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August 11, 2015

Mr. Allan C. Beshore
Director, Central Region, OPS
Pipeline and Hazardous Materials Safety Administration
901 Locust Street, Suite 462
Kansas City, Missouri 64106-2641

AUG 18 2015

Re: **Notice of Amendment**
Case Number CPF 3-2015-1003M

Dear Mr. Beshore:

DTE Gas Company (DTE Gas) acknowledges receipt of your letter of May 11, 2015, regarding findings by representatives of the Michigan Public Service Commission acting as an interstate agent for the Pipeline and Hazardous Materials Safety Administration (PHMSA), Office of Pipeline Safety (OPS), during an inspection of records and facilities for the Vector/DTE pipeline in Michigan during December, 2014.

DTE Gas does not contest the findings described in the Notice of Amendment and hereby submits our response to each of the ten items. The findings listed in the Notice are shown below in italics:

Item 1: § 192.805, Qualification program.

Each operator shall have and follow a written qualification program. The program shall include provisions to:

(b) Ensure through evaluation that individuals performing covered tasks are qualified;

(DTE's Operator Qualification procedures did not include a thorough evaluation for the hot tap qualification task. DTE's qualification only requires a knowledge based test. For hot taps, a performance or simulation test must be included in the evaluation.)

DTE Gas Response

We have reviewed our Operator Qualification procedures and have determined that our **DTE Energy Gas Operations & Contractor Covered Task Summary and Qualifications** incorrectly showed qualifications for tapping pressurized pipelines requiring only "Knowledge" as the subsequent evaluation method. However, we have

always used "Knowledge" and "Performance" as our Subsequent Evaluation method. We can assure you that evaluations for tapping qualifications require successful completion of simulation, or "Performance", tests: an example of a Subsequent Evaluation for tapping, *Operator Qualification Gas Operations Job Template*, is attached for your reference (Attachment A). The names of the Evaluator and of the Employee being re-qualified have been redacted.

We have published a corrected *DTE Energy Gas Operations & Contractor Covered Task Summary and Qualifications* to indicate the requirement for "KP" (both "Knowledge" and "Performance") tests to qualify for tapping, a copy of which is attached for your reference with the corrections highlighted (Attachment B).

Item 2: § 192.911 What are the elements of an integrity management program?

An operator's initial integrity management program begins with a framework (*see* § 192.907) and evolves into a more detailed and comprehensive integrity management program, as information is gained and incorporated into the program. An operator must make continual improvements to its program. The initial program framework and subsequent program must, at minimum, contain the following elements. (When indicated, refer to ASME/ANSI B31.8S (incorporated by reference, see § 192.7) for more detailed information on the listed element.)

(c) An identification of threats to each covered segment, which must include data integration and a risk assessment. An operator must use the threat identification and risk assessment to prioritize covered segments for assessment (§ 192.917) and to evaluate the merits of additional preventive and mitigative measures (§ 192.935) for each covered segment.

Section 192.917(c) requires that an operator must conduct a risk assessment that follows ASME/ANSI B31.8S, section 5, and considers the identified threats for each covered segment. An operator must use the risk assessment to prioritize the covered segments for the baseline and continual reassessments (§ 192.919, § 192.921, § 192.937), and to determine what additional preventive and mitigative measures are needed (§ 192.935) for the covered segment.

(DTE's Integrity Management (IM) plan identifies incorrect operations as a threat to the pipeline in section 4.2.1 on page 9. However, in the comments section, the plan indicates that incorrect operations is managed through other means and not considered in risk ranking or assessments. The plan should always consider incorrect operations in the risk ranking and define what other means are used to manage this risk.)

DTE Gas Response

DTE Gas acknowledges that our initial risk model did not include the Incorrect Operations threat. DTE Gas is now using a risk model that includes the Incorrect

Operations threat data required by ASME B31.8S. The data for this threat will be updated by year-end 2015.

Item 3: § 192.911 What are the elements of an integrity management program?

