

IN THE CIRCUIT COURT OF COOK COUNTY, ILLINOIS
COUNTY DEPARTMENT, LAW DIVISION

McDONALD'S USA, LLC, a Delaware

limited liability company, and

McDONALD'S REAL ESTATE COMPANY,

a Delaware corporation,

Plaintiffs,

v.

Case No. _____

WORLD DRYER CORPORATION,

a Delaware corporation,

Defendant.

COMPLAINT

JURY TRIAL DEMANDED

I. INTRODUCTION

A. The Test

1. The claims made in this case can be verified effortlessly by anyone in a few minutes. They can be experienced directly, without scientific equipment, without expert testimony, without specialized knowledge. Visit any public restroom equipped with

a World Dryer hand dryer. Wash your hands. Place them in the dryer for 15 seconds—the longest drying time World Dryer claims for any current product. Observe three things: (1) Watch where the water goes as it leaves your hands. (2) Remove your hands at 15 seconds. They will be visibly and obviously wet. (3) Look at the walls and floor near the dryer's air outlet. Note the growing mold, dirt and water staining originating from that point.

B. The Hypothetical

2. All aspects of hand dryer performance can be understood if you remove it from the room. Does a dryer improve or degrade the room by being there?



C. The Stakes

3. McDonald's serves approximately 69 million customers daily worldwide. More than 36,000 restaurant locations. Approximately 27,400 World Dryer units operating in approximately 13,700 U.S. locations. Every unit amplifying contamination. Every use dispersing bacteria. Every wall growing mold. The scale is staggering—but the mechanism is simple enough to verify in any McDonald's restroom in minutes.
4. In food service, hand hygiene is not a courtesy—it is the barrier between pathogen and plate. McDonald's employees are required to wash hands after using the restroom precisely because 150 years of unequivocal science proves that clean, dry

hands prevent disease transmission. Semmelweis established the importance of hand hygiene in 1847. Patrick et al. established that wet hands transfer up to 1,000 times more bacteria than dry hands. This is the science that makes hand dryers exist. World Dryer's products fail at every element of this purpose: they leave hands wet, amplify contamination, and disperse bacteria throughout the restroom and beyond.

5. This is not a recent problem. World Dryer and McDonald's were Chicago-area neighbors for decades. Industry sources described McDonald's adoption of World Dryer products as "a big win" for World Dryer—"two [units] multiplied by thousands of locations." That relationship delivered contamination-amplifying devices into every McDonald's restroom in the country.

D. The Case

6. This action arises from decades of deception by a trusted supplier. Defendant World Dryer Corporation marketed hand dryers to Plaintiffs McDonald's USA, LLC and McDonald's Real Estate Company with false claims of drying time, hygiene, and energy efficiency. Plaintiffs relied on these representations when specifying World Dryer equipment for installation across thousands of restaurant locations.
7. Independent scientific testing across an eleven-study research program conducted from September 2023 through December 2025 has established with mathematical certainty that World Dryer's claims are physically impossible. World Dryer's products do not dry hands in claimed times—they require 70-90 seconds to achieve the hygiene threshold, not 10-15 seconds. World Dryer's products amplify contamination by 49.6 to 110.5 times over ambient air. World Dryer's HEPA filtration provides no hygiene benefit whatsoever. World Dryer's energy claims are false because they are predicated on false drying times.
8. World Dryer knew or should have known these claims were false. In July 2016, World Dryer participated in creating the UL Product Category Rules for hand dryers.

World Dryer held three of ten manufacturer seats on the committee: Dave Fisher, Scott Wood, and Erin Gibbemeyer. World Dryer helped write the testing standards—then chose not to seek certification under those standards.

9. Unlike Dyson (which holds NSF P335 certification) and Excel Dryer (which maintains SmartEPD certification), World Dryer holds no third-party hygiene certification and no Environmental Product Declaration for any hand dryer product. World Dryer makes claims without external verification, knowing those claims cannot withstand independent scrutiny.
10. Plaintiffs bring this action seeking replacement of all World Dryer equipment installed in McDonald's locations, restitution for decades of equipment purchases made in reliance on false representations, remediation of mold damage to Plaintiff McDonald's Real Estate Company's properties, and damages sufficient to address the contamination infrastructure World Dryer sold into the largest restaurant chain in the world.

II. THE PARTIES

11. Plaintiff McDonald's USA, LLC is a Delaware limited liability company with its principal place of business at 110 North Carpenter Street, Chicago, Illinois 60607. McDonald's USA, LLC operates and franchises McDonald's restaurants throughout the United States. McDonald's USA, LLC specifies equipment for installation in McDonald's restaurants, including hand dryers manufactured by Defendant.
12. Plaintiff McDonald's Real Estate Company is a Delaware corporation with its principal place of business at 110 North Carpenter Street, Chicago, Illinois 60607. McDonald's Real Estate Company owns the real property and buildings at approximately 70-80% of McDonald's restaurant locations in the United States. McDonald's Real Estate Company has suffered property damage as a direct result of Defendant's defective products.

13. Defendant World Dryer Corporation is a Delaware corporation and subsidiary of Zurn Elkay Water Solutions Corporation. World Dryer was originally headquartered in Berkeley, Illinois—a Chicago suburb—for decades before its acquisition by Zurn Industries in 2017. World Dryer manufactures, markets, distributes, and sells commercial hand dryers throughout the United States, including in Illinois.

III. JURISDICTION AND VENUE

14. This Court has subject matter jurisdiction over this action pursuant to Article VI, Section 9 of the Illinois Constitution and 735 ILCS 5/2-209, as this action involves claims arising under Illinois law and seeks damages exceeding the minimum jurisdictional threshold.
15. This Court has personal jurisdiction over Defendant World Dryer Corporation. World Dryer was originally headquartered in Berkeley, Illinois, conducted substantial business operations in Illinois for decades, sold products throughout Illinois, specifically targeted Illinois customers including Plaintiffs, and committed tortious acts in Illinois giving rise to this action.
16. Venue is proper in Cook County pursuant to 735 ILCS 5/2-101 because Plaintiffs maintain their principal places of business in Cook County, a substantial part of the events giving rise to this action occurred in Cook County, and Defendant conducted substantial business operations in Cook County.

IV. FACTUAL ALLEGATIONS

A. The McDonald's-World Dryer Relationship

17. World Dryer Corporation was founded by George Clemens in 1948 in the Chicago area. World Dryer was headquartered in Berkeley, Illinois—a Chicago suburb—for decades before its acquisition by Zurn Industries in 2017.

