

PIPELINE NATURAL FORCE THREAT MANAGEMENT

AWARENESS TO ACTION FRAMEWORK

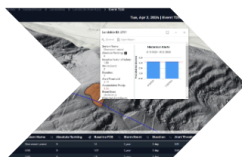
Terevue's intelligent alerting and Awareness to Action Framework transform raw environmental data into prioritized, actionable insights—guiding pipeline operators from broad situational awareness to clearly defined inspection and mitigation decisions through a tiered risk-based framework.



Tier 1: Situational Awareness

Stay informed of changing risks to your pipeline with:

- Monthly alerts flag potential weather-driven changes in natural force threats
- System-wide visibility across pipeline network



Tier 2: Priority Area Monitoring

Prioritize areas of concern for continuous monitoring of elevated threats based on:

- Known landslides
- Landslide susceptibility zones
- ROW boundaries
- HCA and class location
- SCC threat zones
- Hillslope directionality & connectivity to pipe



Tier 3: Action Criteria

Know that inspection is warranted when:

- Risk exceeds geotechnical or hydrotechnical thresholds
- Area is flagged by Terevue Intelligent Alerting

ADDRESSING PAINS WITH TEREVIEW'S AWARENESS TO ACTION FRAMEWORK

We understand the concern that the more you know, the more you're responsible for. But with regulators and other stakeholders raising expectations for proactive threat management, not knowing is no longer a shield—it's a risk in itself.

We've also heard from operators that even well-established natural force threat programs have fallen short under PHMSA audit scrutiny.

Terevue is built to remove these burdens. Our Awareness to Action Framework gives you a structured, defensible approach to environmental and geohazard risk—so you're not overwhelmed by data, and you're not exposed by inaction. You get tiered visibility that prioritizes only the threats that matter, with built-in logic that supports your decisions and holds up under audit.

Compliance is about managing risk intelligently, documenting your rationale, and demonstrating that your team is in control. With Terevue, you're not taking on more liability. You're taking back control—with the science, structure, and support to prove it.

PHMSA EXPECTATIONS FOR THREAT MANAGEMENT

PHMSA regulations, guidance documents, and audit expectations emphasize risk-informed decision-making, proportional response, and structured integrity management rather than omniscient awareness.

PHMSA doesn't penalize operators for failing to detect every potential threat—they hold operators accountable for:

- Understanding the threats that matter
- Prioritizing based on risk
- Acting in a documented, justifiable way

That's exactly what Terevue enables. The Awareness to Action Framework supports this regulatory stance with:

- Physics-based thresholds
- Risk-based prioritization
- Transparent audit trails (i.e., clear, documented record of how decisions were made)

PHMSA REGULATIONS & GUIDANCE

49 CFR § 192.1007 (Gas IMP – Risk Analysis)

“An operator must analyze the information collected... to identify existing and potential threats to each covered pipeline segment. An operator must evaluate the risk associated with these threats.”

Interpretation:

PHMSA mandates a risk-based framework, not blanket surveillance. Operators are expected to analyze data to identify and prioritize threats, not detect every possible anomaly.

49 CFR § 192.911 (IM Program Requirements)

“An operator's integrity management program must include... measures to address risks that could threaten the integrity of the pipeline.”

Interpretation:

This centers on risk-driven action—you are responsible for addressing threats appropriately, not being all-seeing. Terevue's structured escalation and documentation supports this mandate.

PHMSA Integrity Management Inspection Protocols (Gas Transmission Integrity Assessment Question Set, Section C.05)

“Does the risk assessment process integrate information from assessments, inspections, surveillance, and other data sources to support proactive risk management?”



Interpretation:

PHMSA expects a framework that integrates and rationalizes threat data. This aligns with Terevue's tiered risk escalation model, which uses geospatial intelligence and logic to determine when inspection or mitigation is warranted.

PHMSA Advisory Bulletin ADB-2019-02 (Geohazard Threats)

"Operators must monitor and assess geologic hazards and implement appropriate measures to protect pipeline integrity."

Interpretation:

The key requirement is appropriate, not exhaustive, monitoring—again reinforcing that structured, intelligent response meets regulatory expectations.