

Cassandra K. Moody, P.E.

Principal Engineer

Cassandra K. Moody, P.E. is passionate about engineering risk-informed solutions to safely optimize ROI: Return on *INTEGRITY*. She conveys visionary leadership, technical competency, and distinctive communication cultivated over a decade of midstream operations and integrity engineering experience with a mid-size oil and gas operator. As Principal Engineer, she excels in the development, implementation, and optimization of Integrity Management Programs (IMP) in addition to the engineering and execution of the integrity program's individual elemental components. Her ability to interface with individuals from field to executive personnel and lead effectively in order to drive change sets her apart. She has gained encompassing operations engineering knowledge spanning the full life cycle of midstream projects. Her unique perspective on resourceful applications of achieving integrity and compliance through risk-informed reasoning while working for such a cost-focused operator will cement her as a compelling asset to any project. Mrs. Moody believes "quitting" is the only definition of failure and any other result is simply an opportunity to reengineer.

As a proficient expert in the midstream pipeline industry, Mrs. Moody has represented both plaintiffs and defendants on a variety of cases both in the courtroom and through expert opinion reports. Mrs. Moody's retained engagements as an independent Engineering Expert have resulted in favorable resolutions for 100% of her clients to date. Mrs. Moody is an effective communicator who excels at presenting complex information simply, both written and verbally.

In addition to serving in an engineering capacity, Cassandra has a special passion to encourage the female workforce. As females are a minority in both engineering and the oil and gas industry, another facet of her focus is encouraging professional women and next generation engineers through professional and personal coaching services, group workshops, and speaking engagements. Time For Change, LLC. is certified by the U.S. Small Business Association and the Women's Business Enterprise National Council as both a Women's Business Enterprise (WBE) and a Women Owned Small Business (WOSB). In Texas, she is registered as a Historically Underutilized Business (HUB). With the City of Houston Office of Business Opportunity, Mrs. Moody maintains an additional certification as a Women's Business Enterprise (WBE). The Texas Board of professional Engineers and Land Surveyors acknowledges Time For Change, LLC. as a registered engineering firm in addition to Mrs. Moody's accreditation as a certified professional engineer (P.E.) in the mechanical engineering discipline.

Recent Projects

SOP Consolidation & Compliance Initiative, U.S. & Canadian Based Pipeline Operator

- Cassandra led a team of eighteen (18) engineering professionals and industry experts, a weighted mix of mostly seasoned personnel, responsible for review and delivery of over 100 Standard Operating Procedures (SOPs) in accordance with new Title 49 CFR Part 192, Title 49 CFR Part 195, and Canadian CER/ SOR 99-294 regulations for a major US and Canadian gas transmission company. This project was completed on time and under budget despite more than doubling the initial scope of forty-seven (47) procedures as gaps were identified. Change management, personnel training, and collaborative implementation roles with an auditing firm were also involved to integrate the new procedures and processes across the newly merged pipeline company.
 - Procedures include written and phased implementation plans for MAOP Validation, Material Verification, and Engineering Critical Assessments (ECA) in accordance with mega-rule clauses in Title 49 CFR 192.
 - Comprehensive document nomenclature hierarchy system proposed and implemented company-wide.

- Revisited similar procedures across various business units and conducted meetings with stakeholders to present industry and company best practices in a comprehensive and consolidated suite of integrity procedures.

IMP Framework Development, Overseas Pipeline Operator

- Cassandra developed a liquid and gas Integrity Management Program (IMP) framework with sample Threat Response Guidance Document (TRGD) for a leading overseas operator based on API 1160 and industry best practices. As part of this project, she also performed a review and gap analysis of existing plans and procedures.

Engineering Assessment, North American Pipeline Operator

- Cassandra evaluated the historical and current operations of a crude oil pipeline in Canada for fitness for service following a geohazard incidence. As part of this project, a comprehensive threat analysis was performed as well as evaluation of a qualitative risk assessment to supplement the engineering review.

Endorsements

“Five Star integrity engineering consultant” - Executive, U.S. & Canadian based Midstream Operator

“Cassandra is very effective in providing cost effective solutions to her clients. She is dedicated to her role, and is passionate about helping others. She possesses great communication skills, is very safety conscious, and is easy to work with.” - Process Safety Manager, US Pipeline Operator

“I have worked with Cassandra for over eight (8) years. Through this time, Cassandra has demonstrated good professional character and has knowledge of operating crude oil and natural gas pipelines where she worked as an Operations Engineer and Integrity Engineer. The Operations Engineer role included technical support, project engineering and management, and pipeline modeling. The Integrity Engineer role involved being part of the establishment an integrity program, working with vendors to match needs with inspection tool availability and required technology. I was always impressed with Cassandra’s positive attitude and have no reservation in endorsing her for future work.” - Senior Operations Engineer, Midstream Operator