18. McDonald's Corporation was founded by Ray Kroc in Des Plaines, Illinois in 1955. McDonald's has maintained its headquarters in the Chicago area throughout its corporate history, currently operating from 110 North Carpenter Street in Chicago.
19. As Chicago-area neighbors, World Dryer and McDonald's developed a business relationship spanning multiple decades. Industry sources described McDonald's adoption of World Dryer products as "a big win" for World Dryer—"two [units] multiplied by thousands of locations." That relationship has continued through multiple generations of World Dryer products and multiple generations of McDonald's restaurant designs.
20. Today, approximately 27,400 World Dryer units operate in McDonald's approximately 13,700 U.S. locations. Multiple generations of World Dryer products have been installed, including current-generation VERDEdri, SMARTdri, SLIMdri, and Airforce models—all marketed with drying time claims of 15 seconds or less, all failing to achieve those claims by factors of 5× to 9×.
21. McDonald's franchise agreements permit zero modification to equipment specifications. Each franchisee operates as a node of a unified system. Corporate specifies equipment. Franchisees install what corporate dictates. When World Dryer products were specified for McDonald's restrooms, they were installed in every location—a contamination infrastructure deployed at scale based on false representations.

B. World Dryer's False and Misleading Claims

22. World Dryer markets and sells multiple hand dryer models with drying time claims of 15 seconds or less, including: VERDEdri (12-second claimed drying time); SLIMdri (10-15 second claimed drying time); Airforce (12-second claimed drying time); and SMARTdri (10-12 second claimed drying time).

23. World Dryer's hygiene claims include but are not limited to: "HEPA filter captures 99.97% of particles"; "The air returned to the room is actually cleaner than the air taken in"; "Cleaner than Air HEPA filtration system"; "SteriTouch antimicrobial technology inhibits the growth of bacteria, mold, and fungus."
24. World Dryer's energy and environmental claims include but are not limited to: "3.16 watt-hrs per use"; "Energy efficient—low operating cost"; claims supporting LEED certification credits for "EA Prerequisite Minimum Energy Performance" and "MR Credit: Building Product Disclosure and Optimization." These energy claims are predicated on the false drying time claims.
25. World Dryer's marketing materials expressly target food service establishments. World Dryer promotes its products as suitable for "high traffic areas" including restaurants. World Dryer knew McDonald's was using its products in food service restrooms where hand hygiene directly affects food safety.

C. World Dryer's Participation in Creating Industry Testing Standards

26. On July 26, 2016, UL Environment published the first global Product Category Rule ("PCR") for hand dryers. The PCR establishes testing methodology for evaluating hand dryer environmental claims. The development committee consisted of ten manufacturer seats and two UL representatives.
27. World Dryer was one of three manufacturers that "collaborated in the creation of the PCR." World Dryer held three of ten manufacturer seats on the PCR committee: Dave Fisher, Scott Wood, and Erin Gibbemeyer. World Dryer participated in writing the rules that would govern hand dryer certification.
28. The UL PCR establishes a residual moisture threshold of 0.25 grams as the standard for "dry" hands—2.5× weaker than the NSF P335 standard of 0.1 grams. This threshold, and the testing methodology used to measure it, was approved by a committee on which manufacturers held 80% of the seats.

29. World Dryer helped write the rules. World Dryer then chose not to seek certification under those rules. World Dryer holds no Environmental Product Declarations for any hand dryer product. World Dryer holds no NSF P335 certification. World Dryer makes performance claims without any third-party verification—knowing those claims cannot withstand independent scrutiny.
30. This is consciousness of inability to comply. A manufacturer that believed its products could meet certification standards would seek certification. World Dryer participated in creating the standards, then refused to submit its products for testing under those standards.

D. The Science Is The Product

31. 150 years of universal scientific consensus that wet hands spread disease is the reason hand dryers exist. Washing hands exists to reduce microorganism count. Drying hands exists to reduce microorganism transfer. This is not controversial science. This is the foundational premise of an entire product category.
32. Semmelweis established the importance of hand hygiene in 1847. Patrick et al. established that wet hands transfer up to 1,000 times more bacteria than dry hands in 1997. World Dryer cites this research in its own marketing. World Dryer uses the science to sell the products. World Dryer is bound by the science when the products fail.
33. World Dryer cannot claim ignorance of this science. This is the reason these products exist. The entire value proposition of a hand dryer depends on hands leaving the device cleaner than they entered. World Dryer's products deliver the opposite: hands leave wetter than hygiene standards permit and contaminated at 50-110× ambient levels.

E. The Standard Is Indivisible

34. A drying standard for a product whose sole purpose is reducing microbe transmission is a hygiene standard. These two things cannot be separated. Hands must leave the device as clean or cleaner than when they entered. This is not a design preference—it is the only acceptable outcome for a product that exists to support hand hygiene.
35. World Dryer's products fail at every element of this purpose: They do not dry hands within claimed times. They amplify contamination rather than reducing it. They disperse contaminated water throughout the restroom. They cause visible mold colonization on surrounding surfaces.
36. You cannot sell a product into the hand hygiene chain and disclaim responsibility for hygiene outcomes. World Dryer marketed these products as hygienic. World Dryer targeted food service establishments. World Dryer knew exactly where these products would be used and why. World Dryer owns the hygiene failures that result.

F. The Empirical Proofs

37. The scientific evidence presented below is fully documented, transparent, and open to independent verification. All underlying data, images, sampling records, and chain-of-custody materials have been preserved at multiple locations and will be made publicly available in their entirety at the time of filing. These conclusions are not asserted as matters of authority, but as matters of record: they are testable, falsifiable, and reproducible by any qualified party using the same methods and materials.
38. The research methodology, data, and analysis are published in eleven studies with Digital Object Identifiers on Zenodo and at the Harvard Dataverse. All raw data, 1.3TB, is hosted at Cloudflare and Backblaze. The studies are publicly available,

peer-accessible, and independently verifiable. All of this material is preserved on 50 hard drives distributed to 50 trusted individuals.

39. The findings summarized below are not "studies that suggest" or "evidence that indicates." These are physical facts established to scientific certainty.

