

**TRANSMISSION INTEGRITY MANAGEMENT PLANS**

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**Note:** This summary of transmission integrity management plans is applicable to the regulated Questar Gas Company subsidiary listed below. Questar Gas Company will be referred to as “Questar” or “Company” throughout the remainder of this summary.

Questar Gas Company (DOT Operator ID # 12876) – State regulated Local Distribution Company.

## 1 SUMMARY

### 1.1 PURPOSE OF THIS SUMMARY

Questar has prepared this summary of its transmission integrity management plans in conformance with U.S. Department of Transportation (DOT) requirements for transmission integrity management. These DOT requirements are defined at 49 CFR Part 192 Subpart O, "Pipeline Integrity Management" and apply to all natural gas transmission pipelines located in "High Consequence Areas" (HCAs).

Questar's transmission integrity management plans provide for external communications with various stakeholders, including:

Landowners and Tenants Along the Rights-of-Way  
Public Officials  
Emergency Responders  
General Public

The purpose of this document is to provide such parties with a summary of Questar's written integrity management plans, and contacts for additional information. Related pipeline safety information, including general information on Questar's prevention, integrity and emergency preparedness measures, can also be found at Questar's web-site (<http://www.questar.com>).

### 1.2 WHO TO CONTACT FOR ADDITIONAL INFORMATION

Questar Affiliates Represented by This Summary:	Questar Gas Company (QGC)	
24 Hour Emergency Contact Phone No: (Posted on each Pipeline Marker Sign)	QGC – 800-767-1689	
Web-site E-mail	<a href="http://www.questar.com/contact_us/contact_us.html">http://www.questar.com/contact_us/contact_us.html</a>	
Questar Contact For Additional Information:		
General Information	Chad Jones 801-324-5495	Manager, Corporate Communication PO Box 45360 Salt Lake City, UT 84145-0360
Transmission Integrity Management Program	Jeff Hansen 801-324-3645	Supervisor, Integrity Management

### 1.3 BACKGROUND ON UNDERLYING FEDERAL LEGISLATION

President George W. Bush and the 107<sup>th</sup> Congress passed the “Pipeline Safety Improvement Act of 2002” into law on December 17, 2002. Upon passing the bill into law, it became Public Law 107-355 which can be found in its entirety at <http://www.gpoaccess.gov/plaws/>.

The new law required the U.S. Department of Transportation (DOT) to issue regulations prescribing standards for operator’s adoption and implementation of new transmission integrity management programs. The law set forth minimum requirements for integrity management programs for gas transmission pipelines located in “High Consequence Areas” (HCAs.) The law also requires that operators of gas transmission pipelines complete baseline integrity assessments for covered segments within 10 years of enactment (by December 12, 2012.) The law also requires that 50 percent of covered segments be completed within 5 years of enactment (by December 7, 2007.) Finally, the law requires that covered segments be re-assessed at least every 7 years.

The DOT has published the federally-mandated regulations at 49 CFR Part 192 Subpart O. These DOT regulations are further discussed in subsection 1.4 below.

### 1.4 BACKGROUND ON UNDERLYING DOT REGULATIONS

The DOT transmission integrity management regulations (49 CFR 192 Subpart O) define the minimum requirements for natural gas transmission pipeline integrity management programs. These requirements apply to natural gas transmission pipelines located in “High Consequence Areas” (HCAs). HCAs are further discussed in subsection 1.5 below.

The DOT regulations also define what constitutes a transmission line: “Transmission line means a pipeline, other than a gathering line, that:

- (a) Transports gas from a gathering line or storage facility to a distribution center, storage facility, or large volume customer that is not downstream from a distribution center;
- (b) Operates at a hoop stress of 20 percent or more of SMYS; or
- (c) Transports gas within a storage field. A large volume customer may receive similar volumes of gas as a distribution center, and includes factories, power plants, and institutional users of gas.”

The DOT transmission integrity management regulations (49 CFR 192 Subpart O) do not include pipelines classified as a “gathering lines” or “distribution lines.” (Gas service lines and mains serving residential and commercial customers are typically “distribution lines” and are not subject to this particular set of integrity management regulations.)

A copy of the DOT transmission integrity management regulations can be obtained on-line from the DOT’s web-site. See <http://primis.rspa.dot.gov/iim/>

## 1.5 BACKGROUND – HIGH CONSEQUENCE AREAS

Criteria for determining “High Consequence Areas” (HCAs) are defined by DOT regulations at 49 CFR §192.903. Questar has determined the location of HCAs on its transmission systems based on the DOT requirements. In essence, HCAs are highly-populated areas or other areas particularly sensitive to potential transmission pipeline failures.

Questar can be contacted for further information on the specific location of HCAs in a community, or for integrity-related activities in a specific HCA. Questions pertaining to HCAs should be directed to one of the contacts listed in subsection 1.2 above. Questar reserves the right to only respond to officials or other persons requesting information for legitimate purposes.

Questar is also interested in being contacted by public officials or the general public regarding activities (e.g. new construction) that may result in new or expanded HCAs. Please direct any such information to one of the contacts listed in subsection 1.2 above.

