Distribution Integrity Management Program (DIMP) Inspection Form

For Operators of Gas Distribution Systems

For Requirements of 192.1005 - 192.1011

Version 9/23/2011

This inspection form is for the evaluation of a gas distribution integrity management program for all operators of gas distribution except operators of master meter or small liquefied petroleum gas (LPG) systems. The form contains questions related to specific regulatory requirements and questions which are strictly for informational purposes. The questions which are related to specific regulatory requirements are preceded by the rule section number which prescribes the applicable code citation for the question. The cell preceding informational questions states "information only".

S/Y stands for "Satisfactory" or "Yes", U/N stands for "Unsatisfactory" or "No", N/A stands for "Not Applicable", and N/C stands for "Not Checked". If an item is marked U/N, N/A, or N/C, an explanation must be included in the comments section.

Some inspection questions contain examples to further clarify the intent of the question. For example, question 5 asks, "Do the written procedures require the consideration of information gained from past design, operations, and maintenance (e.g. O&M activities, field surveys, One-Call system information, excavation damage, etc.)?" The list following "e.g." is not meant to be all inclusive or that all the items are required. Some of the items may not be applicable to an individual operator's system.

Some States require the operator to notify and send the State regulatory authority any changes to operator's plans and procedures. Operators in these states should also notify and send revisions of the DIMP plan to the State regulatory authority.

Operator Contact and System Information — Operator Information:

Name of Operator (legal entity):	Puget Sound Energy
PHMSA Operator ID(s) Included in this Inspection:	22189
Type of Operator:	☐ Investor Owned ☐ Municipal ☐ Private ☐ LPG ☐ Other (e.g. cooperative)
States(s) included in this inspection:	Washington
Headquarters Address:	355 110th Ave. NE
	Bellevue, WA 98004
Company Contact:	Cheryl McGrath
	Manager Gas Compliance and Regulatory Audits
Phone Number:	Off: (425) 462-3207
	Cell: (206) 604-3221
	Fax: (425) 462-3770
Email:	cheryl.mcgrath@pse.com
Date(s) of Inspection:	October 30 – 31, 2012
Date of Report:	November 2, 2012

Persons Interviewed:

reisons interviewed.			
Persons Interviewed			
(List the DIMP Administrator as the			
first contact)	Title	Phone Number	Email
2		405 460 0044	
Darrryl Hong	Compliance	425-462-3911	Darryl.nong@pse.com
	Coordinator		
Randy Busch	Gas System Integrity	425-462-3965	Randy.busch@pse.com
Stephanie Kreshel	GSI	425-462-3734	Stephanie.kreshel@pse.com
Nancy Wong	GSI	425-417-2377	Nancy.wong@pse.com
Duane Henderson	GSI	425-462-3974	<u>Duane.henderson@pse.com</u>
Cheryl McGrath	Manager Gas	206-604-3221	Cheryl.mcgrath@pse.com
S. C. ,	Compliance	200 00 : 0222	Site Jiming and people
	Compilative		
Toni Imad	Engineer Gas	425-456-2970	Antoinette.imad@pse.com
	Compliance		

State or Federal Representatives:

Inspector Name & Agency	Phone Number	Email
Scott Rukke	360-664-1241	srukke@utc.wa.gov
Inspector Comments (optional):		