1. Drying Time Performance Testing Results

40. Performance curves from three manufacturers across 451 drying time trials demonstrated convergent correlation coefficients exceeding $r = 0.99$ across all pairwise comparisons ($p < 0.001$). World Dryer products were tested alongside Dyson and Excel Dryer products. All three manufacturers' products—despite different engineering approaches, motor technologies, airflow designs, and price points—converged on identical drying curves.
41. In 31 trials conducted at manufacturers' exact claimed dry times—8 seconds for Excel, 10-12 seconds for Dyson, 12 seconds for World Dryer—zero trials achieved any certification threshold. The most favorable result from all trials was 1.67 grams. Standards require 0.1 to 0.25 grams. Actual performance documented 1.67 grams at best, 2.5 to 3.0 grams typically—1000% to 2500% over specification.
42. NSF P335 Section 6.3 establishes clear, quantified requirements: residual moisture of 0.1 grams or less at manufacturer-specified times, with 95% compliance across 20 trials. Independent testing conducted 460 trials—more than twenty times the sample size required for NSF certification. Zero trials achieved 0.1 grams or less at manufacturer-specified times. The average residual moisture was 2.77 grams—nearly 28 times the allowed threshold. The NSF standard requires 95% compliance. Actual compliance was zero percent. The deviation is not marginal. It is 2,770 percent.

43. The probability that products achieving zero percent compliance in 460 trials would achieve 95% compliance in a 20-trial certification test approaches zero ($p < .001$, $r = .99$). This is not sampling variation. It is systematic failure.
44. World Dryer VERDEdri units were specifically tested on December 5, 2025, following a formal prediction documented December 4, 2025: World Dryer products would fail identically to Dyson and Excel because this is a physics issue, not an engineering problem. The prediction was confirmed. World Dryer achieved first compliance with the 0.25 gram UL threshold at 40 seconds—233% longer than the manufacturer's 12-second claim. Blouch, R.A. Jr. (2025), Catastrophic Time-To-Dry Failures: Bi-Modal Drying Physics Across Three Manufacturers, DOI: 10.5281/zenodo.17869567.

2. The Physical Impossibility of Certified Drying Times

45. The claimed drying times are not merely difficult to achieve. They are physically impossible to achieve.
46. Water removal follows a bi-modal decay pattern. The first phase removes loose surface water quickly—the "shear phase." Loose water (surface droplets) can be mechanically stripped by air shear in 5-12 seconds, accounting for 70-80% of total water volume but leaving hands visibly wet. The second phase removes bound water slowly—the "evaporation phase." Bound water (water held by capillary action in skin texture) resists mechanical removal regardless of air velocity, requiring 60-80 additional seconds of exposure. Physics does not negotiate.
47. All dryers—regardless of manufacturer, technology, air velocity, or price—converge on 80 to 90 seconds of drying time to approach the 0.1 gram NSF drying threshold, with each brand and model having a slightly different profile but with all drying curves fitting together in a consistent pattern. R-squared across all trials of 0.9998—near-perfect fit.

48. No engineering approach overcomes this physical constraint. The bound water mechanism is not a design flaw that better engineering could solve—it is a property of water interaction with human skin. Every manufacturer faces the same physics. Every manufacturer's claims fail identically. World Dryer's engineering cannot overcome thermodynamics.
49. The joint probability of three independent manufacturers producing correlation coefficients all exceeding $r = 0.99$ under the null hypothesis (that performance varies by manufacturer) is less than one in one billion. This is not coincidence. This is physics.

3. Contamination Results: Microbe Load in Output Dryer Air

50. Microbial Contamination Studies ($n=87$ and $n=49$) documented bacterial amplification across all tested units. The methodology was consistent: measure ambient air at a realistic drying time, then measure dryer output air at a realistic drying time, then calculate amplification factor.
51. Results: 136/136 (100%) of tested units amplified contamination. Zero dryers reduced bacterial load. The median amplification factor is 49.6 to 110.5 times ambient levels. The probability of this occurring by chance is approximately 10 to the negative 41st power ($p < 10^{-41}$).
52. Products marketed as "hygienic" amplify bacterial contamination by 50 to 110 times compared to ambient room air—literally the opposite of hygienic. Blouch, R.A. Jr. (2025), Transmission of Bacteria and Fungus via Dyson and Xlerator Hand Dryers, DOI: 10.5281/zenodo.15504115; Blouch, R.A. Jr. (2025), Validation of Hand Dryer Microbial Amplification, DOI: 10.5281/zenodo.17859894.
53. The test remains simple: remove the dryer from the room. Is it more or less sanitary?

4. HEPA Filtration Provides No Hygiene Benefit

- 54. World Dryer markets HEPA filtration with claims that it captures "99.97% of particles" and delivers air that is "cleaner than the air taken in." Independent testing compared HEPA-filtered hand dryers to non-HEPA devices.
- 55. Statistical comparison of HEPA versus non-HEPA devices: $p = 0.803$. There was no statistically significant difference. HEPA filters address intake air contamination—but contamination originates downstream of the filter, from internal components, accumulated biofilm, and user hand bacteria aerosolized during drying.
- 56. World Dryer's SteriTouch antimicrobial technology likewise provides no measurable hygiene benefit. Antimicrobial surface treatment addresses surface contamination—it does not address airborne contamination amplified 50-110× over ambient.
- 57. The HEPA and SteriTouch claims are technically accurate in isolation and functionally meaningless in operation. They address problems that are not the source of contamination while ignoring the actual contamination pathway.

5. Water Dispersal: The Absent Standard

- 58. High-speed video documentation established that dispersal-type hand dryers spray water at high velocity in all directions during every use. Each use disperses approximately 7.3 grams of water into the restroom environment—onto the user, the walls, the floor, and into the air as aerosol.
- 59. Dispersal dryers operate at air velocities of 400 to 690 kilometers per hour—hurricane force. At these speeds, water is mechanically stripped from hands and thrown into the room with very little evaporation occurring as part of the removal process. The physics is not subtle. It is violent.

60. The dispersed water cannot be sterile. Microbial studies documented 50-110× bacterial amplification in dryer output air. The contamination measured on petri dishes arrived via the air stream. The air stream contains water droplets. Those droplets originated from users' hands—hands that may or may not have been properly washed.
61. CDC and WHO guidelines require soap and twenty seconds of washing for effective hand hygiene. Compliance studies estimate proper handwashing rates at 5-30% in public restrooms. The dryer does not verify compliance. The dryer disperses whatever is on the user's hands—properly washed or not—throughout the room.
62. Poor washing plus a paper towel equals contamination contained in the towel and disposed in trash. Poor washing plus dispersal dryer equals contamination broadcast to surfaces and people in the space. Every user's output becomes every other user's input.
63. Patrick et al. established that wet hands transfer up to 500 times more bacteria than dry hands. World Dryer's products leave hands wet at claimed drying times, creating the precise condition the research warns against—then amplify the contamination and disperse it throughout the room. Blouch, R.A. Jr. (2025), Visual Analysis of Water Dispersion Patterns, DOI: 10.5281/zenodo.15503304.

