to involved to determine if all procedures were effectively followed during the emergency.
 - a) The review should be documented on the Review of Employee Activities Record or other company approved document and should be kept and maintained for a minimum of 10 years.

1.12 – Outside Leak Investigation Procedures

Requirements:

- 1) During any emergency situation, the first priority is to protect life and then property.
- 2) All reports of leaks must take priority over all other work.
- 3) All reports of leaks must be investigated and classified using a calibrated combustible gas indicator.

Calibration Requirements and Documentation:

- 1) All combustible gas indicators must be calibrated periodically not exceeding the manufacturer's recommendations.
- 2) Documentation of calibration may be kept on the Combustible Gas Indicator Calibration Record or other company approved document and must be kept and maintained for 10 years.

Documentation and Record Retention Requirements:

- 1) All reports of leaks and leak investigation results must be documented whether the presence of gas was found or not.
- 2) Documentation may be completed on the Leak Record or other company approved document and must be kept and maintained for 10 years.
- 3) Documentation must include time the leak was reported, time personnel were dispatched, and time of arrival at leak location.

Outside Leak Investigation Procedure:

The following steps should generally be followed in the order listed until the leak is identified. The investigation may stop at that point ONLY if the investigator is satisfied that there are no more leaks.

- 1) When arriving at leak location, if possible, park vehicle in a location upwind of suspected leak area. Ensure that vehicle is NOT parked on top of storm drains, sanitary sewer manholes, or other locations where gas could be accumulating or escaping.
- 2) Leave cell phones, pagers, and other unsafe devices that may cause sparks in the vehicle.
- 3) Turn on combustible gas indicator outdoors and allow the unit to zero in a gas free atmosphere before entering the building.
- 4) When investigating outdoors, it is recommended the inside the building be deemed safe for occupancy and ensure that gas is not migrating indoors. If applicable, see steps 5-10.
- 5) KNOCK on the door. DO NOT use the doorbell.
- 6) Upon admittance to the premises, test free air immediately (first test near the ceiling).
- 7) If a reading of 20% LEL or higher is obtained at any time while testing free air, all occupants must be evacuated before proceeding to the next step.

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- 8) If at any time, a free air reading is obtained at or above 5% N, immediately evacuate, shut-off the meter set, eliminate ignition sources (have electric provider cut the power to the building), and from a safe distance dial 911.
- 9) Speak with customer and ask of probable location of leak and remind customer to not turn on lights, switches, appliances, use the telephone, etc., until a determination has been made that there is no explosive condition.
- 10) If applicable, test air at top of basement stairwell. This check should be made as soon as possible after gaining admittance as this is an area for potential collection.
- 11) If it has been determined that the inside of the building is safe for occupancy and the source of the leak is NOT indoors, proceed outside and take samples at the following locations:
 - a) The meter set, components, piping and pipe joints, including any customer owned piping accessible downstream of the meter set.
 - b) Bar-hole around the gas riser as close as possible to the foundation wall and thoroughly on every wall around the building to ensure that gas is NOT migrating into or near the building from an underground source.
 - c) If any presence of gas is found below ground during bar-hole testing, bar-hole testing must continue at a maximum of 10-foot intervals in all directions until 0% gas is found to find the spread boundary of the leak.
 - i) Bar-hole the service line at 10-foot intervals from the riser to the main.
 - ii) Bar-hole along the main in both directions at 10-foot intervals.
 - d) Check all meter sets, above ground piping, and thoroughly bar-hole all sides of the buildings adjacent to or across the street from the area where the complaint originated.
 - e) Take samples of all manholes, catch basins, sewers, etc., in the area.
 - f) Check all other above ground utility facilities.
- 12) If it is not possible to identify gas as the source of the odor at this point and all possible checks have been made, attempt to identify the source of any related odors.
- 13) When leaving the customer's premises, assure the customer that their complaint has not been a nuisance and that any future indication of a gas odor should be reported immediately.

1.13 – Outside Emergency Procedure for Large Leaks

NOTE: The following procedure is to be used when there is evidence of a large leak such as uncontrolled blowing gas, obvious physical damage to the pipeline, or any concentration of gas at or above the lower explosive limit.

- 1) Assess the potential for danger to people first, then property. Remember to protect people first.
- 2) Evacuate all buildings and the immediate area, if necessary.
- 3) Eliminate potential ignition sources.
- 4) Blockade and prevent any unauthorized people or vehicles from entering area.
- 5) From a safe distance call 911 and notify appropriate first responders.
- 6) If necessary, from a safe distance, call appropriate personnel so that electricity may be discontinued to the affected area.
- 7) Determine whether the gas flow can effectively be eliminated by performing squeeze-off procedures or stopping procedures.
- 8) If the gas flow may NOT be effectively eliminated by squeezing-off or stopping, the affected area must be isolated from the rest of the system by closing an emergency valve to stop the flow of gas to the leak source.
- 9) When first responders or additional operating personnel arrive at the scene, continue to investigate the surrounding buildings, utility manholes, storm sewer drains, bar-hole testing, etc., to determine the spread boundary of the leak.
- 10) If spread boundary of the leak is widespread and not limited to the immediate scene, evacuate all buildings in the affected area.
- 11) If it is determined that the affected area cannot be isolated from unaffected segments of the system, it may be necessary to shut off the flow of gas at the regulator station essentially eliminating the flow of gas throughout the system causing a system wide outage.

REMINDER: If shutting off the flow of gas to the affected area results in the discontinuation of service to 50 or more customers, the Iowa Utilities Board Duty Officer must be notified at 515-745-2332 as soon as practical (preferably within 1 hour of discovery).

- 12) Continue investigating to identify the source of the leak.
- 13) Once the source of the leak has been identified, repairs must be made.
- 14) If necessary, restore service to all affected customers.
- 15) Ensure that all record keeping documentation has been completed and filed.
- 16) After the emergency situation has ended, repairs have been made, and the system is back to normal operating status, the operator must review the activities of all operating personnel involved to determine if all procedures were effectively followed during the emergency.
 - a) The review should be documented on the Review of Employee Activities Record or other company approved document and should be kept and maintained for a minimum of 10 years.

1.14 – Emergency Procedure for Excavation Damages Resulting in Escaping Gas

NOTE: The following procedure is to be used any time there has been damage caused to the pipeline during an excavation that results in escaping gas.

- 1) Assess the potential for danger to people first, then property. Remember to protect people first.
- 2) Evacuate all buildings and the immediate area, if necessary.
- 3) Eliminate potential ignition sources.
- 4) Blockade and prevent any unauthorized people or vehicles from entering area.
- 5) From a safe distance call 911 and notify appropriate first responders.
- 6) If necessary, from a safe distance, call appropriate personnel so that electricity may be discontinued to the affected area.
- 7) Assess damage to pipeline and determine the best course of action to take to eliminate gas flow.
 - a) Should an emergency valve be closed to isolate the damaged pipeline, or can squeeze-off or stopping procedures be completed safely?
- 8) When a pipeline is hit, "pullout" damage may occur well away from the site of the hit and the possibility of multiple leak locations must be considered.
 - a) At minimum, when a service line is hit it should be bar hole tested for additional leakage at the service riser, the connection to the main (tap tee location), and any known mechanical couplings.
 - b) When a main is hit, it should be bar hole tested for additional leakage at any nearby branch connections or couplings.
- 9) Bar-hole testing must be performed and mapped at a maximum of 10-foot intervals from the point of impact in all directions until a 0% gas reading is obtained.
- 10) Bar-hole testing must also be performed on all foundations of all buildings within close proximity to the line hit to verify that 0% gas is present.
- 11) If gas is discovered along the foundation of any building within close proximity to the line hit, the building must be evacuated and an inside leak investigation performed according to Division 1.10 - Inside Leak Investigation.
- 12) Check for the presence of gas at all nearby manholes, catch basins, storm sewers, and sanitary sewers within close proximity to the line hit.
- 13) Make repairs to damaged pipeline.
- 14) Ensure that all record keeping documentation has been completed and filed.
- 15) After the emergency situation has ended, repairs have been made, and the system is back to normal operating status, the operator must review the activities of all operating personnel involved to determine if all procedures were effectively followed during the emergency.
 - a) The review should be documented on the Review of Employee Activities Record or other company approved document and should be kept and maintained for a minimum of 10 years.

