

STATEMENT OF QUALIFICATIONS

Providing Innovative Solutions for the Global Real Estate Industry Since 1987



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Nova Continues to Evolve, Leading With Innovation in the ESG Movement

By becoming a General Benefit Corporation (GBC), commonly referred to as a B Corp., Nova Group pledged a declaration of interdependence stating the belief that all business ought to be conducted as if people and place mattered and thus we are responsible for each other and future generations. All B Corps make a legal commitment to conduct business with consideration for the environment and all stakeholders.

We will produce an annual B Impact Assessment that will not only score our work, but also provide us with insights as to how we can further implement more sustainable actions and improve.

Commitment to Climate

As part of our commitment as a B Corp, and alignment with UN SDGs, Nova Group places climate actions with the utmost importance. Nova Group has been an environmental expert for the last 35 years. We utilized our environmental and climate experts to develop advanced climate modeling to provide assessment and recommendations for asset level resilience to climate change related events (shocks and stresses). By providing this consultation, we protect our clients' future acquisitions and assets. Nova Group's team of experts are trained to interpret this data and provide knowledge and techniques to mitigate risk for our clients for the lifecycle of the asset (acquisition, management, deposition).

Recent Innovations Include:

As part of our strategy to combat climate change, Nova Group has committed to a Net-Zero Carbon 2030 Plan that is aligned with the B Corp Community, United Nations Global Compact, and is focused on United Nations Sustainable Development Goals (UN SDGs). One component of our Net-Zero 2030 Plan is to provide Nova Group Carbon Neutral Due Diligence Assessments.

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novagroupgbc.com/carbonneutral

ESG Advisory Group Services

- > Energy Audits (ASHRAE Levels 1, 2, 3)
- Carbon Neutral Reporting (Asset) (GHG Emissions, Energy/Waste/Water Audits, Scope 3)
- Green PCA (Acquisition Level Due Diligence PCA with an Energy Audit in one comprehensive set of tables)
- Climate Risk and Resiliency Assessments (Asset/ Portfolio Level)
- > ESG Due Diligence Asset level materiality assessment
- Asset Risk Tool (Novio) Interactive dashboard, through a hub and spoke approach, that encompasses due diligence findings, project management, and all pertinent replacements for a portfolio

Decade of Action to Deliver on UN Sustainable Development Goals (SDGs)

The UN SDGs call on governments, business, and civil society organizations to take action on problems facing our world today. Nova Group embraces the important role these goals play in positively impacting our world and inspiring solutions by 2030. We understand that aligning with SDGs is the next big way to make a positive impact for our clients and their ability to attract investment dollars from increasingly climate-active investors.

SUSTAINABLE GOALS





































Nova Group, GBC (Nova) is an international, multidisciplinary advisory firm providing environmental, engineering, and energy services throughout North America and around the globe.

Incorporated in Minnesota in 1987, Nova has proudly become one of the largest privately held environmental and engineering firms. This pride shows through in our company-wide commitment to service excellence. With a broad depth of experts across the globe, coupled with understanding our clients' needs, we are able to provide innovative and cost-effective solutions for all your due diligence needs. Our Commitment to our clients has placed Nova as one of the top five providers of real estate due diligence services.

Nova advises our clients to minimize financial risk, meet all regulatory requirements, and adhere to quality record keeping in the following service areas:

- Real Estate Due Diligence
- **Environmental Investigation & Remediation** >
- > Facilities & Construction Services
- **Energy Efficiency**
- Health & Safety
- **Environmental Compliance**
- Solid Waste Management
- **NEPA Services**
- **HUD Services**
- **Zoning Services**







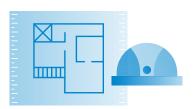


Clients

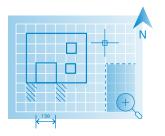
- Mortgage Lenders
- Real Estate Owners, Managers, and Developers >
- Institutional Investors
- **Private Equity Firms**
- > Bankers and Attorneys
- **Industrial Firms** >
- > Schools and Hospitals
- Government Agencies
- **Housing Authorities**
- **Insurance Companies**

Meeting Your Needs

Each Nova project is specifically tailored to the unique needs of the client. We have a proven record of being dedicated to meeting and exceeding our clients' expectations by providing innovative and cost-effective solutions to meet their environmental and engineering needs. Nova's goal is to create long-term partnerships with clients to ensure that our solutions are properly designed, implemented, evaluated, and adjusted to promote sustainable regulatory compliance. Nova's success is based on our commitment to integrity, compliance, pride, and ownership in every project we complete.









WORLD OFFICE LOCATIONS

With a broad depth of experts across the globe, coupled with understanding our clients' needs, we are able to provide innovative and cost-effective solutions for all your due diligence needs.



Main Headquarters

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UK, Europe, Australia & Japan

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Canada

Tom.Warn@novagroupgbc.com

Phone: 913-998-3072



STEVE CUMMINGS

Chief Executive Officer



Mr. Cummings co-founded Nova Group in 1987 and under his guidance and leadership the company has grown to become one of the largest and most respected firms in the environmental and engineering industry. Always keeping the focus on our clients' needs, Steve has guided Nova in developing and expanding the company's services. With a vision to go global, Steve has made strategic acquisitions over the past decade to expand our reach and

make Nova what it is today.

ROBERT HIRD

Senior Vice President, Chief Operations Officer



Mr. Hird has over 27 years of experience in the due diligence, environmental and engineering industry. As Chief Operations Officer, Mr. Hird is responsible for the development and implementation of Nova's operational services to support our clients' needs. This includes working with clients to delineate appropriate scopes, objectives, budgets and priorities to meet their project needs as well as working with staff to ensure that they are properly trained

and that quality assurance programs are properly followed.

ALLAN BUSSE

Director, Nova Ambiente



Mr. Busse founded Ambiente in July 2005 before merging the business with Nova Group to create Nova Ambiente. He's a geologist with a Master's Degree from the Aachen Institute of Technology in Germany and has a 28-year history in environmental consultancy throughout Europe, Asia, Africa, and the Americas specialising on transaction advice and developing the environmental management service line. Allan focuses primarily on business

and product development. He also regularly takes a Project Director role and continues to maintain a keen interest in all of the company projects.

NEIL ARCHIBALD

Senior Vice President, Business Development



Mr. Archibald manages accounts for Nova's domestic and international platform and oversees Nova's Business Development division. Since joining Nova in 2010, he has helped rapidly expand Nova's footprint by focusing on operations, revenue opportunities, customer service, and strategic partnerships. He brings over 15 years of experience in real estate, and the commercial real estate due diligence industry.

BEN BOHLINE

President & Chief Financial Officer



Mr. Bohline oversees the finance/accounting and human resources functions of Nova. Mr. Bohline works closely with the other members of Nova's executive team and helps provide information to make operational, financial, and strategic decisions. He is also responsible for corporate insurance, audit and tax, employee health and welfare plans, and banking relationships. Mr. Bohline is a Certified Public Accountant (CPA).

PAUL JOHNSON

Senior Vice President, Director of Operations



Mr. Johnson directs the international efforts of Nova Group, GBC. He works closely with the group managers and office managers of Nova's branch offices. Mr. Johnson has more than 30 years of experience in environmental consulting. He has managed technical service groups, contracts, sales and marketing initiatives, and has developed many of Nova's technical programs and standard operating procedures.

CARY ASPER

Senior Vice President, Advisory Board



Mr. Asper manages Nova's National Client Program. He provides senior technical review of deliverables to ensure all aspects of the scope are met. As an SVP with Nova, he has extensive client contact, including state and nationwide project management; program implementation; QA/QC; and liaison with federal, state, and local regulatory agencies. Additionally, Mr. Asper serves as an advisor to the Capital Markets Group. He focuses on innovative problem

solving with clients to assist transactions to a successful close.

Tom Warn, LEED AP Senior Vice President, Sustainability Services



Mr. Warn has over 35 years of experience in conducting environmental, energy, and engineering services. His responsibilities have included project management for state and federal agencies, as well as commercial and industrial facilities, on tasks involving sustainable construction, development, and redevelopment; energy audits; environmental site assessments, investigation; remedial action; risk assessment; compliance audits; and

regulatory impact analysis.



RAY HUTCHISON

Senior Vice President, New York, NY



Mr. Hutchison has over 20 years of experience in the engineering and environmental science fields. He has been involved in the details of thousands of real estate transactions and understands the specific needs and scopes of work required for the different parties involved in the transaction.

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GREG MURPHY

Vice President, San Francisco, CA



Mr. Murphy offers over 20 years of experience in the real estate assessment field. He works with a wide variety of clients across the country and has managed the successful completion of over 15,000 due diligence projects throughout his career, including Phase I and II environmental assessments, property condition assessments and seismic studies.