(c) An identification of threats to each covered segment, which must include data integration and a risk assessment. An operator must use the threat identification and risk assessment to prioritize covered segments for assessment (§ 192.917) and to evaluate the merits of additional preventive and mitigative measures (§ 192.935) for each covered segment.

Section 192.917(e)(5) indicates that if an operator identifies corrosion on a covered segment that could adversely affect the integrity of the line (conditions specified in § 192.933), the operator must evaluate and remediate, as necessary, all pipeline segments (both covered and non-covered) with similar material coating and environmental characteristics. An operator must establish a schedule for evaluating and remediating, as necessary, the similar segments that is consistent with the operator's established operating and maintenance procedures under part 192 for testing and repair.

(DTE's IM plan considers corrosion as an integrity threat to its pipeline. However, the IM plan did not contain any procedures for addressing corrosion.)

DTE Gas Response

DTE Gas has reviewed its transmission Integrity Management (IM) plan and has determined that the plan needs additional language describing our plans to expand the In-Line Inspection (ILI) and Direct Assessment (DA) efforts to areas outside of the High Consequence Areas (HCA). These plans were implemented starting in 2012, but are not adequately described in our current IM plan. We have incorporated the expanded ILI and DA plans and results into our formal IM program documents.

Additional language has been added to the IM program documents to address the requirement to evaluate and remediate similar segments. The assistance of an outside engineering firm has been obtained to develop a comprehensive process for performing this evaluation, which we plan to have in place by year-end 2015.

Item 4: § 192.911 What are the elements of an integrity management program?

(e) Provisions meeting the requirements of § 192.933 for remediating conditions found during an integrity assessment.


Section 192.933(d)(1) requires that for immediate repair condition an operator's evaluation and remediation schedule must follow ASME/ANSI B31.8S, section 7 in providing for immediate repair conditions.

(DTE's IM procedures did not indicate that all indications of stress corrosion cracks (SCC) require an immediate action. ASME B31.8S-2004 states that "All indications of stress corrosion cracks require immediate response." Section 7.1 of 13-SWI-011-0053

of the DTE IM plan defines the specifications for an immediate repair. SCC was not included in this procedure.)

DTE Gas Response

Section 6.0, **Condition Remediation**, of the DTE Gas IM plan does include the requirement to consider indications of Stress Corrosion Cracks as an Immediate Condition. However, the same item was inadvertently left off of the list of Immediate Conditions in Section 7.1 of our more detailed Standard Work Instruction (SWI) for in-line inspection of transmission lines, **13-SWI-011-0053**. We have revised **13-SWI-011-0053** to include the requirement for indications of SCC to be classified as an "Immediate Repair" condition:

IN-LINE INSPECTION OF TRANSMISSION PIPELINES		
OWNER: TRANSMISSION ENGINEERING	REVISION 3 EFFECTIVE DATE: 7/31/2015	STANDARD WORK INSTRUCTION DOC ID: 13-SWI-011-0053

7.1 IMMEDIATE CONDITIONS

Immediate Anomalies are the most severe and pose an immediate threat to the integrity of the pipeline. Immediate anomalies are characterized by the following:

- a) Metal Loss anomalies \geq 80% wall penetration
- b) Metal Loss anomalies with a Failure Pressure Ratio (FPR) \leq 1.1
- c) Metal loss anomalies affecting the long seam of low frequency ERW or Flash Welded pipe (Note: not all longitudinal seams are detectable)
- d) Other metal loss anomalies that in the opinion of the ILI Engineer should be inspected immediately
- e) A dent that has any indication of metal loss, cracking or a stress riser.
- f) Any indications of stress corrosion cracking.