192.10	005 What	must a gas distributio	on operator do to	impleme	nt th	is su	bpa	rt?
Question No.	Rule §192	D	escription		S/Y	U/N	N/A	N/C
1	.1005	Was the plan written and implemented per the requirement of 192.1005 by 08/02/2011? OR For a gas system put into service or acquired after 08/02/2011, was a plan written and implemented prior to beginning of operation?			\boxtimes			
Inspector's	Comments	08/02/2011			l	L		
2	Information Only	Were commercially available p development of the operator's	•					
		Fully	Partially 🔀	N	lot at a	all 🗌		
Commercial product(s)/templates name if used: FIA plan								
Inspector's	s Comments							
3	Information Only	Does the operator's plan assign responsibility, including titles and positions, of those accountable for developing and implementing required actions?						
Inspector's	s Comments	Page 2 of the DIMP plan.						
4	.1007(a)(1)	Do the written procedures ide sources used to determine the to assess the threats and risks	ne following characteristic	s necessary				
		 Design (e.g. type of constr pipe method, materials, si services, etc.)? 						
		Operating Conditions (e.g.	pressure, gas quality, etc	c.)?	\boxtimes			
		 Operating Environmental frost heave, land subsider damage, external heat sou paving, population density placement, etc.)? 						
Inspector's	s Comments	Section 5 Knowledge of the Dist Appendix B – Appendix C-1. – 3.2.1	System.,					

		192.1007(a) Knowledge of the System				
Question No.	Rule §192	Description	S/Y	U/ N	N/ A	N/C
5	.1007(a)(2)	Do the written procedures require the consideration of information gained from past design, operations, and maintenance (e.g. O&M activities, field surveys, One-Call system information, excavation damage, etc.)?	\boxtimes			
Inspector's	Comments	Section 5 Leaks back as far as possible. For trending 5 years.				
6	Information Only	Do the written procedures indicate if the information was obtained from paper records, or subject matter expert knowledge (select all which approximately ap		ctroni	c reco	rds,
		Electronic Paper	S۱	1E 🖂		
Inspector's	Comments	Appendix C Appendix C-2 documents subject matter expert Table B-2 Appendix G – subject matter experts				
/	.1007(a)(3)	Does the plan contain written procedures to identify additional information that is needed to fill gaps due to missing, inaccurate, or incomplete records?	\boxtimes			
·	s Comments	 Section 5, page 5 Section Potential Threat Identification and Data Initiatives, page 67, needs capture manufacturer. In addition they need to define "Material". Material is more than just "steel include the specification, grade of steel or type of plastic, manufacturer, coat with the definition of "pipeline" in §192.3, this includes valves and other apprigas flows. PSE agreed to modify this procedure. 	·l" or "p ing, etc	olastic.' . In ac	" It sho	ould ce
8	.1007(a)(3)	Does the plan list the additional information needed to fill gaps due to missing, inaccurate, or incomplete records?	x			
Inspector's	s Comments	Process is section 5, page 5 Page 65 of the continuing surveillance report.				
9	.1007(a)(3)	Do the written procedures specify the means to collect the additional information needed to fill gaps due to missing, inaccurate, or incomplete records (e.g., O&M activities, field surveys, One-Call System, etc.)?	\boxtimes			
Inspector's	s Comments	Page 65 Their procedure needs to specify what information is missing and how they w	vill cant	ure mi	ccina 4	ata
40		PSE agreed to modify this procedure.	ııı capı	are IIII	Joing U	utu.
10	.1007(a)(5)	Do the written procedures require the capture and retention of data on any new pipeline installed?				
Inspector's	Comments	GOS 2500.1700				

11	.1007(a)(5)	Does the data required for capture and retention include, at a minimum, the location where the new pipeline is installed and the material from which it is constructed?	\boxtimes		
Inspector's Comments		PSE agreed to add material definition, see above			
12	.1007(a)	Does the documentation provided by the operator demonstrate implementation of the element "Knowledge of the System"?	\boxtimes		
Inspector'	s Comments	Appendix B documents historical knowledge Part of Continuing Surveillance report starts on page 21. PSE is capturing damages not resulting in leaks.			
13	.1007(a)	Has the operator demonstrated an understanding of its system?	\boxtimes		
Inspector	s Comments				

