



U.S. Department
of Transportation

**Pipeline and
Hazardous Materials Safety
Administration**

8701 South Gessner, Suite 1110
Houston, TX 77074

**NOTICE OF PROBABLE VIOLATION
PROPOSED CIVIL PENALTY
and
PROPOSED COMPLIANCE ORDER**

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

March 23, 2012

Mr. Larry Davied
Vice President, Technical Services
Magellan Pipeline Company
One Williams Center
Tulsa, OK 74172

CPF 4-2012-5010

Dear Mr. Davied:

Between March 22, 2010 and April 22, 2011, representatives of the Pipeline and Hazardous Materials Safety Administration (PHMSA) pursuant to Chapter 601 of 49 United States Code were on site and inspected your operations and maintenance procedures and ten pipeline inspection units in Oklahoma and Texas.

As a result of the inspection, it appears that you have committed probable violations of the Pipeline Safety Regulations, Title 49, Code of Federal Regulations. The items inspected and the probable violation(s) are:

1. **195.575 Which facilities must I electrically isolate and what inspections, tests, and safeguards are required?**
 - (a) You must electrically isolate each buried or submerged pipeline from other metallic structures, unless you electrically interconnect and cathodically protect the pipeline and the other structures as a single unit.
 - (b) You must install one or more insulating devices where electrical isolation of a portion of a pipeline is necessary to facilitate the application of corrosion control.
 - (c) You must inspect and electrically test each electrical isolation to assure the isolation is adequate.
 - (d) If you install an

insulating device in an area where a combustible atmosphere is reasonable to foresee, you must take precautions to prevent arcing. (e) If a pipeline is in close proximity to electrical transmission tower footings, ground cables, or counterpoise, or in other areas where it is reasonable to foresee fault currents or an unusual risk of lightning, you must protect the pipeline against damage from fault currents or lightning and take protective measures at insulating devices.

Magellan (the Operator) failed to isolate each buried pipeline from other metallic structures as required by §195.575 and confirmed in the written procedures required under §195.402. As discussed below, the Operator has both metallicity and electrolytically shorted casings in the units inspected (including Longhorn, Duncan to Ft. Smith, Cimarron Pipeline, Orion West, Oklahoma City, and Tulsa) and has not consistently taken measures to achieve electrical isolation between the casings and carrier pipes.

Metallicity shorted casings are addressed by Magellan Corrosion Control Program procedures, 7.04-ADM-001, Section 2.9.4, which states that metallicity shorted casings require actions when the casing potential is within 100 millivolts of the carrier pipe. Magellan’s annual surveys of pipe-to-soil and casing-to-soil readings show some casing-to-soil readings taken at the same test station or a nearby test station to be within 100 mV of the pipe-to-soil readings. According to Magellan records, testing performed by the Operator has confirmed that some of these casings are metallicity shorted but actions have not been taken to achieve the electrical isolation required to comply with the requirements of 195.575. In addition, the Operator has not followed its procedures to clear the short or fill the casing annulus with dielectric material for each metallicity shorted casing.

A sample of the Magellan annual cathodic protection survey records, included as evidence, show the inspection date, the name of the pipeline segment, the milepost, a description of the location, the pipe-to-soil and casing-to-soil readings in volts and the casing status. Some examples in the Magellan records with casing-to-soil reading within 100 mV of the pipe-to-soil reading, indicating the potential for the casing to be metallicity shorted, include the following:

Segment Name	MP/Station	Year(s)	Comments
Ponca City to Barnsdall	22+24	2005, 2006, 2007, 2008, 2009	(2009) P/S -2.175V, C/S -2.181V
Enid to Oklahoma City	74+06	2005, 2006, 2007, 2008, 2009	(2009) P/S -1.612V, C/S -1.602V
Allen to Drumright	16+27	2007 ² , 2008 ² , 2009 ¹	(2009) P/S -0.926V, C/S -0.844V
Tulsa Jct. to Kansas St. Line	119.223	2005 ³ , 2006 ⁴ , 2007 ⁴ , 2008 ⁴ , 2009 ⁴	(2009) P/S -1.620V, C/S -1.617V
Barnsdall to Kansas City #3-8	1+06	2005 ² , 2007 ² , 2008 ⁴ , 2009 ²	(2008) P/S -1.205V, C/S -1.109V
West Tulsa to Glenpool	4.38	2005 ⁴ , 2006 ⁴ , 2007 ⁴ , 2008 ⁴ , 2009 ¹	(2009) P/S -0.901V, C/S -0.900V
West Tulsa to Glenpool	4.58	2005 ⁴ , 2006 ⁴ , 2007 ⁴ , 2008 ⁴ , 2009 ¹	(2009) P/S -0.943V, C/S -0.930V
Clyde to DeLeon	156.302	2010	P/S -1.127V, C/S -1.124V

¹ Casing-to-soil within 100 mV of pipe-to-soil but shown in Magellan records to be clear.