(from DTE Gas Standard Work Instruction **13-SWI-011-0053**, revised July 31, 2015)

**Item 5: § 192.911 What are the elements of an integrity management program?
(f) A process for continual evaluation and assessment meeting the requirements of § 192.937.**

Section 192.937(b) requires that the operator must conduct a periodic evaluation as frequently as needed to assure the integrity of each covered segment. The periodic evaluation must be based on a data integration and risk assessment of the entire pipeline as specified in § 192.917. For plastic transmission pipelines, the periodic evaluation is based on the threat analysis specified in § 192.917(d). For all other transmission pipelines, the evaluation must consider the past and present integrity assessment results, data integration and risk assessment information (§ 192.917), and decisions about remediation (§ 192.933) and additional preventive and mitigative actions (§ 192.935). An operator must use the results from this evaluation to identify the threats specific to each covered segment and the risk represented by these threats.

(DTE needs more specific procedures for continual evaluation in Section 7 of their IM plan. Review of the continual evaluation and assessment of time dependent threats found that the documentation of this evaluation was not well organized. The

procedures should define what is being reviewed, who is to review it, how this will be documented, and the results of the evaluation.)

DTE Gas Response

We have reviewed our transmission IM plan and acknowledge that Section 7 is deficient in defining what is being reviewed, who is to review it, how this will be documented, and the results of the evaluation. DTE Gas will revise Section 7 to include each of these points in greater detail, and a revamped periodic evaluation process will be developed and implemented by December 31, 2015.

Item 6: § 192.911 What are the elements of an integrity management program?

(h) Provisions meeting the requirements of § 192.935 for adding preventive and mitigative measures to protect the high consequence area.

Section 192.935(a) General requirements – requires that an operator must take additional measures beyond those already required by Part 192 to prevent a pipeline failure and to mitigate the consequences of a pipeline failure in a high consequence area. An operator must base the additional measures on the threats the operator has identified to each pipeline segment.

(DTE needs more specific procedures to determine which preventative and mitigative (P&M) measures should be implemented. In Section 9 of the DTE IM plan, it states that the field supervisor will review (or select) the P&M measure(s) for any threat that does not have a “Low Level.” However, the procedure does not define “Low Level” and as such, it is not clear as to what requires P&M measures and what does not.)

DTE Gas Response

We have reviewed our transmission IM plan and acknowledge that additional language is needed in our SWI for Preventive and Mitigative (P&M) Measures to define the threat levels in terms of risk model output and the results of the continual evaluation process to be enhanced. A revised SWI for P&M measures process is being developed with assistance from an outside engineering firm and will be implemented by year-end 2015.

Item 7: § 192.911 What are the elements of an integrity management program?

(h) Provisions meeting the requirements of § 192.935 for adding preventive and mitigative measures to protect the high consequence area.

Section 192.935(b) Third party damage and outside force damage requires that an operator must enhance its damage prevention program, as required under § 192.614 of this part, with respect to a covered segment to prevent and minimize the consequences of a release due to third party damage.

(DTE determined that the pipeline is not susceptible to outside force damage (e.g., earth movement, floods, unstable suspension bridges). However, the risk model does calculate a value for this potential risk. The procedure does not specify when the risk

value is high enough to warrant additional P&M measures. This guidance should be included in the procedure.)

DTE Gas Response

We have reviewed our transmission IM plan and we acknowledge our risk model is deficient in defining when additional P&M measures should be implemented. The revised risk model implementation will include criteria for implementation of P&M measures based on risk values and will be fully implemented by year-end 2015.

Item 8: § 192.911 What are the elements of an integrity management program?

(j) Record keeping provisions meeting the requirements of § 192.947.

Section 192.947(a) requires that an operator maintain, for the useful life of the pipeline, records that demonstrate compliance with the requirements of this subpart. At minimum, an operator must maintain the following records for review during an inspection.

(a) A written integrity management program in accordance with § 192.907;

(DTE's procedures in Section 11.0 do not indicate that P&M records will be kept for the life of the pipeline. For instance, the bimonthly aerial patrols that DTE is performing for § 192.935(a) need to be kept for the life of the pipeline. DTE personnel indicated that these would be kept for 5 years and that is what is written in the binder where these are housed. This should be changed to the useful life of the facility and added to the IM manual.)