1.15 – Emergency Procedure for Fire or Explosion

NOTE: The following procedure is to be used any time there is a fire or explosion near or directly involving gas pipeline facilities.

- 1) From a safe area, immediately call 911 and notify first responders.
- 2) Evacuate area.
- 3) Blockade and prevent any unauthorized people or vehicles from entering the area.
- 4) After ensuring the safety of people, the top priority is to stop the flow of gas.
 - a) If a building is on fire and service riser valve can safely be turned off, do so. If the fire is near the service riser and it cannot be safely shut off, it may be necessary to isolate the area by closing the appropriate emergency valve eliminating the flow of gas.
 - b) If an explosion has occurred, the affected area must be isolated from gas flow by closing the appropriate emergency valve.
- 5) Fires should not be extinguished until gas flow has been eliminated, unless it is necessary to extinguish a small fire in order to gain access to a shut-off valve.
- 6) Once gas flow has been eliminated, continue to perform leak investigations in the immediate area to determine the extent of the migration of gas.
 - a) Check all surrounding buildings (inside and outside along foundations), utility manholes, storm sewer drains, etc., to determine if additional evacuations are necessary.

REMINDER: If the fire or explosion has caused an injury resulting in inpatient hospitalization, a death, or \$122,000 or more of damage including losses to operator facilities, you must notify PHMSA of the incident within 1 hour of confirmed discovery by dialing the National Response Center at 800-424-8802 or electronically at www.nrc.uscg.mil.

- 7) If necessary, continue investigating to identify the source of the leak.
- 8) Once the source of the leak has been identified, repairs must be made.
- 9) If necessary, restore service to all affected customers.
- 10) Ensure that all record keeping documentation has been completed and filed.
- 11) After the emergency situation has ended, repairs have been made, and the system is back to normal operating status, the operator must review the activities of all operating personnel involved to determine if all procedures were effectively followed during the emergency.
 - a) The review should be documented on the Review of Employee Activities Record or other company approved document and should be kept and maintained for a minimum of 10 years.

1.16 – Emergency Procedure for Interruptions in Gas Supply

NOTE: The following procedure is to be used any time there is an interruption in gas supply due to incorrect operation (closure) of a valve, freezing of pressure regulating equipment, line hit, sabotage, or supplier cut off.

Reduction in Pipeline Pressure:

If pressure has been reduced, not eliminated, to a point where an outage may occur if pressure continues to drop, the following steps should be taken:

- 1) Determine the cause of the pressure reduction and what facilities are being affected.
 - a) A reduction in pressure may be caused by reduction in gas pressure from the supplier, the freezing of pressure regulating equipment, a line hit with escaping gas, incorrect closure of a valve, or by any other means that reduces gas flow.
- 2) If due to a line hit, follow procedures found in 1.14 – Emergency Procedure for Excavation Damages Resulting in Escaping Gas.
- 3) If due to the incorrect closure of a valve, slowly and incrementally open the valve until gas pressure has been increased to the correct operating pressure throughout the affected segment.
- 4) If due to reduction in pressure from supplier, contact supplier immediately and monitor pressure until supplier has corrected the problem.
- 5) If due to malfunctioning of pressure regulating equipment it may be necessary to manually bypass pressure regulation equipment by performing LAMU Procedure #9.8: Adjust and Monitor Flow or Pressure – Manual Valve Operation (Manual Bypass Operation).
- 6) If at any time pressure is reduced to a point where an outage occurs, follow steps provided in this section for Loss of Pipeline Pressure or Outage.

Loss of Pipeline Pressure or Outage:

If pipeline pressure has been reduced to 0 psi causing an outage to the entire system or a specific segment of the system, the following steps should be taken:

- 1) Determine the cause of the outage and what facilities are being affected.
 - a) An outage may be caused by being cut off from the supplier, incorrect closure of a valve, malfunction of pressure regulating equipment, or by any other means of eliminating the flow of gas.
- 2) If the outage has been caused by any means where a large volume of gas is escaping follow procedures found in 1.13 – Outside Emergency Procedures for Large Leaks or 1.14 – Emergency Procedure for Excavation Damages Resulting in Escaping Gas.

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REMINDER: If the outage has caused a loss of service to 50 or more customers, the Iowa Utilities Board Duty Officer must be notified at 515-745-2332 as soon as practical (preferably within 1 hour of discovery).

- 3) Once the cause of the outage has been determined and before gas pressure is re-established, a customer-to-customer operation will be conducted and all service valves in the affected area must be closed.
 - a) If the outage is system wide or includes a large portion of the system, it may be necessary to contact Mutual Aid and obtain additional assistance.
- 4) All service valves that are closed, DO NOT need to be locked during a large outage emergency, but should be tagged or zip tied in the closed position.
- 5) Once all service valves to affected customers have been closed and tagged or zip tied, make pipeline repairs if necessary and begin to bring the system back into operation.
- 6) Once pressure has been re-established in the system and is under control of pressure regulation or bypassing equipment, begin to restore service to all affected customers by following IAMU Procedure #3.8: Restore Service.
- 7) Gas service is NOT to be restored to any customer who is not available or where access to the inside cannot be gained.
 - a) If the gas service is to remain off and service cannot be restored for any reason, the service valve should be locked with an approved locking device.
- 8) If a customer is not available, and access to the inside of the building is not available, a notice of the outage must be left in a conspicuous location and efforts made requesting that the customer contact the operator and set up an appointment for restoring service.
 - a) It is also recommended that if the utility has a social media page or website, that pertinent information regarding the outage and the ability to restore service be posted.
- 9) Ensure that all record keeping documentation has been completed and filed.
- 10) After the emergency situation has ended, repairs have been made, and the system is back to normal operating status, the operator must review the activities of all operating personnel involved to determine if all procedures were effectively followed during the emergency.
 - a) The review should be documented on the Review of Employee Activities Record or other company approved document and should be kept and maintained for a minimum of 10 years.

1.17 – Emergency Procedures for Potential Flooding of Gas Facilities

NOTE: The following procedure is to be used if it is known, due to weather or flood level forecasts, that gas facilities may be affected or potentially damaged by rising water levels.