		192.1007(b) Identify Threats				
Question No.	Rule §192	Description	S/Y	U/ N	N/A	N/C
14	.1007(b)	In identifying threats, do the written procedures include consideration of the following categories of threats to each gas distribution pipeline?				
	Comments	Section 6, they are listed	1	1		
15	.1007(b)	Did the operator consider the information that was reasonably available to identify existing and potential threats?	\boxtimes			
Inspector's	Comments					
16	Information Only	Does the plan subdivide the primary threats into subcategories to identify existing and potential threats?	\boxtimes			
Inspector's	Comments	Appendix C subdivides threats.				
17	.1007(b)	In identifying threats did the information considered include any of the following? Incident and leak history				
Inspector's	Comments					
18	Information Only	Does the plan categorize primary threats as either "system-wide" or "lo	calize	d"?		
		All System-wide All Localized Some of Both		Not Ic	lentifie	d
Inspector's	Comments	Page C-2 appendix C, either asset specific or system wide.				
19	Information Only	Do the written procedures consider, in addition to the operator's own information, data from external sources (e.g. trade associations, government agencies, or other system operators, etc.) to assist in identifying potential threats?	\boxtimes			
Inspector's	Comments	Appendix C Appendix B				
20	.1007(b)	Does the documentation provided by the operator demonstrate implementation of the element "Identify Threats"?				

Inspector's	Comments									
		192.1007(c) Evaluate and	Rai	nk R	isk					
Question No.	Rule §192	Description					S/Y	U/ N	N/A	N/C
21	Information	Was the risk evaluation developed fully or in p	art u	sing a	comm	nercially	availa	ble to	ol?	
	Only	Fully Partially		Not at	t all 🛭					
		Commercial tool name if used:								
	Comments								1	,
22	.1007 (c)	Do the written procedures contain the method used to determine the relative importance of each threat and estimate and rank the risks posed? Briefly describe the method. Risk scores and consequence were								
lin ain a at a w	Comamaanta	rated by SME's using available data. Appendix C of the DIMP								
inspectors	Comments	Appendix C of the DIMP	Corrosion	Natural Forces	Excavation Damage	outside Force Damage	Material or Welds	Equipment Failure	Operation	Other Concerns
		For questions 23 – 25, do the written procedures to evaluate and rank risk consider:	Corre	Natura	Excavatio	Other out Dam	Material	Equipme	Incorrect	Other C
23		Each applicable current and potential threat?	S	S	S	S	S	S	S	S
24	.1007 (c)	The likelihood of failure associated with each threat?	S	S	S	S	S	S	S	S
25		The potential consequence of such a failure?	S	S	S	S	S	S	S	S
		Mark each box above with one of the following N/A for "Not Applicable" and N/C for "Not Che	_		tisfact	ory", U	for "U	nsatis	factory	",
	Comments	Risk Evaluation and Prioritization Matrix.					1	1	1	
26	.1007 (c)	If subdivision of system occurs, does the plans into regions with similar characteristics and fo are likely to be effective in reducing risk?	r whi	ch sim	ilar ad	ctions				
		Briefly describe the approach. Subdivided by a threats require similar mitigation.	asset	type v	vnere	similar				
Inspector's	Comments	Risk matrix.					1	1		
27	Information Only	Is the method used to evaluate and rank risks	reasc	nable	?					
Inspector's	Comments	Yes.								
28	.1007(c)	Are the results of the risk ranking supported by model/method?	y the	risk e	valuat	ion	\boxtimes			
Inspector's	Comments									
29	.1007(c)	Did the operator validate the results generated model/method?	-		k eval	uation	\boxtimes			
Inspector's	Comments	Briefly describe. Risk model was validated by s DIMP appendix C							<u> </u>	
		PSE agreed to add more detail on the validation pro	ocess.							