² >100 mV difference and shown in Magellan records as electrolytically shorted.

³ Casing-to-soil within 100 mV of pipe-to-soil and shown in Magellan records to be metallicity shorted.

⁴ Casing-to-soil within 100 mV of pipe-to-soil and shown in Magellan records to be electrolytically shorted.

The Magellan records show casing status test designations using “C” for clear (not shorted), “E” for electrolytically shorted, “S” for metallicity shorted, and “I” for inhibited (the annulus of the casing has been filled with a dielectric material). These designations have sometimes changed from year to year between metallicity shorted, electrolytically shorted, and clear. For example,

the shorted casing at station 22+24 on the Ponca City to Barnsdall segment was designated to be metallicly shorted (S) as early as 2005, was changed to electrolytically shorted (E) in 2006, then back to metallicly shorted (S) in 2007, 2008, and 2009. The operator does not explain these inconsistencies.

Research on corrosion of cased pipes supports the need to achieve electrical isolation between the carrier pipe and casing and a discussion is provided in the associated Violation Report.

Magellan does not have a procedure specifically addressing the issue of electrolytically shorted casings, but the records indicate that the Operator has recognized the issue given the many casings in their records designated to be electrolytically shorted. The records, however, do not indicate the operator has taken consistent actions to address these electrolytic shorts and achieve electrical isolation as required by 195.575. Out of the many shorted casings (electrolytically) on the Magellan system where the casing-to-soil readings are not within 100 mV of the pipe-to-soil readings some specific examples are as follows:

Segment Name	MP/Station	Year(s)	Comments
Ponca City to Barnsdall	0+04,44+22,52+08	2005 ¹ ,2006 ¹ ,2007,2008,2009	(00+04,2009) P/S -1.395V, C/S -1.102V
Enid to Oklahoma City	69+14,80+26	2006 ² ,2007 ² ,2008,2009	(69+14,2009) P/S -1.271V, C/S -1.062V
Allen to Drumright	68+25,69+16,75+15	2007,2008,2009	(68+25,2009) P/S -1.692V, C/S -1.466V
Tulsa Jct. to Kansas St. Line	110.878,151.557	2005 ³ ,2006,2007,2008,2009 ¹	(110.87,2009) P/S -1.519V, C/S -0.992V
Barnsdall to Kansas City (#3-8)	29+44	2006,2007,2008,2009	(2009) P/S -1.791V, C/S -0.953V
Cushing to Drumright	8+15	2006,2007,2008,2009,2010	(2010) P/S -1.457V, C/S -1.177V
Drumright to Tulsa	0+24, 28+40, 32+29	2005 ³ ,2006 ¹ ,2007 ⁴ ,2008 ⁴ ,2009	(2009,0+24) P/S -1.349V, C/S -0.896V
Concord to East Houston	170.6	2006,2007,2008,2009,2010	(2010) P/S -1.171V, C/S -1171V
Clyde to DeLeon	187.200	2010	P/S -1.201V, C/S -0.972V

¹ Casing(s) designated as clear even though casing-to-soil reading is significantly more electronegative than native steel in soil.

² Casing at 80+26 designated as clear.

³ Casing at 110.878 designated as metallicly shorted.

⁴ Casing at 32+29 designated as clear.

⁵ Casings at 0+24 designated as clear even though casing-to-soil reading is significantly more electronegative than native steel in soil.

None of the casings were intentionally bonded to the carrier pipe or connected to the cathodic protection system to cathodically protect the casings. Therefore, it was not the intent of the Operator to protect the pipe and casing as a unit. In addition, no records were presented documenting the installation of galvanic anodes to cathodically protect the casings which could result in elevated casing-to-soil readings.

2. 195.410 Line Markers.

(1) Markers must be located at each public road crossing, at each railroad crossing, and in sufficient number along the remainder of each buried line so that its location is accurately known. (c) Each operator shall provide line marking at locations where the line is above ground in areas that are accessible to the public.