6. Physical Environmental Mold Contamination: The Plume of Filth

64. The Wandering Plume of Filth Study documented visible contamination patterns beneath hand drying equipment. Researchers randomly entered 127 public restrooms and visually examined the areas under the dryers and towel dispensers using NIOSH and FDA standard mold assessment protocols.
65. Results: Every dispersal-type hand dryer installation exhibited visible wall mold. One hundred percent. The contamination pattern radiates outward from the device,

originating narrow at the unit and fanning toward the floor like a plume—which is exactly what it is.

66. Statistical comparison: $\chi^2 = 72.0$, $p < 0.001$. Dispersal dryers show 8× higher mold rates than white paper towel installations (100% vs. 13%).
67. Independent laboratory analysis by Hayes Microbial Consulting (EPA Laboratory ID: VA01419) confirmed fungal presence in wall contamination samples. Species identified include *Aspergillus*/*Penicillium*, *Alternaria*, *Cladosporium*, and *Chaetomium*—organisms documented by CDC and the Institute of Medicine as respiratory hazards and allergens.
68. World Dryer's SteriTouch antimicrobial technology is marketed to "inhibit the growth of bacteria, mold, and fungus." The claim addresses the dryer surface. It does not address the mold growing on the walls beneath every installation. The problem is not on the device—it is downstream of the device, in the environment the device contaminates. Blouch, R.A. Jr. (2025), The Wandering Plume of Filth, DOI: 10.5281/zenodo.17860971.
69. The plume is visible evidence of the invisible contamination. The mold proves the dispersal. The dispersal proves the contamination. Remove the dryer and the plume disappears.

7. The Paper Towel Alternative

70. Paper towel contamination studies produced a novel finding: prior paper towel research never sorted by towel type.
71. White paper towels are statistically equivalent to ambient room air in microbial content. In testing ($n=29$), 55.6% of white towels were completely sterile. The remainder contained 1-2 CFU. Mean contamination: 0.56 CFU. Wilcoxon signed-rank test against ambient air: $p = 0.23$ —no significant difference.

72. Brown paper towels are contaminated from the factory. 100% of samples contained microbial colonies, ranging from 6-186 CFU across both studies. The contamination is intrinsic to the product.
73. Dual-intervention tests: dryer and paper towels tested in the same restroom on the same day under identical ambient conditions. Hand dryers produced 138-407× more contamination than white paper towels. The difference is the device, not the environment.
74. Paper towels dry hands in 20-30 seconds to 0.1g residual moisture—faster than dryers at actual performance. Water is absorbed into the towel and disposed in trash. No dispersal. No aerosol. No plume. Blouch, R.A. Jr. (2025), Paper Towel Contamination Study, DOI: 10.5281/zenodo.15502911.
75. Remove the dryer. Install a white paper towel dispenser. Every problem documented in this complaint disappears. The infrastructure exists. The cost is equivalent. The hypothetical answers itself.

8. The Green Energy Catastrophe

76. False drying time claims corrupt every environmental calculation built upon them. Energy consumption is power multiplied by time. When manufacturers claim 10-12 seconds but products require 70-90 seconds, energy consumption increases sevenfold to ninefold. The entire environmental marketing narrative collapses.
77. World Dryer claims 3.16 watt-hours per use. This claim assumes 10-12 second drying times. At actual drying times of 70-90 seconds, energy consumption rises to 22-28 Wh per dry—7 to 9 times higher than claimed.
78. Using manufacturers' own commissioned lifecycle data, the claimed environmental advantage disappears entirely. At actual drying times, hand dryers produce CO₂ emissions equivalent to or greater than paper towels.

79. World Dryer's LEED credit claims are predicated on false energy specifications. Buildings that specified World Dryer products based on energy claims contain false data in their LEED certification calculations.
80. Products marketed as environmentally superior consume 7-9 times more energy than claimed and provide no CO₂ advantage over paper towels. Blouch, R.A. Jr. (2025), An Empirical Refutation of Hand Dryer Green Energy Claims, DOI: 10.5281/zenodo.17859198.

9. The Causal Chain

81. The false drying time claim is the root cause of environmental contamination and energy/environmental failure. Each step follows inevitably from the one before:
82. World Dryer claims 10 to 15 second drying times. Actual drying requires 80 to 90 seconds. The claim is false by 500 to 900 percent.
83. If a user stops drying at claimed times, 2.5 to 3.5 grams of water remain on hands. That water has been infested with the microorganisms in the dryer output air stream. Carrying that water after dryer use increases microorganism transfer by 1000×.
84. If a user dries until hands are dry—80-90 seconds—microorganism amplifications on the hands increase over room air by 50-110×. Energy and CO₂ production become equal to or greater than that of paper towels.
85. At 400 to 690 km/h air velocity in a dispersal-type dryer, water is violently blown onto walls, floors, users, and into the air as aerosol. Dispersed water carries microorganisms from users' hands and the output air jets, contaminating the room for the users who come after.

86. Continuous deposition grows visible mold in 100% of installations. The restroom becomes a permanent contamination zone. Everyone who enters is exposed, regardless of whether they use the dryer.
87. The hypothetical answers itself. Remove the dryer and every step in this chain disappears. The water stays on hands or is absorbed by a towel. The mold doesn't grow. The contamination zone doesn't form. The dryer is not incidental to the harm. The dryer is the harm.

10. The Users' Dilemma

88. Users of World Dryer hand dryers face two options, both creating harm.
89. Option one: Use the dryer for the specified 10 to 15 seconds. Leave with wet hands, freshly sprayed with bacteria and fungus. Transfer bacteria to every surface touched thereafter—doorknobs, phones, keyboards, other people, food.
90. Option two: Use the dryer for 70 to 90 seconds to actually achieve dry hands. During this extended exposure, breathe air contaminated by liquid aerosols with 50 to 110 times room air microorganism load and be sprayed with liquid water carrying the same.
91. A user cannot achieve dry hands without extended exposure to contaminated output or pull out prematurely and leave with wet hands transmitting organisms at a rate 500 times higher than dry hands. A user cannot limit exposure without leaving with wet hands. The product design creates an inescapable dilemma.
92. Following the rules makes you sick. Every option the device provides leads to the same place: elevated contamination exposure. The user who trusts World Dryer's claims and uses the dryer for the claimed time is worse off than the user who ignores it.