30	.1007(c)	Does the documentation provided by the operator demonstrate implementation of the element "Evaluate and Rank Risk"?	\boxtimes		
Inspector's	s Comments				

	192.10	07 (d) Identify and implement measures to add	ress	risks					
Question No.	Rule §192	Description	S/Y	U/ N	N/A	N/C			
31	.1007 (d)	Does the plan include procedures to identify when measures, beyond minimum code requirements specified outside of Part 192 Subpart P, are required to reduce risk?	\boxtimes						
Inspector's	Comments	Section 8							
32 .1007 (d)		When measures, beyond minimum code requirements specified outside of Part 192 Subpart P, are required to reduce risk, does the plan identify the measures selected, how they will be implemented, and the risks they are addressing?	\boxtimes						
Inspector's Comments Appendix D lists the mitigative measures.									
33	.1007 (d)	d) Complete the table at the end of this form: Threat Addressed, Measure to Reduce Risk, and Performance Measure							
Inspector's	Comments								
34	.1007 (d)	Does the plan include an effective leak management program (unless all leaks are repaired when found)							
		 Locate the leaks in the distribution system; Evaluate the actual or potential hazards associated with these leaks; Act appropriately to mitigate these hazards; Keep records; and Self-assess to determine if additional actions are necessary to keep people and property safe. 							
Inspector's Comments DIMP plan page 9									
35	.1007(d)	Does the documentation provided by the operator demonstrate implementation of the measures, required by Part 192 Subpart P, to reduce risk?	\boxtimes						
Inspector's	Comments	Appendix D lists measures that have been implemented.							

19	2.10	007(e) Me	easure per	formance	e, monito	or results	s, and ev	<i>y</i> alua	te e	ffect	tiver	ness
Ques		Rule §192			Description	n			S/Y	U/ N	N/A	N/C
	.100	7(e)		i) Number of hazardous leaks either eliminated or repaired, categorized by cause?	ii) Number of excavation damages?	iii) Number of excavation tickets received by gas department ?	iv) Total number of leaks either eliminate d or repaired categorize d by cause?	V Numbe hazard leaks e elimina or repa catego by mat	er of ous ither ated aired, rized	meas opera are no evalu effect IM pr contr	vi) dditional ures the ator deta eeded ta ate the tiveness ogram i olling ea	ermines o of the n
36	Does the plan contain written procedures for how the operator established a baseline for each performance measure?			Choose an item.	Choose an item. S	Choose an item.	Choose an item.	Choos	se an m.			n item.
37	base	s the plan esta line for each p sure?		Choose an item.	Choose an item.	Choose an item.	Choose an item.	ite	item. S S			item.
38	proc for e	s the operator edures to coll ach performa sure?		Choose an item.	Choose an item.	Choose an item.	Choose an item.	Choose an item.		item.		n item.
39	requ mon	he written pro ire the operat itor each perf sure?	tor to	Choose an item.	Choose an item.	Choose an item.	Choose an item.	Choo: ite	m.	Choose an item.		
Inspe	ector's	Mark eac	h box above wi N/A f Page 74 – 76 d	or "Not Appli	cable" and I	N/C for "Not (Checked".	"Unsat	tisfact	ory",		
4		.1007 (e)	When measur procedures pr	res are requir	ed to reduce	e risk, do the	written					
Inspe	ector's	Comments	Appendix F has Pre 1986 pipe i	-	f older PE pip	е			1		•	
4	1	Information Only	Can the perfo plan be count	rmance meas			erator in th	е	\boxtimes			
Inspe	ector's	Comments							1	•	,	T
4	2	.1007(e)	Does the docu implementati Results, and E	on of the eler	nent "Meas				\boxtimes			

Inspector's Comments Example is older PE pg 81 of the CSAR report.

Question	D. L. 5402	5	o /hr	U/		21/0			
No.	Rule §192	Description	S/Y	N	N/A	N/C			
43	.1007 (f)	Do the written procedures for periodic review include: a. Frequency of review based on the complexity of the system and changes in factors affecting the risk of failure, not to exceed 5 years?	\boxtimes						
		b. Verification of general information (e.g. contact information, form names, action schedules, etc.)?							
		 c. Incorporate new system information? d. Re-evaluation of threats and risk? e. Review the frequency of the measures to reduce risk? f. Review the effectiveness of the measures to reduce risk? g. Modify the measures to reduce risk and refine/improve as needed (i.e. add new, modify existing, or eliminate if no longer needed)? 							
		h. Review performance measures, their effectiveness, and if they are not appropriate, refine/improve them?	\boxtimes						
Inspector's	Comments	The continuing surveillance report is done annually. The data is looked at constantly and the CSAR report comes out annually. Page 8							
44	Information Only	Does the plan contain a process for informing the appropriate operating personnel of an update to the plan?	\boxtimes						
Inspector's	Comments			L		L			
45	Information Only	Does the plan contain a process for informing the appropriate regulatory agency of a significant update to the plan?	\boxtimes						
Inspector's	Comments								
46	.1007(f)	Does the documentation provided by the operator demonstrate implementation of the element "Periodic Evaluation and Improvement"?							