## 1.6 QUESTAR’S TRANSMISSION INTEGRITY MGMT. PLANS

Questar has prepared comprehensive written plans defining its transmission integrity management programs. These plans define the methods used to determine the location of “High Consequence Areas” (HCAs) subject to the program, as well as the methods for assessing the integrity of the pipelines, and otherwise complying with program requirements.

Allowable methods for assessing integrity include in-line inspection (i.e. “smart pigs”), pressure testing, direct assessment, and other equivalent technology. Assessments are performed based on risk-based prioritization, and are periodically repeated.

Consistent with Questar’s long-standing commitment to environmental protection and safety, each integrity assessment or other integrity management activity will be conducted in a manner that minimizes environmental and safety risks. Efforts will also be taken to minimize public inconvenience.

The basic content of Questar’s integrity management (IM) plans is overviewed below. Each section represents a major program element or significant function or activity of the IM Program.

Section 1	<b>INTRODUCTION</b>
2	<b>ROLES AND RESPONSIBILITIES</b>
3	<b>HCA IDENTIFICATION</b>
4	<b>THREAT IDENTIFICATION</b>
5	<b>RISK ASSESSMENT AND PRIORITIZATION</b>
6	<b>ASSESSMENT METHODS</b>
7	<b>DIRECT ASSESSMENT PLAN</b>
8	<b>BASELINE ASSESSMENT PLAN</b>

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9	<b>CONDUCTING ASSESSMENTS</b>
10	<b>REMEDATION</b>
11	<b>MINIMIZING ENVIRONMENTAL &amp; SAFETY RISKS</b>
12	<b>PREVENTIVE AND MITIGATIVE MEASURES</b>
13	<b>CONTINUAL EVALUATION &amp; REASSESSMENT</b>
14	<b>MANAGEMENT OF CHANGE</b>
15	<b>QUALITY ASSURANCE PROCESS</b>
16	<b>RECORD KEEPING</b>
17	<b>PERFORMANCE PLAN</b>
18	<b>PERSONAL KNOWLEDGE AND TRAINING</b>
19	<b>COMMUNICATIONS PLAN</b>
20	<b>REGULATORY INTERACTION</b>

Detailed questions on the content of the plans and plan sections should be directed to one of the contacts listed (in subsection 1.2) above. Questar reserves the right to only respond to officials or other persons requesting information for legitimate purposes.

## 1.7 QUESTIONS & ANSWERS

Here are some questions and answers (these are hypothetical questions posed for illustrative purposes) that may assist with stakeholder understanding of Questar's transmission integrity management plans and activities.

**Q –** I live in a subdivision near one of your high-pressure natural gas pipelines. There is extensive housing (hundreds of homes) in our subdivision and nearby surrounding area. Is the pipeline near our subdivision subject to your integrity management program?

**A –** Questar transmission pipelines located in “High Consequence Areas” (HCAs) are included within the Company’s transmission integrity management programs discussed herein. The criteria for HCAs is defined by federal regulations (49 CFR §192.903) and is fairly complex, but HCAs essentially are highly-populated areas or other areas particularly sensitive to potential transmission pipeline failures. The answer to your question is site-specific, and can be provided by an appropriate Company representative (e.g. Dennis Thompson, 801-324-3643.)

**Q –** I’m a County representative who was previously contacted by Questar asking for information on the location of so-called “High Consequence Areas.” I didn’t have any information to provide before, but now I know of a planned new school that might result in the designation of one of these “HCAs” near one of your pipelines. What should I do?

A – Questar greatly appreciates the support and valuable information received from public officials. You should contact Questar’s integrity management representative, Dennis Thompson, at (801) 324-3643.

Q – What options do you have for conducting pipeline assessments? Our agency is concerned that you will choose a method that will result in more excavation than is desired. Can you limit yourself to a single method, say pressure testing, to minimize the amount of excavation?

A – No. All options for assessment methods are needed. The DOT currently recognizes four methods: pressure testing, in-line internal inspection (i.e. “smart pigging”), direct assessment, and other equivalent technology. Questar’s analysis of a particular segment will determine the appropriate method. For example, a certain pipeline providing a critical “one way” feed to customers may not be able to be removed from service for pressure testing (typically done by pressuring the line up to prescribed levels using water.) Questar is in the best position to determine the appropriate assessment methods with the least amount of impact based on the specific circumstances involved with each pipeline.

Q – What is “Direct Assessment”?

A – The DOT regulations explain that Direct Assessment is an integrity assessment method that utilizes a defined process to evaluate certain pipeline threats (e.g. external corrosion.) In the case of external corrosion, a four step process is used including gathering and integration of risk factor data (pre-assessment), indirect examination to identify areas of suspected corrosion, direct examination of the pipeline, and post-assessment evaluation. External Corrosion Direct Assessment is a method established by the National Association of Corrosion Engineers (NACE) in a nationally recognized standard, Recommended Practice RP-0502.

Q – Your website indicates that “in-line inspection” is one of your integrity assessment methods. What is “in-line inspection”?