G. The Food Service Contamination Pathway

93. The contamination pathway in food service operates as follows: (a) Employee uses restroom; (b) Employee washes hands as required by food safety regulations; (c) Employee "dries" hands with World Dryer device; (d) Employee's hands remain wet at claimed drying times, contaminated with 50-110× amplified bacteria; (e) Employee touches door handles, equipment, prep surfaces, and food products; (f) Customer consumes food product.
94. This is direct vectoring of contamination from restroom device through employee hands to food product to customer consumption. The pathway operates every shift, multiple times per hour, at 13,700 locations, with 69 million daily customer exposures globally.
95. McDonald's requires employees to wash hands after restroom use precisely because hand hygiene prevents foodborne illness. World Dryer's products defeat this purpose. The hand dryer positioned between handwashing and food handling amplifies the contamination the handwashing was designed to remove.
96. The food service contamination pathway is not speculative. It is the necessary consequence of devices that: (1) leave hands wet at claimed times, (2) amplify contamination 50-110× over ambient, and (3) are positioned as the final step before employees return to food handling. Every element is documented. Every step is inevitable.

H. Property Damage

97. Plaintiff McDonald's Real Estate Company owns the buildings at approximately 70-80% of McDonald's locations worldwide. Every building with World Dryer dispersal-type devices has sustained property damage from water dispersal and mold colonization.

98. The plumes visible beneath World Dryer installations average 10 square feet in area. EPA laboratory analysis confirmed the presence of *Aspergillus*, *Penicillium*, *Alternaria*, *Cladosporium*, and *Chaetomium*—species classified as respiratory hazards and allergens by CDC and the Institute of Medicine.
99. At approximately 27,400 World Dryer units across approximately 13,700 U.S. locations, total contaminated wall area exceeds 270,000 square feet of property damage caused directly by World Dryer's defective products.
100. Remediation requires removal of contaminated drywall, treatment of underlying structure, replacement of wall materials, and installation of alternative hand drying equipment. The scope of remediation extends to every McDonald's location with World Dryer equipment.
101. McDonald's Real Estate Company has suffered concrete property damage—visible, documented, and directly caused by World Dryer's products—independent of any operational or public health claims.

I. McDonald's Reasonable Reliance

102. McDonald's reasonably relied on World Dryer's representations. McDonald's and World Dryer were Chicago-area neighbors with a business relationship spanning decades. World Dryer marketed its products specifically for food service applications. World Dryer knew its products would be installed in McDonald's restrooms.
103. The scientific research refuting World Dryer's claims did not exist until 2023-2025. McDonald's could not have known that World Dryer's representations were false because the methodology to prove them false had not been developed. The research program that established these facts required over two years and eleven separate studies.

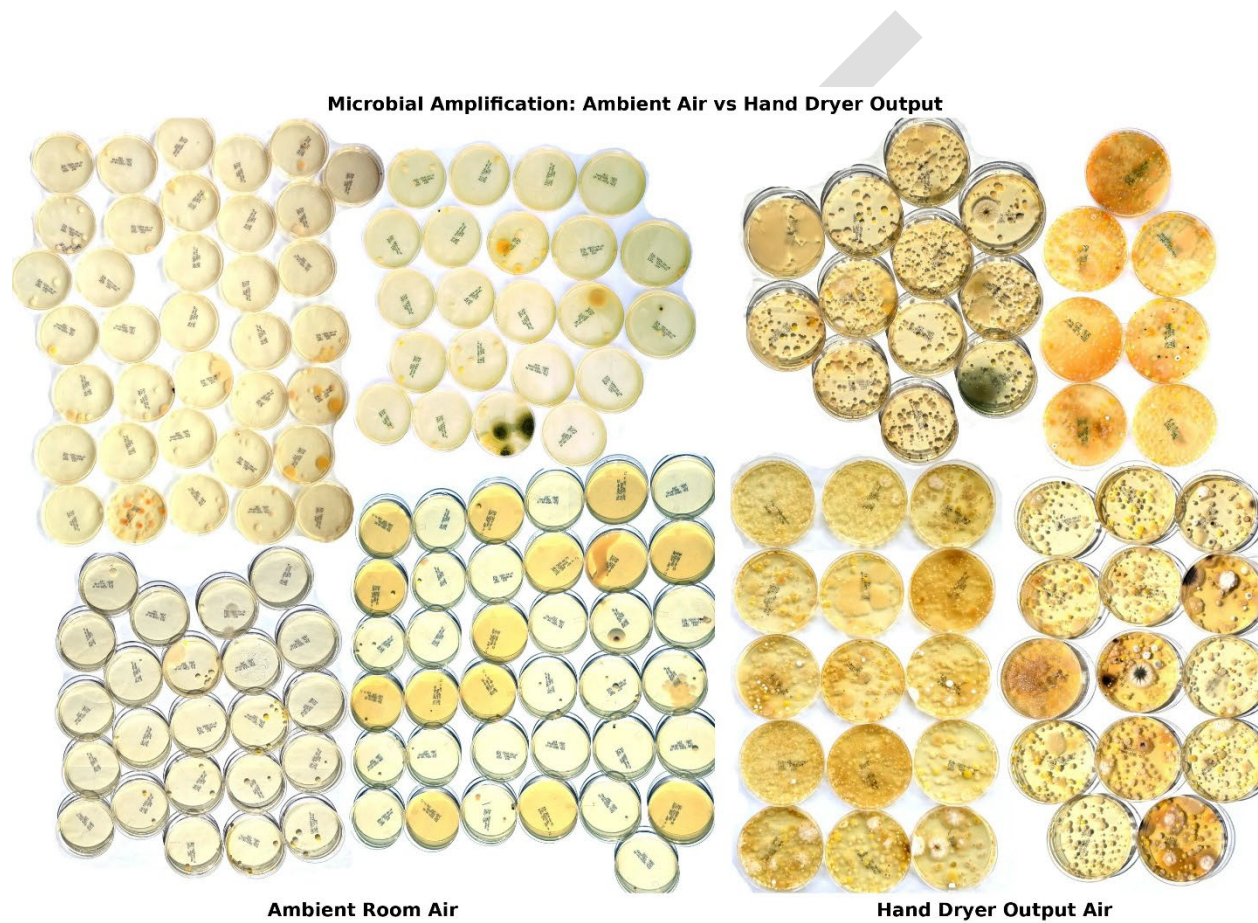
104. McDonald's reliance was not merely reasonable—it was the only option available. World Dryer held itself out as a hand hygiene solution provider. World Dryer made specific claims about drying time, hygiene, and energy efficiency. No independent research existed to contradict those claims. McDonald's had no basis to question representations from a trusted long-term supplier.
105. World Dryer's participation in the UL PCR committee—and subsequent refusal to seek certification under the rules it helped write—was not disclosed to McDonald's. Had McDonald's known that World Dryer declined to submit its products for independent verification, McDonald's would not have specified World Dryer equipment.

