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IN THE UNITED STATES DISTRICT COURT
FOR THE MIDDLE DISTRICT OF PENNSYLVANIA

RONALD A. BLOUCH JR., Plaintiff,

v.

Civil Action No.

1:26 cv 2529

NSF INTERNATIONAL

SGS NORTH AMERICA, INC.

UL SOLUTIONS INC.

SMART EPD LLC

ANNA LASSO, individually, Defendants.

COMPLAINT

I. PRELIMINARY STATEMENTS

A. THE TEST

1. Several of 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, ending in a definitive result. Visit any public restroom equipped with a downdraft electric hand dryer. Wash your hands. Place them in the dryer for 15 seconds - longer than any claimed or certified drying time for the dryers. 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. Key aspects of hand dryer performance can be understood by imagining removing the dryer from the room. Is the room more or less sanitary with it gone? Is a user cleaner or more contaminated if it is not there?

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C. SCOPE

3. This Complaint addresses five Defendants in an intertwined certification network spanning approximately twenty-five years, seven certification standards, and eleven published journal preprints built from 931 tests performed at 226 locations in five states and the District of Columbia. The resulting science materially changes the existing scientific understanding of commercial hand-dryer performance and is central to the claims pleaded here; it therefore must be explained sufficiently for the Court to evaluate it. The Complaint also traces the chain by which a privately created certification becomes a public representation reaching purchasers and users, and the corresponding allocation of responsibility among the parties. Those subjects require factual development. Plaintiff has edited relentlessly for brevity. The length of this Complaint reflects the scope and complexity of the case.

D. ORIGIN

4. Since at least 2007 Defendants have certified performance claims for commercial hand dryers that are false, facilitating the creation of a \$1.5B industry that would not exist had they reported the truth. [Exhibit MM] Users and purchasers have been led to believe they are sanitary and energy efficient. They are neither.
5. Plaintiff, having trusted the Defendants' certifications and relying on their public seals and stamps validating the manufacturers' claims for decades, began to notice black mold directly under the hand dryer output nozzle in multiple restrooms. Plaintiff decided to do a science experiment with his then 12 year old daughter to sample the air in the store, the restroom, and the dryers. The first test set:

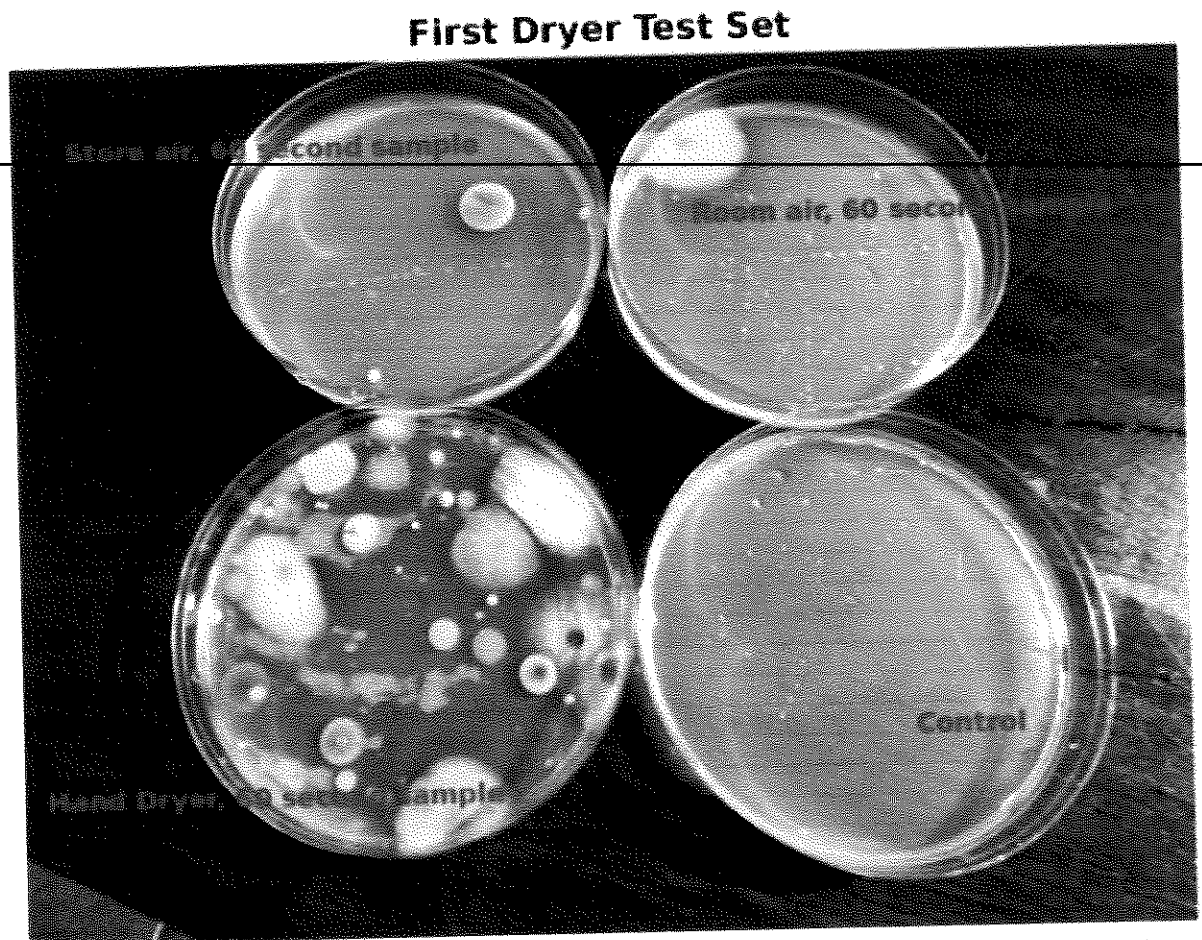


Figure 1: Plaintiff's first test set, September 2023.

E. DECLARATIONS

1. Liability

6. Certifiers are liable for their standards, testing, and certifications, not the products they certify. Product performance is pleaded as evidence for standards violations and failures, not as the wrong.

7. The certification marks issued by the certifiers bind certifiers, manufacturers and purchasers by contract, all parties, including users, by duty.
-

2. Choice

8. Plaintiff holds, and courts have held, that certifiers are free to test whatever they like, in contract with anyone who hires them. That is not in dispute. Plaintiff asserts that Defendants' own standards establish every boundary and issue in dispute in this complaint, and it is their own words that define every harm they have caused. Every obligation this Complaint measures a Defendant by is an obligation that Defendant chose.

3. Standards

9. Plaintiff makes no claim in this Complaint that stands outside the standards the Defendants themselves created or bound themselves to. Harms are exclusively established by the Defendants. Plaintiff describes them.

4. Failure

10. Plaintiff declares the failures take four forms: (1) where a certifier required a measurement, the measurement was made and certified falsely; (2) where a certifier required a measurement, the measurement was never made; (3) where a certifier bound itself to standards that required reporting, no report was made; (4) where a required report was covered over.
11. Every count in this Complaint pleads one or more of these forms and no count pleads anything else.

5. Status

12. Plaintiff declares that Defendants' certifications confer status. A certified device is a different device than an uncertified device. A testing service that contracts to measure the performance of a machine as-it-is provides information. Defendants' certifications define a product as-it-must-be, altering the product's value and marketability. These are not the same thing.

6. Audience

13. Plaintiff declares that Defendants named the audience for their certifications in the standards documents they created or bound

themselves to. P335 writes its hygiene threshold for a user's hands.

UL's PCR exists for a user's hands, *100,000 times*, defined in the

Functional Unit. UL's and Smart EPD's governing document, ISO

14025, names the purchaser or user as the declaration's intended

recipient. UL's PCR declares a business-to-consumer

communication, directly speaking to consumers. UL's defenses

against counterfeit certifications uniformly represent users as being

harmed. UL's SEC 424(b)(4) specifies the marketplace. UL's and

NSF's marks face outward, described in detail below, mounted on

the machine, serving no non-public function. Plaintiff is the user.

7. Non-Audience

14. Plaintiff declares that when a member of the named audience presents a claim, Defendants deny the audience in the same documents and dockets. P335 states that NSF "shall not be responsible to anyone for the use of or reliance upon this protocol." UL's engagement terms disclaim obligation or liability for the information its investigations produce. Sued by an injured user, UL argued it approves no designs and bears no liability even when

negligent. Asked by Plaintiff in a phone call Defendant Anna Lasso stated she is not responsible for the claims she certified.

8. The Chain

15. There is a rational sequence of events, described below, that runs from the moment the manufacturer contracts with the certifier through Plaintiff's use of the hand dryer in a business he trusts. That sequence defines this Complaint.

9. Harm

16. Plaintiff declares the purpose of a standard is to define the harms that occur if it is not met. Failed standards, failed testing, and failed certifications, in any of the four forms declared above, execute those harms. Nothing further is required. While the science claims in this complaint appear to be argument against a product, they are, in fact, evidence of Defendants' failure to properly test the products they were paid to test by the standards they set for themselves. The standards creators - the Defendants - themselves believe that every party downstream is harmed by products that fail their standards, by

definition. The measure of each is the certifier's own documents - the ones it wrote, and the ones it bound itself to.

10. Purpose

17. The purpose of a hand dryer is to increase hygiene. Its method is the drying of hands. It is part of a two-element hygiene system that includes a sink. There are zero restroom hand dryers serving their function that do not have sinks. The sink's hygiene method is the washing of hands. A hand dryer is bound to a sink. They do not exist separately. Together they are a hygiene unit with two different methods to increase hygiene: washing and drying. 150 years of science on both is unequivocal.
18. If you remove hygiene from a sink it still functions as a useful object.
19. If you remove hygiene from a commercial restroom hand dryer it has no function.

11. The Use Cycle

20. The derived NSF and the explicit UL PCR use cycles, arrived at independently by two world class standards bodies, require the drying of hands to a specified standard. The minimum required

elements necessary to do that are: a dryer, electricity, a wall, a floor, air, hands, water, time and dryness. Remove any element and the declared cycle fails.

12. The Science

21. Plaintiff declares that the results in this Complaint rest on 931 individual tests conducted at 226 stores across five states and the District of Columbia, examining 169 hand dryers and 94 paper-towel dispensers: 462 drying trials, 193 hand-dryer microorganism tests, 29 paper-towel tests, 127 charted restroom evaluations, and 116 plating tests within those evaluations, across 1,076 culture dishes. Plaintiff hand counted approximately 50,000 bacterial and fungal colonies in pen on printed dish photos, each of which was then imaged and retained. The record comprises approximately 1.3 terabytes of images, video, complete chain-of-custody documentation, and raw measurement data, published in eleven works with permanent DOIs - ten studies and one synthesis review. The underlying record is hosted in full at handdryerstudy.com, with

redundant publicly available access to all chain-of-custody materials at Backblaze, Cloudflare and pCloud.

22. We know by test and we state the facts. (Exhibit AAAAAA)
23. All the material is public. Plaintiff showed all of the work - every counting decision, every excluded sample, and every error found and corrected is documented in the record.
24. The documents, testing records, and methodologies capable of resolving that conflict exist, and are held exclusively by Defendants, invisible for scrutiny, invisible for decades for a product that fails every claim.

13. Drying Time

25. A hand drying time of less than 15 seconds is the central claim made by Defendants regarding their certifications and validated by every Defendant. For currently manufactured downdraft Dispersal-Type dryers that is physically impossible, as anyone who tried the test above has already determined. Actual time to dry to Defendants' specified dryness levels is 70-90 seconds. (462 drying trials, Exhibits B, E, F, H) That claim impacts downstream calculations of energy

usage, environmental damage, hygiene, and the toxicity questions created by the use-stage emissions occurring within the room the dryer is in and on the user.

26. Unless the physics in a public restroom is different than the physics in the laboratories where Defendants measured the machines, Plaintiff's claims and Defendants' claims cannot co-exist. Plaintiff declares that the number of currently manufactured and installed downdraft Dispersal-Type production hand dryers that can dry hands in 15 seconds or less to any claimed or certified residual moisture threshold is precisely zero. One production downdraft dryer that reproducibly dries washed hands to a certified residual moisture threshold within its certified time disproves that number. Plaintiff alleges none exists. A sheet of paper stating 8.355 seconds does not dry hands. The machine does, or does not.

14. False Green Energy and Environmental Claims

27. Plaintiff declares that drying time determines energy claims. Currently manufactured downdraft Dispersal-Type hand dryers consume 7-10× more energy and produce 6-25× more CO₂ per use

than the certified claims when hands are dried to manufacturers' self-determined dryness standards. The claimed 85-90%

environmental advantage over paper towels does not exist. At actual drying times, hand dryers either have the same energy and CO₂ impact as paper towels or they are 2-3× more damaging, depending on the methodology used to calculate it. The industry's foundational environmental claims are false.

15. Microbial Amplification

28. Plaintiff declares that commercial hand dryers amplify the low number of bacteria and fungi in undisturbed ambient restroom air by median factors of ~50 to ~110 and frequently by extreme factors from ~300 to ~5000, turning the output airstream of hand dryers into a wildly microbially diverse, fecund stream of bacteria, fungi and, potentially, viruses, directed on the freshly washed hands of unsuspecting and trusting users. The devices are bacterial and fungal injectors, throwing microorganisms onto wet hands recently washed. The first test set above looks like every other test set, without exception.

16. Universal Room Contamination

29. Plaintiff declares that with every complete drying cycle done in a

Dispersal-Type hand dryer 7.31 grams of indeterminately clean/dirty wash water is sprayed into the air and all over the walls, floor and user of the restroom, totaling approximately 1.7 billion cups of contaminated water on the walls, floors and users of public restrooms every year in the US. Every day 150,000,000 people step into dirty water put there by the people who used the dryer before them.

17. Persistent Mold Originating at the Dryer

30. Plaintiff declares that commercial hand dryers become a source of persistent mold on the walls and floors near the output air jets in 100% of hand dryer installations, varying only in degree per the cleaning efforts of each facility.

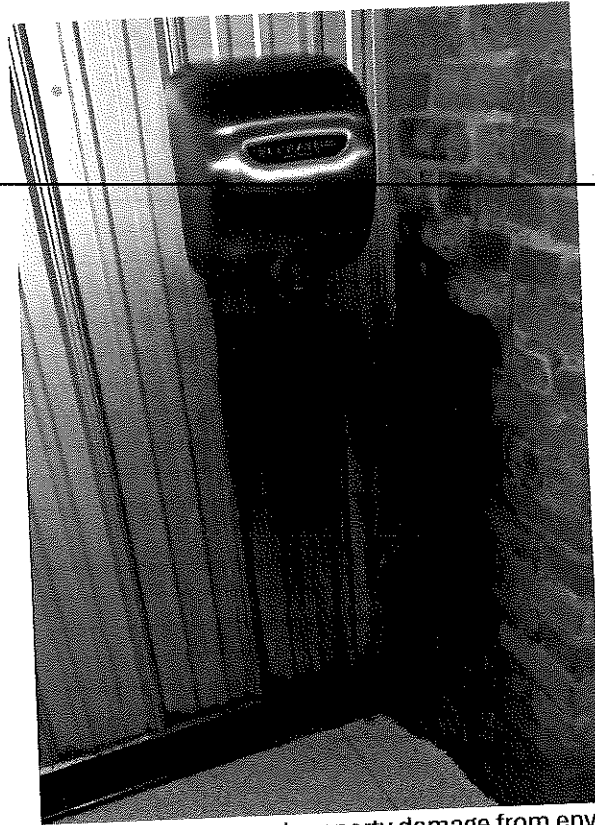


Figure 2: Emissions pattern and property damage from environmental emissions into the room originating within the Functional Unit/Operating cycle

18. The Two Words

31. Defendants NSF, Smart EPD and UL are all bound to the word Hygiene via the P335 and the PCR, NSF irrevocably, UL and Smart EPD less tightly.
32. UL and Smart EPD are bound to Global and Local Environmental Emissions, Human Health Toxicity, Human Health, and Hazard and Risk irrevocably via their governing authority ISO 14025.

33. They are related but not the same thing; the complaint uses each one in its proper place for its proper purpose.
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19. Novel Paper Towel Finding

34. Plaintiff declares that prior paper towel testing for microbial contamination failed to sort for type. All tested brown paper towels contain bacteria and fungus from the factory in concentrations less than but approaching hand dryer air. White paper towels usually contain less contamination than the room air they are used in, almost none, and provide an instant and effortless solution to every one of the problems described in this complaint.

20. Irreconcilable Conflict

35. Plaintiff declares that his measurements and Defendants' certifications cannot both be true. The existence of the conflict requires no discovery. Its cause does.

21. The Extreme

36. Plaintiff declares that he has traveled to New York City from all over the country several times a year, sometimes many, sometimes not at

all. Most recently by train from Central Pennsylvania, more frequently than usual. When passengers de-train at the Amtrak station in Penn Station/Moynihan there is a men's restroom at the top of the six large escalators that serve 12 working train tracks below. Every arriving train funnels every arriving passenger in need into one single restroom. Plaintiff makes no claims about the women's restroom as he has never been in it. The restroom is white tile and is clean-ish for NYC. Directly upon entry there is a wall with ~ten hand dryers on it, directly across from ~ten sinks on the other side. It's a continuous daily stream of people 365 days a year from all over the world getting off the train, grabbing their genitals or wiping after sitting, washing their hands for ten seconds, then sticking them in the dryer for ten. The walls and floors are a constant pond. On the way out at the end of the day, after getting a full load of NYC microbiota, they distribute it all, everywhere before leaving the city. The first thing that happens when you visit NYC is you get all the human bacteria, fungi and viruses in the world in the first 5 minutes. The last thing that happens is you redistribute it before leaving. The New York City Amtrak restroom is the funkiest mixing bowl of organisms

Plaintiff has ever experienced by sheer volume. Remove the dryers from the room. What happens? White paper towels would capture the water and organisms, adding nearly zero unique organisms to the user. And the user next to him.

F. THE CASE

37. Plaintiff holds that certifiers are responsible for the validity of their certifications, not the products they certify. That Defendants have catastrophically failed to evaluate and test hand dryers by the very standards they wrote and cite as their governing documents.
38. That this case is not about a Dyson dryer performing ten percent worse than an Xlerator; it is that every hand dryer these Defendants have certified fails, often by orders of magnitude, every standard they created, and every standard they failed to create, mandated by their own documents or governing documents.
39. That liability for those failures passes through a chain running certifier, manufacturer, purchaser, and user - through two channels: the purchaser is owed through both, contract and duty; the user

through duty alone. Plaintiff is the user, and this Complaint pleads the duty channel; the complete two-channel analysis is Exhibit SSSS.