A – In-line inspection, also known as “smart pigs”, refers to the use of instrumented, internal inspection tools to take integrity-related measurements along a transmission pipeline. Not all transmission pipelines are configured to allow the use of “smart pigs” due to historical restrictions such as constrained bends, fittings, reduced port valves, etc. One commonly used “smart pig” uses Magnetic Flux Leakage (MFL) technology to look for metal loss due to internal or external corrosion. Essentially, a magnetic field is passed through the wall and sensors look for distortions in the magnetic field due to metal loss. Another commonly used “smart pig” is a caliper-tool that looks for physical deformation, such as caused by third-party excavation damage (dents) to the pipeline.

Q – Your company has indicated plans to conduct an integrity assessment in our area. Is this assessment a one-time event?

A – No. Federal legislation and federal regulations require that integrity assessments be periodically conducted on natural-gas transmission pipelines located in “High Consequence Areas.” These assessments will be conducted every few years consistent with the federal requirements.

Q – I’m an emergency first-responder with [ABC] County. I would like web-based access to your pipeline maps, including the location of your “High Consequence Areas.” Can you provide the requested web-based access to your maps?

A – Not presently. Questar places emphasis on the protection of sensitive information that could expose its facilities to the increased risk of terrorism, including public web-posting of maps showing the location of “High Consequence Areas.” Questar recognizes the essential work of emergency responders and is fully committed to supporting them with maps and other information to facilitate emergency pre-planning. Questar will distribute Company maps as requested by emergency responders, local officials or others with a legitimate need for the information. Federal, state and local governments can also obtain access to the National Pipeline Mapping System (NPMS) to learn the location of Questar and other pipelines. The NPMS web-site is: <http://www.npms.rspa.dot.gov/>

Q – The City of [XYZ] has your company’s high-pressure transmission pipelines located in some recently re-paved roads. The City is interested in learning the location of your “High Consequence Areas” and your planned activities. We are concerned that your planned activities may result in excavation and damage to some of these roads (we have an excavation moratorium for 3 years after paving), and we want you to post-pone your activities until after the expiration of the moratorium.

A – It may be possible that Questar’s planned integrity management activities are not scheduled until after the moratorium expires, and depending on the assessment methods used, there may not be any excavation in the roadway needed. Questar would be happy to meet with you to review in detail the location of the HCA’s, and the planned integrity management activities. Please note that the “Direct Assessment” method requires small core holes in the pavement every 10 feet (typically) to take cathodic readings at close intervals along the pipeline. The results of any assessment may dictate that excavation in the roadway take place in order to examine the pipeline. Questar will cooperate with the City by obtaining the required excavation permits and making appropriate road repairs, but ultimately, the federal regulations may require excavation of these pipelines.

Q – Our City Council has recently become aware of Questar’s new transmission integrity management program due to a series of excavations that have been conducted within the City. The Council is curious to know about the results of your inspections and to know whether the pipeline is safe. How do we get a copy of your inspection results?

A – First, Questar is fully committed to safe, reliable natural gas service and its pipelines will be maintained as such. Questar would be happy to meet with the Council or other appropriate City officials to review our integrity management program and results. Questar sees the City as an important partner in its integrity management program, providing valuable information such as the locations of potential new “High Consequence Areas”. We want to facilitate stakeholder dialogue, information sharing, and mutual cooperation, and would be happy to meet at your convenience.

Q – I own land that is crossed by one of Questar’s natural gas transmission pipelines. The land is mostly open range, except for a couple of office buildings at [XYZ] Road. I understand from one of your employees that you plan to come through my land this next year to conduct some specialized integrity-related inspections. I’m not sure that I want to allow any land-

disturbance activities. What assurance do I have that you won't "tear-up" the area when you do these inspections?

A – These inspections are part of the Company's transmission integrity management program, and conducted pursuant to federal pipeline safety requirements. Questar does not have the option of not conducting these inspections as they are federally-mandated. However, Questar's integrity management program has procedures designed to ensure that inspection activities are conducted in a manner that minimizes environmental impact and safety risks. Activities will be conducted in conformance with rights-of-way agreements for the pipeline. Questar will not engage in any unnecessary excavation or site-disturbance, and will work to restore any required disturbances such that you don't feel that your land has been "torn-up" or degraded.

Q – I understand that Questar's integrity management program involves periodic assessments of the condition of transmission pipelines in "High Consequence Areas." What activities occur once the assessments are completed? Are repairs required, or possibly other actions such as line replacements?

A – Any needed repairs will be undertaken to keep the pipeline in a safe, reliable condition. Line replacement is an unlikely contingency, but older lines eventually may warrant retirement or replacement. Any "immediate" (using DOT terminology) repair needs will be undertaken in an immediate timeframe. Under DOT requirements, immediate repair conditions require keeping the line at a safe, reduced operating pressure, or possibly even shutting the line down pending repairs. Less severe repairs, referred to as "scheduled" repairs (again, using DOT terminology) will be made within appropriate timeframes to ensure safety and system reliability.

Do you have additional questions that are not listed above? If so, please contact one of Questar's representatives listed in subsection 1.2 above. Alternately, you can e-mail your question or comment to Questar at [http://www.questar.com/contact\\_us/contacts.html](http://www.questar.com/contact_us/contacts.html)