- 1) Evaluate the location and accessibility of emergency valves.
 - a) Are valves going to be inaccessible during periods of high water?
 - b) Are there other valves that could be operated during periods of high water that offer the same level of safety if emergency shut-down is required?
- 2) Evaluate meter set locations. For any meter sets that could be partially or completely submerged, perform one of the following:
 - a) Install piping on regulator vents and relief stacks and extend above anticipated flood levels.
 - i) Piping must be metallic, at least the same diameter as the vent or stack, and terminate pointing down with a screen.
 - b) Close and lock the service valve, remove the regulator and meter, and cap-off the open ends of the piping (including the customer side).
- 3) After flood waters have receded and it is safe to do so, conduct a pipeline patrol of all facilities that were affected by the flooding and check for the following:
 - a) Damage to above ground facilities
 - b) Soil erosion or subsidence
 - c) Pipeline exposure
 - d) If necessary, take depth of cover measurements above the pipeline
 - e) Pipeline markers (replace if missing or damaged).
- 4) If damage is discovered or significant erosion with pipeline exposure is found, it may be necessary to conduct a leak survey to ensure that the system is gas tight.

1.18 – Emergency Shut-down and Pressure Reduction

NOTE: Under certain circumstances it may be necessary to shut-down or reduce pressure in the system or specific system segments to minimize the hazards to people and property.

- 1) Whenever confronted with uncontrolled escaping gas, determination should be made to shut down or reduce pressure in the system to minimize the hazards to people and property.
- 2) If a fire or explosion has occurred, the affected area must be shut down.

Shut Down of Segment or System:

- 1) The following considerations should be made to determine if it is necessary to shut down or isolate the system or a segment of the system:
 - a) Close proximity to buildings or structures.
 - b) Close proximity to heavily traveled highways or interstates.
 - c) Close proximity to emergency responder search and rescue area.
 - d) Equipment for stopping or squeezing-off is not available.
 - e) Ability to safely perform stopping or squeeze-off procedures taking into consideration the amount of time it would take to eliminate flow.
 - f) Access to, and operability of, valves located in areas prone to high water or flooding conditions.

Pressure Reduction:

- 1) If gas can NOT escape safely into the atmosphere, pressure reduction may NOT be considered. If gas can escape safely into the atmosphere, the following considerations should be made to determine if it is necessary to reduce pressure instead of shutting down pipeline:
 - a) Would shut down affect critical customers such as hospitals or nursing homes?
 - b) Would shut down affect large number of customers during extreme cold conditions?
 - c) What is the proximity to buildings or structures?
 - d) What is possibility of gas migration?
 - e) Ability to keep area safe while gas is escaping.
 - f) What are possible sources of ignition and can they be safely eliminated?

1.19 – Making Safe any Actual or Potential Hazard

NOTE: During any emergency situation, operating personnel on the scene must be able to identify, locate, and make safe any actual or potential hazard.

- 1) When determining how to make safe any actual or potential hazard, consideration should be given to the following:
 - a) Controlling pedestrian and vehicular traffic into and out of the area.
 - i) Setting up barricades, fencing, traffic control.
 - b) Eliminating potential sources of ignition.
 - i) Potentially notify electric utilities to cut power to the affected area.
 - c) Controlling the flow of leaking gas and its potential migration.
 - i) Shut down, isolate, or reduce pressure in the pipeline.
 - ii) Ventilate the area, if applicable, by removing manhole covers, bar-holing, installing bar-hole purging equipment, or hand dig vent holes, etc.
 - d) Determine the full spread boundary of the leak, taking into consideration the possibility of multiple leak locations.
 - e) Monitor the area for any changes.
 - f) Coordinate the following with first responders and public officials.
 - i) Evacuations.
 - ii) Search and rescue efforts.
 - iii) Ensure pertinent information is shared with emergency responders in a timely manner.

1.20 – Emergency Procedure Checklist

NOTE: The following checklist may be used as a guide to follow during a line hit or potential incident.

Emergency Procedure Checklist

- 1) Have precautions been taken to protect people first and then property?
- 2) Have people been evacuated and the area blockaded?
- 3) Has 911 been contacted?
- 4) Has communication been established with the Incident Commander?
- 5) Have utility and other public officials been notified?
- 6) Has civil defense been notified, if necessary?
- 7) Has gas leak been eliminated or brought under control by means of isolating affected pipeline segment?
- 8) Have all sources of accidental ignition been eliminated?
- 9) Has surrounding area (including buildings adjacent to and across streets) been investigated for the possibility of migrating gas?
- 10) Has outside help (mutual aid) been requested, if necessary?
 - a) Mutual aid contact number: KEVIN KUDART MONTEZUMA 515-372-0062
- 11) Have all service valves in the affected area been shut-off and tagged?
- 12) Has telephonic report to the National Response Center (800-424-8802) been made, if necessary?
- 13) Has telephonic report to the Iowa Utilities Board Duty Officer (515-745-2332) been made, if necessary?
- 14) If necessary, have safety instructions been posted on utility website, social media platforms, or provided to local radio or television stations?

1.21 – Investigation of Failures

NOTE: The utility shall fully investigate each incident that meets State and/or Federal reporting requirements for the purpose of determining root cause and minimizing the possibility of recurrence.

Investigation Process:

- 1) The investigation should be completed in a manner that aids in determining the root cause of the incident or failure and minimizes the possibility of recurrence.
- 2) Once it is determined that an incident has occurred and reported to the appropriate agency, a log should be made that includes significant events and actions taken during the incident to create an accurate timeline and to provide specific information when filing incident reports.
 - a) It may also be necessary to include post-incident drug and alcohol testing results.
- 3) Failure investigations may be completed “in-house” or by contracting a subject matter expert (SME) or an outside source with experience in incident or failure investigations.
 - a) If an “in-house” investigation is conducted, the information contained in the 30-day written incident report filed with PHMSA may provide an adequate investigation of the incident or failure.
- 4) If the incident was a result of a failure of pipe or pipeline components and a detailed analysis of the pipe or pipeline component is necessary to determine the root cause of the incident, the pipe or pipeline component must be sent to a laboratory for testing.
 - a) When gathering failed pipe or pipeline components for testing, care must be taken so that additional damage or contamination is not sustained by the failed pipe or component.
 - b) If possible, deliver/send the failed pipe or component to the laboratory “as is” without cleaning or tampering in any way.
- 5) Testing and analysis completed by the laboratory on the failed pipe or component must be retained and reviewed by the operator.
 - a) After review, the operator must determine if additional actions or preventative measures are necessary in other areas of the pipeline that contain the same type of failed pipe or component that were involved in the incident.
- 6) Investigations may include photos, drawings, written descriptions, interviews, and any other pertinent information that could aid in determining root cause and prevent recurrence.
- 7) The investigation must also include a review of the activities of all operating personnel involved in or responding to the incident to determine if all procedures were effectively followed during the emergency.
 - a) The review should be documented on the Review of Employee Activities Record or other company approved document and should be kept and maintained for a minimum of 10 years.

NOTE: If the investigation concludes that the incident was a direct result of a qualified individuals’ failure to follow procedures, consideration should be given to disqualifying and require that re-training and requalification is completed.

1.22 – Review of Employee Activities

- 1) Following each emergency, as previously defined, employee activities should be reviewed to determine whether procedures were effectively followed and proper documentation was completed.
- 2) The process may include, but not limited to, review of the following:
 - a) Record keeping documents.
 - b) Response times.
 - c) Were actions taken to protect people first?
- 3) After the review process, consideration should be given to the need for changes in the written procedures as may be indicated by the experience gained during the emergency.