40. Plaintiff does not ask the Court to hold a certifier liable because a manufacturer produced a defective appliance. He asks the Court to hold each Defendant answerable for its own acts: the standards it wrote, the mandatory standards it failed to write, the testing it performed or accepted, the data it verified, the declaration it issued, the mark it authorized, and the certification it maintained.
41. Every Defendant received written notice of the failures documented in this Complaint on April 27, 2026, delivered with the complete testing record and a copy of an earlier version of this Complaint. UL responded via counsel, Smart EPD and Anna Lasso via telephone call. A second attempt to resolve this outside of litigation was delivered to all Defendants on June 23, 2026. A final attempt to resolve this with UL prior to filing, was delivered via email to Lisa Sullivan, Associate General Counsel, Litigation, on August 25, 2026. In the months and days since, no Defendant has corrected, withdrawn, or re-verified a single certification. They have not issued new testing standards or publicly attempted to verify the science

displayed in the documents and have not indicated a willingness to do so. In the years since these certifications were issued for hand dryers, including after Plaintiff placed every Defendant on written notice, the record of these certifications has not received the same compliance requirements and execution demanded by UL when protecting its marks, as described below. There has been no variation notice, inspection, correction or removal. What the record contains, instead, is the answering posture. Anna Lasso stated by telephone on April 27, 2026 that she is not responsible for verifying the drying-time claims in the certifications she issued, nor for the hygienic performance of the dryers she certified. [Exhibit KKK] NSF's protocol itself provides that NSF "shall not be responsible to anyone for the use of or reliance upon this protocol." [Exhibit X]

42. Every Defendant's standards, certificates, and public marks stand today, republished and renewed, on the walls of the largest retailers in the United States, facing the audience their documents name, and the mark on those walls either carries the meaning UL has told courts, Congress, and the SEC it carries, or it does not. The Counts

below plead the consequences of each alternative, and Plaintiff asks of these certifications nothing UL's own program does not demand.

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43. Each Defendant is answerable for what it did. NSF wrote a protocol titled Hygienic Commercial Hand Dryers, hygienic being the key word, fixed the level at which hygiene becomes unacceptable, approximately one culturable bacterium per drying cycle leaking past the plenum seals, and prescribed only a pressure test - no test capable of detecting a single microbe anywhere in the machine or its output. Further, it established a drying time standard and mandated dryness level which the Dyson downdraft dryers, currently listed as in compliance, fail by ~1000%. UL and Smart EPD selected ISO 14025, a standard requiring relevant environmental aspects to be considered and reported through the PCR, LCA, EPD, and additional-information structure, with UL writing a rule declaring the product's function is hygienic, then producing a declaration reporting none of the mandated use-stage environmental air and water outputs pleaded here, likely caused by a failure to understand the mandates required in the documents it selected when creating the PCR. A narrower instrument existed within the same framework, ISO 14067,

that allows a carbon-only evaluation with no comparable human-health reporting structure. UL did not select it. Plaintiff believes they did not know the difference between the instruments. The broader instrument UL chose and bound itself to carried the human-health and hazard-and-risk obligations underlying the human-health toxicity issue UL itself identified. The resulting declarations report energy and carbon while leaving that toxicity question, and the use-stage emissions that give rise to it, unaddressed. The present record does not establish why UL selected one instrument rather than the other. Plaintiff seeks the documentation.

44. SGS measured the drying performance on which both certifications rest and reported figures its own filed data contradicts. SGS is the central player in this case with only one role: how long does it actually take to dry hands in a dryer? We don't know what they think because SGS drying time data is entirely concealed from the public, only exposed in a single report used in court in 2012, to Plaintiff's knowledge after great effort to locate others. Excel Dryer's entire claims base, flowing downstream to UL and Smart EPD and Anna Lasso, false by a factor of ten, is built on reports by SGS testing no

one has ever seen. Smart EPD adopted UL's PCR as its ruling document, assuming UL's obligations in that choice. Anna Lasso, née Nicholson, was involved in its creation. She managed the PCR's development at UL and later certified a product under it while failing to validate the material by the standards she chose when creating it. She and Smart EPD later issued an EPD for Xlerator dryers that is valid today, based on the document she originally helped write, whose certified figures are false by a factor of ten and which fails to address the environmental elements of the dryer operation pleaded below under its governing documents.

45. Drying time binds all five parties. Plaintiff's science demonstrates an approximately tenfold drying-time testing and reporting failure. The false energy and environmental claims derived from that time bind UL, Smart EPD, and SGS as the source of the figures: electrical power multiplied by a false duration produces a false energy value, and the carbon and comparative results follow. Hand dryers are at least as environmentally harmful and energy wasting as paper towels, possibly two to three times worse, their superiority being the central marketing claim of Dyson and Excel dryers based on UL, SGS,

Smart EPD and Anna Lasso's certifications. NSF makes no energy or non-local environmental burden claim, prescribes no power test, and Plaintiff advances none against it.

46. The failures take the four forms declared above. SGS: form (1), measurements made and certified falsely. NSF: forms (1) and (2), a drying time certified falsely and harms it named with no test capable of detecting them. UL and Smart EPD: forms (1), (3), and (4), false figures, mandated reporting never performed, and a required report covered over. Anna Lasso: likely all, to be determined in discovery.
47. P335 names contaminated air as the condition a hygienic hand dryer exists to prevent, and prescribes a test of the intake filter, providing for no testing at the output airjet. It requires removed handwash water to be disinfected to six logs should a dryer collect it, and offers no sanitation standard when a dryer discharges it directly into the room, uncontained. It requires that surfaces contacting the emitted air be treated to inhibit growth, and prescribes no test of those surfaces, the output air, or the surfaces surrounding the machine. UL's rule declares the product's function hygienic and its conformance table lists no hygiene standard at all. UL replaced a

use-stage emissions reporting block in its EPD with a report of energy usage, footnoting the change in its PCR, then Smart EPD mirrored the same behavior, a technical adjustment inside its EN 15804 reporting structure, detailed below.

48. The standards define product design requirements and testing. A machine is tested and evaluated according to the standards. Certification documents state the results. Public facing brand marks offered and authorized by the certifiers and accepted by the manufacturers communicate successful completion and compliance to consumers and no one else, explained fully in the Chain. [Exhibit SSSS]. Purchasers install the marked machines for others to use. Plaintiff relied on the certification system in the precise manner for which it was designed, detailed frequently in UL's litigation against violators of its mark and described in some detail below; he recognized the marks, trusted that competent independent professionals had performed the work he could not perform, and used the machines for decades without further investigation.

49. Until he didn't.

50. Defendants' claims for the meaning of their marks are entirely dependent on their legal posture. As plaintiff, enforcing, they claim the marks mean everything. As defendant, in defense of claims against them, they claim the marks mean nothing. This Complaint makes the contrast explicit, in detail below.
51. For thirty-five years, in federal courts and before the United States Senate, and in filings with the SEC, UL has established its certification machinery on the record: products are tested before listing, factories are inspected - approximately 438,000 inspections in 1987 alone. When finding variations after testing UL blocks shipment of the products until resolved, demands that marks are removed from noncomplying products, and bears an obligation, recognized by the Federal Circuit in UL's own successful defense of its registrations, to take "reasonable steps, under all the circumstances of the case, to prevent the public from being misled." *Midwest Plastic Fabricators, Inc. v. Underwriters Laboratories Inc.*, 906 F.2d 1568 (Fed. Cir. 1990). When sued in 1967 by a fireman injured by an exploding extinguisher labeled "Underwriters Laboratories, Inc., Inspected," UL argued that it "does not approve

'designs' of products" and that it could be "under no liability to plaintiff even if it were negligent." The court called that "straining at words." When Underwriters lists a product, it "tacitly impresses its approval upon the design." *Hempstead v. General Fire Extinguisher Corp.*, 269 F. Supp. 109 (D. Del. 1967).

52. UL has enforced the value and validity of its marks to include litigating against a counterfeiter that sold nothing but the stickers themselves - proof that the mark alone has value beyond any binding to a product. A value that Plaintiff has not received when using hand dryers. In 2015 UL obtained a consent decree against Butson, reciting that the counterfeit labels alone placed "the health and safety of the general public at risk" by enabling their purchasers "to bypass UL's rigorous processes and controls for testing and certifying products." *UL LLC v. Butson*, No. 4:15-cv-00170-O (N.D. Tex. 2015). When sued in 2003 by the family of a repairman who died of cancer, UL's manager swore UL never tested the appliances for medical risks and never represented them safe in that respect - and by its own testimony: "In the case of hazards that are beyond our capability - and toxicity is one of them - we use a disclaimer,

indicating that we have not looked into toxic effects of this product."

Dekens v. Underwriters Laboratories, Inc., 107 Cal. App. 4th 1177

(2003). Plaintiff provides Dekens, likely UL's first defense, to the

Defendants and the Court with the understanding that Dekens

validates this case by court ruling, effortlessly explained when

motions against are offered.

53. Enforcing against Fly-E Group in 2025, UL pleaded that products that "purport to have been tested by UL . . . when in fact UL never performed any such testing" endanger users and damage "trust in the UL certification process." UL LLC v. Fly-E Group, No. 1:25-cv-01405 (E.D.N.Y. 2025). When sued in 2007 by its own client, Kikson, over its own testing, UL answered with: UL bears "no obligation or liability for damages . . . arising out of or in connection with the use of . . . the information resulting from this investigation." Kikson v. Underwriters Laboratories, Inc., 501 F.3d 672 (7th Cir. 2007).
54. When an outside party affixes UL's name without UL's examination, the public is endangered and the remedy is measured in millions of dollars.

55. When UL's own examination fails, the information carries no obligation at all.
-
56. Had Defendants properly tested according to their own standards, the marketplace could have decided, fully informed. Instead every certificate is false in almost every way, fully misinforming a \$1.5B market, and Plaintiff, every time he used hand dryers.
57. These diametrically opposed sets of standards are central to Defendants' standard of care regarding their certifications and are detailed fully below. When UL enforces, it recites its standard of care. When UL defends, it reveals the one it actually practices.
58. This is the case. What remains is the evidence and binding to the law.

II. PARTIES

A. Plaintiff

59. Plaintiff Ronald A. Blouch Jr. is an individual residing at 107 E. Locust Street, Mechanicsburg, Cumberland County, Pennsylvania 17055.
60. Plaintiff conducted the most comprehensive independent research program on commercial hand dryer performance ever undertaken.
- [Exhibits A-R] Between September 2023 and December 2025 Plaintiff

personally performed every test in the corpus: 226 unique retail and public locations in five states and the District of Columbia; 169

distinct hand dryers and 94 paper towel dispensers; 462 drying-time trials, more than twenty times the sample size NSF Protocol P335 requires for certification; 342 microbiological plating events producing 1,076 culture dishes, from which approximately 50,000 bacterial and fungal colonies were hand counted; and 127 charted restroom evaluations of visible contamination. Video and photographic chain of custody documents nearly every sample from plating through incubation, opening, and analysis - approximately 13,000 files and 1.3 terabytes, preserved at multiple locations.

Independent laboratory confirmation was obtained under EPA Laboratory ID VA01419. On December 4, 2025, before testing a third manufacturer for the first time, Plaintiff recorded a written prediction of the result; the prediction was confirmed on December 5, 2025. The testing values stated throughout this Complaint are the reference figures adopted in the testing-counts exhibits, which set out the complete methodology, every counting decision, and the limits of what a count of this kind can establish. [Exhibits GGGG, HHHH]

61. Plaintiff has written and published 11 journal pre-prints, each with permanent DOIs at Zenodo and Harvard Dataverse, listed here for context and clarity:

Transmission of Bacteria and Fungus via Dyson and Xlerator Hand Dryers in Starbucks, Home Depot and Whole Foods Restrooms: A Comparative Analysis; Blouch, R. A. Jr. (2025) MAIN STUDY [Preprint] Retrieved from www.handdryerstudy.com/. DOI: 10.5281/zenodo.15504115 PAPER [1]

Testing the Validity of Hand Dryer Drying Time Specifications: A Quantitative Study of Residual Water on Dyson and Xlerator Dryers in Retail Store Environments; Blouch, R. A. Jr. (2025) [Preprint] Retrieved from www.handdryerstudy.com/. DOI: 10.5281/zenodo.15503698 PAPER [2]

Visual Analysis of Water Dispersion Patterns During Hand Drying: A Qualitative Comparison of High-Speed Air Dryers and Paper Towels; Blouch, R. A. Jr. (2025) [Preprint] Retrieved from www.handdryerstudy.com/. DOI: 10.5281/zenodo.15503304 PAPER [3]

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An Empirical Refutation of Green Energy Claims for Dyson and Xlerator Hand Dryers in Use in Public Restrooms; Blouch, R. A. Jr.

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from www.handdryerstudy.com/. DOI: 10.5281/zenodo.18322481
PAPER [11]

62. From 2014 through 2024, Plaintiff used NSF P335 certified hand
dryers and products tested to UL PCR standards in public facilities
throughout Pennsylvania and other states, and paid - through the
price of the goods and services he purchased at those facilities - for
the certified performance the products did not deliver. That
documented period is the tail of a longer history. Beginning decades

earlier, Plaintiff routinely used certified commercial hand dryers wherever they were supplied as the available drying method - in stores, restaurants, theaters, airports, and rail facilities, including Grand Central Terminal and Penn Station. Most of those encounters generated no retrievable transaction or location record and cannot now be individually reconstructed. Plaintiff assigns no transaction count and no damages amount to them; they are pleaded as the duration, frequency, and ordinary character of his reliance. Plaintiff relied on Defendants' certifications in using these products, believing them to be hygienic and to perform as represented. Plaintiff ceased using commercial hand dryers in 2024. He continues to patronize the same facilities, and continues to pay for the certified hand-drying service they provide. Exhibits V and Va document this pattern of patronage. Exhibit V records it through Plaintiff's Starbucks Rewards history and bank statements showing regular patronage at facilities equipped with hand dryers bearing the challenged certifications. Exhibit Va separately documents 4,556 transactions at six Home Depot stores between June 28, 2019 and June 6, 2026, exported from the retailer's own system. Plaintiff tested the hand

dryers at each of those six locations. This is not hypothetical future harm; it is documented, repeated reliance on, and payment for, products certified to specifications that achieve zero percent empirical compliance.

B. Defendant NSF International

63. Defendant NSF International is a Michigan nonprofit corporation with principal place of business at 789 North Dixboro Road, Ann Arbor, Michigan 48105.
64. NSF created NSF Protocol P335, titled “Hygienic Commercial Hand Dryers,” in April 2007 [Exhibit X]. The standard establishes requirements for hand dryer performance and hygiene. §4.3.3 requires that the unit dry the user’s hands to 0.1 gram of residual moisture within one normal operating cycle or 15 seconds, whichever is lower; §6.3 sets the acceptance criterion at 95% effectiveness across a minimum of 20 replications.
65. NSF certified the first Dyson Ltd. hand dryer under NSF P335 and certifies current models. [Exhibit GG] The NSF P335 certification mark appears on Dyson products. Dyson markets itself as “The only

hand dryer certified by NSF International Protocol P335.” NSF markets certification directly to consumers, stating that choosing an

NSF-certified product “lets you know the company complies with strict standards and procedures imposed by NSF,” promising “assurance that the product has been rigorously tested,” and describing its mission as protecting public health. [Exhibits YY, ZZ] NSF has maintained this certification for approximately nineteen years despite current model downdraft Dispersal-Type products achieving zero percent compliance with the certified specification.

66. NSF’s President and CEO is Pedro Sancha. [Exhibit BBBB] NSF maintains a Type III environmental declaration program under ISO 14025. [Exhibit EEEE]
67. NSF is measured in this Complaint by Protocol P335, the document NSF wrote. P335 makes no claim concerning energy consumption, carbon, or environmental impact, prescribes no test of any of them, and Plaintiff advances no such claim against NSF.

C. Defendant SGS North America

68. Defendant SGS North America, Inc. is a Delaware corporation with principal place of business at 400 Broadacres Drive, Suite 200, 2nd Floor, Bloomfield, New Jersey 07003, and testing laboratory operations at 620 Old Peachtree Road NW, Suite 100, Suwanee, Georgia 30024.
69. SGS tested hand dryer products in 2012 under what its report described as a revised version of NSF P335 then being developed and reviewed by NSF and its technical panel for the five-year protocol update. The report was filed in federal court during the Excel Dryer V Dyson false advertising case and was later cited by manufacturers and environmental declarations as support for performance claims. [Exhibit BB] In 2012 SGS tested at twelve and fifteen seconds, not the eight seconds now claimed in marketing and certification. No public SGS report supporting an eight-second result appears in the record.
70. Excel Dryer reports current and ongoing SGS testing on its website and in its promotional materials, all proprietary and hidden from public view.

71. SGS North America, Inc. operates as an accredited testing laboratory under ISO/IEC 17025.

72. SGS is measured in this Complaint by the method it was retained to execute. SGS did not write a standard, author a rule, or issue a declaration. It holds itself out as competent to verify environmental and performance claims across a broad range of published standards, including water footprint under ISO 14046 and carbon footprint of products under ISO 14067. [Exhibit FFFF] The competence SGS represents is the measure of the care owed in the testing it performed.

D. Defendant UL Solutions Inc.

73. Defendant UL Solutions Inc. is a Delaware corporation with principal place of business at 333 Pfingsten Road, Northbrook, Illinois 60062.

74. The enterprise now named UL Solutions has operated under three names. The certification marks whose enforcement record this Complaint describes were registered to Underwriters Laboratories Inc.: Registration No. 782,589, issued December 29, 1964, and Registration No. 1,102,931, issued September 19, 1978 - the

registrations Underwriters Laboratories Inc. defended before the Federal Circuit in 1990. In 2012, Underwriters Laboratories Inc. (now named UL Research Institutes) transferred its testing, inspection, and certification business to the Delaware corporation now named UL Solutions Inc. - incorporated in 2008 as Underwriters Laboratories (USA) Inc., renamed UL Inc. in 2011, renamed UL Solutions Inc. in December 2021. UL LLC, the operating subsidiary through which that business runs, prosecuted the enforcement actions this Complaint describes from 2015 through 2025, asserting the same registrations: UL LLC's 2025 complaint against Fly-E Group pleads Registration No. 782,589 by number - the registration issued in 1964 and defended in 1990. [Exhibit AAAAA]

75. UL Solutions states this continuity itself. Its Prospectus (Form 424(b)(4)), filed with the Securities and Exchange Commission, describes "our founding in 1894" and recites each corporate step in its Corporate History section. [Exhibit AAAAA] The name changed three times. The marks, the certification business, and the representations that accompany them did not.

76. UL created the Product Category Rules for Hand Dryers on July 13, 2016, nine years after NSF published P335. [Exhibit W] UL bound that rule to ISO 14025, the international standard governing Type III Environmental Product Declarations, and recorded the binding in the document itself. ISO 14025 incorporates other standards in the ISO 14000 series, including ISO 14040 and ISO 14044 for life-cycle assessment methodology. UL separately selected EN 15804, a European standard, as a non-binding reference framework for organizing the life-cycle stages it would report. An Environmental Product Declaration is the reported output of a Life Cycle Assessment performed under a Product Category Rule, and it must carry both the assessment results and the additional content ISO 14025 and the Rule require.
77. UL is measured in this Complaint by ISO 14025, the standard UL selected and declared compliance with in its own rule, and by the Product Category Rule UL wrote under it. That choice carried the human-health and hazard-and-risk obligations that frame the toxicity issue. UL's own EPD names the subject directly, stating that LCAs are not meant to assess "human health toxicity." [Exhibit CC]

78. The PCR establishes a 0.25 gram residual moisture threshold - 2.5 times weaker than NSF P335. No scientific justification for this threshold appears anywhere in the 37-page document.
79. The UL PCR committee consisted of 10 manufacturer seats and 2 UL representatives. Excel Dryer held 4 of 10 manufacturer seats. William Gagnon, Excel's VP and COO, chaired the committee. World Dryer held 3 seats. Hokwang/FASTDRY held 3 seats. There were no outside, independent committee members, to include no public health officials, no consumer representatives, and no independent researchers participated in creating standards that affect public health.
80. UL's CEO is Jennifer Scanlon. [Exhibit AAAA]
81. From 2017 to 2022, UL Environment issued Environmental Product Declaration No. 4787137936.102.1 certifying Excel's XLERATOR Hand Dryer. [Exhibit CC] Wade Stout, UL Environment's own EPD Project Manager, signed as verifier, and the declaration records that verification as internal rather than external. [Exhibit CC] The certificate specified 8-second drying times and 3.68 Wh energy

consumption - specifications that Plaintiff's 462 field trials establish are not achievable by any downdraft Dispersal-Type hand dryer. UL directly certified the false claims at issue in this complaint and, further, failed to implement the ISO 14025 reporting and verification requirements described below, including the human-health and hazard-and-risk requirements that frame the toxicity issue: relevant environmental aspects, hazard-and-risk methodology, and materials or substances affecting human health; EN 15804 separately identified B1 as the use-stage emissions module.