The Operator did not meet the requirements of §195.410 by placing a sufficient number of markers along the buried pipeline so that its location is accurately known. Magellan also did not follow its “Pipeline Marking Procedure, 7.05-ADM-002, pages 1-5 of 5” dated January 1, 2010 regarding its criteria to “Effectively delineate the pipeline corridor.” This procedure also states

that “Markers must be placed and maintained over each buried pipeline at the following locations: 3.3.4 in sufficient numbers along the remainder of each buried line so that its location is accurately known.”

During the field inspection there were locations on the Magellan pipeline system where there were an inadequate number of pipeline markers in order to accurately know the location of the pipeline, even when turning 360 degrees. At each of the sites listed below and by walking in various directions from each of the specific known pipeline locations identified by the operator, it was impossible to ascertain with any certainty the ongoing pipeline path through the further observation of pipeline markers that would accurately show the location of the pipeline. Locations where there were inadequate pipeline markers include segments in the Barnsdall, Tulsa, Oklahoma City, Odessa to El Paso, and Cimarron inspection units. Some examples are included in the following table:

Date	Unit	Pipeline Segment	Approximate Location	Comments
08/10/2010	Tulsa	Tulsa to State Line	Oologah, OK near Road E0390	Pipeline near house, apt. bldg.
09/24/2010	Oklahoma City	Allen to Drumright	County Road 3261 near 81+05	Pipeline near corral, residence
09/28/2010	Oklahoma City	Wynnewood to OKC	County road crossing near MP 11	Pipeline near residence
09/21/2010	Oklahoma City	Tulsa to Drumright	56 th Street near 26+48	
08/10/2010	Tulsa	Tulsa to State Line	ROW near MP 138	Near Oologah Lake block valve
08/10/2010	Tulsa	Tulsa to State Line	ROW near MP 148	
08/10/2010	Tulsa	Tulsa to State Line	ROW near MP 144	Near old Alluwe Station site
05/11/2010	Duncan-Ft. Smith	Duncan to Ft. Smith	ROW near 94+07	Near east end of Sander Road
05/11/2010	Duncan-Ft. Smith	Duncan to Ft. Smith	ROW near 128+96	Near county road crossing
05/11/2010	Duncan-Ft. Smith	Duncan to Ft. Smith	ROW near 142+31	Near Massey Point gate valve
05/11/2010	Duncan-Ft. Smith	Duncan to Ft. Smith	ROW near 199+32	Near Havener gate valve
05/11/2010	Duncan-Ft. Smith	Duncan to Ft. Smith	ROW near MP 201	Near Spiro rectifier
05/14/2010	Duncan-Ft. Smith	Duncan to Ft. Smith	ROW near 213+21	Near RR x-ing
06/09/2010	Orion West	Frost to Odessa	ROW near MP 310	Near Frost Station
06/09/2010	Orion West	Frost to Odessa	ROW near MP 202	Near Highway 8 crossing
06/09/2010	Orion West	Frost to Odessa	ROW near MP 174	
06/09/2010	Orion West	Frost to Odessa	ROW near MP 163	Near county road 483
06/09/2010	Orion West	Frost to Odessa	ROW near MP 162	Near state highway 283
06/09/2010	Orion West	Frost to Odessa	ROW near MP 73	Near Colorado River crossing
06/10/2010	Orion West	Frost to Odessa	ROW near MP 72	Near Colorado River crossing
07/27/2010	Odessa-El Paso	Odessa to El Paso	ROW near MP 44	
07/27/2010	Odessa-El Paso	Odessa to El Paso	ROW near MP 46	Damaged marker
07/27/2010	Odessa-El Paso	Odessa to El Paso	ROW near MP 61	Damaged marker
07/27/2010	Odessa-El Paso	Odessa to El Paso	ROW near rectifier E-8	Near 355+00
07/29/2010	Odessa-El Paso	Odessa to El Paso	ROW near rectifier E-40	Near 11208+95
08/10/2010	Tulsa	Tulsa to State Line	ROW near MP 168	Near Highway 10 crossing
08/10/2010	Tulsa	Tulsa to State Line	ROW near MP 158	Near county road crossing
08/10/2010	Tulsa	Tulsa to State Line	ROW near MP 147	
08/10/2010	Tulsa	Tulsa to State Line	ROW near MP 139	
08/10/2010	Tulsa	Tulsa to State Line	ROW near MP 130	
08/10/2010	Tulsa	Tulsa to State Line	ROW near MP 118	Pipeline near residence
08/10/2010	Tulsa	Tulsa to State Line	ROW near 49 th Street North	
08/10/2010	Tulsa	Tulsa to State Line	ROW near MP 105	Near Million Dollar Casino
08/10/2010	Tulsa	Glenpool to W. Tulsa	ROW near MP 10	
08/11/2010	Tulsa	Glenpool to W. Tulsa	ROW near MP 2	Old Koch tie-in
09/21/2010	Tulsa	Tulsa to Drumright	56 th Street area	
09/21/2010	Tulsa	Tulsa to Drumright	MP 19 area	
09/23/2010	Oklahoma City	OKC to Wynnewood	MP 34 area	
09/23/2010	Oklahoma City	OKC to Wynnewood	Wynnewood tank farm area	
09/23/2010	Oklahoma City	Allen to Drumright	ROW near 1+42	
09/24/2010	Oklahoma City	Allen to Drumright	MP 74 area	
09/24/2010	Oklahoma City	Allen to Drumright	MP 40 area	County road 108
09/24/2010	Oklahoma City	Allen to Drumright	MP 29 area	