Documentation Requirements:

- 1) The employee activities review may be documented on the Review of Employee Activities or other company approved document.
- 2) The employee review document may be stored or kept with the other emergency documents that pertain to that specific emergency or as its own stand-alone document.

1.23 – Excavation Damage Follow-up Report

- 1) The operator shall complete a follow-up report for all excavation damages that resulted in repairs or replacement of line pipe or components (excluding coating damage) with or without the release of gas.
- 2) The follow-up report shall be conducted with all personnel involved to determine the following:
 - a) What was the root cause of the line hit or incident?
 - b) Were all appropriate emergency procedures followed and documented correctly, if applicable?
 - c) What can be done to minimize the possibility of recurrence?
- 3) Documentation may be completed on the Excavation Damage Follow-up Report or other company approved document and must be kept and maintained for a minimum of 10 years.

NOTE: If the excavation damage resulted in an incident and the operator was required to file a written incident report with the Iowa Utilities Board or PHMSA, the filed report shall be considered sufficient for the follow-up report.

PART 2

CITY OF BLOOMFIELD , IOWA

Procedures for Reporting Incidents



2.0 – State Incident Reporting

1. Telephonic Reporting to the Iowa Utilities Board:

(Reference Iowa Code 199 19.17(1)(2))

- 1) A notice shall be given immediately, or as soon as practical (preferably within 1 hour of discovery) of any event involving the release of gas, failure of equipment, or interruption of facility operations, which results in any of the following:
 - a) A death or personal injury requiring in-patient hospitalization (hospital admittance).
 - b) Estimated property damage of \$15,000 or more to the property of the utility or others **including** the cost of gas lost.
 - c) Any unplanned interruption of service which extinguishes the pilot lights of 50 or more customers in one segment of a distribution system.
 - d) Any other incident considered being significant by the utility. Example: Any condition that receives media attention, but not meeting reporting criteria listed above.
- 2) If the incident meets one of the criteria listed above, the Iowa Utilities Board shall be notified by telephone by contacting the **Board Duty Officer** at **515-745-2332** or electronically at dutyofficer@iub.iowa.gov. If the Board Duty Officer does not answer, leave a call back number for a person who is knowledgeable of the incident. The following information should be readily available to the Duty Officer or stated through electronic communications;

NOTE: The State Incident Notification Worksheet (Guidance Material 1.1) may be used as a resource to capture the following information.

- a) The name of the utility, the name and telephone number of the person making the report, and the name and telephone number of a contact person knowledgeable about the incident.
- b) Location and time of the incident.
- c) The number of fatalities or injuries, including the extent of the injuries.
- d) Initial damage estimates.
- e) A summary of the significant information available to the utility regarding the probable cause and the extent of damages.
- f) Any oral or written report required by US Dept of Transportation and the name of the person who made the oral or written report.

Reminder: Any event requiring telephonic notice to the US Dept of Transportation must also be communicated via telephone or email to the Iowa Utilities Board Duty Officer.

(continued on next page)

2. Written Reports to the Iowa Utilities Board:

(Reference Iowa Code 199 19.7(3))

- 1) A written report must be filed into the Iowa Utilities Board Electronic Filing System within 30 days of the incident. A Docket prefix of "H" followed by the last four digits of the operator's RG# should be used when filing the report into EFS. The written report must include the following information:
 - a) The information required from the telephonic notice.
 - b) The probable cause of the incident as determined by the utility.
 - c) The number and cause of any fatalities or personal injuries requiring in-patient hospitalization.
 - d) A detailed description of any property damage and the amount of monetary damages.
- 2) If significant additional information becomes available at a later date, a supplemental report shall be filed as soon as practicable with clear reference made to the original report.

Guidance Material 1.1

State Incident Notification Worksheet

Date of Incident: _____ Time of Incident: _____

Name of Utility: _____

Name and Telephone Number of Person Making Report: _____

Name and Telephone Number of Person Knowledgeable of Incident: _____

Location of Incident: _____

Injuries or Fatalities (provide extent of injuries): _____

Significant Information and Description of Incident: _____

Customers Affected: _____

Initial Damage Estimates: _____

Date & Time of Report Made to IUB Duty Officer: _____

Method of Report (phone or email): _____

Was notification made to the National Response Center? _____

If so, by whom? _____

2.1 – Federal Incident Reporting

1. Telephonic &/or Electronic Reporting:

- 1) At the earliest practicable moment following discovery, but no later than 1 hour after **confirmed discovery**, the operator must provide notice to the US Dept of Transportation by dialing **1-800-424-8802** or electronically at www.nrc.uscg.mil of any incident that meets any of the criteria listed below. Complete information of the incident is NOT required to make the initial telephonic or electronic notice to the NRC. The intent of the notice is to notify government agencies at the earliest practicable moment without delay even if all information is not available at that time.
 - a) Any event that involves a release of gas from a pipeline that results in a death or personal injury requiring in-patient hospitalization (hospital admittance).
 - b) Estimated property damage (including operator's facilities and properties of others) of \$122,000 or more, **but excluding the cost of gas lost**.
 - c) An unintentional estimated gas loss of 3,000,000 cubic feet or more.
 - d) Any event that is significant in the judgement of the operator, even though it did not meet the criteria of the items listed above (a - c).

NOTE: Remember to notify the Iowa Utilities Board of any incident reports made to the NRC.

- 2) The operator may designate any company personnel to make the report to the NRC as long as the person making the report has the following information available to the NRC.
 - a) Name and telephone number of the operator and of the person making the report.
 - b) The location of the incident.
 - c) The time of the incident.
 - d) The number of fatalities and personal injuries, if any.
 - e) All other significant facts that are known by the operator that are relevant to the cause of the incident or extent of the damages.

NOTE: The Federal Incident Notification Worksheet (Guidance Material 1.2) may be used as a resource to capture information.

- 3) Report Confirmation & Revision: Within 48 hours after the *confirmed discovery* of an incident, to the extent practicable, an operator must confirm or update their initial telephonic notice. Updates may include the amount of product released, the amount of property damage, the number of fatalities and injuries, and any other significant facts. If there are no updates to the initial report, the operator must still call and confirm the estimates in its initial report.

(continued on next page)

- 4) If a telephonic or electronic notice has been made by the operator but then after further investigation, it is determined that incident criteria were NOT met and a written report has NOT been filed, the operator may provide notification to the PHMSA Accident Investigation Division at PHMSAaccidentinvestigationdivision@dot.gov.

2. Written Reporting Requirements

1. Distribution System: Written Incident Report

- 1) The operator of a distribution system must submit a written report as soon as practicable but not more than 30 days after the telephonic or electronic notification of an incident. DOT Form RSPA F 7100.1 shall be completed and filed electronically with PHMSA at <https://portal.phmsa.dot.gov/pipeline>.
 - 2) When or if additional relevant information is obtained after the initial report is submitted, the operator shall make supplemental reports as deemed necessary with a clear reference by date and subject to the original report.
 - 3) Master meter operators are not required to submit an incident report.
- NOTE: Additional instructions and report forms can be downloaded from the PHMSA-OPS website at www.phmsa.dot.gov/forms/pipeline-forms

2. Transmission System: Written Incident Report

- 1) The operator of a transmission system must submit a written report as soon as practicable but not more than 30 days after the detection of an incident. DOT Form RSPA F 7100.2 shall be completed and filed electronically with PHMSA at <https://portal.phmsa.dot.gov/pipeline>.
 - 2) When additional related information is obtained after an initial report is submitted, the operator must make a supplemental report as soon as practicable with a clear reference by date and subject to the original report.
- NOTE: Additional instructions and report forms can be downloaded from the PHMSA-OPS website at www.phmsa.dot.gov/forms/pipeline-forms

NOTE: A copy of all incident reports filed with PHMSA must also be submitted to the Iowa Utilities Board through the Electronic Filing System (EFS).