E. Defendant Smart EPD LLC

82. Defendant Smart EPD LLC is a Virginia limited liability company, entity ID 11379451, with registered office at 25320 Ripleys Field Dr, Chantilly, VA 20152.
83. Smart EPD LLC was formed on April 26, 2022, under the name "EPD USA LLC." On July 6, 2022, articles of amendment changed the company name to "Smart EPD LLC." Anna Lasso is listed as registered agent, with qualification stated as "Member or Manager of the Limited Liability Company."

84. Smart EPD's registered office is a private residence - the same address Anna Lasso lists with the Virginia State Corporation

Commission as her own. The mailing address listed on Smart EPD certificates and the company website - 585 Grove St., Ste. 145, PMB 966, Herndon, VA 20170 - is a private mailbox at a commercial mail receiving agency; "PMB" is the postal designation for a private mailbox. [Exhibit KK]

85. Smart EPD certifies Environmental Product Declarations for hand dryer manufacturers, including Excel Dryer. Certificate numbers include SmartEPD-2023-002-0006-01, SmartEPD-2023-002-0007-01, and SmartEPD-2023-002-0008-01. [Exhibit AA] Smart EPD is measured in this Complaint by the Product Category Rule it adopted. Its declaration names the UL PCR for Hand Dryers v.1 as its Core PCR, and in adopting that rule Smart EPD adopted its requirements: that the reported dry time be third-party tested and verified, that the declaration carry a statement of that verification, and that an internal verifier not have been connected in any manner with the declaration or the underlying assessment. The UL PCR is the methodology that Anna Lasso helped develop while employed at UL Environment.

86. Smart EPD specifically binds itself to ISO 14025 in its EPD, bringing the rules and responsibilities of that document and Type III EPDs with it, including the human-health and hazard-and-risk obligations that frame the toxicity issue.
87. Smart EPD issued its first Excel Dryer EPD on June 23, 2023 - eleven months after UL Environment's EPD for the same product expired without renewal. The Smart EPD certificate uses the same ~ 8-second drying time that UL used in their EPD. Thomas P. Gloria of Industrial Ecology Consultants verified the lifecycle assessment for both the 2017 UL certificate and the 2023 Smart EPD certificate.

F. Defendant Anna Lasso

88. Defendant Anna Lasso, née Nicholson, is an individual. Virginia State Corporation Commission records list her address as 25320 Ripleys Field Dr, Chantilly, VA 20152 - the same address as Smart EPD LLC's registered office.
89. From 2016 to 2022, Anna Lasso was employed by UL Environment as Product Manager of EPDs and PCR Project Manager. In this role, she worked directly with William Gagnon as he chaired the UL PCR

committee that created the Product Category Rules for Hand Dryers.

Her published article on Excel UK's website documents her role,

describing Gagnon by the title he then held: "The PCR development

process was initiated by William Gagnon, Excel Dryer's vice

president of marketing and sales." She continues: "William was

asked to serve as chairman of the PCR committee, working closely

with me and other leading manufacturers." She concludes: "I'm

proud to have played a part in producing the first ever published

global PCR." [Exhibit KK]

90. Ms. Lasso managed the development of the 2016 Product Category Rule as UL Environment's PCR Project Manager, worked directly with the committee chair throughout, and describes her participation in her own published account. She is the only individual Defendant identified with contemporaneous knowledge of how each choice in that rule was made - the selection of ISO 14025 as the governing standard, the non-sourcing of ISO 14067, the treatment of module B1, the single statement of hygienic function, the treatment of ISO 14025's human-health and hazard-and-risk obligations and the toxicity issue those provisions frame, and the conformance

requirements the rule adopted. Six years later, at a company she formed, she certified a product under that same rule while holding the roles of program operator, independent critical reviewer, and independent external verifier. Plaintiff does not allege who proposed the B1 substitution, who approved it, or why. Plaintiff alleges that she managed the process in which those choices were made, that the PCR itself records the B1 treatment as an express deviation, that she was there, that she is here, and that the record of those choices is in her or UL's possession.

91. On April 26, 2022, while employed at UL Environment, Anna Lasso filed articles of organization with Virginia for "EPD USA LLC," listing herself as registered agent and member or manager.
92. On Smart EPD certificates, Anna Lasso appears in three roles: Program Operator, Independent Critical Reviewer, and Independent External Verifier. ISO 14025 [Exhibit Y] does not make those three titles mutually exclusive merely by title. It imposes specific independence requirements instead. Section 8.2.1 requires that an independent verifier not have been involved in execution of the LCA or development of the declaration and not have conflicts of interest;

§8.1.2 requires PCR review by a third-party panel; §§8.1.3 and 8.1.4 require independent verification of the underlying data and the declaration; and §9.4 requires third-party verification for business-to-consumer declarations. The significance of Ms. Lasso's simultaneous roles therefore turns on the work she actually performed in preparation, review, and verification of the current declaration. That record is within Defendants' possession and is a subject for discovery.

93. Anna Lasso is named individually for her own alleged conduct, not solely because of her title, her ownership of Smart EPD, or the collectability of any judgment. Plaintiff alleges that she personally participated in the development of the UL hand-dryer PCR, personally occupied review and verification roles on the current Smart EPD declaration, personally authorized or issued certifications under the same PCR, and personally made representations relevant to the challenged certifications. Her liability, if established, rests on those acts.
94. Ms. Lasso is measured in this Complaint by two documents. The first is the drying-time figure she certified. The second is ISO 14025,

which imposes specific independence requirements on verification: the verifier may not have participated in execution of the LCA or development of the declaration, may not have a conflict of interest, and, for business-to-consumer declarations, verification must be by a third party. Those obligations are separate from the accuracy of the drying-time figure and do not depend upon it.

III. JURISDICTION AND VENUE

95. This Court has subject matter jurisdiction under 28 U.S.C. § 1332.

Plaintiff is a citizen of Pennsylvania. Defendant NSF International is a Michigan nonprofit corporation. Defendant UL Solutions Inc. is a Delaware corporation with principal place of business in Illinois. Defendant SGS North America, Inc. is a Delaware corporation with principal place of business in New Jersey. SGS North America, Inc.'s Delaware incorporation is pleaded on the basis of its own published statements of corporate identity and the available public records; after reasonable inquiry, Plaintiff alleges in good faith that SGS North America, Inc. is not a citizen of Pennsylvania under any characterization of its entity form. See *Lincoln Benefit Life Co. v. AEI Life, LLC*, 800 F.3d 99, 102-07 (3d Cir. 2015). Defendant Smart EPD

LLC is a Virginia limited liability company. Defendant Anna Lasso is a citizen of Virginia. Complete diversity exists. The amount in controversy exceeds \$75,000.

96. Smart EPD is a Virginia LLC. Virginia State Corporation Commission records do not require or publicly disclose the complete membership of Virginia limited liability companies. Plaintiff obtained and reviewed the certified public record for Smart EPD LLC, including its articles of organization and amendments. Those records identify Anna Lasso as the entity's organizer or filer, registered agent, and a "Member or Manager," but do not disclose the complete membership of the LLC. After reasonable inquiry into the available public records and Smart EPD's publicly available materials, [Exhibit-OOOO] Plaintiff has no reason to believe, and alleges in good faith, that any member of Smart EPD LLC is a citizen of Pennsylvania. Accordingly, Smart EPD LLC is diverse from Plaintiff. See *Lincoln Benefit Life Co. v. AEI Life, LLC*, 800 F.3d 99, 102-07 (3d Cir. 2015)
97. This Court has personal jurisdiction over each Defendant. Each Defendant purposefully directed the conduct at issue into Pennsylvania, and Plaintiff's claims arise directly from that conduct.

98. Each Defendant created, applied, verified, or supplied testing for standards governing hand dryers manufactured for national distribution, and each authorized the display of its mark or the publication of its declaration on or for those products. Each Defendant knew that the products carrying its mark or covered by its declaration would be sold and installed throughout the United States, including in this Commonwealth. The certified machines Plaintiff used are installed in Pennsylvania facilities in Camp Hill, Mechanicsburg, and the surrounding area, and the marks Plaintiff encountered were displayed in Pennsylvania, on those machines, in the rooms where he used them. [Exhibit V] Plaintiff's transactions occurred in Pennsylvania, his use of the certified products occurred in Pennsylvania, and his injuries were sustained in Pennsylvania.
99. This Court has supplemental jurisdiction over state law claims under 28 U.S.C. § 1367.
100. Venue is proper under 28 U.S.C. § 1391(b)(2). A substantial part of the events giving rise to this action occurred in this District, including Plaintiff's use of certified hand dryers in Pennsylvania facilities and

Plaintiff's research activities documenting Defendants' certification failures.

IV. FACTUAL ALLEGATIONS

A. PURPOSE, PRODUCT SYSTEM, LOCAL AND GLOBAL OPERATIONAL ENVIRONMENTS

101. The event and its nine elements. Every certified operational cycle contains all of them, and the certifiers defined the event.

102. A hand dryer exists because wet hands transfer microorganisms more readily than dry hands. Washing and drying are two parts of one hygienic process: washing reduces contamination on the hands; drying reduces the transfer associated with residual moisture. Defendants' own standards and materials rely upon that science.
[Exhibits S, T]

103. The product purpose is increased sanitation, its method is the act of drying hands. The dryer appliance does not exist, nor a market for it, without the desired outcome of increased sanitation. When used for its intended purpose it has no other utility. The dryer is unbreakably linked to a sink. The manufacturer specifies it that way. Excel's

technical data sheet, dated May 2026, recommends one dryer for every two washbasins, one dryer per washbasin in small installations, and four to five dryers where a 54-inch washfountain is used. The unit of deployment for a hand dryer is the sink. [Exhibit QQQQ] There are no hands to dry if there are no washed hands. The two are inseparable but the sink has utility other than sanitation. If sanitation is removed, the sink can perform other tasks. If sanitation is removed from the dryer it has no function. The certified event begins with the washing of human hands, and continues within the operational cycle of the hand dryer. It ends when the applicable residual-moisture endpoint is achieved. Machine operation that ends before that result is not completion of the certified service.

104. Plaintiff uses the term “local operational environment” descriptively to identify the immediate environment in which that service occurs: the dryer, the electricity that powers it, the wall and the floor that physically receive it, the air it moves, the hands it acts upon, the water it removes, the time over which the process occurs, and the dryness that completes it. The term is not offered as a defined ISO category. It names the physical system Defendants chose to certify.

Global environmental issues, as used by Plaintiff, are those occurring before and after the dryer begins use and ends its life cycle. Build, materials, installation, then disposal. The drying of washed hands - the service represented by the UL PCR Functional Unit and the P335 Operating Cycle - occurs in the local operational environment.

105. The use cycle has nine minimal necessary constituents: a dryer, electricity, a wall, a floor, air, hands, water, time and dryness. Remove any one and the declared cycle fails. Dryness is the element the certifiers themselves made mandatory: NSF requires 0.1 gram within one normal operating cycle or fifteen seconds, whichever is lower - an endpoint inside a hard time ceiling. UL prescribes no maximum time: its Functional Unit is the drying of 100,000 hand dryings to 0.25 gram of residual water or less, and it requires the drying time itself to be third-party tested, verified, and declared on the face of the EPD. NSF established the clock. UL required the clock be measured and published. Both define completion by endpoint; neither lets the clock go unstated. The wall and floor are not incidental: the device must be mounted to a surface, and the user

must stand on one. Air is the working medium. Hands are the object of the service. Water is the substance transformed and relocated.

Time controls exposure and energy.

106. The cycle necessarily has memory when the dryer is used for its intended purpose in a public restroom. A single cycle creates a particular result, but no hand dryer is ever used once and disposed of. Subsequent cycles are impacted by prior cycles and impact later cycles. Water and biological material deposited during one use remain on the dryer, wall, floor, and surrounding environment. Those surfaces become reservoirs. Later cycles occur in the environment altered by earlier cycles and must necessarily re-entrain or redistribute bacteria, fungi, mold spores, fragments, and contaminated moisture. The assumption there are none is not reasonable after the first use. UL expressly modeled 100,000 completed dryings. It accumulated energy across those uses while omitting the environmental history created by the same 100,000 repetitions.

107. Sanitation is not a tenth element of the cycle, and Plaintiff does not plead it as one. It is the condition the certifiers attached to the

elements they named. P335's operational intent binds the air to the hands: air used to dry a user's hands must not carry microbes to them. Its disinfection requirement binds the water. Its treatment requirement binds the dryer's own surfaces. The wall and the floor carry no condition in any Defendant's document. Hygiene enters the certified cycle not as a constituent but as the declared condition of the constituents - written by the certifiers themselves onto the air, the water, and the surfaces. The sections below measure the elements they conditioned and never tested. The sections below measure both: first the elements they measured and certified wrong, then the elements they conditioned and never tested.

B. DIRECT PERFORMANCE FAILURE

1. The Preserved Scientific Record

108. Plaintiff's testing and analysis are 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. [Exhibits A-R] The research

manuscripts are published pre-prints and are provided in complete form together with the full evidentiary record on which they rest.

109. Plaintiff's research methodology, data, and analysis are published in ten studies with Digital Object Identifiers on Zenodo and at the Harvard Dataverse. All raw data, 1.3 TB, is hosted at Cloudflare and Backblaze. The studies are publicly available, peer-accessible, and independently verifiable across five principal websites and additional mirrors. The complete record is preserved on redundant physical media held at separate locations.

110. The standards at issue were not imposed on Defendants by regulators. Defendants created them. Defendants promoted them. Defendants certified products under them. Defendants' own data proves compliance is impossible.

2. Drying-Time Performance

111. Within Plaintiff's 462-trial drying-time corpus, the time-series performance curves from three manufacturers demonstrated convergent pairwise correlations exceeding $r = 0.99$ ($p < 0.001$).

[Exhibits B, E, H, L]

112. In 31 trials conducted at manufacturers' exact claimed dry times - 8 seconds for XLERATOR, 10-12 seconds for Dyson Airblade, 12 seconds for World Dryer - zero trials achieved any certification threshold [Exhibits B,E,H].

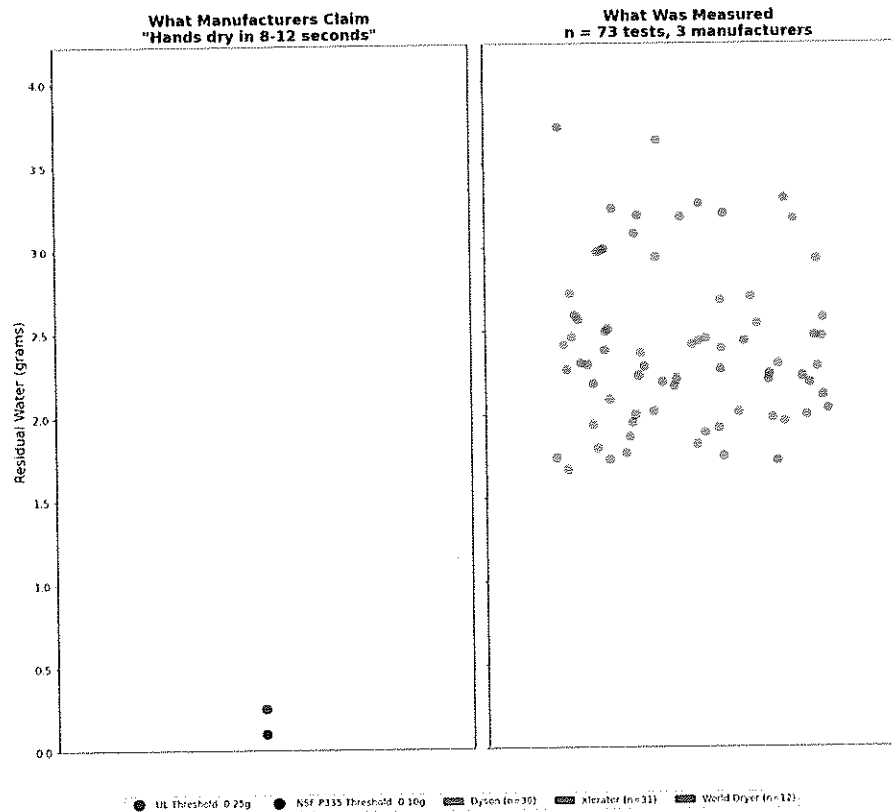


Figure 3: Residual water measured at manufacturers' claimed dry times, 31 trial residual-at-claimed-time test set.

113. The most favorable result from all trials was 1.67 grams. Defendants certified 0.1 to 0.25 grams. Plaintiff documented 1.67 grams as the single best trial, 2.5 to 3.0 grams typically, ~1000% to 2500% over specification.

Compliance rates at claimed dry times:

			Compliance at
Standard	Mandated	Actual	Claimed Times
NSF P335	0.10g	2.29g	0%
Excel rejected proposal	0.20g	Not directly tested.	By interpolation: 0%
UL PCR	0.25g	2.87g	0%

Paper 8, Table 8, Exhibit H

114. In real-world use, giving all the parties involved full benefit of the doubt with a 15 second drying time, hands remain visibly wet in 100% of observed trials. Water can be seen visibly dispersing from the hands onto the walls, floors, and the user with every drying cycle. No instrumentation or special skill is required to see it. Any person can verify this for themselves.

115. NSF P335 §6.3 establishes clear, quantified requirements: residual moisture of 0.1 grams or less at manufacturer-specified times, with 95% compliance across 20 trials.

116. Plaintiff conducted 462 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 2.83 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 2,730 percent.

117. The probability that products achieving zero percent compliance in 462 trials would achieve 95% compliance in an NSF mandated 20-trial certification test approaches zero. ($p < .001$) [Exhibit H] This is not sampling variation, it is systematic failure. Exceeding these thresholds harms users or renders the standards meaningless, establishing liability either way.

118. For the currently manufactured downdraft-Dispersion units in Plaintiff's corpus, the claimed rapid-drying times cannot co-exist with Plaintiff's data. One or the other must be correct. [Exhibits B, E, H, L]

3. The Two-Phase Removal Curve

119. The shape of the drying curve is not in dispute. The mechanism driving its second phase is. Two investigators have examined the question closely - the inventor of the Xlerator dryer and Plaintiff - working twenty-five years apart, by different methods, on different equipment. Both measured the same drying rate distribution curve. They disagree about what governs its slow phase, and that disagreement does not affect the result.