10/05/2010	Cimarron Crude	Glenpool to Tulsa	MP 3 area	
10/05/2010	Cimarron Crude	Glenpool to Tulsa	South I-44 and railroad tracks	

3. 195.567 Which pipelines must have test leads and what must I do to install and maintain the leads?

(b) Installation. You must install test leads as follows: (1) Locate the leads at intervals frequent enough to obtain electrical measurements indicating the adequacy of cathodic protection.

(c) Maintenance. You must maintain the test lead wires in a condition that enables you to obtain electrical measurements to determine whether cathodic protection complies with §195.571.

Magellan failed to maintain its test lead wires in a condition that enabled Magellan to obtain electrical measurements to determine whether cathodic protection complies with §195.571. During the field inspection, Magellan was observed to have cathodic protection test stations listed in their records as annual test points that were damaged but had not yet been repaired so that electrical measurements to determine the adequacy of cathodic protection could be made. For example:

- The test station on the Wynnewood to Allen segment of the Duncan to Ft. Smith 12-inch and 10-inch pipeline located on Racetrack Road north of County Road 357 was destroyed and had not been repaired at the time of the inspection.
- The test station at 7705+00 on the Black river to Hueco segment of the Odessa to El Paso pipeline had been destroyed and not repaired at the time of the inspection.
- The test station on the Cimarron pipeline near County Road 4804 read -707mV at the time of the inspection and the analysis performed by the corrosion technician indicated that the test leads may not have been solidly connected to the pipe.

These actions also show that the Operator failed to follow its procedure for installing and maintaining test leads as required in their procedure titled “Corrosion Control Program, 7.04-ADM-001, pages 1-21 of 21, dated January 1, 2010, section 2.10 Test Leads 195.567, 192.460, and 192.471.”

4. 195.406 Maximum operating pressure.

(a) Except for surge pressures and other variations from normal operations, no operator may operate a pipeline at a pressure that exceeds any of the following: (1) The internal design pressure of the pipe determined in accordance with §195.106. However, for steel pipe in pipelines being converted under §195.5, if one or more factors of the design formula (§195.106) are unknown, one of the following pressures is to be used as design pressure: (i) Eighty percent of the first test pressure that produces yield under section N5.0 of Appendix N of ASME B31.8, reduced by the

appropriate factors in §§195.106(a) and (e); or (ii) If the pipe is 323.8 mm (12¾ in) or less outside diameter and is not tested to yield under this paragraph, 1379 kPa (200 psig). (2) The design pressure of any other component of the pipeline. (3) Eighty percent of the test pressure for any part of the pipeline which has been pressure tested under Subpart E of this part. (4) Eighty percent of the factory test pressure or of the prototype test pressure for any individually installed component which is excepted from testing under §195.305. (5) For pipelines under §§195.302(b)(1) and (b)(2)(i), that have not been pressure tested under Subpart E of this part, 80 percent of the test pressure or highest operating pressure to which the pipeline was subjected for 4 or more continuous hours that can be demonstrated by recording charts or logs made at the time the test or operations were conducted.

