TPMS Attribute Definitions and Valid Codes

(updated 10/05/2018)

The Texas Pipeline Mapping System (TPMS) is a GIS database that requires pipeline attributes to be represented by certain codes. This document defines the attribute fields within the database and explains what codes are valid representations of those attributes.

Valid Code:
Letters, numbers and special characters that are acceptable representations of pipeline attributes.

For Example: NGT = Natural Gas Transmission

The following **data types** are used to **define** a **"valid code"** for pipeline attribute fields:

> **I = Integer only** (ex. 1, 2, 3, etc.)
> **R = Real number with 2 decimal places only** (ex. 6.63, 12.00)
> **C = Characters (letters, numbers and/or special characters)**

Note: All numbers must be **POSITIVE**. All letters must be **CAPITALIZED.**

For Example: In TPMS, the attribute field **"Interstate"** is a **Yes** or **No** answer.
(1, C) designates the valid code for this specific pipeline attribute field. (1, C) means the value of the attribute cannot exceed **1 space** in length and must be a **character**.
Therefore, the **only valid code** for a Yes or No answer, represented as a single character, is either **'Y' or 'N'.**

(Links to web pages are highlighted in <mark>yellow</mark>.)

Definitions of the Attribute Fields:

SYS_NM (40, C) System Name *__Required Field__
  A name of a single pipeline system assigned by the operator. This can be any alpha/numeric value assigned by the operator; not blank.

SUBSYS_NM (40, C) Sub System Name *__Required Field__
  Assigned by the operator. A unique name for a smaller sub-section of a pipeline system. This is a subset of SYS_NM.

DIAMETER (5, R) Diameter *__Required Field__
  Only use Outside Pipeline Diameters in inches.
  The format of the diameter values is as ##.## **(two decimal places only.)**
  (For diameters of __greater than 12 inches__, outside diameter equals nominal diameter.)

COMMODITY1 (3, C) Commodity 1 *__Required Field__
  Abbreviation for primary commodity carried by the pipeline system.
  ## See the Commodity List below

INTERSTATE (1, C) Interstate Designation *__Required Field__
  Identifies if a pipeline segment is Interstate or Intrastate.

Valid Code	Code Description
Y	Interstate Pipeline
N	Intrastate Pipeline

STATUS_CD (1, C)   <u>Pipeline Status Code</u>   ***Required Field**

     Identifies current status of pipeline segment.

     "In Service" lines include idle lines that are maintained according to the rules.

     "Abandoned" lines are any lines that are not maintained and have no intention for future use.

<u>**Unless the pipeline has been physically removed from the ground, always include every abandoned line under the T-4 Permit in the mapping.**</u>

Valid Code	Code Description
I	In-Service
B	Abandoned

QUALITY_CD (1, C)   <u>Data Quality Code</u>   ***Required Field**

     Operator's estimate of the positional accuracy of the submitted pipeline segment.

Valid Code	Code Description
E	Excellent: within 50 feet
V	51 –300 feet
G	301 –500 feet
P	501 –1000 feet
U	Unknown

T4PERMIT (5, C)   <u>T-4 Permit Number</u>   ***Required Field**

     RRC assigned 5-digit, left zero-filled, pipeline permit number; **zeroes if new**.

                                  Examples: 09999   <u>or</u>   00001

P5_NUM (6, C)   <u>P5 Operator Number</u>   ***Required Field**

     A six-digit number generated by the RRC to identify a pipeline operator (**not** the pipeline owner.)

TX_REG (1, C)   <u>Texas Regulated Pipeline</u>   ***Required Field**

     Regulated and Non-Regulated pipeline segments.

Valid Code	Code Description
Y	Facilities are subject to 49CFR 191-195 and 16TAC 8.1. Identify regulated pipelines by pipeline segment or arc.
N	Identify non-regulated pipelines by pipeline segment or arc.

SYS_ID (6, C) System ID Number *Required Field

Identification Number assigned to a regulated (Jurisdictional to the Safety Section) pipeline(s) This number is assigned by the RRC and should be kept as a reference number by the pipeline operator for field inspection purposes. Zeroes are acceptable (000000) if the ID number is unknown.

LOC_DES (1, C) Location Designation *Required Field

GAS: An area that extends 220 yards on either side of the centerline of any continuous one-mile length of pipeline based on population concentration, number of buildings, or places of public assembly. Liquid: Designates an area as either Rural or Non-Rural.