120. Plaintiff's data demonstrate that water removal follows a bi-modal decay pattern. [Exhibit H] The first phase removes loose surface water quickly. The second phase removes bound water slowly. All dryers - regardless of manufacturer, technology, air velocity, or price - converge on eighty to ninety seconds of drying time to approach the 0.1 gram NSF threshold, each brand and model having a slightly different profile, with all curves fitting a consistent pattern. R-squared across all trials is 0.9998.

121. Plaintiff arrived at that pattern from the raw trial data before learning it had been described elsewhere. It had been. Sol Aisenberg's provisional application of 1999, issued as United States Patent No. 7,039,301 and the technical foundation of the XLERATOR, sets out

the same two-phase structure: “plot E ... shows two modes of water removal involving first blow-off of loose water.....The blow-off takes place in about the first 2-3 seconds with a very steep slope of decline in moisture on the hands, when about three quarters of the moisture - the loose droplets - are removed.” [Exhibit JJJ] The patent quantifies the split: an average washed hand carries roughly six grams of water (Plaintiff found 7.31g, Exhibit F) about 4.5 grams of it loose and readily displaced, leaving approximately 1.5 grams “adherent to the hands.” Figure 2 of the patent plots residual water against time and shows the shape - a near-vertical drop, then a long shallow decline, identical to Plaintiff’s below.

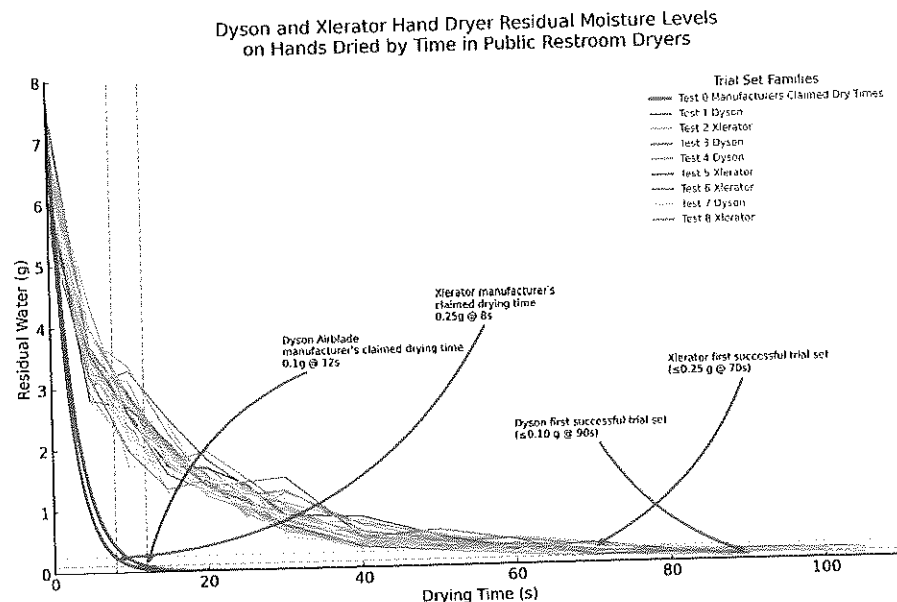


Figure 4: Complete plot of 431 time-series drying trials.

122. The same physics appears in an undated preprint filed as Exhibit H in

Case 3:12-cv-30211-MAP on February 22, 2013, “An Ultrafast,

Comfortable Hand Dryer,” by Excel’s consultants Sol Aisenberg and

G. Freedman. [Exhibit UU] They wrote: “Two sequential phases of

drying are used. Phase 1 is the blowing off of loose water droplets,

accounting for about 75 percent of total water removal in the first 3

seconds, and Phase 2, the evaporation phase.”

123. Plaintiff agrees on the structure and differs on the mechanism.

Aisenberg attributed the second phase primarily to evaporation and

designed the machine to accelerate evaporation by disrupting the

stagnation boundary layer at the skin. Plaintiff’s measurements

indicate that in the machines as built and installed, water

displacement, not evaporation continues to dominate through the

second phase - water leaving the hands and landing in the room

rather than entering the air as vapor. Whether the evaporative

contribution overtakes displacement at the far end of the curve in a

heated machine is a question Plaintiff has not resolved and does not

claim to have resolved. It would require testing designed for that

purpose.

124. The disagreement does not change the consequence. Under either mechanism the curve has the same shape, and the shape is the problem: the last fraction of water is the slowest to leave. A machine that removes three quarters of the load in three seconds does not remove the remainder in five more. The first phase is directly observable. It is the water leaving the hands in the opening seconds of the test set out in paragraph 1 of this Complaint - visible, audible, and landing somewhere.

125. Plaintiff tested the bi-modal framework across three manufacturers: Dyson, Excel, and World Dryer. All three produced effectively identical performance curves, with cross-manufacturer correlations exceeding $r = 0.999$ ($p < 0.001$) seen in Figure 4. These are not similar curves. They are functionally identical curves produced by three companies using three different engineering approaches. [Exhibits H, L] The joint probability that three independent manufacturers would produce correlation coefficients all exceeding $r = 0.99$, under the hypothesis that performance varies by manufacturer, is less than one in one billion.

126. On December 4, 2025, before testing a third manufacturer for the first time, Plaintiff recorded a formal prediction: World Dryer products would fail identically to Dyson and Excel, because the constraint is physical rather than an engineering deficiency. On December 5, 2025, Plaintiff tested World Dryer VerdeDri units at three locations. The prediction held. World Dryer first reached its claimed 0.25 gram UL threshold at forty seconds - 233 percent longer than the manufacturer's twelve-second claim - and never reached 0.1 gram, because water rebounded from the wall owing to nozzle proximity. [Exhibit H]

127. The certified figures are inconsistent with the inventor's own.

Aisenberg defined dryness as 0.20 grams of residual water or less and reported that his invention reached that level in approximately thirteen seconds. [Exhibit JJJJ] The 2013 preprint reports 1.25 grams at four seconds declining to 0.2 grams at 13.5 seconds, and concludes that "preliminary experimental data ... indicate that we can realistically expect this number to be reduced to the 10 to 12 second range in the near future." [Exhibit UU] UL subsequently certified the same product line at 8.355 seconds to a 0.25 gram

threshold - a looser endpoint, reached in roughly sixty percent of the time the inventor reported for the tighter one, and below the range his own researchers projected as achievable.

128. These dry time numbers are not compatible with Plaintiff's testing and are not explainable given the actual performance of current Xlerator models constructed under Aisenberg's patent.

4. The LCA and Energy Claims

129. A Life Cycle Assessment (LCA) is one input into a Type III ISO 14025 Environmental Product Declaration (EPD), binding on UL and Smart EPD by their choice to use it as their governing standard. A set of Product Category Rules (PCR) are built with specific requirements for testing, verification, and reporting - all failed by both parties - for the product being evaluated. An LCA is generated in accordance with the PCR rules, subservient to the ISO 14025 standard requirements. A report is generated that is given to the public for evaluation of the tested and certified product, the EPD.

130. Four elements: ISO 14025, a PCR, an LCA, generating an EPD. For present purposes, an outline of the three document relationships is

sufficient before discussing the testing claims and science. This structure is the very heart of this case for Defendants UL, SGS and Smart EPD and will be discussed in detail below.

131. Plaintiff has been unable to locate a copy of the UL LCA for its original Xlerator Environmental Product Declaration (EPD), seeing only the values from the ghost LCA reflected in the original UL Xlerator EPD.

132. TrueNorth Collective wrote the LCA for Smart EPD's subsequent EPD, post UL, so the chain can be viewed in full. Each of these documents fails in critical ways regarding the toxicity issue UL itself names and the human-health and hazard-and-risk obligations that govern it, discussed in detail below. For our purposes here, we table that and deal only with their energy claims.

133. Every use-stage energy analysis in a hand dryer LCA is built upon the time the machine runs. The controlling number for operational energy is how long the machine is on, and that duration is defined clearly by every Defendant in different ways. False drying-time claims distort the use-stage energy calculation and the carbon results

derived from it, and obscure both hygienic performance and the toxicity question raised by what the machine emits during the actual operating interval. Use-stage energy consumption is power multiplied by time. When manufacturers claim 8 seconds but products require 70-90 seconds, operational energy consumption increases tenfold. The environmentally green and hygienic marketing narrative built on the shorter interval collapses. [Exhibits B, E, G, H, L]

134. Manufacturers claim hand dryers use 3 Wh per dry and produce 85-90% less CO₂ than paper towels. These claims assume 8-12 second drying times.
135. The false times produce false energy and CO₂ values, and the resulting marketing claims are made by the manufacturers with explicit attribution to certification by Defendants.
136. The false data propagates into building certification. Excel's LEED v4.1 guidance [Exhibit HH] instructs building professionals to "input 3.68 Wh per 8 second cycle use... for energy modelling purposes." Thousands of LEED-certified buildings contain false energy data in

their certification calculations. The environmental benefits represented to building owners, tenants, and the public do not exist.

a. The Claimed Calculation

137. Excel claims XLERATOR dries hands in 8 seconds at 1,450 watts:

$1,450\text{W} \times 8\text{s} \div 3,600 = 3.22\text{ Wh per use}$. Dyson claims Airblade dries hands in 10-12 seconds at 1,000 watts: $1,000\text{W} \times 12\text{s} \div 3,600 = 3.33\text{ Wh per use}$. [Exhibit YYY] These figures form the basis of all environmental marketing.

138. At claimed times, manufacturers report approximately 2 grams CO₂ per use. This is the foundation of the "85-90% less CO₂ than paper towels" claim. [Exhibits AA, EE]

b. The Actual Calculation

139. Plaintiff's 462 time-to-dry trials establish actual drying times of 70-90 seconds to reach manufacturer-specified dryness thresholds. Zero units achieved compliance at claimed times, which wildly understates the reality: instead of 8 seconds it takes 80. [Exhibits E, H]

140. At actual times:

- XLERATOR at 70 seconds: $1,450\text{W} \times 70\text{s} \div 3,600 = 28.2\text{ Wh per use}$
 - Dyson Airblade at 90 seconds: $1,000\text{W} \times 90\text{s} \div 3,600 = 25.0\text{ Wh per use}$
-
- Energy consumption is 7.5 to 8.75 times higher than claimed.
 - CO₂ emissions scale with use-phase electricity, which constitutes 87-92% of total hand dryer lifecycle impact per the manufacturers' own lifecycle data. At actual drying times:
 - Conservative estimate, maximally minimized in Defendants' favor, (manufacturer LCA data): 12-18 g CO₂ per use
 - Expansive estimate, based on the varying scales used by the agencies that do this work, (independent academic sources): 30-50 g CO₂ per use
 - CO₂ emissions are 6-9 times higher than claimed under conservative assumptions. Under expansive assumptions incorporating independent academic studies, emissions are 15-25 times higher.

c. The Paper Towel Comparison

141. Paper towel lifecycle emissions for two towels (approximately 4 grams total) range from 12-20 g CO₂ per use depending on recycled content and source methodology.

142. The comparison:

	Paper	Dryer	Dryer
Metric	Towels (4g)	(Claimed)	(Actual)
Energy (Wh)	75-80	3-4	25-28
CO ₂ - Conservative (g)	17-19.5	~2	12-18
CO ₂ - Expansive (g)	12-20	4-10	30-50

143. At manufacturer-claimed drying times, hand dryers produce 50-70% less CO₂ than paper towels under expansive analysis. At empirically-measured actual drying times, and using Defendants' own commissioned lifecycle data [Exhibits AA, BB, CC, DD, EE, FF], hand dryers produce emissions equivalent to paper towels under conservative analysis - and 2-3 times worse under expansive analysis. The claimed 85-90% CO₂ advantage does not exist.

5. UL Unexpectedly Validates Plaintiff's Energy Claims Calculations

144. After completing the empirical testing program and energy calculations described above, Plaintiff discovered UL Environment EPD Declaration No. 4787616201.106.1 for the Hokwang HK-2200 hand dryer, issued April 1, 2022 and valid through April 1, 2027.

[Exhibit DD]

145. The Hokwang EPD certifies a conventional warm-air dryer (2.0 kW, 20.5 m/s air speed) at 30-35 seconds drying time to 0.074 grams residual moisture - well inside the 0.25 gram endpoint the UL PCR specifies. UL's certification produces 18 Wh energy consumption and 13.5-14.8 g CO₂ per use depending on regional methodology.

146. Plaintiff's empirical calculations - completed before discovering the Hokwang EPD - predicted hand dryer energy and environmental impact at 25-28 Wh and 12-18 g CO₂ at actual drying times of 70-90 seconds. The convergence is striking: UL's certification at 30-35 seconds and Plaintiff's calculations at 70-90 seconds produce CO₂ values in the same range (12-18 g), while Smart EPD's certification at 8 seconds produces values 6-7 times lower (~2 g).

Source	Time	Energy (Wh)	CO ₂ (g)
NSF/SGS/Smart EPD	8-12 sec	3-4	~2
UL Hokwang	30-35 sec	18	14
Plaintiff (empirical)	70-90 sec	25-28	12-18

147. The Hokwang EPD was verified by the same personnel who verified Excel's certifications. Thomas Gloria signed both the Hokwang UL EPD and the Excel Smart EPD as independent verifier. [Exhibits AA, DD] The UL PCR Review Panel that approved the Hokwang certification was chaired by Jon Dettling - the same methodology, the same verifiers, the same standards.

148. The Hokwang declaration provides an independent comparison within UL's own methodology. A certified interval of thirty to thirty-five seconds produces approximately 18 Wh and 13.5 to 14.8 grams of CO₂ per use, values near Plaintiff's independently calculated range at longer actual drying times and far above the Smart EPD values derived from eight seconds. The comparison does not resolve

every product-specific variable, but it confirms that drying duration materially controls the declared operational energy and carbon results and requires reconciliation of the conflicting certifications.

C. THE REMAINDER OF THE OPERATIONAL SYSTEM

149. The air the machine emits, the water it disperses, its own surfaces, the wall, and the floor.

150. NSF fixed the acceptable level for the air at approximately one organism per operating cycle and prescribed a test of the intake filter. It required six-log disinfection of removed handwash water in a machine that collects it and is entirely silent when a machine discharges it into the room. It required the surfaces of the machine to be treated and prescribed no test. No certifiers mention the wall or the floor.

151. The drying-time and energy claims are resolved by direct measurement. The remaining failures require a bridge from the standards to the failure. The bridges are supplied within the operational cycle under the constraints of the documents created by the Defendants. No claim exists outside of their own claims but the

absence of standards is a more challenging construct than the direct violation of standards already written.

1. Microbial Amplification

152. Plaintiff's Microbial Contamination Study (Study 1, n=87) and Ambient Air Comparison Study (Study 9, 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 the amplification factor. Study 9's sampling time was based on the findings in Study 2 and Study 5, each one more refined, based on prior testing and technique. [Exhibits A, B, E, I, M, N]

Table 3: Airborne Contamination Results

Metric	Study 1 (LB Agar)	Study 9 (TSA Agar)	Combined
Tests conducted	87	49	136
Tests showing amplification	87 (100%)	49 (100%)	136 (100%)

Metric	Study 1 (LB Agar)	Study 9 (TSA Agar)	Combined
Tests showing reduction	0 (0%)	0 (0%)	0 (0%)
Median ambient air CFU	1	2	-
Median hand dryer output CFU	67	200	-
Median amplification factor	49.6×	110×	-
Probability under null hypothesis	-	-	$p \approx 10^{-41}$

153. One hundred thirty-six consecutive tests showed amplification, validating the hypothesis generated before the first sample was ever taken [Exhibits A, I]. No dryers reduced bacterial load. The probability

of this occurring by chance is approximately 10 to the negative 41st power.

-
154. Products certified as “hygienic” amplify bacterial contamination by 49.6 to 110 times compared to ambient room air, spraying it all over the user’s hands, into the air, and on the walls and floor, literally the opposite of hygienic and creating the toxicity question UL itself names as “human health toxicity.” [Exhibit CC] Plaintiff’s testing establishes the emission and contamination; the professional assessment of its human-health significance is the work the governing standards assigned elsewhere.
155. Measured against the certifier’s own criterion, the hierarchy inverts. NSF Protocol P335 §6.4 derives an acceptance threshold of approximately one culturable colony per minute of exposure. Plaintiff’s broad-spectrum testing recorded white paper towels at a median of 1 CFU, statistically indistinguishable from ambient air ($p = 0.24$); ambient restroom air at a median of 2 CFU; brown paper towels at a median of 46 CFU; and NSF-certified hand dryers at a median of 200 CFU. [Exhibit I]

156. Three features of the record bear on reliability. Every one of the 49 broad-spectrum dryer tests recorded amplification and none recorded reduction. The distributions do not overlap: the lowest dryer petri dish reading was 70 CFU and the highest petri dish ambient room air reading was 34 CFU. All 116 control dishes returned sterile at 0 CFU. [Exhibit I] Earlier published restroom studies measuring ambient air by direct dish exposure report values in the same single-digit range - Huesca-Espitia et al. (2018) at or below 0.5 CFU per minute, Alharbi et al. (2016) at 2.5, and Kouadri (2020) at 5. Plaintiff's ambient measurements fall within that range.

2. Water Relocation

157. Plaintiff created a novel but accurate distinction that brings clarity to the current state of the hand dryer market. [Exhibits C, F] There are Dispersal-Type dryers and Capture-Type dryers. There are also Insert-Type and Downdraft-Type dryers.

158. Capture dryers collect water in receptacles for disposal. Very few remain in use, never having become common in the United States.

159. Dispersal dryers have no mechanism for processing the water after the output dryer air jets hit it. They spray it everywhere in a truly bizarre design parameter that every user sees and nobody notices.

[Exhibit RRRR]

160. Until they do.

161. NSF P335 remarkably addresses removed handwash water in detail when a machine collects it (capture-type) and says nothing at all about it when a machine sprays it everywhere (dispersal type). §4.3.5 applies “if applicable” - that is, only if the dryer “is equipped with a reservoir to capture or collect the handwash effluent” - and then requires in a capture dryer that no liquid discharge flow from any point other than the discharge point, that bacteria and mold present in the retained water be removed or killed before discharge, and that no objectionable odors be detected. §6.5 sets the corresponding acceptance criteria: a 4-log reduction for *Trichophyton mentagrophytes* and a 6-log reduction for *Pseudomonas aeruginosa*, *Staphylococcus aureus*, and *Salmonella choleraesuis*, each within five minutes. A dispersal dryer sprays the same water all over the room and the user and into the air. The P335 says nothing at all. The

same water that must be rendered nearly sterile inside a tank is unregulated when expelled into the occupied room. [Exhibit X]

162. No known certification addresses the water coming off of hands - the necessary last phase of the product operational cycle. This complaint exists, in part, to rectify that problem. Plaintiff never noticed, trusting the manufacturers, certifiers, and purchasers without question for decades. After a year of testing he still did not notice the water spraying everywhere, assuming it was somehow normal. And then he saw it. It cannot be unseen, only ignored or denied.
163. Manufacturers advertise dispersal-dryer airstream velocities of up to approximately 420 mph. The high-velocity air mechanically strips water from the hands and disperses it into the occupied room. Plaintiff's high-speed video documents the resulting droplets and destinations; the evidence does not require an assumption that the droplets themselves travel at the advertised airspeed. [Exhibit RRRR]
164. Plaintiff's baseline water study documented 7.31 grams of water on hands after washing [Exhibit F]. Approximately 90% of this water is

removed by mechanical shear during the first phase of drying, not by evaporation. That water must go somewhere.