Guidance Material 1.2

Federal Incident Notification Worksheet

Date of Incident: _____ Time of Incident: _____

Location of Incident: _____

Facilities Involved: _____

Injuries or Fatalities: _____

Description of Incident: _____

Customers/Suppliers Affected: _____

Emergency Action Taken: _____

Other Significant Facts: _____

Date & Time of Report to National Response Center: _____

Method of Report (phone or email): _____

Name and Phone Number of Person Making Report to NRC: _____

24 HR Telephone Number Provided to NRC: _____

Report Number Assigned by NRC: _____

2.2 – Retracting a 30-Day Written Report

An operator who files a written incident report and upon further investigation determines that the event did **NOT** meet criteria required to be defined as an incident, may request that the report be retracted. Requests to retract a 30-day written report are to be emailed to InformationResourcesManager@dot.gov. The request must include the following information;

- 1) The Report ID (the unique 8-digit identifier assigned by PHMSA).
- 2) Operator name.
- 3) OPID number.
- 4) The number assigned by the National Response Center (NRC) from when the telephonic notice of the event was made. If supplemental calls/reports were made to the NRC for the event, list all supplemental report numbers assigned by the NRC.
- 5) Date of the event.
- 6) Location of the event.
- 7) A brief statement as to why the report should be retracted.

NOTE: This request for retracting a 30-day written report must also be submitted to the Iowa Utilities Board through the Electronic Filing System (EFS).

2.3 – Safety Related Condition Reports

- 1) Each operator shall report the existence of any of the following safety-related conditions:
 - a) In the case of a pipeline (other than an LNG facility) that operates at a hoop stress of 20% or more of its specified minimum yield strength, general corrosion that has reduced the wall thickness to less than that required for the MAOP, and localized corrosion pitting to a degree where leakage might result.
 - b) Unintended movement or abnormal loading by environmental causes, such as an earthquake, landslide, or flood, that impairs the serviceability of a pipeline.
 - c) Any crack or other material defect that impairs the structural integrity or reliability of an underground natural gas facility.
 - d) Any material defect or physical damage that impairs the serviceability of a pipeline that operates at a hoop stress of 20% or more of its specified minimum yield strength.
 - e) Any safety-related condition that could lead to an imminent hazard and causes (either directly or indirectly by remedial action of the operator), for purposes other than abandonment, a 20% or more reduction in operating pressure or shutdown of operation of a pipeline or an LNG facility that contains or processes gas or LNG.
 - f) For transmission pipelines only, each exceedance of MAOP that exceeds MAOP plus allowable build-up for that pipeline.
- 2) A report is **NOT** required for any safety-related condition that-
 - a) Exists on a master meter system or a customer-owned service line.
 - b) Is an incident or results in an incident before the deadline for filing the safety-related condition report.
 - c) Exists on a pipeline (other than an LNG facility) that is more than 220 yards from any building intended for human occupancy or outdoor place of assembly, except that, reports are required for conditions within the right-of-way of an active railroad, paved road, street, or highway.
 - d) Is corrected by repair or replacement in accordance with applicable safety standards before the deadline for filing the safety-related condition report, except that, reports are required for conditions under paragraph (1) of this section.

NOTE: The next page provides a chart for determining if a condition meets the requirements for a safety-related condition report.

**DETERMINATION OF REPORTING REQUIREMENTS FOR
SAFETY-RELATED CONDITIONS ^{1, 2, 3}**

Location	Time Factor	Type	Effect on Facility Operation		Report Required ¹
Within 220 yards of a building intended for human occupancy or outdoor place of assembly or within the right-of-way of an active railroad, paved road, street or highway	Will not be corrected within 5 working days ³ after determination or 10 working days ³ after discovery, whichever comes first	General Corrosion	Causes the MAOP to be reduced		Yes ⁴
			Does not cause the MAOP to be reduced		No
		Localized Corrosion Pitting	Leakage might result		Yes ⁴
			Leakage unlikely to result		No
		Unintended Movement or Loading	Impairs serviceability		Yes
			Does not impair serviceability		No
		Material Defect or Damage	Impairs serviceability		Yes ⁴
			Does not impair serviceability		No
		Malfunction or Operating Error	Causes pressure to increase above MAOP + allowable buildup		Yes ²
			Does not cause pressure to increase above MAOP + allowable buildup		No
		Leak	Creates an emergency		Yes
			Does not create an emergency		No
		All Other Conditions	Could lead to an imminent hazard and causes a) 20% or more pressure reduction or b) shutdown		Yes
			All others		No
	Will be corrected within 5 working days ³ after determination or 10 working days ³ after discovery, whichever comes first	General Corrosion	Causes the MAOP to be reduced		Yes ⁴
			Does not cause the MAOP to be reduced		No
		Localized Corrosion Pitting	Leakage might result	Effectively coated & cathodically protected	No
				All other coating/cathodic protection conditions	Yes ⁴
			Leakage unlikely to result		No
All Other		All		No	
All Other Areas	No SRC Report Required, however, see Note 2 below.				
Notes:					
¹ An event which has been reported as an incident (§191.5) is not reportable as a safety-related condition. Report is not required for any safety-related condition that exists on a master meter system or a customer-owned service line.					
² For transmission facilities that have exceeded MAOP plus buildup allowed for operation of pressure limiting or control devices, an MAOP Exceedance Report is required to be reported within 5 calendar days. All such MAOP exceedances on transmission facilities must be reported regardless of location or time factor relative to condition correction. See guide material under §191.23.					
³ Working day does not include Saturday, Sunday, or federal holidays.					
⁴ Does not pertain to pipelines operating at less than 20% SMYS.					

Filing Safety Related Condition Reports:

- 1) Each report of a safety-related condition meeting the requirements stated above must be filed (received by OPS within five working days, not including Weekends or Federal Holidays) after the day a representative of the operator first determines that the condition exists, but not later than 10 working days after the day a representative of the operator discovers the condition. Separate conditions may be described in a single report if they are closely related.
- 2) Reports of transmission MAOP exceedance must be filed in writing within 5 calendar days of the exceedance event.
- 3) Reports must be filed by email to InformationResourcesManager@dot.gov or by fax to 202-366-7128 and contain the following information:
 - a) The report must be headed "Safety-Related Condition Report" or "Maximum Allowable Operating Pressure Exceedance".
 - b) Name, principal address and OPID# of the operator.
 - c) Date of the report.
 - d) Name, job title, and business telephone number of the person submitting the report.
 - e) Name, job title, and business telephone number of the person who determined that the condition exists.
 - f) Date condition was discovered and date condition was first determined to exist.
 - g) Location of the condition, with reference to the State (and town, city, or county), and as appropriate, the nearest street address, survey station number, mile post, landmark, or name of the pipeline.
 - h) Description of the condition, including circumstance leading to its discovery, any significant effects of the condition on safety, and the name of the commodity transported or stored.
 - i) The corrective action taken (including reduction of pressure or shutdown) before the report is submitted and the planned follow-up or future corrective action, including the anticipated schedule for starting and completing such action.