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HITESH PATEL National Account Manager, New York, NY



Mr. Patel has over 22 years of consulting experience in the environmental and engineering industry. He has assisted a wide range of clients, including CMBS lenders, insurance companies, national and regional banks, REITs, agency lenders, and equity firms with their due diligence needs.

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ANGELA SCOTT National Account Manager



Ms. Scott has over 25 years of diverse experience in the commercial real estate due diligence field. She has extensive knowledge of CMBS, Fannie Mae, and Freddie Mac markets and has been involved in thousands of due diligence transactions, including environmental, energy, property condition, seismic, and zoning assessments. Ms. Scott serves a broad range of national, regional, and local clients with an active, hands-on approach focused on

innovative solutions and designed to successfully move projects to completion.

Angela.Scott@novagroupgbc.com | Phone: 214-236-9981

For over a decade, Nova's Capital Markets Group (CMG) has grown and maintained its position as a nationwide leader in environmental and engineering due diligence services. From Nova's national platform, CMG has provided timely, pragmatic and cost-effective solutions for clients throughout North America and Mexico.

CMG continues to exceed client expectations, working with banks, agency lenders, life insurance companies, CMBS lenders, REITs, pension funds and developers. We have built an expert and experienced staff of National Account Managers that average over 20 years of experience in the industry. They have expertise in evaluating each specific project and interpreting the most recent industry standards.

KRISTIN TATEVice President, HUD Program Manager



Ms. Tate oversees all of the HUD/FHA reports and other deliverables. In this capacity, she reviews all Property Condition Needs Assessment (PCNA) reports and CNA e-Tools while working closely with project managers and conducting final reviews on all environmental due diligence to assure all federal, state, and local agencies were contacted and the appropriate information is relayed to the client in a timely manner.

Kristin.Tate@novagroupgbc.com | Phone: 281-622-4664

SARAH OHLMEIER National Account Manager



Ms. Ohlmeier has over 18 years of experience in the environmental and engineering industry, primarily focusing on the real estate market. With extensive knowledge of Fannie Mae, Freddie Mac, and CMBS markets, she has assisted a wide variety of clients nationwide by providing a proactive approach while striving to produce innovative solutions to drive transactions to completion.

Sarah.Ohlmeier@novagroupgbc.com | Phone: 913-251-2682

MARGARET SILVA Account Manager



Ms. Silva has over 25 years of diverse experience in the environmental and property condition industry. She worked in Florida for over 15 years approving environmental assessments and environmental Phase II reports as well as coordinating Brownfields cleanups as per the Florida Brownfields Program. She has assisted several clients with the various state Brownfields programs and navigated the projects through the regulatory process, especially in New York.

Margaret.Silva@novagroupgbc.com | Phone: 803-992-4548



DOUG KNIGHT

Vice President, Equity Group Director



Mr. Knight is Director of the Equity Group. He has over 25 years of experience in the consulting engineering business, with a focus in environmental services. As a project professional, he has been involved with the identification, quantification, and mitigation of environmental and facility defects on a wide variety of commercial, residential, and raw property projects. Mr. Knight has experience in over 1,000 environmental and facility projects,

including Phase I and II ESAs, hazardous substances (asbestos, lead, and radon), remedial investigation/delineations, PCAs, and building envelope commissioning. Mr. Knight earned a Bachelor of Science in Chemistry from Centre College in Kentucky and is based out of Columbus, Ohio.

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HELENA ARIZA, AIA, CEI, LEED AP BD+C ESG Program Manager



Ms. Ariza is an architect from Barcelona, licensed as a Registered Architect (RA) in the State of New York and in Spain. After moving to the United States in 2015, she developed her expertise in facade systems and building envelope design while maintaining her focus on climate change risks and sustainable practices. As lead of the Environmental, Social, and Governance (ESG) Program in the Equity Group, Ms. Ariza focuses on developing and

conducting ESG and Climate Resilience Assessments for multifamily and commercial properties. Her main goal is to adapt and develop innovative approaches to fulfill the industry's needs and requirements in a fast-evolving environment. Ms. Ariza has experience in construction monitoring and administration, along with conducting property condition assessments (PCA) for large-scale asset acquisitions and lender projects.

<u>Helena.Ariza@novagroupgbc.com</u> | Phone: 312-694-5688

MICHAEL MARSICH, RA

Senior Project Manager



Mr. Marsich is a Senior Project Manager out of Raleigh, North Carolina with a Master of Architecture. He has five years of experience in the property condition assessment industry, having completed over 350 PCAs of various project types, including office, retail, industrial, multifamily, hospitality, assisted living, skilled nursing, medical, mobile home communities, self-storage, Fannie Mae, and Freddie Mac. Mr. Marsich also has over 18 years of experience as

a licensed Architect in the state of North Carolina and 12 years as an intern architect and construction administrator.

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Nova has developed a reputation for national leadership in providing due diligence services. Acknowledging that there is no "one size fits all," our group is committed to providing Nova clients with customized solutions at all points in the real estate cycle.

This starts with understanding the scope of a project. We advise in areas such as acquisition, disposition, pre-/mid-/post-lease, and capital planning. Our due diligence team shifts to meet a client's specific needs and goals. By focusing on a client's needs, Nova's Equity Group can help determine the appropriate scope and thus deliver value and favorable cost/benefit solutions to solve many real estate problems.

JONATHAN NELSON, PE

Account Manager



Mr. Nelson has joined Nova with over 25 years of real estate, civil, and environmental engineering experience. He specializes in the preparation of Architectural and Engineering Physical Condition Assessments, Document and Constructability Reviews, PMLs, Construction Administration Services, Environmental Engineering Services, and Construction Management Services for commercial real estate properties throughout the country for

many of the major real estate investors and providers of equity and debt financing as well as the federal government. Mr. Nelson has worked on all property types, including K-12, industrial, office, retail, multi-family, mixed-use building, telecommunications sites, and undeveloped land. He has conducted or been responsible for services in all 50 states, Guam and Mexico.

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KEITH HABERERN, PE, AIA

Project Manager



Licensed as both a Registered Architect (RA) and Professional Engineer (PE), Mr. Haberern has been practicing since 1981. His nearly four decades of work have included a large variety of both public and private architecture and engineering projects ranging from high-rise multifamily housing, assisted living facilities, and nationally famous restaurants to single-family housing and residential additions. He has provided numerous PCAs for a wide range of

local and national clients, including government agencies, banks, agency lenders, investment banks, law firms, and property owners. Additionally, Mr. Haberern has over 35 years of construction monitoring and administration experience. His experience ranges from monitoring the construction as part of architectural and engineering services to work as a construction site superintendent and Quality Control Officer for governmental construction projects. Keith.Haberern@novagroupgbc.com | Phone: 856-701-4021

JOSEPH DIBERNARDO

Vice President, Construction Services Group Manager



Mr. DiBernardo, with a background in Civil Engineering, has over 25 years of experience in engineering design, consulting, construction monitoring, and project management. More recently, he has focused on construction loan risk management for national and international lenders, commercial banks, real estate investment trusts, private equity investors, tax credit unions, bridge lenders, CMBS's, and developers. He is currently responsible

for the management of technical staff including: architects, engineers, construction specialists, and professional associates. His duties include department operations, department sales/marketing, preparing proposals, client interface, and construction administration reporting nationwide while providing high level construction services and minimizing construction loan risks for clients.

Joseph.DiBernardo@novagroupgbc.com | Phone: 732-674-2288

Nova minimizes risk to major construction lenders, developers, and building owners by providing third-party comprehensive review, monitoring, and reporting during the construction process.

For almost a decade, Nova staff has performed these services on hundreds of construction projects across the U.S. Nova maintains a staff of experienced engineers, architects, and construction managers to assist our clients in the review of specific building systems from conceptual schematics to completed installations and commissioning.

JAMES NAPOLI Account Manager



Mr. Napoli is a structural engineer working in the NYC metro area. Trained as a forensic engineer, Mr. Napoli has experience performing damage assessments throughout the eastern and southern United States following natural disasters, cause and origin investigations for various structural failures, construction defect assessments, and litigation support. He has acted as a Project Manager for various construction projects, including ground-up,

restoration, and adaptive reuse.

<u>James.Napoli@novagroupgbc.com</u> | Phone: 631-387-3170

SEAN PARADINESenior Project Manager



Mr. Paradine is a Registered Architect with over 25 years of experience in architectural design, project management, construction administration, property condition assessments, constructability / document reviews and construction draw monitoring. A career highlight includes the participation of multiple education facilities projects in California.

Sean.Paradine@novagroupgbc.com | Phone: 909-285-6088

RYAN MORRIN

Project Manager



Mr. Morrin has over ten years of consulting experience in the construction, project management, and real estate development industries throughout the United States. He has conducted Construction Progress Monitoring and Document and Review Costs for a wide range of local and national clients, including government agencies, banks, agency lenders, investment banks, life companies, law firms, and property owners.