165. Plaintiff's Visual Dispersal Study documented where the water goes [Exhibits C, RRRR]. High-speed video captured water destinations including:

- Adjacent walls and floor surfaces
- User clothing: torso, forearms, thighs, shoes
- User face and hair from upward dispersion
- Airborne mist remaining visible for three or more seconds after drying
- Concentrated accumulation patterns on all surrounding surfaces

166. Paper towels showed a single destination with occasional large drops falling off as the towels are grasped: absorption into the towel material, followed by disposal. Minimal environmental dispersal. [Exhibit C, RRRR]

167. The dispersed water cannot be sterile. Plaintiff's microbial studies documented 50-110× bacterial amplification in dryer output air [Exhibits A, I]. The contamination measured on petri dishes arrived

via the air stream. The air stream contains water droplets. Those droplets originated from users' hands. The water is the carrier medium for the measured contamination.

168. At 150 million daily Dispersal-Type dryer uses in the United States, water dispersal occurs at population scale [Exhibits AAA, BBB]:

- Daily: 2.8 to 4.6 million cups of water sprayed onto users, walls, floors, and fixtures [Exhibit RRRR]
- Annually: 1 to 1.7 billion cups of water dispersed into public restroom environments
- Per dryer: Approximately 3 cups of water dispersed daily

169. That is not incidental moisture. It is systematic environmental contamination at industrial scale with hygienic impact.

170. Defendants certified drying time. Defendants certified energy consumption. Defendants certified HEPA filtration of intake air. Defendants ignore water that sprays onto walls, floors, clothing, faces, and into the lungs of everyone in the room. The most consequential sanitation related output of the device has not a single standard written to manage it.

171. Remove the dryers from the room. Is it more or less hygienic?

172. The water the standard never accounts for does not vanish. It lands, and it grows. The physical evidence of where it goes is documented next.

3. Deposition, Accumulation, and Secondary Emissions

173. Plaintiff's Wandering Plume of Filth Study [Exhibits J, Q, R]

documented visible contamination patterns beneath hand drying equipment. Plaintiff randomly selected 127 public restrooms by wandering in his vehicle for five days up the street from one to the next. Each was visually examined in the room and in the areas under the dryers and towel dispensers using NIOSH and FDA standard mold assessment techniques along with a proprietary set of criteria that offered much greater detail. The study compared all drying interventions as found in the restrooms with no criteria for non-inclusion. Hand dryers and/or paper towels using various dispenser configurations were found in all restrooms. Dryers of all four types and paper towels were tested with petri dishes in 122 of the 127 restrooms in the study. In the remaining five restrooms, Plaintiff

recorded the visible wall plume by direct observation only; no culture dishes were plated at those locations. All 127 restrooms are included in the plume observation; the 122 are those at which parallel plating was also performed.

Table 4: Environmental Contamination Results (n=127 restrooms)

Intervention Type	n	Wall Plume Present	Visible Mold	Mold Rate
Dispersal-type hand dryers	50	50 (100%)	50	100%
Capture-type hand dryers	3	0 (0%)	-	-
Brown paper towel dispensers	30	-	12	40%
White paper towel dispensers	39	-	5	13%

Statistical comparison: $\chi^2 = 72.0$, $p < 0.001$; **Ratio:** Dispersal dryers show 8× higher mold rates than white paper towel installations (100% vs. 13%)

174. Every Dispersal-Type hand dryer installation exhibited visible wall mold. One hundred percent. The contamination pattern radiates outward from the device, originating narrowly at the unit and fanning toward the floor like a plume, hence the study name.
175. 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 to cause allergic reactions, hypersensitivity pneumonitis, and mycotoxin production. [Exhibit U]
176. The plume is a persistent physical presentation that correlates with the microbial and fungal findings in the dryer output air. Mold was present at 100% of dispersal-dryer installations and 13% of white-paper-towel installations - an eightfold difference ($\chi^2 = 72.0$, $p < 0.001$). In matched same-restroom comparisons, the difference tracked the device, not the environment, and the contamination radiates outward from the unit in a gradient consistent with the dryer's documented output dispersal. The convergence of these

findings supports the dryer as the source of the contamination. The visible contamination reflects dryer emissions minus cleaning, with even the cleanest installations still showing trace mold, particularly under the dryer itself, in the zone of maximum air turbulence during drying.

177. Critical finding: The contamination affects everyone who enters the restroom, not just dryer users. A person who uses paper towels if they are provided, a person who uses the sink but not the dryer, a person who simply walks through - all are exposed to amplified microbial loads and environmental mold created by a hand dryer. The harm extends beyond users to everyone in the space.

Defendants certified drying. Defendants certified products whose sole purpose is hygiene, using and writing standards that demand hygiene testing or environmental and human-health reporting which they failed to perform, impacting Plaintiff during decades of trusting use.

178. Plaintiff's paper towel contamination studies produced a novel finding: prior paper towel research had never sorted by towel type.

[Exhibits D, I, M-P]

179. White paper towels are statistically equivalent to ambient room air in microbial content. In Study 4 (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. White paper towels do not add contamination. They may reduce it.
180. 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.
181. The distributions do not overlap. The 75th percentile of white towels (1 CFU) falls below the 25th percentile of brown towels (11 CFU). This complete distributional separation is exceptionally rare in biological data. Cohen's $h = 1.671$. $p < 0.003$.

In the definitive finding, entirely serendipitous and not understood until analysis of the entered raw data, Study 9 conducted dual-intervention tests: 9 restrooms contained both dryers and paper towels next to each other. They were tested within minutes of each other, in the same restroom air, 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. This image is causal for dryer contamination and provides proof of the method that resolves the problem. Every paired restroom looked like this:

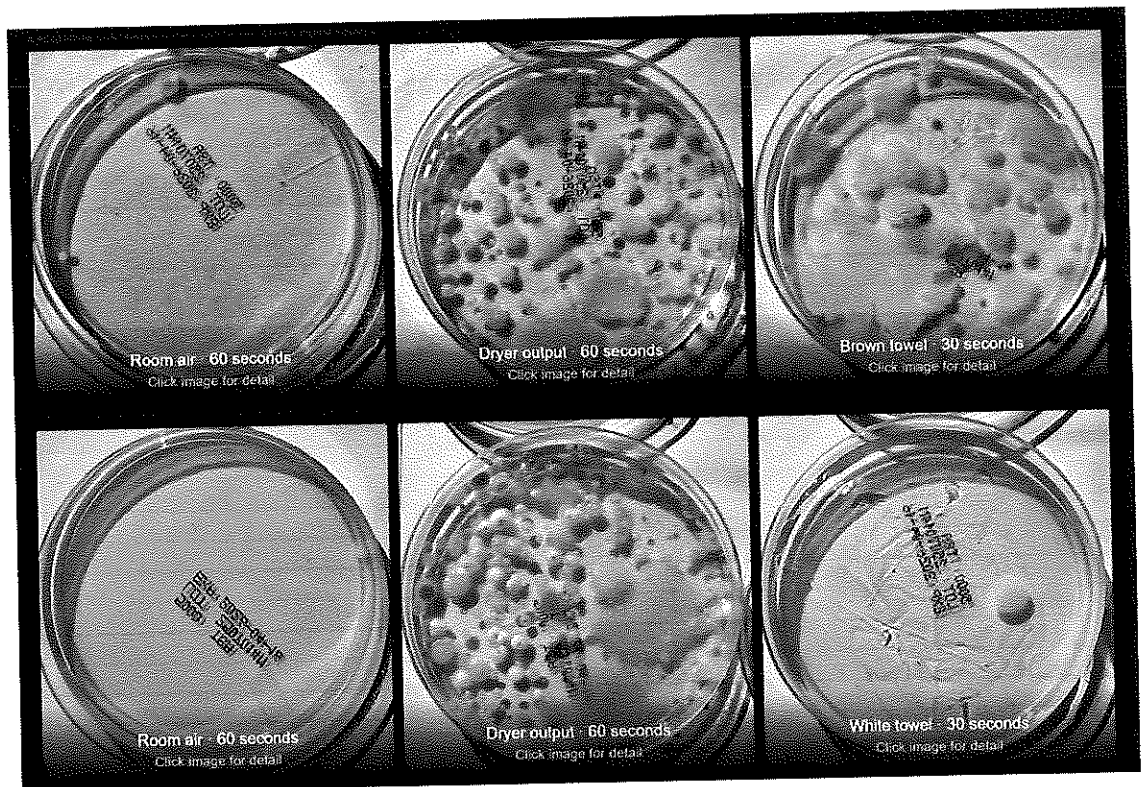


Figure 5: Two restrooms with both a hand dryer and paper towel installation in the same room: one with brown paper towels, one with white.

182. 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.

183. Plaintiff's Wandering Plume study documented the environmental consequence. White paper towel dispensers showed 13% mold rates (5/39 installations). Brown paper towel dispensers showed 40% (12/30). Dispersal-type hand dryers showed 100% (50/50). The 8-fold difference between white paper towels and dispersal dryers is not variation - it is categorical. The dryer creates the mold. The paper towel does not. [Exhibits J, M-P, Q, R]

184. Remove the dryer. Install a white paper towel dispenser. Every problem documented in this complaint disappears. The infrastructure exists. The cost is equivalent. The dispenser fits the space. The hypothetical answers itself.

4. The User's Dilemma

185. Plaintiff faces two options, both creating harm.

186. Option one: Use the dryer for the specified 8 to 14 seconds. Leave with wet hands, freshly sprayed with bacteria and fungus. Transfer bacteria to every surface touched thereafter - doorknobs, phones, keyboards, other people, food.

187. 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 49.6 to 110 times room air microorganism load and be sprayed with liquid water carrying the same.

188. 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. [Exhibit A]. A user cannot limit exposure without leaving with wet hands. The product design creates a forced choice between two harms.

D. HOW THE CERTIFICATIONS CAME TO EXIST

1. The High-Speed Claim and the First Standard

189. The institutional history begins before any Defendant issued an environmental declaration. In 2001 Denis Gagnon, then the owner of Excel Dryer, claimed he had created the first high-speed hand dryer, a machine that dried hands in less than twenty seconds, and marketed it against the sixty-to-ninety-second dryers then dominating the market. [Exhibit OO] By 2012 Excel claimed twelve

seconds; it now claims eight. Gagnon testified under oath in 2012 that the XLERATOR dried hands in twelve seconds. [Exhibits OO, SS]



Figure 6: Excel XLERATOR / early high-speed dryer / black mold on wall

190. The protocol's drying-time methodology came from the manufacturer whose architecture it was built around. NSF P335 §2 lists among its normative references "Dyson Test Method DTM 553, Evaluation of Hand Dryer Drying Times." [Exhibit X] By the protocol's own terms, documents listed there "contain provisions that, through reference in this text, constitute provisions of this protocol." DTM 553 was authored by Toby Saville, a Dyson microbiologist. Saville also served on the NSF Protocol Development Panel that produced P335, and is identified as a panel member on the protocol's front

matter. [Exhibit X] The method by which certified drying time is measured was developed by a manufacturer, on that manufacturer's insert architecture, and incorporated into the standard by a panel on which its author sat.

191. In approximately 2006 Dyson entered the United States market and worked with NSF International to create a performance standard for commercial hand dryers. The result was NSF Protocol P335, "Hygienic Commercial Hand Dryers," published in April 2007. P335 was the first non-manufacturer hand-dryer performance standard in the record and was developed during the introduction of Dyson's original insert-dispersal Airblade AB01.



Figure 7: Dyson AB01, insert-dispersal type / water on floor

192. The original Airblade was an insert-dispersal machine developed in competition with the existing Mitsubishi Jet Towel, an insert-capture machine.

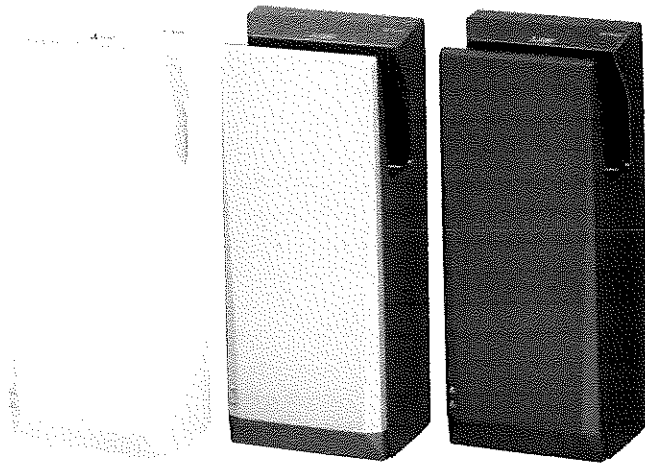


Figure 8: Mitsubishi Jet Towel, insert-capture type

193. Both insert architectures place the hands between opposing air blades. The capture design retains removed handwash water in a receptacle; the dispersal design allows that water to leave the machine. P335 accordingly contains detailed provisions concerning collection, containment, drainage, disinfection, sanitation, and maintenance when water enters a receptacle, but no corresponding destination rule for a tankless machine that discharges the same handwash water into the occupied room.

194. P335 defined dry hands as less than 0.1 gram residual moisture and required the specified result within one normal operating cycle or fifteen seconds, whichever was shorter, with 95 percent effectiveness across at least twenty trials. [Exhibit X] The standard therefore joined hygiene to a measurable drying result and treated contaminated air, microorganisms, removed wash water, drainage, containment, and sanitation as subjects material to hygienic hand drying.

2. The Rejected Revision and the Sworn Record

195. In 2012 Excel proposed changing P335's residual-moisture threshold from 0.1 gram to 0.2 gram. NSF rejected the proposal. Toby Saville - the author of DTM 553, the Dyson microbiologist who served on the panel that wrote P335 - confirmed the rejection in sworn testimony. [Exhibits PP, RR] Saville's declaration also reported a mean drying time of 9.58 seconds to the 0.1-gram threshold across twenty-two DTM 553 studies conducted between 2009 and 2011. [Exhibit PP] The declaration does not identify the models tested. Plaintiff does not allege that figure is false. Based on the dates, the units were insert-

architecture Airblades, and insert machines can approach a ten-to-twelve-second result. The consequence is that the drying data underlying the protocol may be accurate as to a nearly discontinued architecture and inapplicable to every downdraft product certified under the same standard since.

196. By 2012 Dyson had shifted much of its product line from insert machines to tankless downdraft-Dispersal dryers mounted above the hands, similar in general operating geometry to existing World Dryer and Excel XLERATOR products. Their airstreams strike hands positioned below the outlet and disperse removed water into the surrounding room.



Figure 9: Downdraft-Dispersal dryer (Airblade V) / mold on wall, water staining on floor

197. The architectural change matters because insert dryers can place both sides of both hands between opposing air blades and can approach a ten-to-twelve-second result. Downdraft-Dispersal dryers act primarily on the exposed surfaces of hands held below the outlet and, in Plaintiff's retained-moisture testing, require approximately seventy to ninety seconds to reach the certified endpoints.

198. NSF did not rewrite P335 to account for that change. It continued to certify later downdraft products under a protocol developed around the original insert architecture. The old data may accurately describe an older machine. The current certifications remain false if the currently certified machines cannot reproduce the specified performance.

3. The Rejected Revision and the 2012 SGS Testing

199. Excel commissioned SGS North America to test hand dryers under what the SGS report called “a revised version of NSF Protocol P335 Hygienic Commercial Hand Dryers currently being developed and reviewed by NSF and its new technical panel for the 5 year protocol update.” [Exhibit BB] The report defined “thoroughly dry” as less than 0.1 gram per hand, or 0.2 gram total. P335 itself defines dry hands as less than 0.1 gram total. The record does not establish who placed the 0.2 gram figure in the draft under review, or when NSF declined to adopt it.

200. The report tested at twelve and fifteen seconds. It did not test the eight-second value later placed into UL and Smart EPD documents.

That distinction becomes important because the report was later cited as the performance basis for an eight-second certification.

4. The 2012 Excel-Dyson Litigation

201. In December 2012 Excel Dryer sued Dyson in the United States

District Court for the District of Massachusetts, Case No. 3:12-cv-30211-MAP. The competing manufacturers placed previously private test reports, declarations, environmental studies, protocols, and drying-time data into the public record. Each accused the other of using false drying-time claims and defective testing. [Exhibits NN-UU]

202. Excel relied on the SGS report and described its method as a revised NSF P335 protocol. Dyson responded that NSF had rejected Excel's proposed revision and that describing it as a revised protocol was untrue. Dyson further emphasized that XLERATOR was not NSF certified and asserted that Excel's rapid-drying claims were false. Excel, in turn, challenged Dyson's methods, data, and environmental comparisons.

203. The litigation also disclosed that manufacturers and commissioned researchers were supplying material inputs to the competing environmental analyses. Dyson supplied test results for its competitor's product to the MIT study it commissioned. The authors of the competing manufacturer-funded LCAs later acknowledged material differences among the drying-time data and stated that they had not observed the underlying testing. [Exhibits FF, TT, WWW]

204. Plaintiff does not ask the Court to retry the manufacturers' 2012 dispute. The case matters because it establishes that the accuracy of rapid drying claims, the meaning of P335, the SGS methodology, the tested product architecture, and the environmental consequences of drying time were already contested and documented in federal court. Several records exposed in that dispute later became source material for the standards, testing representations, LCAs, EPDs, and certifications challenged here.

205. Each manufacturer identified defects in the other's drying-time claims. [Exhibits WW, XX] Plaintiff's independent research later demonstrated that the central criticism applied to both currently manufactured downdraft product lines. The manufacturers were

fighting in 2012 over whose drying-time claim was false. The certification system later accepted and propagated claims from both sides without resolving the conflict their litigation had exposed.

5. Excel shops for a standard it can pass: Enter UL

206. By 2016 the installed market was dominated by downdraft-Dispersion machines. Excel had never obtained NSF P335 certification and had failed to secure its proposed 0.2-gram revision. Excel and other manufacturers then participated with Underwriters Laboratories in creating a separate Product Category Rule for Hand Dryers under the ISO 14025 environmental-declaration system. [Exhibits W, JJ], discussed in detail below.

207. UL's July 2016 PCR adopted a 0.25-gram residual-moisture threshold - two and one-half times the P335 threshold and higher than the 0.2-gram proposal NSF had rejected. The PCR supplied no scientific explanation for the new endpoint. It defined a functional service, a standardized drying-time method, an environmental reporting architecture, and the rules under which hand-dryer EPDs would be created.

208. On July 25, 2017, UL Environment issued Environmental Product Declaration No. 4787137936.102.1 for Excel's XLERATOR. It used an 8.355-second drying time, reported approximately 3.68 Wh of electricity per use, and normalized the environmental results to 100,000 completed hand dryings to 0.25 gram residual moisture or less. Wade Stout, UL Environment's EPD Project Manager, signed as verifier of the declaration; Thomas P. Gloria verified the life-cycle assessment. The verification block records that verification as internal: of the two boxes offered, "INTERNAL" is marked and "EXTERNAL" is not. The field reserved for the identity of the PCR review is completed with the words "PCR review panel" and a program e-mail address; it names no chair and no organization. [Exhibit CC] UL's own Product Category Rule provides, in the verification block every declaration under it must complete, that where verification is internal the verifier "must not have been connected in any manner with the EPD or LCA," and requires that same block to identify the chair of the PCR review by name and organization. [Exhibit W, Table 8] ISO 14025 §9.4 provides that verification of a business-to-consumer declaration "shall ... be

carried out by a third party," a term §3.10 defines as a body
"recognized as being independent of the parties involved." [Exhibit Y]

The Product Category Rule states the primary audience of
declarations issued under it as "Business to business (B to B) and/or
Business to consumer (B to C)." [Exhibit W, Table 1] The declaration
expired in July 2022.