DTE Gas Response

We have reviewed our transmission IM plan and we acknowledge our procedures in Section 11 are deficient in listing the P&M records that must be retained for the useful life of the pipeline. We have revised Section 11 to add the requirement to retain documents that support selected P&M measures for the life of the facility. The SWI for P&M measures was also modified to include the same requirement. These changes will be communicated to affected personnel by October 1, 2015.

Item 9: § 192.911 What are the elements of an integrity management program?

(k) A management of change process as outlined in ASME/ANSI B31.8S, section 11.

(Section 12 of the DTE IM plan does not define how the management of change process will be documented. Additionally, the IM plan does not state that the following are to be provided as required by Section 11 of ASME B31.8S:

- 1) Authority for approving changes;*
- 2) Analysis of implications;*
- 3) Acquisition of required work permits;*
- 4) Communication of the change to affected parties, time limitations;*
- 5) Qualification of staff)*

DTE Gas Response

We have reviewed our transmission IM plan and acknowledge our Section 12 is deficient in its description of our Management-of-Change (MOC) process. A revised MOC plan is being developed with assistance from an outside engineering firm and will be implemented by year-end 2015.

Item 10: § 192.911 What are the elements of an integrity management program?

(1) A quality assurance process as outlined in ASME/ANSI B31.8S, section 12.

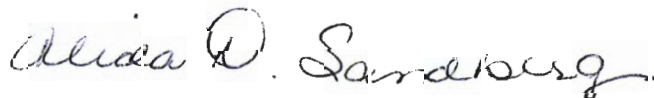
(The procedure located in Section 3.2 of 13-SWI-011-0053 ILI gives internal requirements for DTE employees, but does not state what constitutes qualifications for outside vendors, particularly those who analyze pig data. While the procedure references qualification standards (ANSI/ANST ILI-PQ-2005 and API 1163), there is nothing that specifies the requirement (level) of the analysts.)

DTE Gas Response

We have reviewed Section 3.2 of **13-SWI-011-0053** in our transmission IM plan and acknowledge that more detail is needed to specify the required level of qualifications of the analysts involved in producing the ILI report. The SWI has been modified to include the specific qualifications required by DTE Gas and will be included in future vendor ILI contracts.

DTE Gas believes that our actions listed above have or will achieve compliance with §§ 192.805 and 192.911 and can provide additional evidence to demonstrate that future-dated items have been completed by the dates provided in this response.

Sincerely,



Alida D. Sandberg

Attachments:

Attachment A - Sample **Operator Qualification Gas Operations Job Template**

Attachment B - Corrected **DTE Energy Gas Operations & Contractor Covered Task Summary and Qualifications**

