

Integrity Management Services

IMPLEMENT COMPREHENSIVE INTEGRITY MANAGEMENT PROGRAMS FOR ADVANCED PIPELINE SAFETY MEASURES

REGULATORY UNDERSTANDING

STRONG CHA COMPANIES BACKING

PROVEN IM BEST PRACTICES

Novara GeoSolutions (Novara) has been providing consulting, technical services and geospatial-based software solutions for over 30 years for pipeline and utility asset management, integrity management and regulatory compliance.

Novara's experience is paired with the vast engineering experience of our parent company, CHA Consulting, Inc., to create the best integrity management support offerings available. The company, its regulatory and integrity management experts, and technologists are well-versed with federal and state integrity management regulations and global industry best practices. We recognize that an operator's integrity management program is the cornerstone in the management of risk and safety performance. It is critical to preventing system failures, injuries, property and environmental damage and other serious consequences.

Pipeline safety regulations include requirements for operators of hazardous liquid, natural and other gas transmission and distribution pipelines to develop and implement comprehensive integrity management programs. These integrity management (IM) regulations are codified in Title 49 of the Code of Federal Regulations (CFR) Part 195, § 195.452 for hazardous liquid pipelines, Part 192, Subpart O for gas transmission pipelines, and Part 192, Subpart P for gas distribution pipelines.

Integrity Management Services

Natural Gas HCA/MCA Analysis

Novara provides in-depth consulting, engineering, field and analytical services to assess and delineate natural gas high consequence areas (HCAs) along an operator's pipeline in accordance with 49 CFR §192.903 and/or in accordance with moderate consequence area (MCA) adjustment. Our services include pipeline centerline routing and attribute analysis, structure and identified site identification, confirmation and analysis, Potential Impact Radius (PIR) calculation, HCA delineation, "legacy to current" HCA change analysis, final reporting of findings and observations, and recommendations for follow-up actions.

Class Location

We calculate and assess Class 1, 2, 3 & 4 locations, including clustering adjustment for Class 2, 3 & 4 locations in accordance with 49 CFR § 192.5. Our services include pipeline centerline routing and attribute analysis, structure, building and well-defined area identification, sliding mile analysis, 4-story building and clustering class adjustments, "legacy to current" class location change analysis, final reporting of findings and observations, and recommendations for follow-up actions.

Liquids Pipeline HCA Impact Analysis

This service includes pipeline centerline routing and attribute analysis, HCA identification and analysis, "worst-case" outflow modeling and analysis, release/spill modeling and dispersion analyses to include overland spill modeling and analysis for hazardous liquid products and/or dispersion, liquid pooling, flammability analysis for high vapor pressure (HVP) products, confirmatory HCA impact assessment to identify the pipelines and pipeline segments that could reasonably negatively impact an HCA in the event of a product release, "legacy to current" HCA change analysis, final reporting of findings and observations, and recommendations for follow-up actions.

Average Occupancy & Total Occupancy Count (AOC, TOC) Calculation

Novara assesses AOCs, TOCs along segments of an operator's pipeline to support prioritization and planning for integrity assessments, replacement projects, and other repair and rehabilitation activities. These services include pipeline centerline routing and attribute analysis, buffering, structure and building or identified site identification, occupancy analysis, AOC and/or TOC calculation and delineation by specified segment(s), and final reporting of findings and observations.

Pipeline Records Review, Interpretation & Validation

We provide complete services for pipeline centerline survey and pipeline data interpretation, automation, migration and integration in support of MAOP analysis and substantiation. These services include assessing historic records and identifying data elements critical to PHMSA's "TVC" requirements for pipelines. We can assist pipeline operators in updating data to help ensure safe and effective operations and to support overall regulatory compliance.

MAOP Validation/Verification & Reporting

Industry-leading MAOP utility that not only effectively calculates and reports pipeline MAOP but also produces detailed data validation reports that help identify where critical data elements necessary for establishing MAOP of your pipelines may not be accurate or complete. We also offer consulting, engineering, field and technologically enabled geospatial services to support the validation of these critical data elements.

IMP Development & Update

Novara's regulatory and integrity management consulting helps to develop integrity management programs for hazardous liquid pipelines (LIMP), gas transmission and gathering pipelines

(TIMP), distribution systems (DIMP), and natural gas underground storage facilities.

Inline (ILI) & Above Ground Survey Data Management, Alignment & Analysis

Novara offers consulting, engineering, field and analytical services for survey data management including establishing complete survey standards that govern the collection of data along the pipeline, whether those surveys are being performed as part of an integrity analysis, general field survey, route location survey, pipeline construction survey, ROW survey or environmental study. Our services also include the alignment of survey data to a linear network model, which is a critical step to integrating survey data with existing relational pipeline databases. We can also provide resources to perform the survey itself. We provide software tools that can seamlessly load survey data into a structured GIS database.

ILI Project Management

We offer expert project management services for integrity related ILI assessments, including pre-inspection planning, the development of specifications and standards, vendor selection, process and procedures auditing, analysis of inspection results and recommendations for found anomaly mitigation.

Risk Analysis

Novara provides consulting, engineering, field and technologically enabled geospatial services for threat, probability of failure, and consequence analysis. We can determine and manage risk for both pipeline and natural gas distribution systems in accordance with current PHMSA and state rulemakings as well as industry best practice.

CONTACT US TO LEARN MORE ABOUT OUR INTEGRITY MANAGEMENT SERVICES!