Ryan.Morrin@novagroupgbc.com | Phone: 404-388-8415

REBECCA FRECKS

Project Manager



Mrs. Frecks joined Nova Group, GBC as a Project Manager in the Construction Services Group (CSG). She is based out of the Kansas City, Kansas area, with a background in Education and a master's degree in Administration. Before joining Nova, Rebecca worked as a support specialist in a large school district, working directly with over 70 educators and managing data for several schools at all levels. Additionally, she has helped manage a local

trucking company for over ten years. In her role, Mrs. Frecks will be performing construction loan site work and reviewing construction loan monitoring reports.

Rebecca.Frecks@novagroupgbc.com | Phone: 913-406-3763

KEELY FELTON, CEA, CMVP

Vice President, Nova Energy Group



Ms. Felton oversees all Freddie and Fannie green loan reports and other deliverables completed by Nova Energy Group. In this capacity, she reviews High-Performance Building reports and Green Assessment reports for these programs while working closely with Nova's clients to make sure that all pertinent information is communicated throughout the process. Keely is a Certified Measurement and Verification Professional. She is highly

experienced with utility data analysis, including Portfolio Manager and benchmarking.

Keely.Felton@novagroupgbc.com | Phone: 207-939-4983

NOLAN WARN, BPI-MFBA

Senior Energy Project Manager



Mr. Warn is a certified energy auditor and building analyst working out of Shawnee, Kansas. Nolan worked in the renewable energy sector as a Photovoltaic System Designer for 2 years prior to joining the Nova team in April of 2017. Since joining the team, Nolan has conducted 100+ Level I and Level II energy audits and has become responsible for the continued training of the field assessors.

Nolan.Warn@novagroupgbc.com | Phone: 913-292-4104

Nova Energy Group provides real estate investors, developers, and managers with insight into the effects of energy on the financial performance of real estate portfolios. Drawing on extensive experience in energy advising, the Nova team specializes in translating the energy performance of buildings into financial terms. Nova assists clients with developing energy expense reduction strategies as a means of increasing the value of real estate assets.

Nova has key personnel on staff with 10+ years of experience in the energy efficiency field. We provide custom energy audit reports that include site-specific solutions based on dialogue with clients and actual historic performance. We are able to meet tight delivery timelines that fit within the due diligence period for lenders. We also do equity work that relies on long relationships with clients and frequent communication and support.







KIM RILEY, LEED AP O&M

Senior Project Manager



Ms. Riley has over 16 years of experience in commercial real estate property management and energy consulting. Most recently, she has focused on completing Level I and Level II energy audits, Green Rewards Verifications, Property Condition Assessments (PCAs), loan status reports, and ENERGY STAR® Certifications. She has her LEED-AP designation, with a specialty in Operations and Maintenance. In her current role, she manages all Fannie Mae Green

Rewards Verifications, SOMAH Energy Audits, and ENERGY STAR Certifications. She is responsible for scheduling, staff assignments, and review of deliverables prior to submission to ensure a high level of quality.

<u>Kim.Riley@novagroupgbc.com</u> | Phone: 832-771-9488

MARGO BILLINGS, BPI-MF

Associate Technical Team Manager



Ms. Billings is the Technical Team Leader and Senior Project Manager for Nova Energy Group. Margo is a BPI-certified energy auditor with nine years of experience in building energy efficiency consulting and project management. Her primary responsibilities at Nova include senior technical review of deliverables to Energy Group clients, energy and water usage modeling, and consumption analysis, training and support of field assessors and technical

reviewers and QA/QC of all aspects of project management.

Margo.Billings@novagroupgbc.com | Phone: 207-210-1215

NEIL ARCHIBALD

Senior Vice President, Business Development



Mr. Archibald manages accounts for Nova's domestic and international platform and oversees Nova's Business Development division. Since joining Nova in 2010, he has helped rapidly expand Nova's footprint by focusing on operations, revenue opportunities, customer service, and strategic partnerships. He brings over 15 years of experience in real estate, and the commercial real estate due diligence industry.

Neil.Archibald@novagroupgbc.com | Phone: 404-808-8012

Nova's business development team is dedicated to working with our clients across the country and globe to fully understand their business so we can provide the best products, services, and technical talent that will allow them to achieve their goals.

Our team works closely with our operations group to incorporate feedback from our clients so we can continue to build the tools and technology necessary to improve the way we communicate internally and with our customers.

TOM WARN, LEED AP Senior Vice President, Sustainability Services



Mr. Warn has over 35 years of experience in conducting environmental, energy, and engineering services. His responsibilities have included project management for state and federal agencies, as well as commercial and industrial facilities, on tasks involving sustainable construction, development, and redevelopment; energy audits; environmental site assessments, investigation; remedial action; risk assessment; compliance audits; and

regulatory impact analysis.

<u>Tom.Warn@novagroupgbc.com</u> | Phone: 913-998-3072

JACK CUMMINGS
Vice President, Business Development Team Lead



Mr. Cummings works with lenders and institutional investors in the commercial real estate industry. Based out of New York City, Mr. Cummings' priorities are fostering relationships with Nova's Northeast clientele, sharing best practices as well as offering best in class solutions enabling our clients to achieve their most critical goals. Prior to joining Nova Group, he worked at Cushman & Wakefield as a member of their advisory team in their office

brokerage department.

Jack.Cummings@novagroupgbc.com | Phone: 952-221-4774

KEVIN WITTIGVice President, Business Development



Mr. Wittig works with lenders and institutional investors in the commercial real estate industry. Based out of Los Angeles, CA, Mr. Wittig's priorities are cultivating relationships with Nova's West Coast clientele and offering best-inclass real estate due diligence services to enable our clients to achieve their objectives. Before joining Nova Group, GBC, he worked at CBRE as a leader of Southern California's Research, Marketing, and Business Development teams.

Kevin.Wittig@novagroupgbc.com | Phone: 307-413-7054

TANNER JOHNSON Business Development Associate



Mr. Johnson works with lenders and institutional investors in the commercial real estate industry. Based out of Minneapolis, Mr. Johnson's priorities include cultivating relationships with Nova's clientele in the Midwest (specifically, Minnesota and Chicago). Mr. Johnson is also responsible for coordinating marketing efforts for Nova's new service lines, most recently working to spread awareness around California's newly enacted multifamily balcony

legislation (California Senate Bill 721). Prior to joining Nova Group, he earned his degree in Global Business Leadership from Saint John's University in 2021.

Tanner.Johnson@novagroupgbc.com | Phone: 763-898-8329





- **ASTM Standard & Client-specific** Phase I ESAs
- **ASTM Standard Transaction** Screen ESAs
- Third-Party Report Reviews
- **HUD Multifamily Accelerated** Processing (MAP) and HUD LEAN ESAs
- Subsurface Investigations (Phase II ESAs)
- Feasibility (Preliminary) Studies
- Remedial Action Work Plans
- Soil & Groundwater Remediation Oversight & Reporting
- **Groundwater Monitoring Well** Installation & Sampling



30 Retail Facilities Nationwide

CASE STUDY

Summary

Nova was engaged to conduct Phase I Site Assessments for a single client on a portfolio of over 300 commercial properties throughout the United States, while adhering to a strict 21-day deadline. The portfolio included various property types that ranged from small gas stations to convenience stores to large distribution warehouses.

Highlights

In addition to Nova's assistance in closing the deal in a short time frame, all work followed strict client guidelines, which went beyond the ASTM E1527-13 scope. Nova exceeded the client's expectations throughout the process by offering proactive communication and compiling all salient data for the assessments and inserting it into a comprehensive summary matrix. This allowed for ease of review for all parties involved with the project.

Service Overview

An environmental assessment is conducted to identify potential environmental concerns related to on-site and off-site activities. A phased approach allows the client to maximize information obtained while minimizing costs. Nova networks with national database research firms and coordinates subcontractors.

Typical Environmental Site Assessment activities include:

- Review of topographic/geologic/hydrogeologic information pertaining to the site and surrounding area
- Review of historical land use activities at the site
- Review of regulatory information
- Site reconnaissance
- Surrounding property observation

Experience

Nova field professionals and team leaders have solid experience conducting and managing Environmental Site Assessments for private clients, banks, and government agencies all over the country. Nova employees are trained to conduct or review Phase I investigations in accordance with ASTM E1527-13, the EPA's All Appropriate Inquiry (AAI), Freddie Mac, Fannie Mae DUS, and HUD guidelines or specific lender requirements. Staff has a strong understanding of facility operating systems, state and federal regulations, and the fate and transport of chemicals through air, soil, surface water, and groundwater. Additionally, Nova has staff trained in specific areas of expertise who are available to advise as needed.