c. D. Chislea, MPSC

OPERATOR QUALIFICATION
 Gas Operations
 Job Template

Name: [REDACTED] I.D.#: [REDACTED] Location: _____

Job Title: _____ SAP Date: _____

Distribution									
SAP	Qual #	Length	Title	Unsatisfactory/ Satisfactory	Training	Type	Evaluation Date	Evaluator	Score
Q 42000203	1418.01	3	Purging - Large Volume, i.e. Segment of main or transmission line, etc. - Performance Evaluation	SAT		Sim	5/19/15	[REDACTED]	[REDACTED]
Q 42000207	1421.01	3	Installation of Steel Pipe - Repair of imperfections or Damages - Grinding or Removal - Performance Evaluation	N/A					
Q 42000208	1424.01	5	Support, Expansion Joint and Anchor Maintenance - Exposed Pipeline - Performance Evaluation	N/A					
Q 42000209	1425.01	3	Tapping cast and ductile Iron Pipe - Performance Evaluation	SAT		Sim	5/20/15	[REDACTED]	[REDACTED]
Q 42000210	1426.01	5	Tapping Steel and Plastic Pipe: Manual self tapping, Bull In cutter - Performance Evaluation	SAT		Sim	5/20/15	[REDACTED]	[REDACTED]
Q 42000211	1426.02	3	Tapping plastic Pipe - Mechanical tapping equipment - Performance Evaluation	N/A					
Q 42000212	1426.02.01	3	Tapping Steel Pipe - Mechanical tapping equipment (TDW Low Pressure < 100 psig) - Performance Evaluation	SAT		Sim	5/24/15	[REDACTED]	[REDACTED]
Q 42000213	1426.02.02	3	Tapping Steel Pipe - Mechanical Tapping Equipment (TDW High Pressure >=100 psig) - Performance Evaluation	N/A					
Q 42000214	1426.02.03	3	Tapping Steel Pipe - Mechanical Tapping Equipment (Mueller) - Performance Evaluation	SAT		Sim	5/24/15	[REDACTED]	[REDACTED]
Q 42000215	1426.02.04	3	Tapping Steel Pipe - Mechanical tapping equipment (Wachs) - Performance Evaluation	N/A					
Q 42000220	1432.01	3	Leak Clamps and Sleeves: Bolt-on type - Performance Evaluation	N/A					
Q 42000223	1501.01	5	Odorization - Mains and Transmission Lines - Periodic Sampling - Performance Evaluation	N/A					
Q 42000220	2010.01	5	Service Line Replacement - Performance Evaluation	N/A					
Q 42000220	2010.02	5	Service line replacement - Underground Service Entrance - Performance Evaluation	N/A					

*See Training Log Distribution

DTE Energy - Gas Operations - Contractor Covered Task Summary and Qualifications

MichCon SAP Course No.	OQ Task Numbers	Qual Name	Evaluation Intervals (Yrs)	Additional Information	OQ Tasks Performed By Contractor (Yes/No)?	Contractor OQ Tasks Evaluated By MichCon (Yes/No)?	Initial Evaluation Method - See: Notes	Subsequent Evaluation Method - See: Notes	Distribution/ SO Policy & Procedure Manual Reference	Field Service Policy & Procedure Manual Reference	Standards Reference
Q 42000209	1425.01	Tapping Cast and Ductile Iron Pipe	3		no	no	KP	KP	9.1, 9.2		
Q 42000210	1426.01	Tapping Steel and Plastic Pipe: Manual Self Tapping, Built In Cutter	5		yes	no	KP	KP	9.1, 9.2, 9.6		605(b)5 627
Q 42000211	1426.02	Tapping Plastic Pipe - Mechanical Tapping Equipment.	3	Plastic Pipe	yes	yes	KP	KP	9.1, Manf Inst, Fusion Procedures		605(b)5 627
Q 42000212	1426.02.01	Tapping Steel Pipe - Mechanical Tapping Equipment	3	TDW Low Pressure < 100	no	no	KP	KP	9.1, 9.2, 9.3		605(b)5 627
Q 42000213	1426.02.02	Tapping Steel Pipe - Mechanical Tapping Equipment	3	TDW High Pressure >=100	no	no	KP	KP	9.1, 9.2, 9.3, 9.4, 9.5		605(b)5 627
Q 42000214	1426.02.03	Tapping Steel Pipe - Mechanical Tapping Equipment	3	Mueller	no	no	KP	KP	9.1, 9.2		605(b)5 627
Q 42000215	1426.02.04	Tapping Steel Pipe - Mechanical Tapping Equipment	3	Wachs	no	no	KP	KP	9.1, 9.2		605(b)5 627
Q 42000216	1426.02.05	Tapping Steel Pipe - Mechanical Tapping Equipment	3	Qualitech	no	no	KP	KP	9.1, 9.2		605(b)5 627

Original Date: 08/11/15
 Revision Date: 08/06/15

EVALUATION METHODS:
 K = KNOWLEDGE (WRITTEN OR ORAL TEST)
 P = PERFORMANCE (SIMULATION OR OTJ)
 * Manufactures Inst/Job Aid/Equip Manuals: ect.