(b) No operator may permit the pressure in a pipeline during surges or other variations from normal operations to exceed 110 percent of the operating pressure limit established under paragraph (a) of this section. Each operator must provide adequate controls and protective equipment to control the pressure within this limit.

Magellan has allowed pipeline pressures to exceed the maximum operating pressure in violation of the requirements in §195.406. Specifically, according to records submitted by the Operator in response to the PHMSA March 3, 2011, Request for Specific Information, Magellan has allowed their pipeline system to exceed the Maximum Operating Pressure (MOP) for ten (10) minutes, or longer, seventeen (17) times since 2007. Magellan states that it is standard practice per their System Integrity Plan procedure 13.01-ADM-008, Abnormal Operating Conditions List, to alarm as an abnormal operating condition when exceeding MOP on a ten minute basis. However, allowing the pressure to remain over the MOP for ten minutes is not consistent with a reasonable definition of surge pressure.

Another issue involving an overpressure situation occurred when the Magellan control center received an alarm indicating that the MOP +110% had been exceeded at the Ponca City facility. The Operator determined that a pressure relief valve had been incorrectly set at 1,440 psig for a pipeline with a MOP of 480 psig. A Magellan technician also found during an inspection at the Sooner Road facility that the numbered tags identifying the pressure relief devices did not match the numbers on the Pipeline and Instrumentation Drawing (P&ID). In addition to showing the configuration of the piping, valves, and relief devices, the P&ID ties the MOP of the pipeline segment to the relief valve so that the correct settings can be established. Incorrect tagging may result in incorrect setpoints for the pressure relief devices.

Magellan records also show that at the Drumright facility the overpressure devices were set to activate at pressures higher than the designated pressure on the inspection form (07-FORM-0741). For example, the inspection form indicates that device MLMF-0033 on the East Pig Bypass should be set to activate at a pressure of 1,050 psig. However, on September 24, 2009, the pressure was set at 1,448 psig. Another example is device UNT2-0012 was set to activate at 809 psig but the maximum pressure indicated on the form is 800 psig. The inspection form for the Oklahoma City Reno facility shows that device PSV-1221 was found to be set to relieve at

500 psig but the maximum pressure is 305 psig. Improperly setting the relief device pressures may allow an overpressure condition and could result in a failure of the pipeline facilities.

5. 195.402(a) Procedural manual for operations, maintenance, and emergencies.

(a) General. Each operator shall prepare and follow for each pipeline system a manual of written procedures for conducting normal operations and maintenance activities and handling abnormal operations and emergencies. This manual shall be reviewed at intervals not exceeding 15 months, but at least once each calendar year, and appropriate changes made as necessary to insure that the manual is effective. This manual shall be prepared before initial operations of a pipeline commence, and appropriate parts shall be kept at locations where operations and maintenance activities are conducted.

Magellan failed to follow its Inspection of Right-of-way Procedure, 7.05-ADM-006, which requires the Operator to identify activity along the right-of-way that could, if not corrected, pose a hazard or compromise the safety, integrity or operation of pipelines and right-of-way. Specifically, several encroachments were observed during the field inspection with large quantities of junk on the right-of-way (abandoned trucks and cars, and oil storage tanks) in West Tulsa and near Drumright, OK. While barn construction predates the Magellan acquisition of the pipeline, there are other indications of encroachment and overgrowth indicating Magellan is not following its Inspection of Right-of-way Procedure for identifying conditions on the pipeline right-of-way that could pose a hazard or compromise safety.

Specific locations where problems were found related to encroachment activities found on or adjacent to the pipeline ROW include:

1. Sandler Road, tank on the ROW
2. Race Track Road, encroachment of equipment on the ROW
3. County Road 145, barn on the ROW
4. Commercial business wareyard on the ROW
5. Cushing 8", truck and storage facilities encroaching on the ROW
6. Cushing 8", oil field debris on the ROW
7. Wynnewood 12", metal debris on the ROW
8. Cushing to Glenpool, abandoned vehicles on the ROW
9. West Tulsa Area, miscellaneous materials in yard over ROW
10. Tulsa to Drumright 8", facility encroachment on the ROW

Major overgrowth which obscured the ROW was found at the following locations identified as follows:

1. 39th street
2. Caney River
3. 49th street
4. Glenpool to PSO
5. Glenpool to West Tulsa
6. South Ok City
7. Allen to Drumright 8", MP68

6. **195.402(a) Procedural manual for operations, maintenance, and emergencies.**

(a) General. Each operator shall prepare and follow for each pipeline system a manual of written procedures for conducting normal operations and maintenance activities and handling abnormal operations and emergencies. This manual shall be reviewed at intervals not exceeding 15 months, but at least once each calendar year, and appropriate changes made as necessary to insure that the manual is effective. This manual shall be prepared before initial operations of a pipeline commence, and appropriate parts shall be kept at locations where operations and maintenance activities are conducted.