RAY HUTCHISON

Senior Vice President, New York, NY

Mr. Hutchison has over 20 years of experience in the engineering and environmental science fields. He has been involved in the details of thousands of real estate transactions and understands the specific needs and scopes of work required for the different parties involved in the transaction.

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SUBSURFACE INVESTIGATION, SITE **CHARACTERIZATION & REMEDIATION**



REAL ESTATE DUE DILIGENCE HEALTH AND SAFETY ENVIRONMENTAL COMPLIANCE ENERGY EFFICIENCY





- Drilling/Direct-Push Probing
- Soil, Soil Vapor & Groundwater Characterization
- Contaminant Delineation/ Modeling
- Vapor Intrusion Assessment/ Mitigation
- Risk-Based Assessment and **Corrective Action**
- Regulatory Compliance Reporting
- UST Removal/Assessment/ **Closure Services**



A subsurface investigation to further evaluate the presence of detrimental impact to subsurface soil, soil vapor, and/or groundwater is often warranted at sites where potential environmental concerns are identified. Nova's subsurface investigations are carefully developed to thoroughly assess locations of potential concern and identify any resulting risk to human health or the environment; and, are implemented in accordance with applicable local regulatory requirements. At various types of sites, Nova designs and implements Remedial Investigations (RI) and Corrective Action Design (CAD) programs, and routinely develops detailed feasibility studies to establish practical mitigation solutions that can be cost-effectively implemented.

Experience

Nova's technical staff includes Professional Geologists (PG) and Professional Engineers (PE) with extensive experience in performing real estate due diligence, site investigations, and corrective action/remediation. Nova's staff has experience in the design and implementation of a wide range of investigative methods and mitigation/remediation technologies, including: natural attenuation, soil excavation, land spreading, thermal treatment, landfill disposal, groundwater pump and treatment, soil-vapor extraction, subslab depressurization, air sparging, and chemical and bio-remediation.



MARK PERRY Corporate Vice President, Environmental Assessment & Remediation **Group Leader**

Mr. Perry has more than 25 years of experience conducting and managing environmental investigations, brownfield redevelopment/remediation, and property site assessments, including: Phase I Environmental Site Assessments (ESA), Property Condition Assessments (PCA), Property Zoning Reports (PZR) and Hazardous Materials Surveys. Mr. Perry also has experience with the coordination and oversight of Geotechnical Evaluations and aspects of Construction Loan Monitoring projects, including upfront

construction document reviews, monthly site inspections, and pay application/draw reviews.

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CASE STUDY

Summary

In response to identified contamination and dump debris discovered during a road right-of- way project, Nova directed the characterization, excavation, and permitted off-site disposal of approximately 100 cubic yards of mercury-contaminated material as part of an interim Response Action Plan (RAP) during initial construction activities. Subsequent investigation, including organic vapor screening and soil laboratory analyses, facilitated the preparation and submittal of a comprehensive RAP to the Brownfields Voluntary Cleanup Program. The RAP included additional segregation of mercury-impacted soil with a Lumex® Mercury Vapor Analyzer.

Highlights

The comprehensive right-of-way cleanup included the segregation, excavation, and disposal of approximately 3,200 tons of dump debris and contaminated soil along the right- of-way embankment. Following the excavation and off-site disposition of the impacted materials, Nova characterized the extent of excavation by collecting a gridded array of confirmation soil samples for applicable laboratory analyses and associated sampling to assess any resulting impact to the adjoining lake bottom sediment. The response actions and risk assessment activities were documented in a subsequent implementation report that was submitted on behalf of the client and was approved by the Brownfields Voluntary Cleanup Program.

REAL ESTATE DUE DILIGENCE HEALTH AND SAFETY ENVIRONMENTAL COMPLIANCE ENERGY EFFICIENCY









Property Condition Assessment

- Fannie Mae
- Freddie Mac
- **Portfolios**
- Small Loan Program

Third-Party Review

Service Overview

Property Condition Assessments (PCA) are often required as part of pre-purchase, ownercommissioned, or refinance transactions. Nova services include a site visit to evaluate the general condition and maintenance history of the property and to assess the overall design and construction of structures. All available on-site project and construction documentation is reviewed, and interviews with property managers, tenants, and local officials are conducted. Nova's Property Condition Report offers a complete narrative on the condition and adequacy of all site and building improvements and includes all required forms and information, including items of deferred maintenance, estimates of immediate and annual replacement reserves, and comments on the buildings' conformance with code, ADA, unfinished work, and FHA compliance.

Experience

Nova field professionals and team leaders have extensive experience performing and managing high-quality, thorough, and timely Property Condition Reports. Its staff includes Registered Architects, Professional Engineers, and construction specialists. Employees have a strong understanding of facility operating systems, architectural finishes, structural systems, life safety systems, and ADA surveys. Nova provides real estate investors with a solid understanding of a building's current physical condition and code compliance status, as well as recommended repair and replacement costs. Staff with specific areas of expertise are available to advise as needed.

RAY HUTCHISON

Senior Vice President, New York, NY

Mr. Hutchison has over 20 years of experience in the engineering and environmental science fields. He has been involved in the details of thousands of real estate transactions and understands the specific needs and scopes of work required for the different parties involved in the

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CASE STUDY

Summary

Nova's Capital Markets Group commissioned to provide PCAs on a portfolio of high-rise office and multifamily properties for a major life insurance company. Included within the mix of assets was the McGuire Apartments, a \$32MM, 25-story, mixed-use development constructed in 2001, within the Belltown neighborhood of downtown Seattle.

Highlights

Preliminary research conducted by Nova called for multiple investigations into alleged construction defects, including premature corrosion of slab tendons, spalled concrete floor slabs, and irregularities with the placement of steel within the floor slabs. Nova immediately advised the client of these past construction issues.

The lender, upon review of Nova's findings, delayed funding the loan application until a scope and cost for the mitigation of defects could be determined. In March 2010, the borrower's engineer determined that the cost to mitigate (as high as \$80MM) exceeded the cost of construction. Residents and tenants were asked to move from the building, and in April of 2011, the McGuire Apartments building was demolished, just ten years after construction.

By commissioning a Property Condition Assessment from Nova, the lender avoided funding a large loan secured by a high-rise asset that was demolished within two years of the proposed closing.



EXPANDED PROPERTY CONDITION ASSESSMENT SERVICES

REAL ESTATE DUE DILIGENCE HEALTH AND SAFETY ENVIRONMENTAL COMPLIANCE

ENERGY EFFICIENCY



- **Expanded Equity-Level Property Condition Assessment and Report**
- Seller Disclosure Property Condition Assessment and Report
 - Structural Condition Assessment > and Report
 - Seismic Risk Assessment and Report
- Building Envelope (Roof & **Exterior) Assessment and Report**

- Parking Garage Assessment and
- Forensic Analysis and Remedial Design
- Roof Replacement Design
- Facade Advising, Design and **Construction Oversight**
- **BOMA Area Measurements**
- **ADA Compliance Audits**



When performing due diligence prior to acquisition, Nova is aware that buyers' risk tolerance may vary. Its Equity Markets Group provides expanded due diligence services beyond that provided by the ASTM's baseline standard. Within the Equity Markets Group, clients will have access to experienced architects, engineers, certified roof and building envelope professionals, and construction specialists who can provide expanded assessments of building structure, enclosure systems, internal operating, and life safety systems. Nova can assemble an assessment team to meet client expectations and to provide property information sufficient to better understand acquisition risk. Nova reports are well documented with photographs and include Opinions of Probable Costs to remedy the physical deficiencies observed and to aid in assignment of capital allocations during ownership.

Experience

The experienced professionals within Nova's Equity Markets Group operate with the mindset that meeting client expectations first requires an understanding of the expanded assessments that are most appropriate. Please contact the Equity Markets Group to tailor the most appropriate due diligence plan that will help you better assess your risk in pursuit of real equity assets.



DOUG KNIGHT Vice President, Equity Group Director

Mr. Knight is Director of the Equity Group. He has over 25 years of experience in the consulting engineering business, with a focus in environmental services. As a project professional, he has been involved with the identification, quantification, and mitigation of environmental and facility defects on a wide variety of commercial, residential, and raw property projects. Mr. Knight has experience in over 1,000 environmental and facility projects, including Phase I and II ESAs, hazardous substances (asbestos, lead, and radon), remedial investigation/delineations, PCAs, and

building envelope commissioning. Mr. Knight earned a Bachelor of Science in Chemistry from Centre College in Kentucky and is based out of Columbus, Ohio.

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CASE STUDY

Summary

Nova's Equity Markets Group was engaged to perform an expanded Property Condition Assessment (PCA) for a Class A office property development that included multiple office towers constructed during the 1970s and provided a total net rentable area of approximately 800,000 square feet. A threelevel parking garage and plaza structure was included in the property assessment.