J. Timeliness

106. Plaintiffs' claims are timely. The independent scientific research establishing World Dryer's misrepresentations was published between September 2023 and December 2025. Plaintiffs could not have discovered the falsity of World Dryer's representations before this research was available.
107. World Dryer's false marketing continues. World Dryer's products remain in McDonald's locations. World Dryer continues to make the same false claims. Plaintiffs' injuries continue to accrue daily.
108. World Dryer's misconduct constitutes a continuing course of wrongful action. Each day that World Dryer markets false drying time claims, each day that World Dryer products amplify contamination in McDonald's restrooms, each day that mold accumulates on McDonald's property—constitutes a new injury.

K. The Hypothetical

109. All aspects of hand dryer performance can be understood if you remove it from the room. Does a dryer improve or degrade the room by being there?



V. CAUSES OF ACTION

COUNT I: BREACH OF EXPRESS WARRANTY

110. Plaintiffs incorporate by reference all preceding paragraphs as though fully set forth herein.
111. World Dryer made express warranties including: drying times of 10-15 seconds; HEPA filtration delivering air "cleaner than" intake air; SteriTouch antimicrobial technology inhibiting bacteria, mold, and fungus growth; energy consumption of 3.16 watt-hours per use; and suitability for food service and high-traffic applications.
112. These warranties formed the basis of the bargain. McDonald's relied on these warranties when specifying World Dryer equipment for installation across thousands of restaurant locations.
113. World Dryer's products failed to conform. Drying times are 7-9× longer than warranted. HEPA filtration provides no hygiene benefit ($p = 0.803$). SteriTouch technology does not prevent mold colonization on surrounding surfaces. Energy consumption is 7-9× higher than warranted. The products amplify contamination rather than providing hygiene benefits.
114. As a direct and proximate result of World Dryer's breach of express warranty, Plaintiffs have suffered damages in amounts to be proven at trial.

COUNT II: BREACH OF IMPLIED WARRANTY OF MERCHANTABILITY

115. Plaintiffs incorporate by reference all preceding paragraphs as though fully set forth herein.
116. World Dryer is a merchant with respect to hand dryers.

117. World Dryer impliedly warranted that its hand dryers were merchantable and fit for the ordinary purpose for which such goods are used—namely, drying hands hygienically.
118. World Dryer's hand dryers are not fit for the ordinary purpose of hand drying because they do not dry hands within claimed times, amplify rather than reduce contamination, and cause environmental contamination. A hand dryer that leaves hands wet and amplifies bacteria is not merchantable.
119. As a direct and proximate result of World Dryer's breach of the implied warranty of merchantability, Plaintiffs have suffered damages in amounts to be proven at trial.

COUNT III: BREACH OF IMPLIED WARRANTY OF FITNESS FOR PARTICULAR PURPOSE

120. Plaintiffs incorporate by reference all preceding paragraphs as though fully set forth herein.
121. World Dryer knew Plaintiffs required hand dryers for hygienic hand drying in high-traffic food service restrooms. World Dryer marketed its products for food service applications. World Dryer knew its products would be used by food service employees between restroom use and food handling.
122. Plaintiffs relied on World Dryer's skill and judgment in selecting hand dryers for this particular purpose.
123. World Dryer's hand dryers are not fit for hygienic food service hand drying because they amplify contamination, leave hands wet, and create a direct contamination pathway from restroom to food product. Products that amplify bacteria 50-110× are the opposite of fit for food service hygiene applications.

124. As a direct and proximate result of World Dryer's breach of the implied warranty of fitness for particular purpose, Plaintiffs have suffered damages in amounts to be proven at trial.

COUNT IV: STRICT PRODUCTS LIABILITY — DESIGN DEFECT

125. Plaintiffs incorporate by reference all preceding paragraphs as though fully set forth herein.
126. World Dryer's hand dryers were defective in design when they left World Dryer's control. The defect is the design itself—not a manufacturing flaw. The dispersal mechanism—high-velocity air that sprays water throughout the restroom—is inherent to the product design. No manufacturing variance is required for the products to amplify contamination, fail to dry hands, and cause mold colonization. These outcomes occur in 100% of normal use.
127. Under the consumer expectation test, ordinary consumers expect hand dryers to dry hands within claimed times without amplifying contamination. World Dryer's products fail both expectations by factors of 7-9× (drying time) and 50-110× (contamination).
128. Under the risk-utility test, safer alternatives exist: paper towel dispensers achieve superior drying without contamination amplification, dispersal, or mold colonization—at equivalent or lower total cost of ownership.
129. As a direct and proximate result of the design defect, Plaintiffs have suffered damages in amounts to be proven at trial.

COUNT V: STRICT PRODUCTS LIABILITY — FAILURE TO WARN

130. Plaintiffs incorporate by reference all preceding paragraphs as though fully set forth herein.

131. World Dryer knew or should have known its products do not dry hands within claimed times, amplify contamination 50-110×, disperse contaminated water throughout the restroom environment, and cause mold colonization on surrounding surfaces.
132. World Dryer failed to warn Plaintiffs of these hazards. World Dryer not only failed to warn but affirmatively represented the opposite: that its products were hygienic, efficient, and suitable for food service applications.
133. Adequate warnings would have altered Plaintiffs' decision to specify World Dryer equipment.
134. As a direct and proximate result of World Dryer's failure to warn, Plaintiffs have suffered damages in amounts to be proven at trial.

COUNT VI: NEGLIGENCE

135. Plaintiffs incorporate by reference all preceding paragraphs as though fully set forth herein.
136. World Dryer owed Plaintiffs a duty of reasonable care in the design, manufacture, testing, marketing, and sale of its products.
137. World Dryer breached this duty by making performance claims it knew or should have known were false; by participating in creating testing standards and then refusing to seek certification under those standards; by marketing products for food service applications knowing they amplify contamination; by failing to test real-world performance; and by failing to warn of known hazards.
138. World Dryer's negligence was a direct and proximate cause of Plaintiffs' damages.
139. As a direct and proximate result of World Dryer's negligence, Plaintiffs have suffered damages in amounts to be proven at trial.

