

# PHMSA Reportable Incident<sup>(1)</sup> Data

## 12 Month Rolling Rate through July 2022

	Rolling 12 Month <sup>(4)</sup>	2021	2020	2019	3 Yr. Avg.
Number per 1,000 Miles					
<b>KM Transmission and Regulated Gathering Rate<sup>(2)</sup></b>	<b>0.39</b>	<b>0.39</b>	<b>0.31</b>	<b>0.51</b>	<b>0.40</b>
<b>Industry Transmission and Regulated Gathering Rate (US)<sup>(3)</sup></b>	<b>NA</b>	<b>0.30</b>	<b>0.40</b>	<b>0.40</b>	<b>0.37</b>
Number per 1,000,000 BBLs Storage					
<b>KM LNG Marine Terminals Rate<sup>(2)</sup></b>	<b>0.00</b>	<b>0.00</b>	<b>0.18</b>	<b>0.00</b>	<b>0.06</b>
<b>Industry LNG Marine Terminals Rate (US)<sup>(3)</sup></b>	<b>NA</b>	<b>0.23</b>	<b>0.10</b>	<b>0.11</b>	<b>0.09</b>

(1) An Incident means any of the following events:

- I. An event that involves a release of gas from a pipeline, or of liquefied natural gas, liquefied petroleum gas, refrigerant gas, or gas from an LNG facility, and that results in one or more of the following consequences;
  - i. A death, or personal injury necessitating in-patient hospitalization;
  - ii. Estimated property damage of \$122,000 (before July 1, 2022) or \$129,300 (July 1, 2022 or after) or more including loss to the operator and others, or both, but excluding cost of gas lost
  - iii. Unintentional estimated gas loss of three million cubic feet or more;
- II. An event that results in an emergency shutdown of an LNG facility.
- III. An event that is significant in the judgment of the operator, even though it did not meet the criteria of paragraphs (1) or (2) of this definition.

(2) 2019, 2020 & 2021 Kinder Morgan rates calculated using the respective year's annual report data.

(3) Industry rates exclude Kinder Morgan data.

(4) Rolling 12 Month Kinder Morgan incident rate calculated using Kinder Morgan 2021 annual report data.

# Gas Pipeline Onshore PHMSA Significant Incidents<sup>(1)</sup>

	Rolling 12 Month <sup>(4)</sup>	2021	2020	2019	3 Yr. Avg.
Number per 1,000 Miles					
<b>KM Transmission and Regulated Gathering Rate<sup>(2)</sup></b>	<b>0.19</b>	<b>0.17</b>	<b>0.25</b>	<b>0.27</b>	<b>0.23</b>
<b>Industry Transmission and Regulated Gathering Rate (US)<sup>(3)</sup></b>	<b>NA</b>	<b>0.20</b>	<b>0.22</b>	<b>0.22</b>	<b>0.22</b>

(1) PHMSA Significant Incident:

- a. Fatality or Injury requiring inpatient hospitalization or
- b. \$50K or more in total PHMSA adjusted costs measured in 1984 dollars
  - i.  $1984\$ = \frac{D+IG}{\text{Inflation}} + \frac{UG}{1984 \text{ City Gate}}$ , where
    - i. Inflation = Current Year Dollars/1984 Inflation Value, determined using the U.S. Government's GDP Price Index.
    - ii. 1984 City Gate = Current Year compared to 1984 City Gate Gas Price, defined by PHMSA.
    - iii. "D" = This includes (but is not limited to) estimated costs due to property damage to the operator's facilities and to the property of others, facility repair and replacement, and environmental cleanup and damage, it does not include the cost of unintentional or intentional gas lost.
    - iv. "IG" = Estimated cost of gas released from intentional and controlled blowdown.
    - v. "UG" = Estimated cost of gas released unintentionally.

(2) 2019, 2020 & 2021 Kinder Morgan rates calculated using the respective year's annual report data.

(3) Industry rates exclude Kinder Morgan data.

(4) Rolling 12 Month Kinder Morgan significant incident rate calculated using Kinder Morgan 2021 annual report mileage.

# LNG Marine Terminals PHMSA Significant Incidents<sup>(1)</sup>

	Rolling 12 Month <sup>(4)</sup>	2021	2020	2019	3 Yr. Avg.
Number per 1,000,000 BBLs Storage					
<b>KM LNG Marine Terminals Rate<sup>(2)</sup></b>	<b>0.00</b>	<b>0.00</b>	<b>0.18</b>	<b>0.00</b>	<b>0.06</b>
<b>Industry LNG Marine Terminals Rate (US)<sup>(3)</sup></b>	<b>NA</b>	<b>0.03</b>	<b>0.03</b>	<b>0.00</b>	<b>0.04</b>

(1) PHMSA Significant Incident:

- a. Fatality or Injury requiring inpatient hospitalization or
- b. \$50K or more in total PHMSA adjusted costs measured in 1984 dollars
  - i.  $1984\$ = \frac{D+IG}{\text{Inflation}} + \frac{UG}{1984 \text{ City Gate}}$ , where
    - i. Inflation = Current Year Dollars/1984 Inflation Value, determined using the U.S. Government's GDP Price Index.
    - ii. 1984 City Gate = Current Year compared to 1984 City Gate Gas Price, defined by PHMSA.
    - iii. "D" = This includes (but is not limited to) estimated costs due to property damage to the operator's facilities and to the property of others, facility repair and replacement, and environmental cleanup and damage, it does not include the cost of unintentional or intentional gas lost.
    - iv. "IG" = Estimated cost of gas released from intentional and controlled blowdown.
    - v. "UG" = Estimated cost of gas released unintentionally.

(2) 2019, 2020 & 2021 Kinder Morgan significant incident rates calculated using the respective year's annual report data.

(3) Industry rates exclude Kinder Morgan data.

(4) Rolling 12 Month Kinder Morgan significant incident rate calculated using Kinder Morgan 2021 annual report data.