Highlights

Nova's assessment team was assembled to comply with the client's assessment scope and included licensed structural and mechanical engineers, a registered roofing observer, a registered exterior wall consultant, and a vertical transportation specialist.

The expanded assessment included several scopes, including a detailed examination of the building's exterior elevations; a roof area assessment; a Probable Maximum Loss (PML) seismic assessment; a visual survey of both the inside and outside of the mechanical equipment and operational systems, including maintenance programs; and an assessment of elevator equipment.

The Property Condition Report included cost projections for immediate repair, ADA improvements, and a 10-year capital and maintenance projection for the subject property.





CONSTRUCTION SERVICES GROUP

REAL ESTATE DUE DILIGENCE HEALTH AND SAFETY ENVIRONMENTAL COMPLIANCE ENERGY EFFICIENCY





- **Construction Document Review**
- **Construction Loan Monitoring**
- Owners' Representation
- **Construction Management**
- **Project Completion Agreements**
- **Funds Control**
- **Contract Review**
- **Asset Management**
- > **Construction Civil Property Review**
- > Borrower's/Lender's Representative



Service Overview

Nova's team of construction specialists partners with construction lenders, developers, and building owners to provide comprehensive management, precise monitoring, and concise reporting throughout all phases of the construction process. By streamlining internal procedures, utilizing advanced project tracking software, and proactively communicating, Nova effectively manages the requirements, deadlines, and expectations of its worldwide client base. By tailoring services and deliverables to custom-fit client needs, the projects Nova services and orchestrates finish promptly and successfully.

Experience

For almost a decade, Nova staff has partnered with clients on hundreds of construction projects nationwide, with services expanding into Europe, Asia, and Australia. Nova employs a widespread team of expert engineers, architects, and construction managers who understand their clients' needs and can react quickly under rapidly changing and often difficult market conditions. Nova's upfront and unambiguous approach enables it to provide answers on-demand and when they're needed most.



JOSEPH DIBERNARDO

Vice President, Construction Services Group Manager

Mr. DiBernardo, with a background in Civil Engineering, has over 25 years of experience in engineering design, consulting, construction monitoring, and project management. More recently, he has focused on construction loan risk management for national and international lenders, commercial banks, real estate investment trusts, private equity investors, tax credit unions, bridge lenders, CMBS's, and developers. He is currently responsible for the management of technical staff including: architects, engineers, construction specialists, and professional associates. His duties include department operations,

department sales/marketing, preparing proposals, client interface, and construction administration reporting nationwide while providing high level construction services and minimizing construction loan risks for clients.

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CASE STUDY

Summary

Nova's Construction Services Group performed an upfront Construction Document Review (CDR) before managing responsibility of both construction loan monitoring and servicer reporting. This dual role provided the client with a more all-inclusive view of hard and soft costs associated with the construction of the Arrivé Tower in Seattle.

Highlights

Nova had drawn on its depth of experience to provide a comprehensive view of project expenses by reporting on both hard construction costs and project-related soft costs in the client's own proprietary tracking/financial reporting format.

As always, Nova's upfront and unambiguous approach enables us to provide important answers on-demand. By assuming a more comprehensive role on behalf of our clients, Nova simplified the project by offering both precise monitoring and concise reporting. By tailoring our services and deliverables to custom-fit the clients' needs, we ensured the prompt and successful process and finish.





- Roofing & Exterior Wall Advising
- Water Intrusion Investigation
- **Building Enclosure Testing and Analysis**
 - Fenestration, Curtain Wall and Facade Performance Testing (Air and Water)
- Peer Review and Design Service
- Non-Destructive Evaluation and Analysis (Infrared Thermography)

- Forensic Evaluations and Remedial Designs
- **MEP Advising**
- Foundation/Structural Advising
- **Pavement Advising**
- **Project Management/Contract** Administration
- **Document Review**
- **Litigation Support**



CASE STUDY

Summary

As part of the client's due diligence work, Nova was hired to complete an equity-level Property Condition Assessment for a retail site in Snoqualmie, Washington. The project consisted of five single-story retail buildings, constructed in between 2003 and 2006. The strip retail centers had a variety of exterior wall finishes.

Highlights

During the initial site observations for the PCA. Nova determined that the stucco-clad elevations of the building had excessive hairline cracking. While on-site, our associate was able to contact one of our in-house Registered Exterior Wall Consultants to review the field conditions. The Nova team was able to confirm field conditions indicative of systemic failure. We quickly communicated this information and the potential cost impact to the client. A follow-up site visit was scheduled to complete an infrared assessment (moisture survey) and collect samples for petrographic analysis. Based on the additional information obtained, Nova was able to provide an accurate repair scope and cost to our client. While the original PCA would have identified the issues with the stucco, the true extent and overall cost impact of the issue would have been an unknown risk. The detailed scope and costs gave the client the information needed to negotiate with the seller for corrective repairs. By working closely with the current building owner, their contractor and the client. Nova was able to ensure repairs were properly completed.

Service Overview

Often during completion of standard due diligence work, problematic or systemic building issues are encountered. Nova has the resources and expertise to assist with identifying, quantifying, prioritizing, and solving potential or existing physical risks and liabilities. These capabilities allow for a quick response to determine the extent of a problem's impact on the overall value and performance of a building or system.

For existing properties, some building systems fail or perform at a level that is unsatisfactory to the owner, property manager, contractor, or design professional. Nova assists clients by investigating the cause or causes of a failure and makes recommendations for corrective measures.

Experience

Nova has licensed architects, engineers, and advisors located throughout the country. Its staff is able to mobilize quickly to meet today's shortened due diligence timelines. With Nova's diverse team as a due diligence partner, clients can rest assured they'll have a versatile resource committed to providing the information they need to make informed decisions during real estate transactions. Additionally, Nova has staff trained in specific areas of expertise available to advise as needed.



DOUG KNIGHT Vice President, Equity Group Director

Mr. Knight is Director of the Equity Group. He has over 25 years of experience in the consulting engineering business, with a focus in environmental services. As a project professional, he has been involved with the identification, quantification, and mitigation of environmental and facility defects on a wide variety of commercial, residential, and raw property projects. Mr. Knight has experience in over 1,000 environmental and facility projects, including Phase I and II ESAs, hazardous substances (asbestos, lead, and radon), remedial investigation/delineations, PCAs, and

building envelope commissioning. Mr. Knight earned a Bachelor of Science in Chemistry from Centre College in Kentucky and is based out of Columbus, Ohio.

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BUILDING SCIENCE & FACILITY INSPECTION / TESTING

REAL ESTATE DUE DILIGENCE HEALTH AND SAFETY

ENVIRONMENTAL COMPLIANCE

ENERGY EFFICIENCY





- Roofing & Exterior Wall Advising
- Building Enclosure Testing and Analysis
- Building Enclosure Commissioning (BECx)
- ➤ Large Building Air Barrier
 Performance Testing/ Certification
- > Peer Review and Design Service
- Forensic Evaluations

- Fenestration, Curtain Wall and Facade Performance Testing (Air and Water)
- Quality Assurance Construction Observation and Reporting
- Non-Destructive Evaluation and Analysis (Infrared Thermography)
- Project Management/Contract
 Administration



CASE STUDY

Summary

Nova recently provided on-site air barrier installation quality assurance observation and testing services for a new elementary school in Tonganoxie, Kansas. The two-story, approximately 120,000-square-foot structure had a fluid-applied air barrier assembly applied to sheathing prior to installation of the exterior brick veneer and composite metal panel.

Highlights

Nova completed multiple site visits during construction to document the installation of the air barrier system, window flashing, and exterior sheathing. Adhesion and thickness tests were completed by certified personnel. Nova reviewed the plans and specification prior to the start of work and recommended revisions to ensure the air barrier was continuous and would perform as intended. By working closely with the project architect, the general contractor, and the air barrier sub-contractor, Nova helped ensure that a quality air barrier system free of defects was installed.

Service Overview

Nova has experienced building science professionals who advise for existing facilities and new construction projects. For existing facilities, Nova provides visual assessments, field testing, moisture surveys, design service, and project oversight. On new construction projects, Nova contributes trained staff to document installation, complete performance testing, and assist with project close-out. Nova can also offer peer review of new construction design services. Nova's goal is to work with project team members, not only to identify potential issues or deficiencies but to provide solutions. By doing so, we strive to develop economical solutions and add value to each project. Our services give owners and contractors the confidence that the air barrier systems will readily achieve performance test and installation requirements. Nova's comprehensive approach helps to avoid extensive air-leakage investigations and costly repairs.