Magellan did not install pipeline markers where the pipe is to remain exposed as specified by its procedures, Corrosion Control Program, 7.04-ADM-001, 2.11.4. The Magellan procedures state that if the pipe is to remain exposed, proper pipeline markers shall be installed. During the field inspection exposures were observed without pipeline markers and without stated plans for reburial. The Operator was found to have unmarked exposures on the Glenpool to West Tulsa, Tulsa to Drumright, Drumright to Cushing, Cushing to Glenpool, Barnsdall to El Dorado, and Odessa to El Paso pipelines.

7. **195.571 What criteria must I use to determine the adequacy of cathodic protection?**

Cathodic protection required by this subpart must comply with one or more of the applicable criteria and other considerations for cathodic protection contained in paragraphs 6.2 and 6.3 of NACE Standard RP 0169 (incorporated by reference, see §195.3).

Magellan did not meet one of the applicable cathodic protection criteria required by §195.571 for portions of its pipeline system. With regard to §195.571, the Operator was unable to adequately show how IR drop is considered in the pipe-to-soil readings as required by the referenced standard (NACE RP 0169). Magellan also did not follow its Corrosion Control Program procedure, 7.04-ADM-001, Sections 2.3 and 2.4. During the field portion of the inspection, some pipe-to-soil readings were not meeting the criterion chosen by the Operator for determining the adequacy of the cathodic protection. Examples of inadequate readings were found on the Cimarron 8-inch pipeline at MP 53 (-683mV), MP 54 (-768mV), MP 61 (-696mV), MP 71 (-707mv), the Odessa to El Paso pipeline at 9899+72 (-700mV), 9700+19 (-771mV), 9747+19 (-500mV), 10123+95 (-500mV), 10264+00 (-654mV), the Cushing to Oklahoma City pipeline at MP 30.5 (-781mV), MP 0.7 (-817mV), the Glenpool to PSO pipeline at MP 16.7 (-822mV), the Tulsa to State Line pipeline at MP 110.5 (-500mV), MP 128.4 (-746mV).

8. **195.573 What must I do to monitor external corrosion control?**

(d) Breakout tanks. You must inspect each cathodic protection system used to control corrosion on the bottom of an aboveground breakout tank to ensure that

operation and maintenance of the system are in accordance with API Recommended Practice 651. However, this inspection is not required if you note in the corrosion control procedures established under §195.402(c)(3) why compliance with all or certain operation and maintenance provisions of API Recommended Practice 651 is not necessary for the safety of the tank.

Magellan did not meet one of the applicable cathodic protection criteria required by §195.573 for some breakout tanks. For the breakout tanks not meeting the cathodic protection requirements, the operator has not demonstrated why compliance with API 651 is unnecessary as required by §195.573. Magellan also did not follow its Corrosion Control Program procedure, 7.04-ADM-001, Sections 2.3 and 2.4. During the field portion of the inspection, some tank-to-soil readings were not meeting the criterion chosen by the Operator for determining the adequacy of the cathodic protection. With regard to §195.573, structure-to-soil readings for breakout tanks 533, 535, and 868 in Oklahoma City were found to not meet the criterion chosen by the operator.

9. 195.573 What must I do to monitor atmospheric corrosion control?

(c) If you find atmospheric corrosion during an inspection, you must provide protection against the corrosion as required by Sec. 195.581.

Magellan failed to provide protection against atmospheric corrosion as required by §195.581. The operator also did not follow its Corrosion Control Program procedure, 7.04-ADM-001, Section 3.0. There were areas of oxidation observed on the chime area of some breakout tanks, above ground valves and piping, flange bolts, pipe/soil interfaces, and spans at various locations on the Magellan Pipeline System. Evidence includes photographs taken during the field inspection. These photographs indicate ongoing atmospheric corrosion at the following locations:

1. Allen Station Breakout Tank (BOT) 880
2. Barnsdale BOT 1214
3. Barnsdale BOT 416
4. Barnsdale BOT 729
5. Barnsdale BOT 730
6. Enid BOT 1231
7. Enid BOT 1232
8. Enid BOT 1238
9. Odessa BOT 574
10. Odessa piping
11. Odessa BOT 586
12. Odessa BOT 225
13. Odessa BOT 228
14. Odessa BOT 229
15. Line #1, 8" MP 21
16. P/S Interface on Old Tulsa line
17. Orion West Unit
18. Orion West MP 312

19. Pipeline span near Black River Station
20. Glenpool to West Tulsa
21. MLV @ MP 21
22. Pipeline Span @ MP 46

10. 195.430 Firefighting equipment.