COUNT VII: NEGLIGENT MISREPRESENTATION

140. Plaintiffs incorporate by reference all preceding paragraphs as though fully set forth herein.
141. World Dryer supplied false information to Plaintiffs in the course of its business: drying time claims, hygiene claims, energy specifications, and suitability for food service applications.
142. World Dryer failed to exercise reasonable care in obtaining or communicating this information. Basic testing of real-world performance would have revealed that the claims were false.
143. Plaintiffs justifiably relied on World Dryer's representations in specifying World Dryer equipment for thousands of restaurant locations.
144. As a direct and proximate result of World Dryer's negligent misrepresentation, Plaintiffs have suffered damages in amounts to be proven at trial.

COUNT VIII: VIOLATION OF ILLINOIS CONSUMER FRAUD ACT (815 ILCS 505)

145. Plaintiffs incorporate by reference all preceding paragraphs as though fully set forth herein.
146. The Illinois Consumer Fraud and Deceptive Business Practices Act, 815 ILCS 505/1 et seq., prohibits unfair or deceptive acts or practices in the conduct of trade or commerce.
147. World Dryer engaged in deceptive acts by making false drying time claims, false hygiene claims regarding HEPA filtration and SteriTouch technology, false energy efficiency claims, and false representations regarding suitability for food service applications. World Dryer engaged in unfair practices by participating in creating industry testing standards and then refusing to seek certification under those standards while continuing to make performance claims.

148. World Dryer's conduct was willful and knowing. World Dryer participated in creating the UL PCR testing methodology, then chose not to seek certification. World Dryer knew or should have known that its performance claims were false.
149. Plaintiffs suffered actual damages as a result of World Dryer's violations.
150. Pursuant to 815 ILCS 505/10a, Plaintiffs are entitled to actual damages, punitive damages, and reasonable attorney's fees and costs.

COUNT IX: UNJUST ENRICHMENT

151. Plaintiffs incorporate by reference all preceding paragraphs as though fully set forth herein.
152. Plaintiffs conferred a benefit on World Dryer by purchasing approximately 27,400 hand dryer units over decades.
153. World Dryer accepted this benefit with knowledge its products did not perform as represented.
154. It would be unjust for World Dryer to retain this benefit. Plaintiffs paid for hygienic hand dryers. Plaintiffs received contamination amplifiers.
155. Plaintiffs are entitled to restitution in amounts to be proven at trial.

VI. PRAYER FOR RELIEF

WHEREFORE, Plaintiffs respectfully request judgment against Defendant as follows:

156. Compensatory damages including: replacement costs for all World Dryer equipment; costs of mold assessment and remediation at all affected locations; costs of alternative hand drying equipment; operational disruption during replacement and remediation; and all other consequential damages.

157. Restitution of all amounts paid for hand dryer products that failed to perform as represented.
158. Punitive damages sufficient to punish World Dryer for willful and knowing deceptive conduct.
159. Injunctive relief requiring World Dryer to: (a) cease marketing products with false drying time claims; (b) cease marketing products as "hygienic" without third-party certification; (c) disclose to past purchasers that products do not perform as represented; and (d) remove McDonald's from any marketing materials.
160. Attorneys' fees and costs pursuant to 815 ILCS 505/10a.
161. Pre-judgment and post-judgment interest at the maximum legal rate.
162. Such other and further relief as the Court deems just and proper.

VII. JURY DEMAND

163. Plaintiffs demand a trial by jury on all issues so triable.

Respectfully submitted,

McDONALD'S USA, LLC and

McDONALD'S REAL ESTATE COMPANY

By: _____

Their Attorneys

Dated: _____

EXHIBITS

Journal Preprints

[EXHIBIT-A] Transmission of Bacteria and Fungus via Dyson and Xlerator Hand Dryers, Blouch, R. A. Jr. (2025); DOI: 10.5281/zenodo.15504115; Journal Preprint 1 of 11

[EXHIBIT-B] Testing the Validity of Hand Dryer Drying Time Specifications, Blouch, R. A. Jr. (2025); DOI: 10.5281/zenodo.15503698; Journal Preprint 2 of 11

[EXHIBIT-C] Visual Analysis of Water Dispersion Patterns, Blouch, R. A. Jr. (2025); DOI: 10.5281/zenodo.15503304; Journal Preprint 3 of 11

[EXHIBIT-D] Bacterial and Fungal Contamination Assessment of Paper Towel Types, Blouch, R. A. Jr. (2025); DOI: 10.5281/zenodo.15504144; Journal Preprint 4 of 11

[EXHIBIT-E] Systematic Performance Failure in Commercial Hand Dryers, Blouch, R. A. Jr. (2025); DOI: 10.5281/zenodo.17858443; Journal Preprint 5 of 11

[EXHIBIT-F] Baseline Water Mass on Freshly Washed Hands, Blouch, R. A. Jr. (2025); DOI: 10.5281/zenodo.17858834; Journal Preprint 6 of 11

[EXHIBIT-G] An Empirical Refutation of Green Energy Claims, Blouch, R. A. Jr. (2025); DOI: 10.5281/zenodo.17859198; Journal Preprint 7 of 11

[EXHIBIT-H] Catastrophic Time-To-Dry Failures via Bi-Modal Mechanism, Blouch, R. A. Jr. (2025); DOI: 10.5281/zenodo.17869567; Journal Preprint 8 of 11

[EXHIBIT-I] Validation of Hand Dryer Microbial Amplification, Blouch, R. A. Jr. (2025); DOI: 10.5281/zenodo.17859894; Journal Preprint 9 of 11

[EXHIBIT-J] The Wandering Plume of Filth, Blouch, R. A. Jr. (2025); DOI: 10.5281/zenodo.17860971; Journal Preprint 10 of 11

Complete List of Testing Data Files

[EXHIBIT-K] Complete Data File Index, Blouch 2025

Dryer Time Test Results Graphs

[EXHIBIT L] Comprehensive All-Trials Time-To-Dry Hand Dryer Data Graph

Petri Dish Images

[EXHIBIT-M] 136 Ambient Room Air Petri Dish Images Sampled In Front of Machines, Blouch, R. A. Jr. (2025)

[EXHIBIT-N] 60 Hand Dryer Output Air Jet Petri Dish Sample Images, Blouch, R. A. Jr. (2025)

[EXHIBIT-O] 28 Brown Paper Towel Petri Dish Sample Images, Blouch, R. A. Jr. (2025)