Experience

Nova's experienced advisors provide clients with the design consultation, testing, and installation oversight needed to ensure air barriers, fenestration, curtain walls, and facades are installed and perform as intended. Requirements for performance testing vary, and Nova can develop testing protocols to meet specific project and budget mandates. We also have experience troubleshooting existing systems and providing corrective solutions.



DOUG KNIGHT

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REAL ESTATE DUE DILIGENCE HEALTH AND SAFETY ENVIRONMENTAL COMPLIANCE





- **Roof Condition Assessments**
- **Building Envelope Analysis**
- Materials Testing
- Roof Maintenance/Management **Programs**
- Life Cycle Cost Analysis
- Peer Review
- **Quality Assurance Construction Observation and Reporting**
- Non-Destructive Evaluation and **Analysis**
- Moisture Surveys (Infrared Thermography)
- **Forensic Evaluations**
- **Design Services**
- **Project Management/Contract** Administration



CASE STUDY

Summary

Nova recently assisted a client with a hail and wind damage insurance claim. The project consisted of a 180,000-square-foot facility in Arlington, Texas. The facility had 11 buildings with multiple roof types.

Highlights

Following a storm event, Nova's client contacted their insurance company, who initially denied their claim. Nova completed a follow-up investigation and documented the storm damage in detail. Armed with this information, the client was able to work with their insurance company to resolve the claim. Nova assisted the client with the roof replacement scope and reviewed the installation.

Service Overview

Nova's assessment services assist owners in evaluating the integrity of an existing roof or building envelope through comprehensive surveys that determine signs of deterioration, water tightness, and estimated remaining life. These evaluations can be augmented by nondestructive test methods utilizing a moisture gauge, nuclear density gauge, and/ or infrared camera technology. Nova's primary approach to roof assessments is to prolong the life of the asset and provide clients with the information they need to make informed decisions. If it is determined that a roof replacement is the answer, then Nova's professionals can provide complete replacement design services, bidding assistance, and contractor selection review. Staff also provides on-site monitoring of installation activities.

Experience

With experience in design consultation and testing, Nova's professional advisors provide clients with the technical team members they need to tackle roofing and waterproofing issues. Nova offers installation oversight to ensure roof systems are installed and perform as intended and has experience in storm damage (cause and origin) assessments.



DOUG KNIGHT

Vice President, Equity Group Director

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- **Comprehensive Asbestos Building Surveys**
- Specification/Contract Administration
- On-Site Abatement Air **Monitoring & Contractor** Oversight
- Operations and Maintenance Program (O&M)
- Training Programs in Asbestos Management for Facilities Managers



CASE STUDY

Summary

Nova conducted on-site inspection and management for comprehensive asbestos surveys in over 150 occupied locations nationwide.

Solution

Nova assisted in public relations with management staff and employees and issued reports, as reviewed by Nova's Certified Industrial Hygienist, that included color digital photographs and digital drawings. Nova also submitted cost estimates for asbestos removal and monitoring activities.

Service Overview

Nova conducts asbestos surveys that meet Environmental Protection Agency (EPA) and Occupational Safety and Health Administration (OSHA) requirements. Nova's computerized program can update, change, and maintain facility information, including floor plans, digital photographs, and training data, and allows for on-site and off-site property management of multiple facilities. Nova's staff of project designers are EPAcertified to prepare asbestos abatement designs and specification to complete facility abatement projects. Nova manages abatement contracts from initial bid through final payment.

Nova's certified professionals provide abatement contractor oversight, project management, and on-site air sampling/analysis during asbestos abatement projects. Operation & Maintenance (O&M) programs cover essential training information for operations and maintenance personnel and outline specific work practices to prevent or control the disturbance of asbestos-containing materials.

Experience

Nova's professional staff includes Certified Industrial Hygienists, licensed Asbestos Inspectors, Management Planners, Supervisors, certified Abatement Project Designers, Air Sampling Professionals, and registered Engineers and Architects.



RICK LEINES, REM, CESCO

Vice President - Industrial Hygiene (IH) & Hazardous Materials Group Mr. Leines is Vice President of the IH & Hazardous Materials Group, working out of Lenexa, Kansas. He has spent his 25+ years of experience in the environmental, health, and safety (EHS) industry serving clients by managing a wide variety of EHS projects at industrial, commercial, state, and federal facilities throughout the United States. He is responsible for business development, contract and project management, industrial hygiene and safety-related services, project oversight, training of clients and staff, regulatory review, and reporting. Phone: 913-297-4733 | E-mail: Rick.Leines@novagroupgbc.com

REAL ESTATE DUE DILIGENCE HEALTH AND SAFETY ENVIRONMENTAL COMPLIANCE





- Lead Analysis Utilizing Handheld Nitro XRF Analyzer
- Hazard Control Plan Development
- Lead Abatement Monitoring
- Lead Clearance Testing
- Collection and Laboratory **Analysis of Drinking Water**
- Field Sampling for Lead in Paint, Soil, Water, Air, Steel and Dust
- Lead Toxicity Risk Assessments
- Lead Remediation Design and **Project Management**
- Observations and Testing During **Abatement**
- **OSHA** Compliance



CASE STUDY

Summary

Nova was hired by a major metropolitan city in Minnesota managing federal grants to provide homeowners funding to reduce lead paint hazards in their homes.

Solution

Nova has provided over 350 lead inspections. risk assessments in compliance with state and applicable sections of the Housing and Urban Development (HUD) LBP guidelines. Nova performed clearance wipe sampling throughout all phases of abatement. Close coordination with several contractors was required to ensure the project was successfully completed on time.

Service Overview

Lead-based paint (LBP) investigations are completed by using an X-Ray Fluorescence (XRF) spectrum analyzer, paint chip, and soil sample analysis. XRF surveys and inventories are accurate, timely, and cost-effective. This method causes little or no damage to existing finishes. An XRF can also sample structural steel in building components. Paint chip sampling is also used for testing commercial building components and structural steel. Samples are collected and submitted to a laboratory for analysis. All three methods meet federal lead-based paint testing requirements.

Experience

The professional staff at Nova includes Certified Industrial Hygienists, licensed Lead Inspectors, and Lead Risk Assessors.

Nova staff members are familiar with new lead-based paint regulations for residential properties. They have completed numerous lead projects following HUD/FHA, HUD/ EPA, EPA RRP, Fannie Mae, Freddie Mac, and other lender-specific requirements. Nova professionals routinely work with and meet federal and state requirements for leadbased paint.



RICK LEINES, REM, CESCO

Vice President - Industrial Hygiene (IH) & Hazardous Materials Group Mr. Leines is Vice President of the IH & Hazardous Materials Group, working out of Lenexa, Kansas. He has spent his 25+ years of experience in the environmental, health, and safety (EHS) industry serving clients by managing a wide variety of EHS projects at industrial, commercial, state, and federal facilities throughout the United States. He is responsible for business development, contract and project management, industrial hygiene and safety-related services, project

oversight, training of clients and staff, regulatory review, and reporting.

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INDOOR AIR QUALITY





- Investigations
- Remediation Project Design
- **Bid Services & Contract** Administration
- **Expert Witness**
- Mold
- Bacteria
- Volatile Organic Compounds

- Particulate Identification
- > Formaldehyde
- Radon
- Hydrogen Sulfide & Sulfur Dioxide
- **Moisture Testing**
- **Ventilation System Evaluation**



Service Overview

Nova has significant experience in performing Indoor Air Quality (IAQ) evaluations, monitoring IAQ remediation projects, developing corrective engineering procedures, training employees, and performing periodic audits. Sampling and testing can be performed to measure exposure to airborne microbiological contaminants, chemical hazards, or excessive noise or heat. Evaluations may also entail an analysis of engineering control strategies, including installation of ventilation systems, process modifications, or product substitution.

Nova's projects often address regulatory and liability concerns of employers or homeowners and respond to employee/resident questions or complaints. Typical IAQ investigations require a site walk-through to identify indoor conditions that may lead to symptoms of allergies, illness, and/or general discomfort. Sampling and testing are performed via culturing and non-culturing analytical techniques to measure bioaerosols (aeroallergens and/or bacteria) present in the air and building materials. The IAQ investigation also includes the inspection of and sampling of HVAC system(s) and associated ducting. Expert witness testimony and advisory services are provided to clients involved in health-related claims.

Experience

Nova's trained professionals include Certified Industrial Hygienists and Certified Safety Professionals with many years of experience in evaluating, identifying, and controlling indoor environmental concerns. Trained staff has provided numerous IAQ services evaluating the air quality and building conditions of multiple-story office and apartment buildings and single-level office structures. Nova helps its clients identify control methods and remediation procedures, providing solutions to resolve air quality concerns.