Each operator shall maintain adequate firefighting equipment at each pump station and breakout tank area. The equipment must be-

- (a) In proper operating condition at all times;**
- (b) Plainly marked so that its identity as firefighting equipment is clear; and,**
- (c) Located so that it is easily accessible during a fire.**

Magellan does not maintain adequate firefighting equipment at each pump station and breakout tank area. The Operator has only fire extinguishers at most pump stations and breakout tank areas as required under its Portable Fire Extinguishers Administrative Procedure, 5.05-ADM-076, which states that “equipment shall be adequate to extinguish fires that are in the early stages of development and in no case shall be expected to fight a fully engulfed fire.” The Operator relies on public firefighting agencies or firefighting cooperatives to respond to fires at their breakout facilities. However, liaison documentation is not adequate to show that Magellan has confirmed that these agencies have adequate training, equipment, and supplies to respond to fires at their pump stations and breakout tank areas.

11. 195.432 Inspection of in-service breakout tanks.

(a) Except for breakout tanks inspected under paragraphs (b) and (c) of this section, each operator shall, at intervals not exceeding 15 months, but at least once each calendar year, inspect each in-service breakout tank.

(b) Each operator must inspect the physical integrity of in-service atmospheric and low-pressure steel aboveground breakout tanks according to API Standard 653 (incorporated by reference, see §195.3). However, if structural conditions prevent access to the tank bottom, the bottom integrity may be assessed according to a plan included in the operations and maintenance manual under §195.402(c)(3).

The Magellan breakout tank inspection program and methodology to establish in-service and out-of-service inspections does not meet the requirements for a risk-based inspection process defined by API 653, incorporated into Part 195 by reference. Specifically, the Magellan Tank Integrity Risk Based Inspection Procedure, 7.10-ADM-013, does not adequately incorporate some of the factors in the referenced version of API 653, including the materials of construction, the as-built standard, the accuracy and completeness of determining bottom plate thickness, the methods used to determine the product side and soil side corrosion rates and accuracy of the methods, the availability, accuracy and need for leak detection, the effectiveness of corrosion mitigation measures, and the quality of maintenance including previous repairs. Magellan personnel administering the risk-based program do not have formal training in risk-based

inspection methodology and no records showing initial and subsequent assessments of the program by an authorized inspector and tank engineer were presented. Also, the Magellan routine breakout tank inspections failed to identify issues that should be addressed by the Operator's breakout tank maintenance program such as plugged telltale holes, corrosion near the floor to shell weld, corrosion of the extension, soil or gravel covering the extension, corrosion around the perimeter of the reinforcing plates, cracked foundations supporting equipment and piping connected to the tanks, incomplete records of construction and repairs, and documentation that API 653 inspection recommended repairs were evaluated and completed or determined by the operator to not be needed.

Proposed Civil Penalty

Under 49 United States Code, § 60122, you are subject to a civil penalty not to exceed \$100,000 for each violation for each day the violation persists up to a maximum of \$1,000,000 for any related series of violations. The Compliance Officer has reviewed the circumstances and supporting documentation involved in the above probable violation(s) and has recommended that you be preliminarily assessed a civil penalty of \$149,800 as follows:

<u>Item number</u>	<u>PENALTY</u>
2	\$ 61,500
4	\$ 55,400
5	\$ 32,900

Warning Items

With respect to item(s) 3, and 6 through 11 we have reviewed the circumstances and supporting documents involved in this case and have decided not to conduct additional enforcement action or penalty assessment proceedings at this time. We advise you to promptly correct these item(s). Be advised that failure to do so may result in Magellan Pipeline Company being subject to additional enforcement action.