“I believe that Cassandra is an excellent resource to help spearhead the [Project]. She was always professional, very responsive, and positive/courteous to engage with (even when her and her team were extremely working longer hours to meet delivery dates). I would definitely enjoy working with Cassandra again and would recommend her again for her positive demeanor as well as her diligent work ethic/commitment to see things through.” – Department Head, U.S. & Canadian based Pipeline Operator

Education

University of Houston
 Environmental Engineering, Master of Science; 2011
 Texas A&M University
 Biochemistry, Bachelor of Science; 2009
 Genetics, Bachelor of Science; 2009
 Chemistry, Minor; 2009

Certifications

Licensed Professional Engineer, State of Texas, #118840
 Mechanical Engineering Discipline, Texas Board of Professional Engineers & Land Surveyors
 Registered Engineering Firm, State of Texas, #F-21372
 U.S. Small Business Association Women’s Owned Small Business, #WOSB210624
 WBENC National Women’s Business Enterprise, #WBE2100849

Texas Historically Underutilized Business
City of Houston, Office of Business Opportunity, Women's Business Enterprise, #21-05-15009

Expert Testimony

Crude oil pipeline failure defendant deposition and testimony, Texas; 2014-2015
Pipeline marking, safety, and damage prevention plaintiff expert report, Texas; 2021
Pipeline operation's expert opinion, Texas 2022
Upstream production methane emissions expert opinion, Texas 2022
Pipeline Construction Plaintiff Expert Report, Texas; 2022

Speaking Engagements

"Engineering vision into results", Society of Women Engineers, Houston, TX 2022
"Leveraging engineering processes to approach change resulting in positive ROI", Oilfield Connections International, Houston, TX; 2021
"Embracing change" Texas Women's Business Conference, Houston, TX 2021
"Engineering more time" Workshop, Houston, TX; 2019-2020
Integrity Management Symposium Operator Panelist, Galveston, TX; 2017
Young Pipeline Professionals Leadership, Houston, TX; 2015-2017
Monthly Company Lifting Cost Meeting Lead Speaker, TX, LA, CO, NM; 2011-2019

Professional Associations

Society of Women Engineers, Houston Section
Young Pipeline Professionals, USA and Houston Chapters

Engineering Services

Integrity Management

Cassandra K. Moody, P.E. believes asset integrity management refers to more than the set of procedures, data, and assessment schedules relating to a collection of assets. Integrity management is a risk-informed philosophy to achieve safe and reliable operations of assets throughout their lifecycle while balancing the competing demands of revenue targets and compliance. Integrity management consulting services include:

- Written development of Integrity Management Programs (IMP) and asset specific plans for liquid and gas assets as well as associated procedures and forms
- Performing hazard, threat, and risk assessment, especially when data limited
- Data collection, analysis, and management including creative solutions to overcoming data gaps
- Conducting pipeline and asset integrity inspections and assessments including In-Line Inspections (ILI), hydrostatic pressure tests, and Direct Assessment (DA)
- Creative Engineering Critical Analysis (ECA) solutions
- Coordinating repairs from planning to commissioning
- Implementing and documenting risk-informed Preventative & Mitigative Measures (P&MM)
- Integrity Management Program (IMP) benchmarking to industry standards such as API 1160
- Extensive familiarity with industry standards and best practices including ASME B31.8S, ASME B31G, API 1160, NACE SP0102, and others incorporated by reference (IBR)

Implementations

Whether a new set of procedures, software, or principles of thought are at hand, Mrs. Moody is well suited to assist in driving change across organizations. With over a decade of experience in implementing new initiatives, processes, and software, her leadership, vision, and communication skills are proven assets to project success. Examples of recent implementation support:

- Integrity software evaluation and execution
- Training, communication, and implementation of new procedures from corporate to field personnel
- Creative solutions to increase Return on Investment (ROI)

Regulatory Compliance

Mrs. Moody has extensive knowledge of state, provincial, and federal regulatory agencies in the United States and Canada while being well-informed of new requirements. Regulatory compliance consulting services include:

- Ensuring compliance and audit support for Title 49 CFR Part 192 including all new mega-rule clauses, Title 49 CFR Part 195, Title 49 CFR Part 193, and CER Onshore Pipeline Regulations (SOR 99/294)
- Jurisdictional determinations, class location, and High Consequence Area (HCA) analysis
- Establish or validate Maximum (Allowable) Operating Pressures (M(A)OP)
- Perform program gap analyses
- Creative and proactive data management solutions

Project Management

When projects arise exceeding the capacity of current company resources, Cassandra Moody is nimble and eager to infuse our experience in order to ensure project success. From planning, executing, optimizing, and executing, Mrs. Moody has the technical competency with the critical communication and leadership skills to accomplish the task at hand. Project management consulting services include:

- Planning and execution for integrity specific or general operations projects
- Acquisition, merger, or divestiture due diligence
- Creation of corrosion control programs (monitoring, corrosion inhibition, biocide, pigging, etc.)
- Optimization, asset investment planning, budgeting, and forecasting