RICK LEINES. REM. CESCO

Vice President - Industrial Hygiene (IH) & Hazardous Materials Group Mr. Leines is Vice President of the IH & Hazardous Materials Group, working out of Lenexa, Kansas. He has spent his 25+ years of experience in the environmental, health, and safety (EHS) industry serving clients by managing a wide variety of EHS projects at industrial, commercial, state, and federal facilities throughout the United States. He is responsible for business development, contract and project management, industrial hygiene and safety-related services, project oversight, training of clients and staff, regulatory review, and reporting.

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CASE STUDY

Summary

The client contracted Nova to provide comprehensive building inspections on a floor-by-floor basis to determine if building deficiencies and environmental issues were present, causing significant health effects to employees.

Solution

Vertical exterior sealants were replaced to address extensive water infiltration on curtain walls, which had led to significant mold and bacteria growth within the building. Issues with the building's HVAC system were identified, leading to a floorby-floor replacement and upgrade of the entire ventilation system (units, ducts, and controls). Exhaust issues were identified that were associated with the underground parking facilities. Exhaust and fresh air equipment and operating procedures were evaluated and adjusted, ensuring that automobile exhaust did not affect the building occupants.

INDUSTRIAL HYGIENE & SAFETY SERVICES

REAL ESTATE DUE DILIGENCE HEALTH AND SAFETY ENVIRONMENTAL COMPLIANCE



- Regulatory Applicability Assessments
- **Employee Chemical Exposure** Monitoring
- Industrial Hygiene Health Hazard
- Noise Survey, Dosimetry, Area and Ordinance Compliance Evaluation
- **Indoor Air Quality Investigations**
- Asbestos, Lead-Based Paint, and Fungal/Mold Assessments
- Health and Safety Audits
- Loss Prevention Strategies
- Written Compliance and Best **Management Programs**

- **Process Safety Management**
- Performance Measurement **Programs**
- Risk Management
- **Ergonomics Assessments**
- **Employee Training/Involvement Programs**
- > Loss Control Services and **Prevention Strategies**
- Train-the-Trainer Programs
- Incident Investigations/Incident **Analysis**



Service Overview

Nova offers a wide range of services related to workplace health and safety hazards and compliance with health and safety regulations. Its professional staff can help identify, evaluate, and control health and safety problems in commercial and industrial settings. Projects often address employers' regulatory and liability concerns and respond to employee questions or complaints. Typical projects require a facility walk-through to identify potential hazards that may lead to accidents, illnesses, hearing loss, or repetitive motion injuries. Sampling and testing can be performed to measure potential exposure to airborne chemical hazards or excessive noise or heat. Evaluations may also entail an analysis of engineering control strategies, including ventilation systems, process modifications, product substitution, or personal protective equipment. Expert witness testimony and advisory services are provided to clients involved in regulatory or healthrelated claims.

Experience

Nova has significant experience in supporting its clients' employee health and safety. Nova's professional staff includes Certified Industrial Hygienists, Certified Safety Professionals, and educated professionals knowledgeable in regulatory and best management practices. Nova provides clients with both regulatory compliance services and improvement services that focus on prevention of workplace exposures. Nova performs a variety of services, including air monitoring, problem investigation, compliance review, corrective engineering, and employee training and compliance audits. Air and noise monitoring are conducted using state-of-the-art equipment. Nova staff also develops, implements, and presents programs for hazard communication, hearing conservation, respiratory protection, right-to-know, confined space, and lockout-tagout. Nova works with the full range of OSHA, health department, and compliance issues.

RICK LEINES, REM, CESCO

Vice President - Industrial Hygiene (IH) & Hazardous Materials Group Mr. Leines is Vice President of the IH & Hazardous Materials Group, working out of Lenexa, Kansas. He has spent his 25+ years of experience in the environmental, health, and safety (EHS) industry serving clients by managing a wide variety of EHS projects at industrial, commercial, state, and federal facilities throughout the United States. He is responsible for business development, contract and project management, industrial hygiene and safety-related services, project oversight, training of clients and staff, regulatory review, and reporting.

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CASE STUDY

Summary

food-producing major company contracted Nova to evaluate potential employee exposure to smoke from its pork smokehouse facility. The client's concern was potential exposure to by-products from the incomplete combustion of wood chips used in the smokehouses to add smoke flavor and aromas to pork products. Nova helped conduct a workplace exposure assessment, which included an evaluation of the smokegenerating equipment and smokehouse seals, and conducted employee air sampling.

Solution

The exposure assessment determined that additional modifications were required to prevent smoke from escaping into workspaces and exposing employees. Additional maintenance was scheduled to improve smokehouse door seals, and ventilation improvements reduced the loss of smoke into workroom air during smokehouse operation.



ENVIRONMENTAL COMPLIANCE





Air Emission Permitting & Reporting

- Wastewater Permitting & Reporting
- Stormwater Permitting (Individual, General and Construction) & Reporting
- Hazardous and Solid Waste **Management Services**
- SPCC and Facility Response Plan Preparation, Implementation and Management
- > Tier II & TRI Data Management & **Annual Compliance Reporting**
- Storage Tank Permitting and Management
- Multimedia Compliance Auditing
- Compliance Management System Development

Service Overview

Nova provides Environmental Compliance Services to public and private sector clients to ensure compliance with federal, state and local environmental regulations. Nova's Environmental Compliance Group focuses on providing cost-effective solutions that promote sustainable compliance tailored to the specific needs of each individual client. Our goal is to exceed client expectations through our knowledge and unwavering dedication to service and results. Nova assists our clients with evaluating applicable environmental regulations, acquiring the proper permit and plans, implementing appropriate tools and systems to manage compliance obligations, fulfilling reporting and recordkeeping requirements and managing change due to new regulatory requirements or expanded operations.

Experience

Nova professionals have extensive experience in environmental compliance management and provide our clients with valuable insight into meeting their regulatory compliance requirements. Nova professionals have a wide range of experience in the manufacturing, chemical, petroleum distribution, agricultural chemical, food production, retail distribution, educational, financial and health care industries.



JOHN BALE, PE **Environmental Compliance Group Manager**

Mr. Bale has more than 27 years of experience as a professional environmental engineer, with over 18 years of environmental consulting experience. He manages Nova's environmental compliance services nationally.

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Compliance Audit of Large Manufacturing Corporation

CASE STUDY

Summary

Nova conducted a multimedia environmental compliance audit of a manufacturing company consisting of six facilities. The compliance audit was requested by a potential buyer to evaluate environmental liabilities prior to acquisition.

Nova's scope included the following:

- 1. Review of regulatory agency databases to assess permit status and compliance history.
- 2. Facility inspection and personnel interviews to assess operations and determine applicable compliance requirements.
- 3. Review of current compliance documentation management and practices.
- 4. Identification of compliance gaps.

Solution

The audit resulted in the following recommendations:

- > Prepare a comprehensive tool to track air emissions and air permit triggers during planned expansions.
- > Acquire a stormwater permit and develop a stormwater pollution prevention plan (SWPPP).
- > Cease improper management and disposal of hazardous and universal wastes.
- > Implement a proactive used oil management process to avoid triggering of SPCC requirements.
- Initiate EPCRA Tier II reporting.

Based on the findings, the buyer was able to implement practices to significantly reduce environmental liabilities, properly manage existing requirements and proactively manage new requirements as planned expansions were implemented.









- Energy Audits Level I, II and III
- Fannie Mae High-Performance **Building Module**
- > Freddie Mac Green Assessments
- **Building Energy Modeling**
- Building Energy Benchmarking
- > **Program Management**
- Commissioning
- **Retro-Commissioning**
- > **Building Operator Training**
- Measurement & Verification
- **PACE Energy Audits**



CASE STUDY

Summary

Nova was engaged to increase cash flow through energy efficiency in a six-building multifamily portfolio, consisting of 144 apartments. Ownership was interested in developing the most cost-effective solutions, while leveraging all available incentives and rebates. Nova's scope of work included the following:

- 1. A preliminary energy-use analysis and benchmark of each building.
- 2. Investment-grade energy audits on each building, identifying savings of at least 20% source energy.
- 3. All required program management, interfacing including with state agencies.

Solution

An average of 20% source energy savings identified through the following improvements:

- > Separate and correct DHW production.
- Reduce heating distribution losses through insulation and reset controls.
- Allow for better tenant control of the heat through zone valve rebuilds and new thermostats.

The improvements qualified for and received almost \$90,000 in rebates, covering 50% of the project costs.

Service Overview

Nova Energy Group assists real estate investors in evaluating the efficiency of their asset and reducing utility expenses. Drawing on extensive experience in real estate development and energy advising, the energy team specializes in translating the energy performance of buildings into financial terms. This analysis gives our clients greater control of their utility expenses, helping to reduce financial risk in an unpredictable energy market. Nova offers almost a decade of experience in the energy efficiency field. We provide custom energy audit reports that provide site-specific solutions based on dialogue with clients and actual historic performance. We are able to meet tight delivery timelines that fit within the due diligence period for lenders.