6. Excel moves to Smart EPD

209. The next transition is documented by corporate records and the
declarations themselves. On April 26, 2022, articles of organization
were filed for EPD USA LLC, with Anna Lasso identified as registered
agent and a member or manager. The company was renamed Smart
EPD LLC on July 6, 2022. At or near that time, Ms. Lasso had served
as UL Environment's EPD Product Manager and PCR Project Manager
and had participated in the hand-dryer PCR system. [Exhibits KK, LL]

210. Excel's UL declaration expired in July 2022. The present record does
not establish whether Excel sought renewal or why it did not renew. It
establishes that Excel did not obtain a renewed UL declaration and

instead obtained a current declaration from Smart EPD under UL's existing hand-dryer PCR.

211. On June 23, 2023, Smart EPD issued Environmental Product Declaration No. SmartEPD-2023-002-0006-01 for the XLERATOR. It states an eight-second dry time, approximately 3.68 Wh per use, and the same 0.25-gram threshold. It cites SGS testing performed under the UL PCR even though the identified public SGS report tested at twelve and fifteen seconds, not eight. Thomas P. Gloria appears in the verification history of both the UL and Smart EPD declarations. [Exhibits AA, BB, CC]

212. Anna Lasso, UL Environment's EPD Product Manager and PCR Project Manager, formed EPD USA LLC on April 26, 2022, while the XLERATOR EPD was approaching expiration. The UL declaration expired in July 2022 without renewal. Eleven months later, Smart EPD, the renamed company, issued a new Excel declaration under the same PCR.

213. The current Smart EPD certificate identifies Anna Lasso as program operator, independent critical reviewer, and independent external

verifier. The underlying LCA identifies her as chair of an “External Independent Third-Party Review Panel.” [Exhibits AA, EE] The significance of those roles is addressed below after the ISO system defining them is explained.

7. One Historical System, Not Five Isolated Defendants

214. Each institutional act appears independent when viewed alone. Read in sequence, each later document relies upon, alters, or republishes material from an earlier stage. The manufacturer claim becomes a test input; the test input becomes an LCA input; the LCA input becomes an EPD value; the EPD value becomes a public environmental representation; and the representation enters procurement, green-building guidance, installation, and ordinary user reliance.

215. The sequence is pleaded as traceable documentary reliance and continuity. The failure is that no stage, through any sort of verification as simple as the test at the beginning of this complaint called out the false drying time claims. Those claims have acquired decades of cumulative authority of multiple professional names,

documents, marks, and verifications when they could have never been true.

E. THE ENVIRONMENTAL DECLARATION SYSTEM: UL, ISO 14025, AND EN 15804

1. How a Type III Environmental Product Declaration Is Built

216. When Excel Dryer approached UL to create standards for their dryer, UL could have written any standard set it preferred. That is the courtesy given to standards organizations by custom, by law, and by government regulation and is not contested here. UL sought an external guiding standard. It chose to bind itself to the International Organization for Standardization (ISO) and to be guided by the European Committee for Standardization (CEN) as it created its standard and testing requirements.

217. They specifically chose to write for a Type III Environmental Product Declaration (EPD), a system distinct from Type I and Type II environmental labels and declarations, involving the establishment of product-category rules, calculation of energy use and

environmental impact, and issuance of the EPD with the assessment results and other information required by the governing rules.

218. The contrast with NSF is instructive. NSF wrote Protocol P335, released in 2007, on its own authority. NSF is answerable to no one but itself, bound only by the standards it created. UL sought a recognized international system and bound its entire hand dryer standards set to the ISO material, guided by standards of the European Committee for Standardization (CEN), including EN 15804, for additional structure. These bodies publish standardized methodologies for testing, evaluation, and environmental reporting.
219. The system does not begin with the declaration. It begins with a rulebook. UL and Smart EPD have bound themselves to ISO 14025. ISO 14025 is part of the ISO 14000 family of environmental-management standards. ISO 14001, another standard in that family, supplies environmental-management concepts used throughout that body of work, including environmental protection, prevention of pollution, and the relationship between organizations and the environment.

220. ISO 14025 begins with the creation of a set of specific rules for the device category, in this case hand dryers, called Product Category Rules (PCR). The PCR defines what product function is being evaluated, the Functional Unit that makes products comparable, the system boundary, the test and calculation methods, the parameters to be reported, the additional information required, and the form of the resulting declaration. A PCR is just what it describes itself as, Rules for an entire group of products. It is a broad-spectrum instrument covering multiple elements of what a product must do to qualify.
221. The Life Cycle Assessment then performs quantitative analysis for energy use and environmental impact under the PCR using the ISO 14040 series.
222. The Environmental Product Declaration reports the LCA results together with the additional content the PCR and ISO 14025 require.
223. The relationship is sequential: ISO 14025 mandates, the PCR prescribes; the LCA measures; the EPD reports. A defect at an earlier stage enters every later document that depends upon it.

224. Verification is the safeguard between those stages. The PCR is reviewed. The underlying data and LCA are critically reviewed. The final declaration is independently verified. ISO 14025 §8.1.2 requires the PCR review to determine, among other things, whether the LCA-based data together with the additional environmental information prescribed by the PCR describe the significant environmental aspects of the product. Section 8.1.3 requires independent verification of the underlying data and requires confirmation of coverage, precision, completeness, representativeness, consistency, reproducibility, sources and uncertainty, together with the “plausibility, quality and accuracy of the LCA-based data.” ISO 14044 §6.1 separately requires critical review to ensure that the methods are scientifically and technically valid and that “the data used are appropriate and reasonable in relation to the goal of the study.” ISO 14025 §8.1.4 then requires verification of the completed declaration to confirm that it accurately reflects the documents on which it is based and that the information is “valid and scientifically sound.” [ISO 14025 §§8.1.2-8.1.4; ISO 14044 §6.1] The public is not

asked to repeat those tasks. The EPD's professional value arises because those tasks are represented as already completed.

225. Excel Dryer approached UL to create a PCR for hand dryers. UL chose the ISO 14025 Type III declaration system, wrote the PCR, selected ISO 14040 and ISO 14044 for the LCA methodology, selected EN 15804 as a reference framework, established the Functional Unit and reporting architecture, and issued the 2017 EPD challenged here along with the PCR. The LCA for the 2017 UL EPD cannot be found, ghosted as data within the EPD. [Exhibits W, CC] Smart EPD's current LCA and EPD independently identify ISO 14025, ISO 14040, and ISO 14044 as governing reference standards. [Exhibits W, AA, EE] Those choices define the professional undertaking alleged in this action.

2. The Functional Unit

226. And, uniquely, humans are inserted directly into the center of the environmental chain for the hand dryer product by UL's choices when defining the operating cycle and Functional Unit: "the drying of 100,000 hand dryings, to dryness equaling 0.25 grams of residual

water or less.” Hands are a mandatory part of every use, placing the human being attached to them directly within the physical service being modeled and in contact with the product’s outputs every time it is used. For hand dryers the Functional Unit is a completed service performed on human hands; the human is therefore physically present in every execution of the defined unit. For hand dryers, the human sits at the center of the Functional Unit.

3. The Choice of Instruments: ISO 14025 and ISO 14067

227. Within the ISO framework, more than one instrument can produce an environmental evaluation of a product. There are different methodologies, different criteria, different aspects of the function of the whole that can be standardized. They differ in what they require the declarant to look at, and the difference is an unbreakable foundational element of this case.

228. In his telephone conversation with Anna Lasso on April 27, 2026, the day the demand package was delivered, Plaintiff was told in substance that Environmental Product Declarations are for energy and carbon dioxide evaluation and do not address the directly

human consequences of the product's operation. [Exhibit KKK] Lisa Sullivan, UL's Associate General Counsel for Litigation, telephoned on May 8 and delivered a written response on May 22. Plaintiff replied. Sullivan wrote again on June 5. Plaintiff replied again.

229. Plaintiff interpreted the stated positions, at the time, as an error - assuming that a Life Cycle Assessment under ISO 14040 and ISO 14044 was the same thing as the Product Category Rule and Environmental Product Declaration governed by ISO 14025. He responded as such.

230. Sullivan's response triggered a new set of questions. Plaintiff spent 14 consecutive 12 hour days in June of 2026 reading the ISO 14025 one line at a time, taking it wherever it led, rereading, outsourcing, searching, reading the collateral documents of the ISO 14001 series, obtaining physical copies of 14001 [Exhibit Zb], 14025 [Exhibit Y], 14040 [Exhibit Za], 14044 [Exhibit Z], and 14067 [Exhibit MMMM]. He drove two hours to the University of Maryland STEM library to obtain a physical copy of the EN 15804, licensed to the University and not in the exhibit list.

231. The evidence to be brought forth suggests that Plaintiff spent more time reading these documents than Anna Lasso and the UL and Smart EPD Type III EPD departments did.

232. The error turned out to be larger than a confusion between an LCA and an EPD. The distinctions at issue are codified in different ISO documents in explicit, definitive terms.

233. ISO 14025, selected by UL during Anna Lasso's tenure there, continuously held by UL, and now cited by Anna Lasso in her role as CEO at Smart EPD, governs Type III Environmental Product Declarations. Section 5.3 requires all relevant environmental aspects of the product throughout its life cycle to be taken into consideration and become part of the declaration, and requires elements not covered by the LCA to be addressed using other appropriate methods.

234. Let's state this clearly: the LCA evaluates energy usage and the PCR mandates testing outside of the calculations of the LCA to report other mandated material. An EPD is not an energy document, it's a

report on the environmental impact, local and global, of a product. A restroom is an environment.

Section 6.7.1 requires the Product Category Rule to specify requirements for additional environmental information, including methodological requirements such as hazard-and-risk assessment, and materials and substances to be declared, including substances that can adversely affect human health or the environment across the life cycle. Section 7.2.1(i) then places the corresponding materials-and-substances content in the declaration's core content, subject to its stated proprietary-information exception. Those are the governing human-health and hazard-and-risk obligations underlying the toxicity issue pleaded here. Section 7.2.3 separately requires, where relevant, additional environmental information and directs identification of significant environmental aspects to consider, at minimum, toxicity related to human health or the environment, environmentally significant product performance, and hazard-and-risk assessment. [Exhibit Y: §§5.3, 6.7.1(f), 6.7.1(g), 6.7.2(f), 6.7.2(g), 7.2.1(i), 7.2.3(a)(2), 7.2.3(b), 7.2.3(h), 7.2.4(d), 9.2.1] [Exhibit Zb: §3.5] UL's own EPD uses the phrase "human health toxicity." [Exhibit CC]

Plaintiff uses toxicity in this Complaint as shorthand for that human-health and hazard-and-risk subject, not as an assertion that Plaintiff performed a toxicological assessment.

235. Anna Lasso denied by telephone that any evaluation beyond energy and carbon was required. [Exhibit KKK] Her position, in substance, was that this is simply how EPDs are done, an entirely novel idea to Plaintiff when it occurred, as he had already read the standards. Universal industry practice of this kind is addressed in *The T.J. Hooper*, 60 F.2d 737, 740 (2d Cir. 1932).

236. Plaintiff assumed, at that point, that they simply did not know - and wondered how Lasso, who had worked with ISO 14025 for roughly a decade, had missed what he, a layman, could plainly see written in the material. There are only two possibilities, both presented to the Court:

1. UL and Anna Lasso and Smart EPD understood the difference. They knew ISO 14025 carried environmental human-health and hazard-and-risk obligations and that ISO 14067 did not.
2. They did not understand.

237. Plaintiff believes the second, as stated above. Either way, they selected the broader instrument and did not perform the obligations it mandated. Which explanation the record supports is a matter for discovery.

238. An answer appeared with the late discovery of ISO 14067 in July of 2026 on the Dyson website. Dyson sorted it out - it obtained its energy claims through a carbon-only instrument that did not take on ISO 14025's human-health and hazard-and-risk obligations or the toxicity issue those obligations frame. Dyson is not a defendant, and this Complaint pleads nothing against it: ISO 14067 is a valid instrument used for a valid purpose, properly executed, binding Dyson to no hygiene reporting. Dyson's hygiene obligations run through NSF's P335 - the protocol that failed on all counts, as pleaded above. [Exhibits LLLL, MMMM, NNNN]

239. ISO 14067 provided the documentary guide UL and Smart EPD sought, seek, and hold as their stated goal. ISO 14067, existing within a much larger set of ISO standards designed to protect human health as described above, carves out a path to a purely energy-and-carbon evaluation of a product without taking on the broader human-health

and hazard-and-risk obligations through which ISO 14025 frames the toxicity issue. It addresses, in its own words, “only a single impact category: climate change,” and “does not assess any social or economic aspects or impacts, or any other environmental aspects and related impacts potentially arising from the life cycle of a product.” It is the instrument that produces the document UL and Smart EPD were, and apparently still are, seeking. They appear to have missed it. Discovery may reveal the story.

240. ISO 14025 and ISO 14067 build on the same life-cycle assessment methodology, ISO 14044. They differ in scope, deliberately so. When ISO wrote the carbon-only standard, it stated the limitation expressly. It is a scope restriction carved out of the broader human-health and hazard-and-risk architecture in which toxicity is expressly recognized as an environmental subject.

241. The two instruments differ in market value. ISO 14025 produces an Environmental Product Declaration - a recognized credential accepted in green-building certification. ISO 14067 produces a carbon-footprint study report, which is not. Plaintiff pleads that difference as a fact and draws no conclusion from it. The present

record does not establish why UL selected one instrument rather than the other; the records of that choice are matters for discovery.

242. UL selected ISO 14025, wrote the Product Category Rule and issued an EPD for the XLERATOR dryer citing ISO 14025 as authoritative and binding, and produced a declaration reporting only energy and carbon. Smart EPD and Anna Lasso continue.

243. UL and Smart EPD could have chosen ISO 14067. Instead they chose ISO 14025. That choice brought with it the human-health and hazard-and-risk requirements that frame the toxicity issue UL itself names as “human health toxicity.” [Exhibit CC] This case demands that they perform the obligations attached to the instrument they chose. Plaintiff had been confused for two years about how it fit together. Plaintiff is no longer confused and shares it with the Court.

4. The Product Category Rule

244. PCR construction. Section 6.7.1(f) requires the PCR to specify requirements for additional environmental information, including methodological requirements such as hazard-and-risk assessment. Section 6.7.1(g) requires materials and substances to be declared,

including identification of materials and substances that can adversely affect human health or the environment across the life cycle. Both are restated as comparability requirements at §6.7.2(f) and (g). These are the PCR-level human-health and hazard-and-risk obligations underlying the toxicity issue.

245. UL's EPD defines the Functional Unit as "the drying of 100,000 hand dryings, to dryness equaling 0.25 grams of residual water or less."
[Exhibit CC] The unit is not eight seconds of machine operation. It is a completed result on human hands, repeated 100,000 times.
246. The Functional Unit is the quantified performance reference to which the LCA's input and output data are normalized. [Exhibit Z, §4.2.3.2]
It defines the completed service; the physical event required to perform that service necessarily involves, at minimum, a dryer, electricity, air, hands, water, a wall, a floor, time, and dryness.
Remove any one and the certified event cannot occur or cannot be completed. The Functional Unit is therefore the binding point between the global life-cycle model and the local operational event.
Environmental values are reported for the completed service UL defined, not merely for an interval of machine operation.

247. The definition of environment set out above - air, water, land, flora, fauna, humans, and their interrelation - governs here. [Exhibit Zb, §3.5] ISO 14044 separately requires the system boundary to be consistent with the study goal and provides that deletion of life-cycle stages, processes, inputs, or outputs is permitted only if it does not significantly change the study's conclusions; omissions and their reasons and implications must be stated. [Exhibit Z, §4.2.3.3] The restroom air, wash water, human hands, wall, and floor are part of the physical event the Functional Unit describes. Each is therefore a mandatory subject of the certification as written, and the wall and the floor are within the certified cycle, not incidental to it.

248. Each completed or attempted cycle produces primary outputs. Air leaves the outlet. Water leaves the hands. ISO 14044 defines an LCA as the compilation and evaluation of the inputs, outputs, and potential environmental impacts of a product system; it defines output to include material flows and releases, and releases to include emissions to air and discharges to water and soil. [Exhibit Z, §§3.2, 3.25, 3.30] Humans are necessarily directly involved in every use cycle via their hands and Plaintiff's testing measured biological

material carried in the dryer output and wash water deposited on the machine and room. Repeated cycles create reservoirs, and later operation can produce secondary emissions from the environment altered by earlier use.

249. UL expressly established the Functional Unit as having 100,000 cycles. No dryer is installed, used once, then removed. It tracked electricity across the repetitions while treating water, biological discharge, deposition, and reservoir formation as though the physical environment retained no memory. Defendants cannot divide one physical use cycle into portions favorable to energy certification and portions later disclaimed.

250. The function statement makes relevance to UL's own determination.

ISO 14025 §6.7.1(a) requires the PCR to state "the function of the product, its technical performance and use." UL discharged that obligation in one sentence - the only statement about hygiene in a thirty-seven-page document: hand dryers "are electric devices used to provide a hygienic method to dry hands in public washrooms."

[Exhibit W, §1.2] The PCR nevertheless supplies no hygiene evaluation. Lasso's and UL's later statements describe the EPD as

an energy-and-carbon instrument, the narrow task ISO 14067 expressly provides. Why UL selected the broader ISO 14025 system and then used it in that narrower way is a matter for discovery.

251. The EPD issued by UL and mimicked by Smart EPD six years later under the same PCR carries the same statement, enlarged, on its cover: hand dryers are "electric devices used to provide a hygienic and sustainable method to dry hands in public washrooms." [Exhibit CC] The representation is therefore not confined to a thirty-seven-page rule a purchaser may never read. It is the first line of the issued certificate, supported by the Mark. That sentence is not marketing copy. It is the functional definition the governing standard compelled UL to supply, in the document UL authored. The declaration then removes the subject from its own comparison. Under the heading Application it states that "the purpose of this product is to dry hands," that "it is possible that the system has secondary functions, such as hygiene," and that "for purposes of the present study it is assumed that any other functions are equivalent among different systems and that the systems can be evenly compared on the basis of the hand-drying function alone." [Exhibit CC] Plaintiff holds the

inverse: the purpose of the product is hygiene and the method is the drying of hands. Further, Plaintiff states that is self-evident.

