

Community Pipeline Safety Initiative

City of Lafayette

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Introductions

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TREE-BY-TREE REVIEW IN LAFAYETTE

- In 2015, we initially identified more than 1,000 trees located up to 14 feet from the gas transmission pipelines in Lafayette
- Working together with the city arborist, we conducted a tree-by-tree review and found that most trees could remain in place with ongoing monitoring; 272 trees were identified as posing a safety concern
- In 2017, we completed an additional review and confirmed that 207 trees are located too close to the pipeline and need to be replaced for safety reasons





TREE-BY-TREE REVIEW CRITERIA

What does the tree-by-tree review involve?

Our pipeline integrity and risk management experts review a number of factors, including:

Tree Characteristics	Pipeline Information	Site Conditions
<ul style="list-style-type: none">• Tree species and size at full maturity	<ul style="list-style-type: none">• Pipeline depth	<ul style="list-style-type: none">• Ability to access pipeline in an emergency
<ul style="list-style-type: none">• Distance from tree to pipeline	<ul style="list-style-type: none">• Pipeline installation date	<ul style="list-style-type: none">• Ability to access pipeline for critical maintenance work and patrols
<ul style="list-style-type: none">• Potential for root interaction with pipeline	<ul style="list-style-type: none">• Pipeline coating type	<ul style="list-style-type: none">• Lightning and wind exposure
<ul style="list-style-type: none">• Tree hazard	<ul style="list-style-type: none">• Pipeline size (diameter)	<ul style="list-style-type: none">• Seismic activity and soil instability



UNACCEPTABLE RISK TREE EXAMPLE

Pipeline Information

- **Name:** Line 191-1
- **Diameter:** 12.75"
- **MAOP:** 497 psig

Vegetation Information

- **Location:** Lafayette, Calif.
- **Tree Species:** Cottonwood
- **Approx. Diameter at Breast Height:** 42"
(multistem)
- **Approx. Distance to Pipe:** 1'
- **Approx. Depth of Cover:** 32"

Unacceptable Risk Determination

- Distance to pipe
- Depth of pipe
- Lightning and wind exposure
- Ability to access the pipeline for maintenance work



Thank You



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