NOTE: Any safety-related condition report filed with PHMSA must also be filed with the Iowa Utilities Board through their Electronic Filing System (EFS).

2.4 – Distribution System MAOP Exceedance

- 1) If a distribution system MAOP plus allowable build-up exceedance event occurs, as soon as possible, the operating pressure must be reduced to at or below MAOP and appropriate remedial action taken.
- 2) Once the operating pressure is at or below MAOP and repairs have been made, a special one-time leak survey must be conducted on the entire affected area to determine if the over pressure event caused any leakage.
- 3) The Iowa Utilities Board has asked for a courtesy call to be made to the Duty Officer at 515-745-2332 or electronically at dutyofficer@iub.iowa.gov, if a distribution system MAOP plus allowable build-up exceedance event occurs.

2.5 – Transmission MAOP Exceedance

- 1) If a transmission system MAOP plus allowable build-up exceedance event occurs, as soon as possible, the operating pressure must be reduced to at or below MAOP and appropriate remedial action taken.
- 2) Once the operating pressure is at or below MAOP and repairs have been made, a special one-time leak survey must be conducted on the entire affected area to determine if the over pressure event caused any leakage.
- 3) If the transmission pipeline pressure exceeds the established MAOP plus allowable buildup, the operator must report the exceedance event to PHMSA and the Iowa Utilities Board on or before the fifth day (calendar days) following the date of the occurrence.
 - a) PHMSA must be notified by through the same process detailed in Part 2.3 “Filing Safety Related Condition Reports” of this Plan by emailing InformationResourcesManager@dot.gov and the report must be titled Maximum Allowable Operating Pressure Exceedance.
 - b) Once the report is filed with PHMSA it must also be filed with the Iowa Utilities Board through their Electronic Filing System.

2.6 – Railroad and Utility Emergency Contact Information

- 1) If the Operator has pipeline facilities crossing a railroad right-of-way, it is required by Iowa Code 476.27 that the Operator visit the Iowa Utilities Board website (www.iub.iowa.gov), to complete and electronically submit the "Emergency Contact Information for Public Utilities" form.
- 2) The Operator may also view any emergency contact information provided by railroads in case the Operator needs to contact the railroad for any nonroutine maintenance or emergency repairs that need to be made in the railroad right-of-way.

NOTE: This information must be updated through the Iowa Utilities Board website anytime there are personnel changes or contact information changes that differ from the previous submission.

PART 3

CITY OF BLOOMFIELD, IOWA

Emergency Training



3.0 – Liaison & Emergency Training with First Responders and Public Officials

NOTE: The operators' public awareness program may supplement some of the requirements for training and liaison with first responders and public officials. In some cases, when in-person meetings are held with first responders and public officials, the requirements for public awareness, emergency training, and liaison may all be fulfilled at the same time.

Frequency of Liaison and Training:

- 1) The utility shall conduct documented meetings, at least annually, with representatives of the police/sheriff's department, fire department, EMS, and other public officials to establish and maintain liaison and to provide training in emergency response and procedures.
 - a) These meetings are on a voluntary basis and in some cases, participation in meetings may be denied or limited to a few who actually attend. A document providing a list, including signatures, of those who attended the meeting should be kept and maintained.
 - b) If participation is denied by an organization who refuses to attend the meeting, packets containing pertinent emergency response information should be delivered to the head of the organization.

Establishing and Maintaining Liaison:

- 1) Each operator shall establish and maintain liaison during annual meetings with representatives of the police/sheriff's department, fire department, EMS, and other public officials to identify the following:
 - a) Learn the responsibilities and resources of each government organization that may respond to a gas pipeline emergency, such as the following:
 - i) Name of organization.
 - ii) Type of responsibility.
 - iii) Geographic area covered.
 - iv) Availability to assist in case of a pipeline emergency.
 - v) Responsibility and resources for fire, explosion, bodily injury, and evacuations.
 - vi) Type, size and capacity of equipment and vehicles.
 - vii) Level of training completed by responders.
 - b) Acquaint the officials with the operator's ability in responding to a pipeline emergency, such as the following:
 - i) Provide the officials with a current list of "on-call" employees who can be contacted at any hour.
 - ii) Inform officials of the availability, capability, and location of operating personnel, equipment, Mutual Aid, and materials for response to pipeline emergencies.
 - iii) Consider including public emergency response personnel in simulated emergency response situations.

(continued on next page)

- c) Identify the types of pipeline emergencies of which the operator notifies the officials, such as the following:
 - i) A serious fire or a fire on adjacent property.
 - ii) Serious bodily injury.
 - iii) Where the number of people involved or the spectators are too numerous for the operator to handle.
 - iv) Adjacent to public rights-of-way where the public could be endangered.
 - v) Where an area patrol or evacuation is needed.
 - vi) An incident in a highly populated area.
- d) Plan how the operator and officials can engage in mutual assistance to minimize hazards to life or property, such as the following:
 - i) How the operator and the officials can work effectively together in an Incident Command System.
 - ii) What type of Mutual Aid resources are available to each organization?
- e) Explain in training or provide instructional materials describing the basic properties of natural gas.

Training for Potential Emergencies:

- 1) Provide a copy of the Emergency Plan and Procedures to the head of each government organization so that they can review and familiarize themselves with the procedures.
- 2) Provide a list, including names and contact numbers, for the Emergency Response Coordinator and all individuals that may be contacted to provide assistance during a pipeline emergency.
- 3) The training provided during the meeting shall cover applicable procedures during each type of the following emergencies including simulations of worst-case scenarios:
 - a) Gas detected inside or near a building.
 - b) Fire located near or directly involving a pipeline facility.
 - c) Explosion occurring near or directly involving a pipeline facility.
 - d) Natural disaster.
 - e) Respective responsibilities during gas related accidents.
 - f) Guidelines for fighting gas-fed fires.
 - g) Instructions on operating service valves and that main line emergency valves are NOT to be operated.

Documentation:

- 1) All required training and liaison meetings with first responders and public officials must be documented on the Emergency Training & Liaison Record for First Responders and Public Officials or other company approved document. Records must be kept and maintained for a minimum of 10 years.

3.1 – Emergency Training for Employees (Gas Personnel)

NOTE: All operating and maintenance personnel who may be required to respond to a potential emergency must be familiar with the requirements of written emergency procedures.

Frequency and Type of Training:

- 1) The utility shall conduct at least one documented training session each calendar year with employees who may respond to potential emergencies and determine if the training was effective.
 - a) Consideration should be given to also incorporating dispatch personnel into the training sessions.
- 2) The individual(s) providing training of the emergency procedures should be knowledgeable in emergency response and consideration should be given to conducting classroom or field simulated emergency exercises involving appropriate personnel. Simulations should include worst-case scenarios of potential emergencies.
 - a) If conducting field simulated emergency exercises, consideration should be given to including/inviting first responders and public officials to attend and engage in the exercise.