252. The more fundamental omission is physical. Every execution of the Functional Unit produces use-stage outputs into the local environment: air leaves the dryer and wash water leaves the hands. The declaration assessed neither the biological character of those outputs nor their environmental consequence, instead assuming that any hygiene function was equivalent among the compared systems. Plaintiff's testing measured what that assumption concealed: hand dryers produced a median of 200 colony-forming units per one-minute exposure, while white paper towels produced a median of 1, statistically indistinguishable from the ambient air of the same rooms. [Exhibit I] Plaintiff measured the emission and contamination; the toxicity question is what those emissions mean for human health and the environment. UL's own definition of the product as providing a "hygienic" method of drying hands makes the biological character of those emissions independently relevant, but the reporting obligation does not depend upon the word hygiene. The air and water are physical outputs of the product system during

execution of the Functional Unit. Their existence does not depend upon how UL chose to characterize them. ISO 14025 §5.3 requires all relevant environmental aspects throughout the product life cycle to be taken into consideration and become part of the declaration, and requires relevant aspects not covered by the LCA to be addressed using other appropriate methods. Section 6.7.1 then requires the PCR to define the product function, system boundary, inputs and outputs, and the additional environmental information necessary to carry that obligation into the product-category rules. UL and Smart EPD did none of that for the use-stage emissions alleged here.

253. These requirements attach to the physical service UL chose to define. Air leaves the machine and wash water leaves the hands during every execution of the Functional Unit. Those are physical outputs before anyone asks whether they are hygienic, safe, toxic, or harmful. Toxicity is the question created by what those outputs contain and where they go; it does not determine whether the outputs exist or whether they are environmentally relevant. The human-health and hazard-and-risk obligations are the machinery the chosen standard provides for addressing that question. Safety and

hygiene may describe consequences of the emissions, but they are not the predicate for the reporting duty alleged here.

5. The Life Cycle Assessment

254. ISO 14025 builds the quantitative assessment through the ISO 14040 series. UL's PCR selected ISO 14040 and ISO 14044 for that methodology. ISO 14044 defines life-cycle assessment as the compilation and evaluation of the inputs, outputs, and potential environmental impacts of a product system throughout its life cycle.

[Exhibit Z, §3.2] The LCA performs that product-specific analysis under the Product Category Rule.

255. ISO 14025 builds its declarations on a life-cycle assessment and permits different LCA methodological paths. UL's PCR adopted the TRACI 2.1 characterization method and selected a list of impact categories that does not include the human-health toxicity categories TRACI itself provides. ISO 14044 separately requires selected impact categories to be justified, consistent with the goal and scope, and to reflect a comprehensive set of environmental issues related to the product system. [Exhibit Z, §4.4.2.2.1] That

question need not be resolved to decide the separate ISO 14025 duties pleaded here.

256. Whatever latitude Defendants possessed inside the impact assessment does not displace the separate requirements of ISO 14025 governing the Product Category Rule, additional environmental information, declaration content, and relevant aspects not covered by the LCA. The human-health and hazard-and-risk obligations underlying the toxicity issue pleaded here do not depend upon a particular LCIA category. Section 5.3 independently requires all relevant environmental aspects throughout the product life cycle to be taken into consideration and become part of the declaration, and relevant aspects not covered by the LCA to be addressed by other appropriate methods. UL was not permitted to calculate energy falsely, and it was not permitted to make a relevant environmental aspect disappear merely because the LCA did not characterize it.

257. The TrueNorth Collective LCA, Smart EPD's feeder document for its dryer EPD, states that dry time, power, and energy consumption are based on "average test results provided by Excel." [Exhibit EE] Its

Functional Unit section states: “According to the NSF Protocol P335 (NSF, 2007), hygiene is part of the protocol for commercial hand dryers. ~~Although hygiene is another purpose for hand dryers that is of~~ interest to the scientific community (Materials Systems Laboratory, 2011), hygiene is not considered in this study.” [Exhibit EE] The certificate nonetheless presents a completed eight-second drying service and environmental values derived from it. Plaintiff declares those roles are reversed: that the function of the machine is to increase hygiene and the method is to dry hands. Further, he argues that is self-evident.

258. The study's own contents measure the exclusion. Its sensitivity analysis contemplated the dry time being wrong, modeling the dryers at double the claimed duration and reporting that the comparative advantage survived. At the measured 70 to 90 seconds, roughly ten times the modeled duration, it does not. And per the declaration's own Functional Unit, the excluded material totals approximately 193 gallons - over 1,600 pounds - of discharged wash water per 100,000 drying cycles, the use phase's largest physical output by mass, from a machine that itself weighs about thirteen pounds. The use phase

was assessed as the dominant module. The water was not in it.

[Exhibit EE]

259. They cannot do that. ISO 14025 §5.3 first requires all relevant environmental aspects of the product throughout its life cycle to be taken into consideration and become part of the declaration; it then requires relevant aspects not covered by the LCA to “be addressed using other appropriate methods.” [Exhibit Y] The TrueNorth study says hygiene was not considered. No other method in the declaration chain is identified as addressing the discharged wash water, the emitted air, their deposition on the receiving room, or the resulting use-stage environmental exposure.

6. The Environmental Product Declaration

260. The Environmental Product Declaration is the public output of that process. It reports the LCA results together with the additional content the PCR and ISO 14025 require.

261. EPD core content. Section 7.2.1(i) requires the declaration to carry a content declaration covering materials and substances to be declared, expressly including substances that can adversely affect

human health or the environment across the life cycle, subject to the provision's stated proprietary-information exception. The present record identifies no invocation of that exception. This is core content in §7.2.1, not additional information in §7.2.3 - a distinction that matters because the product-safety exclusion UL relies upon sits in §7.2.3 and cannot erase §7.2.1's separate content requirement. It is part of the declaration-level human-health architecture underlying the toxicity issue.

262. Additional environmental information, separately. Section 7.2.3 provides that a Type III declaration shall include, where relevant, additional information related to environmental issues beyond the LCA, LCI, or information modules.

263. Plaintiff holds that standing in a spraying stream of seven grams of water injected with bacteria and fungus by 420 mph air with each Functional Unit cycle while being surrounded by the prior users' offjetting and offgassing from the prior 99,999 cycles, is the definition of relevant.

264. In identifying significant environmental aspects it directs that, at a minimum, consideration be given to toxicity related to human health or the environment, environmentally significant product performance, geographical aspects, and hazard-and-risk assessment on human health and the environment. Section 7.2.4 requires such information to be substantiated, specific, accurate, relevant, and unlikely to mislead through omission of facts. Section 9.2.1 provides that for a business-to-consumer declaration - which UL's EPD is by its own scope - no part of the content required by the PCR may be omitted or simplified. [Exhibits Y, LLL] Plaintiff does not rely on §7.2.3 as the source of the §5.3, §6.7.1, or §7.2.1 duties pleaded above. Its narrower significance here is textual: ISO 14025 itself expressly names toxicity related to human health or the environment and hazard-and-risk assessment as environmental subjects.

265. Relevance is not supplied here by a safety label. It is supplied by the physical event and the standards governing it. UL defined a completed Functional Unit of 100,000 hand dryings; the repeated service necessarily moves air and wash water into the occupied

room; ISO 14044 makes inputs and outputs part of the LCA architecture and requires system-boundary omissions to be stated and explained; and EN 15804 separately identifies normal-use emissions as the subject of B1. Plaintiff's testing identifies what those outputs contain and where they accumulate. UL calculated electricity use for the incomplete interval created by the false drying times and reported it as electricity required for completed hand drying, while reporting none of the pleaded use-stage air, water, deposition, or resulting environmental significance. The Functional Unit binds the whole event to the declaration.

266. UL's PCR and EPD report no wash-water destination, no actual microbial output, no surface deposition, no accumulation across repeated use, no mold or secondary emissions, and no consequence to the human user of stopping wet or continuing until dry. Those are the measured outputs and consequences of the same 100,000 drying events for which UL accumulated electricity.

267. Ignoring any other reporting requirements it remains fact that both the UL and Smart EPD energy claims, resting on drying-time figures

verified by SGS, are false by a factor of approximately ten. [Exhibits W, AA, BB, CC, B, E, F, G, H]

268. A hypothetical: Consider an architect specifying restroom equipment for a school. He obtains a standard EN 15804/ISO 14025 Environmental Product Declaration and reads it closely. He reaches the use stage. Module B1, titled “Use”, subtitled, “Environmental aspects and impacts connected to the normal (i.e. anticipated) use of products, not including those related to energy and water use, which are dealt with in B6 and B7” takes his attention into the room the dryer will be in, raising the toxicity question in the ordinary language UL itself uses: what is emitted into the occupied room, what does it contain, and what are its human-health consequences. The B1 block contains either a report or the designation “ND”. Either way the certifier is on record regarding the issue. In practice, the same architect reading the actual EPDs created and certified by UL and Smart EPD never knows the device-local impact in the room was to be tested and reported. He sees an energy impact statement, and nothing tells him it occupies a place reserved for something else.

269. Had UL and Smart EPD properly reported the information their governing documents required for the task they were designed to perform, dryer purchasers and users, Plaintiff in this complaint, could have decided whether to use them by being properly informed. 110× microbial amplification, energy use comparable to paper towels, water spray everywhere: report it and let the market decide. Instead all of it was masked in violation of the reporting requirements of the chosen standards and Plaintiff has been harmed.

7. EN 15804 and Module B1

270. At this point the record establishes the ISO 14025 obligations and their omission. It does not establish who within UL's process read, overlooked, or chose not to implement each of those dispersed provisions. EN 15804 changes that evidentiary posture for one specific subject because UL's PCR itself records what the drafters understood and changed.

271. UL explicitly states that the European standard, EN 15804, is not binding, unlike ISO 14025, but is used as a guide. Plaintiff does not allege otherwise. Its importance is documentary: UL selected it as a

reference framework, followed its module structure, and recorded specific deviations from it in the PCR. During Plaintiff's fourteen-day document review, EN 15804 supplied the detailed use-stage reporting structure that made the B1 issue visible.

272. EN 15804 divides the environmental information declared in an EPD into modules. Module B1 is titled "B1 Use of the installed product in terms of any emissions to the environment (not covered by B2-B7)." It covers environmental aspects and impacts arising from components of the building and construction works during their normal, anticipated use. Its first example is "Release of substances from the facade, roof, floor covering and other surfaces (interior or exterior) to indoor air, soil or water."

273. The subject matter assigned to Module B1 did not originate with EN 15804. ISO 14044 already required the LCA to account for the product system's inputs, outputs and releases across its life cycle, including emissions to air and discharges to water and soil. ISO 14025 then required all relevant environmental aspects to become part of the declaration and expressly identified emissions to air, water and soil among the LCI data. EN 15804 supplied the more

granular reporting architecture and designated those normal-use emissions as Module B1.

274. For the product in this case, B1 identifies a set of physical events without any hygiene or safety characterizations added. EN 15804 §6.3.4.4.2 identifies B1 as “Use of the installed product in terms of any emissions to the environment (not covered by B2-B7)” and applies it to environmental aspects and impacts arising during normal anticipated use, including releases to indoor air, soil, or water. [EN 15804 §6.3.4.4.2] A hand dryer in normal anticipated use expels air and removes wash water from hands into the occupied room. ISO 14044 separately defines an “output” to include releases and defines releases as emissions to air and discharges to water and soil. [ISO 14044 §§3.25, 3.30] Plaintiff measured those emissions: water and biological material into indoor air and onto walls, floors, the machine, and users. B1 asks first what the installed product emits to the environment during use. Contamination is measured. Toxicity and human-health significance are the questions that follow from what the emitted material contains and where it goes.

275. The framework offered two compliant courses, both on the page the drafters were reading. A declarant that examines the use-phase emissions declares them in B1. A declarant that does not wish to examine them marks the module “ND” - not declared - and stands on record that the subject was not assessed. Operational energy required neither course. It has its own module, B6, where every trained reader of these declarations looks for it. Compliance cost two letters.

276. The two compliant courses share one property: each leaves the reader informed. A declared B1 answers the emissions question. An ND entry shows the reader a visible absence - a gap to see, to ask about, and to follow into ISO 14025’s requirement that aspects the LCA does not cover be addressed by other methods. [Exhibit Y, §5.3] Only a third course prevents the question from ever arising: fill the module with something else, so that no absence shows. That is the course the deviation clause conditions on justification, and it is the course that was taken.

277. UL did not miss B1, and it did not leave it blank; it covered it over. Its PCR states, in a footnote: “EN 15804 defines B1 is a generic category

for emissions directly from the product, such as off-gassing, and category B6 as for operational energy use. This PCR deviates from this approach by using B1 for reporting operational energy use.”

[Exhibit W, n.1]

278. The footnote states what B1 is for, states that B6 is for operational energy, and announces that the PCR will do otherwise. A declarant does not depart from a rule it has not read, and this footnote states the rule correctly before departing from it. The allocation was understood, and the substitution was deliberate at the rule level.

279. The contrast with the rest of ISO 14025 is central. The UL PCR does not implement the mandatory human-health and hazard-and-risk provisions that frame the toxicity issue set out above. The present record does not establish whether those dispersed provisions were overlooked or knowingly omitted. B1 is different: the PCR shows on its face that the drafters found the use-emissions module, understood it, and deliberately removed it from view in the certification document.

280. EN 15804 anticipates that a declarant may depart from the module structure, and states the condition: “any deviation from the

~~categorisation of aspects and impacts into Modules B1–B5 and B6~~

B7 shall be transparently reported and justified.” UL’s footnote

reports the deviation. It offers no justification. No reason is given for

the substitution, in the footnote or anywhere else in the thirty-seven-

page document. UL took neither compliant course. It occupied B1

with operational energy, information EN 15804 itself places in B6.

281. The substitution was then written into the rule itself. The PCR

provides that “the use module (B1) includes operational impacts

associated with energy consumption,” and defines total power

consumption during the use stage as the sum of operational and

standby power. [Exhibit W] The footnote announced the deviation;

the operative rule carried it forward.

282. The rule’s treatment appears first in UL’s 2017 XLERATOR

Environmental Product Declaration. It reports energy impacts under

B1 across every results table. [Exhibit CC] Its system boundary

diagram lists the use-stage modules as B1, B2, and B3. B6 does not

appear. The section headed “Environmental and Health During Use

Stage” contains a single sentence, and it concerns electrical safety under UL 499. Nothing in the declaration discloses that the emissions module has been repurposed, and nothing tells a reader that a module for operational energy exists.

283. The treatment appears again in the 2023 Smart EPD declaration issued under UL’s Product Category Rule and bound by its terms. It carries the same boundary - A1-A3, A4, A5, B1-B3, C1-C4 - and reports energy under the B1 module, covering over the room-emissions block again. [Exhibit AA] It does not mention EN 15804. It does not mention B6. It does not mention operational-energy allocation, and it contains no footnote, requiring the reader to find the deviation in the governing PCR. The deviation UL disclosed in the rule is not disclosed in the declaration issued under it.

284. Page 13 states the consequence. The declaration reports that the cradle-to-grave impacts for the XLERATOR are dominated by B1, Use Phase, at 88% to 95.5%, followed by A1, Raw Materials, at 4.2% to 10.4%. [Exhibit AA] A reader of that sentence learns that the use phase accounts for nine-tenths of the declared impact and has been assessed. What has been assessed is the electricity. The water the

machine discharges, the air it emits, and the surfaces it wets are reported nowhere in the declaration.

285. Page 3 of the declaration carries a section titled Life Cycle Module

Descriptions. It describes the exclusion of module A5 as optional under the Rule. It describes modules B2 and B3 as having zero impact, explaining that maintenance consists of blowing dust off the product and wiping down the cover as needed. It describes the exclusion of module C1 as optional. It lists four further exclusions with reasons. Module B1 appears once in that section, inside the boundary list, and is not described. The section describes every module that contributes nothing and does not describe the module that contributes ninety percent.

286. The B1 record also fixes the line of what is and is not yet known about Anna Lasso. She managed development of this PCR as UL's PCR Project Manager and worked directly with the committee chair. The present record does not establish that she personally wrote the footnote, proposed the substitution, approved it, or why it was made. Those facts are within UL's records and the knowledge of the participants and are matters for discovery.

287. What is established is continuity. The same B1 treatment runs from UL's 2016 PCR into UL's 2017 EPD, then into Smart EPD's adoption of the PCR, the TrueNorth LCA, and the current Smart EPD EPD.

Lasso flows through that chain from start to finish: managing the PCR process at UL and later occupying program-operation, review, and verification roles at Smart EPD. The LCA and EPD set out above show the treatment carried forward in the documents themselves.

8. Verification

288. ISO 14025 also assigns verification responsibilities at the data, LCA, PCR, and declaration stages. Review and verification must address conformity, representativeness, reproducibility, plausibility, validity, and scientific soundness. Manufacturer-supplied data may enter the process; responsibility for accepting and publishing it remains with the professionals and program operators performing the stated review and verification. Those duties apply to the whole declaration, including the human-health and hazard-and-risk requirements underlying the toxicity issue, not merely its energy arithmetic.

289. The review panel included professionals whose prior work was cited by the PCR. Jon Dettling had authored the Quantis LCA

~~commissioned by Excet, Jeremy Gregory had co-authored the MIT~~

LCA commissioned by Dyson. Both reviewed a PCR that relied upon the competing manufacturer-funded work. [Exhibits FF, TT, WWW] In

October 2012, before either sat on the panel, Dettling and Gregory

jointly signed a letter stating that the Airblade and the XLERATOR

were statistically indistinguishable in environmental impact. [Exhibit

TT] Four years later they reviewed the rule under which those

products would be separately declared.

290. UL's EPD accepted an 8.355-second drying time that Plaintiff could

not reproduce in 462 trials. The current Smart EPD declaration

repeats the same time. The UL and Smart EPD declarations for the

same product and Functional Unit report operational-energy figures

differing by approximately ninefold and carbon figures differing by

approximately 39 percent, while Thomas P. Gloria appears in the

verification history of both. [Exhibits AA, CC] Both cannot be correct.

291. The operational-energy discrepancy is on the face of the two

declarations. The UL declaration reports operational energy of 3.680

watt-hours, stated as 0.01325 megajoules, per use, and a global warming potential for the use module of 286 kilograms of carbon dioxide equivalent per 100,000 dryings. [Exhibit CC] The Smart EPD certificate, for the same product, under the same Product Category Rule, at the same 0.25 gram threshold, reports operational energy of 0.12 megajoules per use and a global warming potential of approximately 174 kilograms. [Exhibit AA] The energy figures differ by a factor of approximately nine. The carbon figure is approximately thirty-nine percent lower on the certificate reporting nine times the energy. Thomas P. Gloria verified the life-cycle assessment underlying both. [Exhibits AA, CC]

292. The Smart EPD figure is inconsistent with the inputs stated on the same certificate. That certificate reports a power consumption of 1,450 volt-amperes, a dry time of 8 seconds, and a run-on time of 0.7 seconds. [Exhibit AA] A 1,450-watt device operating for 8.7 seconds consumes 12,615 joules, or 0.0126 megajoules. The certificate reports 0.12 megajoules. The reported figure is approximately ten times the figure its own stated inputs produce, and the difference is a single decimal place. ISO 14025 §6.3(d) requires the program

operator to establish a procedure to safeguard the consistency of data within a program. [Exhibit Y] Both declarations cannot be correct, and the Smart EPD certificate is not consistent with itself.

293. The error overstates the product's energy consumption, and no advantage is available from it. UL's 2017 declaration for the same product reported 0.01325 MJ per use, consistent with the correct arithmetic. What the discrepancy establishes is that the declared figure was not reconciled against the inputs printed beside it.

9. The Rule Passes to a New Program Operator

294. Every declaration issued under this rule inherits the substitution, and the current declaration is issued under this rule.