Experience

The professional staff at Nova hold the following certifications: Multifamily Building Analyst from the Building Performance Institute (BPI) and Certified Energy Manager and Certified Measurement and Verification Professional from the Association of Energy Engineers. We work with public housing authorities to meet HUD requirements and lenders to help borrowers qualify for the Fannie Mae Green Rewards program and the Freddie Mac Green Up and Green Up Plus. We have extensive experience benchmarking properties in ENERGY STAR® Portfolio Manager® and working with utilities to access historical utility consumption data.



KEELY FELTON, CEA, CMVP

Vice President, Nova Energy Group

Ms. Felton oversees all Freddie and Fannie green loan reports and other deliverables completed by Nova Energy Group. In this capacity, she reviews High-Performance Building reports and Green Assessment reports for these programs while working closely with Nova's clients to make sure that all pertinent information is communicated throughout the process. Ms. Felton is a Certified Energy Auditor as well as a Certified Measurement and Verification Professional. She is highly experienced with utility data analysis, including ENERGY STAR® Portfolio Manager® and benchmarking.

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- > HUD MAP/LEAN Property Condition Needs Assessments (PCNAs)
- NECA Tables (15 and 20 years)
- Capital Needs Assessments (CNAs) -Online 3.0 System
- > HUD Intrusive Testing (Electrical & Sewer)
- > HUD RAD PCNAs
- **HUD Architectural Cost and Review for** New Construction and Sub-Rehabs
- HUD MAP/LEAN Phase I Environmental Site Assessments (ESAs)

- HEROS (HUD Environmental Review Online System)
- ANSI-AARST MAMF-2017 Radon Testing
- **HUD Compliant Baseline &** Comprehensive Asbestos Testing and O&M Plans
- ➤ HUD Compliant Lead-Based Paint Risk Assessments and O&M Plans
- Archeology, Wetlands, and FEMA Studies (5-Step & 8-Step Processes)
- SEDI, Energy Benchmarking, ASHRAE Level I, II, & III Audits, and NGBS Certification

Priority Access for High Volume Clients

- Dedicated staff for revisions after draft issuance
- Customized templates for quicker delivery/turnaround time.
- Dedicated Senior Manager and Project Managers (Assessors) for your account (you will speak with the same personnel regarding any deal in your account).
- Dedicated pricing allowing acceleration of your deal from originations to site visit date.
- Contact Kristin Tate to customize your Priority Access.

Nova's Streamlined Process

- Documentation checklist is provided to the client prior to engagement.
- Site visits dates are requested within 5-business days of engagement.
- Continuous document review before report delivery date including clear communication channels with client and Property personnel.
- Delivery of Draft Reports within 30 days of site visit.

Services Overview

The HUD Division within Nova conducts on-site inspections to evaluate the general condition, overall design, and structural elements of the Property buildings. Document reviews are also conducted to review previous and planned capital expenditures. Nova's Property Condition Needs Assessment (PCNA) complies with the HUD MAP/LEAN Guidelines and offers a complete narrative on the condition and adequacy of the site and building improvements, including the required forms and information. Items such as maintenance, an estimate of immediate costs (Life Safety/ADA and Non-Critical), annual replacement reserves in the CNA e-Tool, comments on the building's conformance with un-finished work, ADA accessibility, FHA, and UFAS/504 compliance are inclusive. Nova's Phase I Environmental Site Assessments (ESAs) also comply with HUD MAP/LEAN Guidelines. The ESAs are conducted to identify potential environmental concerns for on-site activities, off-site activities, and compliance with federal, state, and local agencies which are also included in HUD Environmental Review Online System (HEROS).

Experience

Nova's team members have extensive experience performing and managing high quality, thorough, and timely reports. Our staff includes Registered Architects, Professional Engineers, and Construction Specialists. Nova's PCNA employees have a robust understanding of facility operating systems, MEP systems, architectural finishes, structural systems, life safety systems, and ADA accessibility compliance. Nova's ESA employees are trained in facility operating systems, federal, local, and state regulatory requirements, and transport of chemicals through air, soil, soil vapor, surface water, and groundwater. Additionally, Nova may consult with staff located nationwide when needed, who are specialists and leaders in their field.

Nova Etool Converter Assistant (NECA) Tables

Nova's proprietary software, NECA Tables, were created in-house to assist our clients and in-house staff with Critical, Non-Critical, and Reserve for Replacement (R4R) table creation and modification. NECA tables give Nova and their partners more control over how the component tables will be delivered to HUD. These tables are outside of HUD's purview. The NECA Tables seamlessly integrate with HUD's CNA e-Tool 3.0 system creating a streamlined process for submissions. Revision times are now dramatically decreased using our exclusive, new NECA Tables.

Our NECA Tables also integrate with HUD's Financial Factors Tool (FFT) for (R4R) compliance to assist Lenders in determining their Initial and ongoing Annual Deposits over 20-years. By incorporating the FFT, Lenders have greater control with the ability to adjust several key factors, thereby dramatically streamlining the underwriting process.

What changes were made in the new MAP Guide that was posted on December 18, 2020?

- Radon Testing: The new MAP Guide requires testing of 100% of Property ground-floor units along with 10% of upper units. Testing is required in all three radon zones.
- Asbestos Testing: Now required for all buildings constructed prior to
- **Energy:** In chapter 6 of the updated Guide, **ENERGY** MAP for Existing Buildings is largely eliminated from the list of approved certifications for Section 223(f) and 223(a)(7) programs except as a means to demonstrate ongoing performance. There will be a two-year grace period allowing properties less than three years old to use ENERGY STAR Existing Building certification; however, the ENERGY STAR score will need to be a 90 or above. Owners can select one of the other approved certification programs, such as National Green Building Standard (NGBS) offered by Home Innovation Research Labs. NGBS Bronze certification requires 15% energy savings as well as water savings that can often be achieved with prescriptive measures. A Level 2 or 3 energy audit will be required as will ongoing benchmarking.

Contact Us:

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Service Overview

The Nova Zoning Group was developed in response to the increasing demand for clients to receive quick and reliable property zoning analysis that outlines zoning conformance. This analysis gives Nova clients greater comfort with the overall property compliance with the local zoning laws. Without a reliable zoning report that thoroughly examines your property in advance of the transaction, the risk of an unknown zoning violation could result in a substantial delay of your closing or unexpected costs.

Nova's Expertise

Our team is comprised of Zoning professionals that have 30+ combined years of zoning experience. The Nova Zoning Group specializes in a complete analysis of the site's zoning compliance, we offer competitive pricing and a high-quality product.

The highly trained team of zoning analysts offer detailed reports of the most complex real estate sites. Exceeding industry standards, these reports are trusted and relied upon by lenders, attorneys, surveyors, brokers, and other real estate professionals nationwide.

We continually evolve to meet the current industry standards and regularly update our process to give our customers the best service possible. We can tailor our reports to your project needs.

What is a Zoning Conformance Report (ZCR)?

Nova has developed a Zoning Conformance Report that provides a complete and reliable analysis that speaks to the overall conformance of a property. Our report highlights what uses are permitted and outlines the current requirements for any particular zone. The Report compares the current requirements of the municipal zoning code to what is existing on the property using an American Land Title Association (ALTA) Survey to determine conformance.

What is included in the Zoning Conformance Report?

Along with the ZCR, we will include all applicable municipal documents as listed below:

- Zoning Verification Letter
- Notice of any open zoning, building, and fire code violations
- Notice of applicable variance/special/conditional use permits or approvals >
- Certificates of Occupancy
- Final Approved Site Plan (if available from the municipality)
- Applicable Municipal Zoning Code Sections

What is required to complete a Zoning **Conformance Report?**

- Property Address(es)
- Property Use
- ALTA Survey (including Gross Land Area, Building) Footprint, Building Height & Parking Count)
- Legal Description / Lot & Block (If Available)
- Tax Parcel / APN Number (If Available)
- Date of Construction (If Available)



ALICIA TAYLOR

Nova Zoning Group Lead

As the Nova Zoning Group Lead, Ms. Taylor's role is to develop the Zoning Services offered at Nova Group, GBC. Her duties include creation of the Nova zoning report and database, end-to-end production of quality zoning reports, efficiently communicating and mentoring internal Client Managers to drive growth, and building relationships with external Clients to extend services. Ms. Taylor started her zoning career at the age of 22 and now has more than 12 years of experience in the Zoning industry. She has written over 2,500 and managed over 5,000 Zoning Conformance Reports of various project types, including office, retail, industrial, multifamily, hospitality, assisted living, skilled nursing, medical, mobile home communities, self-storage, and shopping centers.

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