Training of Employees:

- 1) Training sessions shall include a review of procedures and emphasis should be placed on the following types of emergencies to ensure prompt and effective response:
 - a) Gas detected inside or near a building.
 - b) Fire located near or directly involving a pipeline facility
 - c) Explosion occurring near or directly involving a pipeline facility.
 - d) Natural disasters.
 - e) Partial or complete system outage.
 - f) Bypass procedures.
- 2) The following topics shall also be discussed and reviewed during the training session:
 - a) A review of any updates or changes that have been incorporated into the Emergency Plan and Procedures.
 - b) A review of each employee's specific responsibilities in an emergency.
 - c) The responsibility of all employees to adhere to guidelines for statements to the press and general public.
 - d) A review of the location, use, and periodic inspection of emergency equipment.
 - e) A review of the location and use of system maps and all other pertinent records that could be used as a resource during emergencies.
 - f) A step-by-step review of procedures using a hypothetical emergency situation, including procedures for establishing and maintaining contact with first responders and public officials.
 - g) Review what documents need to be completed for record keeping.
 - h) A review of State and Federal incident reporting requirements.

(continued on next page)

Documentation:

- 1) All required emergency training for employees must be documented on the Employee Emergency Training Record or other company approved document. Records must be kept and maintained for a minimum of 10 years.

Effectiveness of Training:

- 1) The effectiveness of the emergency training session may be verified by the following methods:
 - a) Oral test or evaluation.
 - b) Written test or evaluation.
 - c) Evaluating performance during simulated emergencies.
 - d) Any other type of document that verifies personnel understand their roles and responsibilities in responding to emergencies.
- 2) The Evaluation of Emergency Training Effectiveness written evaluation may be used to verify and document the effectiveness of emergency training.
- 3) Documentation verifying that training was effective must be kept and maintained for at least 10 years.

PART 4

CITY OF BLOOMFIELD , IOWA

Record Keeping Documents



EMPLOYEE EMERGENCY TRAINING RECORD

Training Conducted by: _____

Date of Training: _____

Location of Training: _____

Have any changes or modifications been made to the Emergency Plan and Procedures since the last scheduled training session? ☐ Yes ☐ No

Was a review of the Emergency Plan and Procedures conducted and included as part of this training session? ☐ Yes ☐ No

This training session included a review of procedures and individual responsibilities, including simulations of worse case scenarios, for the following types of emergencies:

- 1) Gas detected inside or near a building.
- 2) Fire located near or directly involving a pipeline facility.
- 3) Explosion occurring near or directly involving a pipeline facility.
- 4) Natural disasters.
- 5) Partial or complete system outage.
- 6) Bypass procedures.

In addition, a review of the following items was included in the training session:

- 1) Location and availability of Emergency Plan and Procedures.
- 2) Location, use, and periodic inspection of emergency equipment.
- 3) Location and use of complete system maps (including emergency valve locations) and all other pertinent records that could be used as a resource during emergencies.
- 4) The responsibility of all employees to adhere to guidelines for statements made to the press and general public.
- 5) State and Federal incident reporting requirements.
- 6) Documentation requirements.

PRINT NAME	SIGNATURE	TITLE

EMERGENCY TRAINING & LIAISON RECORD FOR FIRST RESPONDERS AND PUBLIC OFFICIALS

Training Conducted by: _____

Date of Training: _____

Location of Meeting: _____

An updated list of operator personnel who could respond to emergencies and their contact information has been provided to the appropriate department personnel. ☐ Yes ☐ No

The most recent copy of the Emergency Plan and Procedures has been provided to the appropriate department personnel. ☐ Yes ☐ No

This meeting provided a means of establishing and maintaining liaison with first responders and public officials by identifying and/or reviewing the following:

- 1) Learn the responsibilities and resources of each government organization that may respond to a gas pipeline emergency.
- 2) Acquaint the officials with the operator's ability in responding to a pipeline emergency.
- 3) Identify the types of pipeline emergencies of which the operator notifies the officials.
- 4) Plan how the operator and officials can engage in mutual assistance to minimize hazards to life or property.

In addition, this training session also included a review of procedures and responsibilities, including simulations of worse-case scenarios, for the following:

- 1) Gas detected inside or near a building.
- 2) Fire located near or directly involving a pipeline facility.
- 3) Explosion occurring near or directly involving a pipeline facility.
- 4) Natural disaster.
- 5) Respective responsibilities during gas related emergencies.
- 6) Guidelines for fighting gas-fed fires.
- 7) Instructions on operating service valves at meter set locations and that main line emergency valves are NOT to be operated.

PRINT NAME	SIGNATURE	ORGANIZATION

EVALUATION OF EMPLOYEE EMERGENCY TRAINING **EFFECTIVENESS**

Employee Name: _____ Date: _____

Training Conducted by: _____

- 1) All reports (notifications) of potential leaks or odors are considered _____ until deemed otherwise by operating personnel?
 - a) maintenance activities
 - b) potential emergencies
 - c) daily activities
 - d) nuisances
- 2) All reports (notifications) of potential leaks or odors take priority over all other work and must be responded to immediately.
 - a) True
 - b) False
- 3) What is the primary responsibility for all operating personnel during an emergency?
 - a) Provide a fire extinguisher
 - b) Respond when possible
 - c) Protect life and property
 - d) Call for mutual aid assistance
- 4) When possible, a gas-fed fire should NOT be extinguished until gas flow has been shut off or eliminated.
 - a) True
 - b) False
- 5) Where can emergency contact information be found for operating personnel, first responders, mutual aid coordinators, third party contractors, etc., that may be needed to provide assistance in the event of an emergency?
 - a) O&M Emergency Plan and Procedures
 - b) O&M Requirements and Recommendations
 - c) O&M Written Procedures
- 6) Which of the following is NOT an example of a potential emergency that requires the immediate attention of operating personnel?
 - a) Fire
 - b) Leak complaint
 - c) Explosion
 - d) Improper documentation

- 7) During a partial or system wide outage event, it is NOT necessary to shut off all affected service valves prior to making repairs and establishing service.
- a) True
 - b) False
- 8) What is the minimum time duration for performing a “no flow” test on a customer meter?
- a) 5 minutes
 - b) 10 minutes
 - c) 1 minute
 - d) Not necessary to perform “no flow” test
- 9) In the State of Iowa, an incident is defined as an event that causes a fatality or injury requiring in-patient hospitalization, estimated property damage of \$15,000 or more, or if gas service has been lost to _____ or more customers.
- a) 10
 - b) 25
 - c) 100
 - d) 50
- 10) Written incident reports filed with the Iowa Utilities Board for state reportable incidents must be filed within _____ days of the incident?
- a) 10
 - b) 30
 - c) 15
 - d) As soon as practical
- 11) Notification of a Federally reportable incident must be made to the National Response Center (NRC) within _____ hour(s) of confirmed discovery?
- a) 1
 - b) 2
 - c) 12
 - d) 24
- 12) All written incident reports filed with PHMSA must also be filed with the Iowa Utilities Board through their electronic filing system.
- a) True
 - b) False

LEAK RECORD

NOTIFICATION AND DISPATCH INFORMATION

Notification Received by: _____

Date Received: _____ Time Received: _____ (AM/PM)

Reported by: _____ Address: _____

City/State/Zip: _____ Phone No.: _____

Person reporting is: ☐ Customer ☐ General Public ☐ Other: _____

Location of suspected leakage: ☐ Inside ☐ Outside

Person dispatched to: _____

Date: _____ Time: _____ (AM/PM)