Proposed Compliance Order

With respect to item(s) 1, 2, 4, and 5, pursuant to 49 United States Code § 60118, the Pipeline and Hazardous Materials Safety Administration proposes to issue a Compliance Order to Magellan Pipeline Company. Please refer to the *Proposed Compliance Order*, which is enclosed and made a part of this Notice.

Response to this Notice

Enclosed as part of this Notice is a document entitled *Response Options for Pipeline Operators in Compliance Proceedings*. Please refer to this document and note the response options. Be advised that all material you submit in response to this enforcement action is subject to being made publicly available. If you believe that any portion of your responsive material qualifies for confidential treatment under 5 U.S.C. 552(b), along with the complete original document you must provide a second copy of the document with the portions you believe qualify for confidential treatment redacted and an explanation of why you believe the redacted information qualifies for confidential treatment under 5 U.S.C. 552(b). If you do not respond within 30 days

of receipt of this Notice, this constitutes a waiver of your right to contest the allegations in this Notice and authorizes the Associate Administrator for Pipeline Safety to find facts as alleged in this Notice without further notice to you and to issue a Final Order.

In your correspondence on this matter, please refer to **CPF 4-2012-5010** and for each document you submit, please provide a copy in electronic format whenever possible.

Sincerely,



R. M. Seeley
Director, Southwest Region
Pipeline and Hazardous Materials Safety Administration

Enclosures: *Proposed Compliance Order*
Response Options for Pipeline Operators in Compliance Proceedings

PROPOSED COMPLIANCE ORDER

Pursuant to 49 United States Code § 60118, the Pipeline and Hazardous Materials Safety Administration (PHMSA) proposes to issue to Magellan Pipeline Company a Compliance Order incorporating the following remedial requirements to ensure the compliance of Magellan Pipeline Company with the pipeline safety regulations:

1. In regard to Item Number 1 of the Notice pertaining to electrical isolation where Magellan failed to address metallically and electrolytically shorted casings, the Operator must perform tests to determine if each casing is metallically or electrolytically shorted. If a casing is determined to be metallically or electrolytically shorted, the Operator must evaluate any existing ILI data to determine if there are metal loss indications and make any required repairs to the carrier pipe. If no ILI data is available from studies made within the past five years, Magellan must perform studies using ILI or an alternative technology to determine for each casing if there is metal loss requiring repairs. The Operator must also clear the shorts, purge the casings of electrolyte, and replace the end seals as described in NACE SP0200. The Operator must also develop a procedure that specifically addresses the issue of electrolytically shorted casings.
2. In regard to Item Number 2 of the Notice pertaining to line markers where Magellan failed to adequately mark its pipeline, the Operator must install additional line markers in the Barnsdall, Tulsa, Oklahoma City, Odessa to El Paso, and Cimarron inspection units so that the location of the pipeline is accurately known as required by 195.410.
3. In regard to Item Number 4 of the Notice pertaining to maximum operating pressure where Magellan allowed the pipeline pressure to exceed the MOP for durations longer than indicated by a surge event, the Operator must review the design of its overpressure protection and make changes necessary to prevent recurrence. Magellan must also perform a review of the MOP's for each pipeline segment, check the setpoints of each overpressure device, ensure each overpressure device is correctly tagged, and check each inspection form to ensure the tag numbers, maximum pressures, and setpoints are all correct.
4. In regard to Item Number 5 of the Notice pertaining to patrolling the rights-of-way where Magellan failed to identify activity along the right-of-way that could, if not corrected, pose a hazard or compromise the safety, integrity or operation of pipelines and right-of-way specified by its inspection of right-of-way procedure. The Operator also failed to remedy overgrowth that prevents the inspection of the surface condition on or adjacent to the pipeline right-of-way, also as specified by its right-of-way procedure. Magellan must make modifications to its patrolling practices to ensure that its procedures are followed. The Operator must also remedy existing encroachments that impair observation of the right-of-way and safety of the pipeline system. The operator must also perform maintenance on areas of the right-of-way that are obscured by vegetation.
5. Magellan must complete all items within 180 days following receipt of the Final Order.

6. It is requested (not mandated) that Magellan Pipeline Company maintain documentation of the safety improvement costs associated with fulfilling this Compliance Order and submit the total to R. M. Seeley, Director, Southwest Region, Pipeline and Hazardous Materials Safety Administration. It is requested that these costs be reported in two categories: 1) total cost associated with preparation/revision of plans, procedures, studies and analyses, and 2) total cost associated with replacements, additions and other changes to pipeline infrastructure.