NOVEMBER 2023

# D. MICHAEL DOWDALL, P.E.

## Senior Vice President



#### Summary

Mike Dowdall has more than 30 years of experience in mechanical design and forensic mechanical engineering. He specializes in complex facilities, such as mission critical facilities and clean rooms. In addition to his knowledge of design and construction, he is experienced with forensic investigations and expert witness testimony, primarily for HVAC equipment failures and installation issues. Mike is also skilled at commissioning and life-cycle cost analysis.

#### **Areas of Technical Expertise**

- Mechanical Engineering (Piping, Equipment, HVAC and Controls)
- Plumbing Engineering
- Forensic Mechanical Engineering
- Forensic Plumbing Engineering

#### **Education**

• B.S.M.E., 1982, University of Kansas

#### Registrations

 Licensed Professional Engineer in AL, AR, CA, CO, DC, FL, GA, IA, IL, IN, KS, KY, LA, MA, MN, MO, MS, NE, NH, NM, NC, NY, OH, OK, PA, SC, SD, TN, TX, VA, WA, WI, and WV.

## **Professional Activities**

- Member, American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE)
- Member, National Society of Professional Engineers (NSPE)

## **Select Project Experience**

## **Mechanical Engineering (Piping, HVAC and Controls)**

**ISP Chemicals, Clean Room**, Calvert City, KY.\* Designbuild services for the design, construction, startup and commissioning of a Class 100 clean room for production of a hygroscopic powder.

**DJ Engineering, Inc., Clean Room**, Augusta, KS.\* Designbuild services for the design, construction, startup and commissioning of a Class 1000 aerospace carbon fiber composite component production clean room.

**Boehringer Ingelheim Vetmedica, Inc., Boiler,** St. Joseph, MO.\* Design-build services for the installation, startup and commissioning of a 1,000-horsepower, 175-psi boiler.

#### **Plumbing Engineering**

**Wastewater Pump Stations 36 and 63,** Christchurch, NZL. Peer review for the development of temporary and permanent pump stations for the reconstruction associated with earthquake damage.

## **Forensic Mechanical Engineering**

**North Shore Towers,** Floral, NY. Cause and origin investigation and validation of repair costs on a 2000-horsepower stationary 10-cylinder natural gas engine connected to a 2-Mw generator.

**St. Clair Condominiums,** Houston, TX. Forensic investigation of a multistory PVC condenser water piping system failure.

**Allen Ritchey, Inc.,** Yuba, OK. Cause and origin investigation and validation of repair costs for a sunken dredge and diesel engines indundated by water.

## **Forensic Plumbing Engineering**

**CAT 90-Sandy,** Multiple Locations. Damage assessments related to the inundation of water in multiple facilities in NY and NJ, specifically as it relates to HVAC, electrical, plumbing and fire protection equipment.

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#### **Sworn Testimony**

Deposition, Grecian Delight Foods v. Great Am. Ins. Co of New York, regarding damage resulting from an Ammonia leak and subsequent deflagration. State of Illinois, County of Cook. April 4, 2023 and March 11, 2022.

Deposition, Master Case – Market on University Plaza Negligence/Premises Liability. All Cases regarding natural gas piping installation and subsequent leak that lead to an explosion. 17th Judicial Circuit, Broward County, FL. August 17, 2022.

Deposition, Smith Grp. v. Skanska USA Bldg. Inc., regarding defects in an office building HVAC system, in the United States District Court for the District of Maryland, Greenbelt Division. October 19, 2021.

Deposition, Aria Longboat Key Condo. Ass'n, Inc. v. BBC KEY, LLC, et al., regarding temperature, humidity and pressure control within multiple condominiums, in the Circuit Court of the Twelfth Judicial Circuit in and for Sarasota County, FL, July 16, 2021, April 5, 2021, and March 4, 2021.

Deposition, 1515 Sunset v. OHL-Arellano Constr. Co., regarding HVAC issues and condenser water piping. Miami-Dade County, Florida, Circuit Court, Eleventh Judicial District, 2020.

Deposition, ECC Centcom Constructors, LLC v. Michael Baker Int'l, regarding alleged mechanical design defects in a new BEQ, 2020.

Deposition, Imahouse, LLC v. Marketplace Designers LLC, regarding defects in new building HVAC systems, 2020.

Deposition, 18201 Collins Ave. Condo. Ass'n, Inc. v. Royale Florida Enter., Inc., et al., regarding defects in a high-rise condominium building. Circuit Court of the 11th Judicial Circuit, Miami-Dade County, FL, 2019.

Deposition and arbitration, FH Brooklyn, LLC v. Macdonald-Miller Facility Sol. Inc., regarding design issues on a design-build midrise private dormitory. Arbitrator: Chrisopher J. Soelling, 2019.

Deposition, Two City Plaza Condo. Ass'n, Inc. v. Kolter City Plaza II Inc., et al., regarding defects in a high-rise condominium building. Circuit court of the 15th Judicial Circuit, Palm Beach County, FL, 2018.

Deposition, Zurich Am. Ins. a.s.o. 111 W. Wacker v. S. Mechanical, regarding the failure of a chilled water system expansion bellows, State of Illinois, Circuit Court of Cook County, 2017.

Deposition, Village of Pleasant Prairie v. Partners in Design Architects, et al., regarding defects in a Natatorium. State of Wisconsin, Circuit Court, Kenosha, 2016.

#### Litigation

People v. Hrynenko, et al., regarding a natural gas explosion. Indictment 74-2016, Supreme Court, New York County, Part 77. 2019.

455 Companies, LLC v. Landmark Am. Ins. Co., regarding a building heating system and frozen pipes. United States District Court, Eastern District of Michigan. 2018.



#### **CONTACT**

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