LEAK INVESTIGATION INFORMATION

Time arrived at location: _____ (AM/PM) Instrument (CGI) Serial #: _____

Leak found: ☐ In House ☐ Outside ABOVE Ground ☐ Outside BELOW Ground ☐ NO LEAK

Leak Classification: ☐ 1 ☐ 2 ☐ 3 Gas % found: _____ CO PPM found: _____

Completed bar-holes ☐ Yes ☐ No Map of leak migration pattern completed? ☐ Yes ☐ No

Any appliances or piping Red Tagged: ☐ Yes ☐ No Gas shut-off at appliance valve? ☐ Yes ☐ No

Customer notified of problem? ☐ Yes ☐ No Gas service shut-off and locked? ☐ Yes ☐ No

Return/re-check required after repairs made by plumber: ☐ Yes ☐ No

RESULTS

Additional Comments/Repairs Made: _____

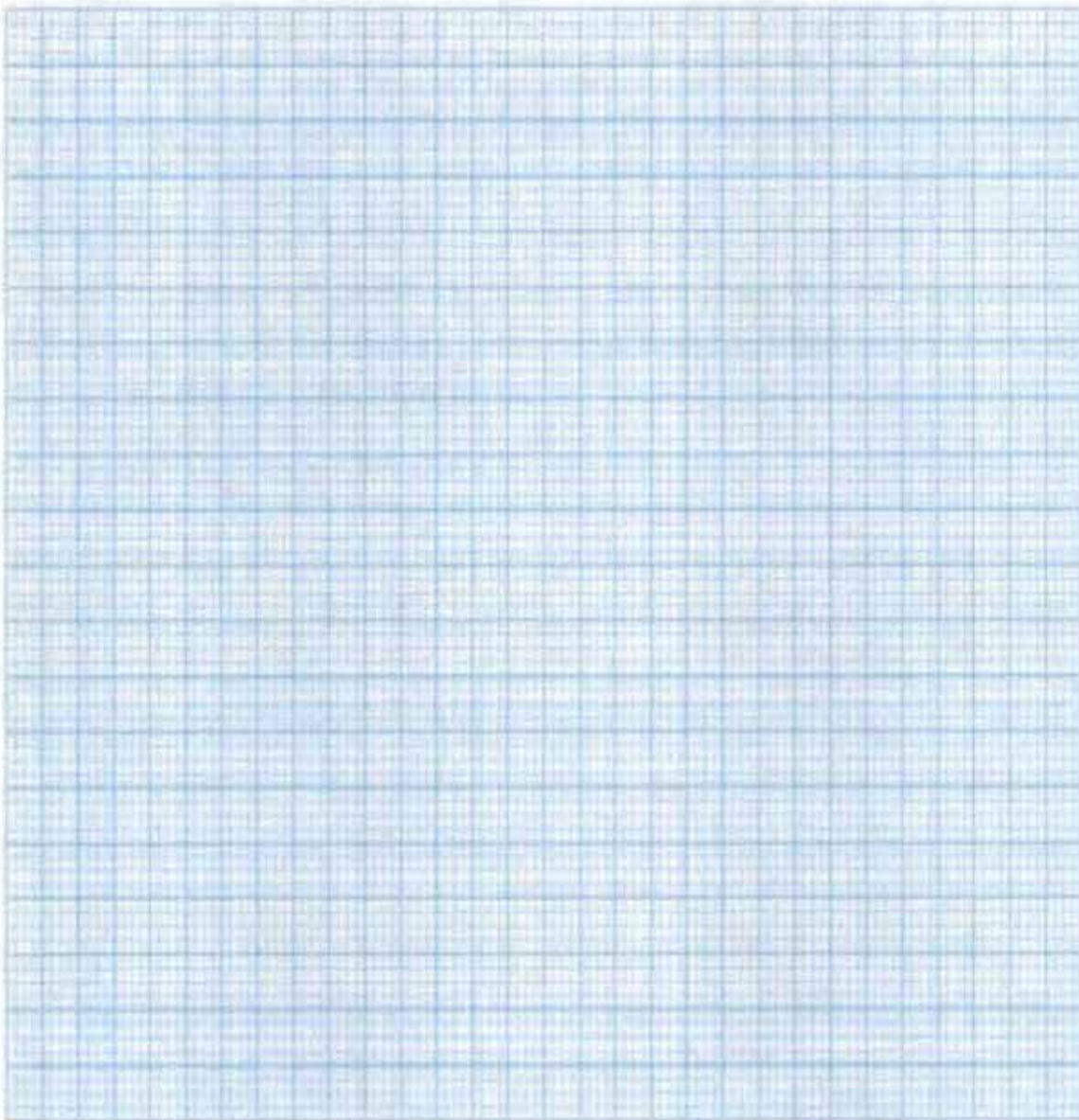
Date of re-check: _____ Appropriate repairs made and/or leak corrected? ☐ Yes ☐ No

Meter "no-flow" Test: Time Start: _____ Time Stop: _____ ☐ Pass ☐ Fail

Completed by: _____

MAP OF LEAKAGE AREA

(Bar-hole mapping is required for all underground leaks)



NOTE: Map information should include at a minimum, bar-hole locations with CGI readings to determine the boundaries of the spread migration.

REVIEW OF EMPLOYEE ACTIVITIES

NOTE: This report shall be completed after an emergency involving a Grade 1 leak, or a State or Federally reportable incident has occurred. All operator personnel involved with response to the emergency shall be included in the review process.

Review conducted by: _____ Date: _____

Operator personnel involved: _____

Date emergency or incident occurred: _____

Injuries or fatalities? ☐ Yes ☐ No Property damage? ☐ Yes ☐ No

Did the emergency result in a State or Federally reportable incident?? ☐ Yes ☐ No

What was the root cause of the emergency/incident? _____

All appropriate emergency procedures followed? ☐ Yes ☐ No Documented? ☐ Yes ☐ No

All leak investigation procedures followed and documented? ☐ Yes ☐ No

Was mutual aid assistance needed? ☐ Yes ☐ No Documentation completed? ☐ Yes ☐ No

What can be done to minimize the possibility of recurrence, if anything? _____

EXCAVATION DAMAGE FOLLOW-UP REPORT

NOTE: This report is to be used any time excavation damages resulted in the repair or replacement of line pipe or components (excluding coating damage) with or without the release of gas.

Completed by: _____ Date: _____

Excavation Information:

Date excavation damages occurred: _____

Excavating company or individual who caused damage: _____

Did the excavator have a valid One-Call ticket for the proposed excavation? ☐ Yes ☐ No

One-Call Ticket Number: _____

Had excavator waited the required 48 hours prior to excavation? ☐ Yes ☐ No

What was the root cause of the excavation damage (select one or more of the following)?

- ☐ Failure to follow One-Call laws ☐ Failure to locate facilities by Operator
☐ Facilities mislocated ☐ Locating equipment malfunction ☐ Digging without spotter
☐ Failure to hand dig within 18" of facility ☐ Hand digging caused damage ☐ Other

Did damage result in the escape of gas? ☐ Yes ☐ No

Did the excavator notify 911? ☐ Yes ☐ No

Additional information (if necessary): _____

Response Information:

Were all appropriate emergency procedures followed correctly? ☐ Yes ☐ No

Were procedures followed for preventing accidental ignition? ☐ Yes ☐ No ☐ NA

Documentation, including leak investigations properly completed? ☐ Yes ☐ No

Did the damage result in a State or Federally reportable incident? ☐ Yes ☐ No

What could be done to minimize the possibility of recurrence? _____