Valid Code	Code Description
	1,2,3,4 are class location (population) designations for Gas permits – an area that extends 220 yards on either side of the centerline of any continuous one-mile length of pipeline based on population concentration, number of buildings, or places of public assembly. (see http://www.rrc.state.tx.us/media/32263/2016_t-4-instructions-modified.pdf)
1	An offshore area; OR any class location unit that has 10 or fewer buildings intended for human occupancy.
2	Any class location unit that has more than 10 but fewer than 46 buildings intended for human occupancy.
3	Any class location unit that has 46 or more buildings intended for human occupancy; OR an area where the pipeline lies within 100 yards of either a building or a small, well-defined outside area (such as a playground, recreation area, outdoor theater, or other place of public assembly) that is occupied by 20 or more persons on at least 5 days a week for 10 weeks in any 12-month period. (The days and weeks need not be consecutive.)
4	Any class location unit where buildings with four or more stories above ground are prevalent.
R	Rural (for liquid permits)
N	Non-rural (for liquid permits)

T4_AMD (2, C)   <u>T-4 Amendment Code</u>   ***Required Field**

Created to link pipeline geography to T-4 amendments and changes with the current T-4 Permit filing.
Listed below are the Standard Codes for Submitting T4 Amendments in Digital Form.
For Digital submissions, use T4_AMD as the Database Field Name. *Note: **Use these Codes or Descriptions** in the <u>database file</u> (.DBF) and the **<u>T-4 Permit Cover Letter</u>**, when describing T-4 amendments or changes.*
See sample cover letter(s).

Valid Code	Code Description
OC	Operator Change, acquired the entire permit from another permit or operator. (Keeps the same Permit# as previous operator.) **<u>BUYING party only.</u>** Note: For verification purposes the new operator may be required to submit maps of the system(s) they have acquired.
SP	Sold Permit, sold the entire permit, abandoned lines and all, to another operator. (Permit number goes to new operator.) **<u>SELLING party only.</u>** Note: Old operator must submit the bottom half of a T-4B (Pipeline Transfer Agreement between Operators).
AM	Acquired and Merge, acquired the entire permit from another operator and merging into existing Permit. (Old/Acquired permit usually cancelled, conditions apply.)
MP	Merge Permit, merge entire permit with another permit within the same operator.
PM	Partial Merge, partial transfer (merge) from one permit to another within the same operator.
PT	Partial Transfer, partial transfers from one permit to another, different operators.
PA	Pipeline Addition, addition to existing permit. (New construction report may be required, see **16TAC §8.115)**
NP	New Permit & New Pipeline (New construction report may be required)
DP	Delete Pipelines, delete pipelines (removed from the ground).
BP	Abandon in Place, but remains under the same permit and operator and there are still active lines under the permit.
BS	Abandon and Sold, sold abandon pipelines only to another operator. (New permit)
CP	Cancel Permit. For example: Abandon ALL the pipelines under the permit, changed ALL pipelines to distribution or other pipeline use where a permit is not required.
FC	Fluid Change. For example: Natural Gas to Gasoline.
NC	No Change, for all arcs with no changes.
OM	Other Modifications: Changes that are not suitable for any of the other T-4 Amendment Codes. For example: diameter change, system name change, pipeline location, etc.

*Required Field if Systype = L and Diameter is 6.63 – 8.63:

USA (1, C)   <u>Unusually Sensitive Area</u>

Designates when segment is within quarter mile of unusually sensitive area.

Valid Code	Code Description
Y	Yes, segment is within a quarter mile of an unusually sensitive area
N	No, segment is NOT within a quarter mile of an unusually sensitive area.

*Required Field if Systype = L and Diameter is 6.63 – 8.63:

SMYS (5, R)   <u>Specified Minimum Yield Strength</u>

The format of the values is as ##.##   **(two decimal places only.)**

Percentage value of the specified minimum yield strength for steel pipe manufactured in accordance with a listed specification. Percentage from 1 to 100, **can be null if not required**.

PLINE_ID (20, C)   <u>Pipeline_ID</u>   ***Optional**

This is an identifier for a specific section of the pipeline within a pipeline system. This identifier can be any alpha/numeric value assigned by the operator.

OPS_ID (5, I)   <u>Operator Number</u>   ***Optional**

Accounting number assigned by the U. S. Department of Transportation, Office of Pipeline Safety, to the company that physically operates the pipeline system.
(This is only needed if there is State or Nationally Regulated pipe. Go to the NPMS site:
www.npms.phmsa.dot.gov   then Click on: **OPS Operator ID Search**)

MODDATE (10, C)   <u>Modified Date</u>   ***Optional**

Date that the pipeline data was submitted to the RRC.
The correct format is (YYYY-MM-DD) note that the Field should contain the dashes.
For Example: **2018-03-31**

Commodity List

	Commodity Description	System Type	Commodity 1 Code
1	(ANHYDROUS AMMONIA)	C	AA
2	(CARBON DIOXIDE)	K	CO2
3	(CRUDE OIL)	O	CRO
4	(CRUDE OIL)	L	CRL
5	(CRUDE FWS)	L	CFL
6	(HIGHLY VOLATILE LIQUID (HVL))	Q	HVL
7	(NATURAL GAS)	T	NGT
8	(NATURAL GAS)	G	NGG
9	(NATURAL GAS FWS)	G	NFG
10	(NATURAL GAS FWS)	T	NFT
11	(REFINED LIQUID PRODUCT)	P	PRD
12	OTHER GAS	T	OGT
13	(OTHER GAS)	G	OGG