[EXHIBIT-P] 47 White Paper Towel Petri Dish Sample Images, Blouch, R. A. Jr. (2025)

Plume of Filth Images

[EXHIBIT-Q] Hand Dryer Plume of Filth Images

[EXHIBIT-R] Hand Dryer Mold Images with Corroborating Petri Dish Test Images

Comprehensive summary articles

[EXHIBIT-S] Comprehensive Hand Washing and Hand Drying Efficacy Studies, 59, AI, (December 2025)

[EXHIBIT-T] Comprehensive Functioning Hand Dryer Output Air Studies, 18, AI, (December 2025)

Lab Testing

[EXHIBIT-U] Hayes Microbial Consulting Report (EPA Laboratory ID: VA01419)

Evidence of Plaintiff Exposure

[EXHIBIT-V] Evidence of Plaintiff Exposure — Starbucks Rewards History + M&T Bank Statements

Standards documents

[EXHIBIT-W] UL PCR for Hand Dryers (July 13, 2016)

[EXHIBIT-X] NSF Protocol P335: Hygienic Commercial Hand Dryers (April 2007)

[EXHIBIT-Y] ISO 14025 Environmental Standards Principles and Procedures

[EXHIBIT-Z] ISO 14044 Life Cycle Assessment Requirements and Guidelines

Certifications

[EXHIBIT-AA] Smart EPD Certificate SmartEPD-2023-002-0006-01 (XLERATOR)

[EXHIBIT-BB] SGS Performance Test Report No. 2774929EFF-001 (Sept. 7, 2012)

[EXHIBIT-CC] UL Environment EPD No. 4787137936.102.1 — XLERATOR Hand Dryer certification; July 25, 2017

[EXHIBIT-DD] UL Environment EPD No. 4787616201.106.1 — Hokwang 2200 Hand Dryer certification; April 1 2022

[EXHIBIT-EE] TrueNorth Collective LCA (May 2023): Comparative Life Cycle Assessment of Hand Drying Systems: Excel Hand Dryers and Paper Towel Systems

[EXHIBIT-FF] MIT Materials Systems Laboratory Lifecycle Assessment — Document 6-1, September 2011.

[EXHIBIT-GG] NSF P335 Dyson Certified Live Listing 251231

[EXHIBIT-HH] XLERATOR LEED v4.1 Document

[EXHIBIT-II] DYSON LEED May 2014 Document

Collusion Network Structures

[EXHIBIT-JJ] Personnel and Committee Connections Master Reference Document

[EXHIBIT-KK] Standards and Certification Chronology UL to Smart EPD, Lasso, Blouch 2025

Defendant Source Documents

[EXHIBIT-LL] Anna Lasso, The First Sustainable Hand Dryer, Excel UK Website December 2025

Journalistic Industry Analysis and History

[EXHIBIT-MM] Hand dryers v paper towels, The Guardian_files, The Guardian, 25 April, 2019

Excel V Dyson Court Documents — Case_3:12-cv-30211-MAP_(D._Mass.)

[EXHIBIT-NN] Excel V Dyson Original Complaint, PACER

[EXHIBIT-OO] Denis Gagnon Affidavit Excel V Dyson, PACER

[EXHIBIT-PP] Toby Saville Affidavit Excel V Dyson, PACER

[EXHIBIT-PP-A] Toby Saville Claimed Dry Times Versus Ron Blouch Data, a Detailed Comparison

[EXHIBIT-QQ] Dyson's Answer, Statement of Defenses, and Counterclaims — Document filed February 22, 2013.

[EXHIBIT-RR] Defendant Dyson, Inc.'s Memorandum of Law in Opposition to Plaintiff Excel Dryer, Inc.'s Motion for Preliminary Injunction

[EXHIBIT-SS] Excel Reply to Dyson Opposition — Document 32, Filed February 4, 2013; includes Second Declaration of Denis Gagnon (Document 32-1)

[EXHIBIT-TT] MIT-QUANTIS Letter in response to dry time testing conflicts, 17 October 2012

[EXHIBIT-UU] Excel White Paper: “An Ultrafast, Comfortable Hand Dryer”

ITC Complaint

[EXHIBIT-VV] ITC COMPLAINT; Excel Dryer V Multiple Respondents, China; DN 3159; June 24, 2016

False Claims Summary Documents

[EXHIBIT-WW] False Advertising Claims Analysis Dyson

[EXHIBIT-XX] False Advertising Claims Analysis Excel

[EXHIBIT-YY] False Claims Analysis NSF with UL Supplemental Analysis

[EXHIBIT-ZZ] False Claims Supporting Screenshots and Document Images

Global Dryer Statistical Estimates

[EXHIBIT-AAA] US Dryer Use Estimates Annual and Per Use with microbe estimates, Blouch 2025

[EXHIBIT-BBB] US Dryer Use Estimates Annual and Per Use with energy estimates, Blouch 2025

[EXHIBIT-CCC] US Dryer Use Estimates Annual and Per Use with LEED estimates, Blouch 2025

Hokwang Dryer Product Sheets, UL

[EXHIBIT-DDD] Hokwang 2200W product sheet with UL certification, December 2025

[EXHIBIT-EEE] Hokwang high speed EcoHygiene product sheet without UL certification, December 2025

Journal Preprint

[EXHIBIT-FFF] Performance Failures in Commercial Hand Dryers: An Historical Synthesis and Sequential Summary Review of an Eleven-Study Research Program, Blouch, R. A. Jr. (2026); DOI: 10.5281/zenodo.18322481; Journal Preprint 11 of 11

[EXHIBIT-GGG] Dyson False Advertising Claims, Blouch 2025

[EXHIBIT-HHH] Excel False Advertising Claims, Blouch 2025

[EXHIBIT-III] NSF False advertising Claims, Blouch 2025

[EXHIBIT-JJJ] Screenshot False Advertising Claims Supporting Material

[EXHIBIT-KKK] Grand Central Terminal Excel Case Study

[EXHIBIT-LLL] US Green Building Council Excel Case Study

[EXHIBIT-MMM] Northwestern University Hospitals Excel Case Study

[EXHIBIT-NNN] Seabury Excel Case Study

[EXHIBIT-OOO] USDA Excel Case Study

[EXHIBIT-PPP] Dyson Energy Saving Signs

[EXHIBIT-QQQ] Excel Energy Savings Signs

[EXHIBIT-RRR] Gia AIRMID study

[EXHIBIT-SSS] Xlerator Hygiene Technical Data Sheet

SAMPLE