192.1007(g) Report results									
Question No.	Rule §192	Description	S/Y	U/ N	N/A	N/C			
47	.1007(g)	Does the plan contain or reference procedures for reporting, on an annual basis, the four measures listed in 192.1007(e)(1)(i) through (e)(1)(iv) to PHMSA as part of the annual report required by § 191.11 and the State regulatory authority?	\boxtimes						
Inspector's Comments		DIMP plan page 12, section 11							
48	Information Only	When required by the State, does the plan identify the specific report form, date, and location where it is to be submitted?							
Inspector's Comments									
49	.1007(g)	Has the operator submitted the required reports?							
Inspector's Comments Submitted with the Annual Report. Section 11 refers to Procedures manual section 242 5.			125.260	00 parag	graph				

192.1009 What must an operator report when mechanical fittings fail?								
Question No.	Rule §192	Description	S/Y	U/ N	N/A	N/C		
50	.1009	Does the operator have written procedures to collect the information necessary to comply with the reporting requirements of 192.1009?	\boxtimes					
Inspector's Comments		2425.1100						

192.1011 What records must an operator keep?									
Question No.	Rule §192	Description	S/Y	U/ N	N/A	N/C			
51	.1011	Does the operator have written procedures specifying which records demonstrating compliance with Subpart P will be maintained for at least 10 years?	\boxtimes						
Inspector's Comments		DIMP Plan section 12							
52	52 .1011 Does the operator have written procedures specifying that copies of superseded integrity management plans will be maintained for at least 10 years?		\boxtimes						
Inspector's Comments		DIMP Plan section 12				•			
53	.1011	Has the operator maintained the required records?							

Inspector's Comments	DIMP Plan section 12

Table 1: Threat Addressed, Measure to Reduce Risk, and Performance Measure

For the top five highest ranked risks from the operator's risk ranking list the following:

- Primary threat category (corrosion, natural forces, excavation damage, other outside force damage, material or weld, equipment failure, incorrect operation, and other concerns);
- Threat subcategory (GPTC threat subcategories are acceptable. Try to be specific. Example, failing bonnet bolts of gate valve, manufacturer name, model #);
- Measure to reduce the risk (list the one measure the operator feels is most important to reducing the risk);
- Associated performance measure.

	Primary Threat Category	Threat Subcategory, as appropriate	Measure to Reduce Risk	Performance Measure
1	Excavation Damage	Failure to call	3rd party Damage Prevention Program, A/A's in development	Number of excavation Damages, Number of Locate Requests, and Number of Excavation damages/1000 Locate Requests
2	Excavation damage	Improper Excavation	3rd party Damage Prevention Program, A/A's in development	Number of excavation Damages, Number of Locate Requests, and Number of Excavation damages/1000 Locate Requests
3	Materials and Welds	Brittle Cracking, Older vintage PE	Older Vintage PE Pipe Mitigation Program	Number of brittle-like cracking and fusion failures on Older Vintage PE
4	Materials and Welds	Fusion failure, Older Vintage PE	Older Vintage PE Pipe Mitigation Program	Number of brittle-like cracking and fusion failures on Older Vintage PE
5	Incorrect Operation	Sewer Cross Bore	Sewer Cross Bore Program in Development	In Development

Other Inspector			
Comments			