295. UL authored the hand-dryer PCR and issued the original Excel declaration. That declaration expired, but the PCR remained available and Smart EPD used it to issue the present declaration. The false performance input and the rule-level human-health and hazard-and-risk omissions underlying the toxicity issue therefore did not end with UL's 2017 document.

296. The next stage is not inferred from institutional similarity. It is identified on the face of the documents. Smart EPD invokes UL's PCR, repeats the disputed time and energy figures, cites the SGS testing, and identifies the people performing program-operation, review, and verification roles. The standards story therefore moves from the rule UL created to the current actors who adopted and applied it.

F. THE RULE MIGRATES: SMART EPD AND ANNA LASSO

297. The timeline is significant:

- April 1, 2022: UL issues Hokwang EPD at 30-35 seconds
- April 26, 2022: Anna Lasso incorporates EPD USA LLC in Virginia
- July 2022: Excel's UL EPD expires, not renewed
- June 23, 2023: Smart EPD certifies Excel at 8 seconds

298. The chronology establishes divergence, not its undisclosed cause.

UL issued the Hokwang declaration at thirty to thirty-five seconds.

Excel's UL declaration later expired, and Smart EPD issued a new

Excel declaration at eight seconds. The present record does not

establish whether Excel sought renewal from UL or why it moved programs; those matters are appropriate for discovery.

1. The Current Declaration

299. Smart EPD issued the current XLERATOR Environmental Product Declaration on June 23, 2023, after the earlier UL EPD expired. The Smart EPD declaration remains effective through June 23, 2028.

[Exhibit AA]

300. The certificate states on page 3 that “The XLERATOR dries hands completely in 8 seconds.” Page 4 lists “Dry time: 8 seconds.” Page 13 states that SGS testing was performed to 0.25 gram or less under the UL Environment Global Product Category Rules for Hand Dryers. The declaration thus places the performance claim in the public product description, the specifications, and the environmental calculation chain.

301. Smart EPD’s declaration is independent present conduct. Plaintiff does not treat Smart EPD as UL under another name. Smart EPD chose to use UL’s PCR, accept or repeat the challenged inputs, verify the resulting documents, issue the current declaration, and

authorize the associated public representations. That adoption also carried forward the human-health and hazard-and-risk obligations that frame the toxicity issue.

302. The declaration carries UL's module treatment forward and drops the module that treatment displaced. The EPD Scope stated on page 2 is A1 - A3, A4, A5, B1 - B3, C1 - C4. Module B6, which EN 15804 designates for operational energy, does not appear in the scope at all. There is no module in this declaration for operational energy, because operational energy is reported in B1.

2. Anna Lasso's Roles Across the System

303. The current Smart EPD certificate identifies Ms. Lasso as Program Operator, Independent Critical Reviewer, and Independent External Verifier. The underlying LCA's Critical Review Statement identifies her as chair of an "External Independent Third-Party Review Panel."
[Exhibits AA, EE]

304. Those are not decorative titles. They correspond to the stages the ISO system uses to prevent the program operator, the author of the analysis, the reviewer, and the verifier from collapsing into one

unchecked act. Plaintiff alleges that the roles shown on the face of the documents raise the independence issue pleaded here because ~~the same individual and company appear as program operator,~~ reviewer, and verifier. Whether the work performed in those roles satisfied the governing independence requirements is a matter for discovery.

305. The LCA review panel was commissioned by Excel Dryer and included Ms. Lasso, Thomas P. Gloria, and Alison Conroy. Ms. Lasso signed as chair, represented that the panel possessed sufficient scientific knowledge, and confirmed the plausibility, quality, and accuracy of the LCA-based data containing the eight-second input. [Exhibit EE]

306. Ms. Lasso's alleged personal liability does not arise solely from her title, ownership of Smart EPD, or the size of the company. It arises from the acts attributed to her: participation in the PCR architecture, review of the LCA, external verification of the declaration, program operation, authorization, issuance, and publication of the current certification result.

307. The continuity establishes a documented migration of rule, data, personnel, and verification responsibility from UL's earlier program into Smart EPD's current declaration. Discovery will determine the internal communications, allocation of roles, source data, review records, and decisions underlying that continuation.

3. The Current Document Points Backward to SGS

308. The Smart EPD declaration does not present a newly published eight-second performance test. It points backward to SGS. That citation makes the SGS report the next link in the chain and permits a direct comparison between what SGS actually tested and what Smart EPD currently certifies.

G. THE DATA BENEATH THE DECLARATION: SGS

309. SGS North America is the binding link to claimed drying times for UL and Smart EPD and is instructive regarding NSF and Dyson. SGS is cited by all defendants as authoritative while reporting impossible drying times for which we have no public record except one. SGS's proprietary material is entirely unavailable to Plaintiff's knowledge despite hours of scraping. Plaintiff discovered a single report in an

exhibit to a motion or complaint in the 2012 Excel V Dyson court case, giving us some insight into what they do. Plaintiff's material is fully public. SGS will be found in discovery.

310. We know nothing about SGS' reporting before 2012 and nothing about their reporting after 2012 beyond the claims made by the dryer companies and the certifiers about it. They are currently a ghost and this case hinges on their past testing reports and their ability to prove Plaintiff wrong publicly for the court.

1. The 2012 Report

311. SGS North America tested hand dryers in 2012 at Excel Dryer's request. Performance Test Report No. 2774929EFF-001 was later filed in the Excel-Dyson litigation and remains the public SGS report cited in the certification history. It is signed by project engineer Martin Dodd and reviewed by Jody Leber. [Exhibit BB]

312. The report tested several Excel, World Dryer, and Dyson models between August 15 and August 24, 2012. It described its method as a revised version of P335 then being developed and reviewed by NSF. The report's Annex A defined thorough dryness as less than 0.1 gram

residual moisture per hand, or 0.2 gram total. P335 itself defined dry hands as less than 0.1 gram total.

313. The report therefore used a threshold twice as permissive as the one P335 states. It did not establish that NSF had adopted the revision, and Excel never obtained P335 certification for XLERATOR.

2. What SGS Tested and What Later Documents Claim

314. The report records three measurements on each product: residual moisture after the dry cycle, standby current consumption, and energy consumption during the dry cycle. One sample of each model was procured through normal retail channels. The public report tested XLERATOR at twelve and fifteen seconds. It reported 0.186 gram average residual moisture at twelve seconds and 0.108 gram at fifteen seconds. It reported a Dyson Airblade at 0.183 gram at twelve seconds. [Exhibit BB]

315. The current claim is eight seconds. The Smart EPD declaration states eight seconds as a product specification while citing SGS testing under the UL PCR. No public SGS report in the evidentiary record tests XLERATOR at eight seconds, and the identified 2012 report

could not have tested under a UL PCR that was not published until 2016.

316. Plaintiff's 462-trial corpus, using comparable gravimetric methodology, recorded approximately 2.5 to 3.0 grams at equivalent rapid-drying times. The SGS figures and Plaintiff's measurements differ by one to two orders of magnitude and have not been independently reconciled or reproduced.

3. SGS's Distinct Undertaking

317. The visible data-provenance questions are concrete: which models were tested, which threshold was used, why the report invoked an unadopted P335 revision, which times were actually measured, whether any eight-second test exists, how the 2012 data were mapped into the 2016 PCR and 2023 declaration, and whether the results can be reproduced.

318. Discovery is required for the raw measurements, participant and hand-selection records, product identification, test conditions, internal review, communications with Excel and later program operators, and any additional testing offered to support the present

eight-second claim. The complaint does not ask discovery to invent an SGS theory. The report, its method, its results, its later citation, and the reproducibility conflict supply the pleaded theory.

H. RETURN TO THE FIRST STANDARD: NSF P335 AND CONTINUING HYGIENIC CERTIFICATION

1. P335's Direct Undertaking and Direct Failure

319. The analytical sequence returns to NSF, where the institutional history began. NSF created Protocol P335, titled "Hygienic Commercial Hand Dryers," in April 2007. P335 defines dry hands as less than 0.1 gram residual moisture and requires the manufacturer-specified result within one operating cycle or fifteen seconds, whichever is shorter, with 95 percent effectiveness across twenty trials. [Exhibit X]

320. NSF's direct performance failure requires no ISO bridge and none was ever made. Plaintiff conducted 462 trials - more than twenty times the P335 certification sample - and recorded zero compliance with the 0.1-gram threshold at manufacturer-specified rapid-drying

times. Average residual moisture was approximately 2.83 grams.

[Exhibits B, E, H]

321. A late finding supports the earliest ten second drying claims made by Dyson: Insert-type dryers can approach a ten-to-twelve-second result. There are few remaining units and Plaintiff happened upon one near the filing date of this complaint, discovering that the four air jets hitting on both sides of the hands do dry in approximately ten seconds. He did not have access to the machine for formal testing but ran ten trials off-the-cuff with a time and agrees that the Dyson AB14 and likely the AB01 strip water to 0.1g in ten seconds. This rolls in Defendant's favor so Plaintiff concedes the point without running another study.

322. Plaintiff's currently manufactured downdraft dryer sample required approximately seventy to ninety seconds. If the historical P335 data were generated on original insert products, the old data may be accurate and the certification was later transferred to materially different machines without adjustment or re-evaluation. If the data were generated on comparable downdraft machines, the results

present a reproducibility failure. Discovery can identify the tested models and resolve the alternatives.

2. P335 Recognized the Components but Did Not Govern the Complete System

323. P335 contains pieces of a hygienic hand-drying standard: dryness, time, air filtration, microbial control, removed handwash water, collection, containment, drainage, sanitation, maintenance, and cleanability. The protocol thereby identifies those subjects as material to the hygienic service NSF undertook to certify.

324. The standard does not join those pieces into a complete physical use cycle for a dispersal dryer. It regulates microbial reduction and sanitation when removed wash water enters a tank. It supplies no corresponding destination, deposition, or sanitation rule when the same water leaves a tankless machine and enters the occupied restroom.

325. P335 does contain one unconditional microbial requirement, applicable to every certified machine regardless of architecture.

§4.3.2 provides that “[e]xternal surfaces and internal surfaces that

come into contact with the emitted air shall be designed or treated to inhibit the growth of bacteria and mold.” The requirement is not qualified by “if applicable.” It is not limited to capture machines. It applies to the surfaces that contact the air the machine blows onto a user’s hands. Plaintiff documented visible mold colonization on or immediately adjacent to the dryer at 100% of Dispersal-Type installations examined. [Exhibits J, Q, R]

326. The question is physical: why does the hygienic standard require severe microbial treatment when removed handwash water enters a receptacle but require nothing when the same water enters the room, the wall, the floor, the user, and the air? The source and potential biological content of the water do not change with destination. This is a sin of omission of the highest order.

327. P335’s filtration provision similarly evaluates a selected challenge at the intake or filter. §4.3.1 requires a HEPA filter “designed to filter the drying air emitted onto the user’s hands,” and §6.2 sets the acceptance criterion at sustained aerosol penetration not exceeding 0.03% of the upstream concentration. Both address what the machine draws in. Plaintiff evaluated the output of functioning

certified machines in actual rooms. HEPA-equipped units did not produce a statistically significant reduction in measured output contamination relative to unfiltered units. [Exhibits A, I]

328. P335 also fixes the level of microbial emission it treats as acceptable, and it is the only such figure in the protocol. §6.4 provides that "the operational intent of a hygienic commercial hand dryer is to prevent the hand dryer from using air contaminated with microbes to dry a user's hands." That is really the entire case. Plaintiff agrees.

329. To set an acceptance criterion NSF states in the same section that no peer-reviewed research or regulation identifying acceptable levels of microbes in indoor air was readily available to it, and derives a figure from a single conference paper reporting culturable bacteria in office buildings. The derivation yields a threshold on the order of one culturable organism emitted per operating cycle. [Exhibit X] Plaintiff's broad-spectrum testing recorded a median of 200 colony-forming units per one-minute exposure at the output of certified dryers against a measured ambient of 2, with amplification in 49 of 49 tests and no overlap between the distributions. [Exhibit I] NSF stated the

condition its protocol exists to prevent, quantified the acceptable amount, prescribed no test capable of detecting that condition in a functioning machine, and certified the products for nineteen years.

330. Plaintiff offered all 11 journal papers along with an early version of this complaint with exhibits and other materials to NSF, received by signature on April 27, 2026. They declined to respond.

3. Continuing Commercial Service and Repeated Use

331. P335 describes an individual operating cycle rather than a series like the UL Functional Unit of 100,000 cycles, but NSF does not certify a machine for one isolated ceremonial use. No machine has ever been installed, used once, then removed. It maintains a listing for “Hygienic Commercial Hand Dryers” installed for continuing public service. The NSF mark communicates continuing hygienic performance across repeated use.

332. Repeated use matters because each cycle can alter the next. Water and biological material deposit on the machine and surrounding surfaces; reservoirs and mold can develop; later operation can re-entrain or redistribute accumulated material. P335 regulates

maintenance and cleanability in parts, yet it does not evaluate the complete repeated-use environmental system created by dispersal architecture.

333. NSF also stated what it would do to maintain the certifications it issued. Annex A.2 of P335, headed “Annual audits,” provides that “NSF shall conduct audits of all facilities and production locations at least annually,” covering “[n]o changes in labeling or product literature,” “[n]o change in design, construction or materials without prior approval by NSF,” and recordkeeping. Annex A.3 provides that “[r]e-testing of certified systems shall occur every five years.” Annex A.1 specifies the mark itself, reproducing the NSF logo with the legend “NSF Protocol P335 / Hygienic Commercial Hand Dryers” and directing that certified products or packaging bear it. [Exhibit X]

334. Nineteen years have elapsed since P335 issued. The architecture of the certified products changed within that period, from the insert dryer geometry the protocol was drafted around to the downdraft-Dispersal dryer geometry now certified under it. Whether the audits and retesting occurred as Annex A states, and what they recorded, are matters within NSF’s possession. Those records include the

annual facility and production-location audit reports, the approvals of each change in design, construction or materials, and the five-year re-test files for every model certified under Protocol P335. Under Annex A.2 that change could not be made without NSF's prior approval. Plaintiff does not allege what NSF knew when it approved the change. Plaintiff alleges that the protocol required NSF to approve it, that the certifications continued afterward, and that the products do not meet the protocol's quantified endpoint.

335. NSF continues to authorize P335 certification for downdraft-

Dispersal products that fail the protocol's quantified drying endpoint in Plaintiff's testing. The present case therefore concerns both the original protocol and the continuing decision to maintain certifications for materially changed products.

4. ISO 14025 Illuminates NSF's Present Conduct

336. In 2026 NSF maintains a company division dedicated to ISO 14025

PCRs and EPDs. This complaint exists to resolve past harms but also to prevent ongoing and future harm to Plaintiff. NSF may not have understood the larger context of a proper Type III EPD when they

created the P335 but they do now and they have authored no changes in standards or certifications for it. [Exhibit EEEE]

337. The original and continuing acts must remain distinct. The original question is whether P335 reasonably performed the hygienic undertaking NSF selected for the products and architecture before it at the time of creation. The present question is whether NSF may continue authorizing the same certification for materially different products after acquiring relevant institutional expertise and after the direct performance and system failures have become documented.

338. The standards narrative thus ends where the history began. NSF first transformed manufacturer performance claims into institutional hygienic and drying time certification. The later ISO system supplies no retroactive rule, but it removes any present inability to understand the omission. The current standard and certifications remains a current professional act.

I. DEFENDANTS' RESPONSES TO THE DEMAND

339. Notice to Defendants, and the conduct that followed it.

340. On April 23, 2026 Plaintiff delivered to each Defendant written notice of the certification failures alleged in this Complaint, together with the supporting research, the testing record, the standards analysis, and the documentary exhibits. Delivery was signed for on April 27, 2026. Each Defendant has since held the material on which this Complaint rests. UL Solutions responded through Lisa Sullivan, its Associate General Counsel for Litigation, on May 22, 2026. Plaintiff replied. Sullivan wrote again on June 5, 2026, and Plaintiff replied again. Anna Lasso telephoned Plaintiff on April 27, 2026 [Exhibit KKK]. NSF International and SGS North America did not respond.

341. In a telephone call on April 27, 2026, Anna Lasso stated that she is not responsible for verifying the drying-time claims in the certifications she issued, and that she is not responsible for the hygienic performance of the dryers she has certified. [Exhibit KKK] She appears on the current Smart EPD certificate as Program Operator, Independent Critical Reviewer, and Independent External Verifier, on a declaration stating that the XLERATOR dries hands completely in eight seconds. [Exhibit AA] The life-cycle assessment underlying that certificate carries, at Appendix I, a Critical Review

Statement describing the review as an external independent

verification by a panel commissioned by Excel Dryer, Inc., signed by

Ms. Lasso as Chair. The same statement certifies that the panel

possessed “sufficient scientific knowledge and experience of energy

and fuel pellet systems.” [Exhibit EE] The product under review was a

hand dryer. Plaintiff suggests a prior document was copied without

verification into the new one.

342. On June 23, 2026, Plaintiff delivered a second attempt to resolve

these matters outside litigation to every Defendant. UL, via Lisa

Sullivan, responded by phone on June 30. Sullivan declined by email

on July 14, 2026.

343. On August 25, 2026, Plaintiff delivered a final attempt to UL, by email

to Lisa Sullivan, disclosing additional enforcement-record materials

and a current draft of this Complaint. No response followed.

344. As of the date of this filing, no Defendant has corrected, withdrawn,

or re-verified a single certification.

J. PLAINTIFF'S TRANSACTIONS AND INJURIES

345. Plaintiff never purchased a hand dryer. He purchased goods and services from facilities that installed certified dryers for patrons. The dryer purchaser selected the certified device; Plaintiff received and used the certified service. The purchaser is inside the procurement transaction. Plaintiff is the intended user and the human object of the certified performance. This set of relationships is described in detail below.

346. Exhibit V documents repeated patronage at facilities equipped with challenged certified dryers. Plaintiff alleges that the price paid for the establishments' goods and services included the premises and patron services supplied with the transaction, including the hand-drying service selected and installed for customer use. He paid for certified performance and received performance materially different from what was represented.

347. The resulting injuries, occurring over decades, include the alleged economic loss from the difference between the certified service paid for and delivered; repeated involuntary time loss created by a service

represented to require seconds but requiring approximately a minute or more; and repeated personal exposure to amplified microbial output, dispersed wash water, and contaminated surfaces during the years Plaintiff trusted the certifications.

K. CONTINUING CERTIFICATION AND PRESENT CONDUCT

348. The challenged conduct is not confined to issuance dates in 2007, 2016, 2017, or 2023. NSF continues to maintain P335 certification.

Smart EPD's Xlerator declaration remains current. UL's PCR continues to govern present declarations and UL continues to operate an EPD program for hand dryers.

349. The original acts and current acts must be separated. The original documents are judged by the standards, undertakings, knowledge, and evidence applicable when they were created. Continued maintenance, republication, mark authorization, verification, failure to correct, and failure to withdraw after later knowledge or notice are present conduct.

350. The complaint is discovery-ready, not discovery-dependent. The standards, certificates, public marks, published data,

measurements, documentary contradictions, and continuing declarations establish the pleaded claims. Discovery is required for the internal operation of the visible system: raw data, model selection, review records, verification, communications among Defendants, role allocation, prior knowledge, knowledge denied, knowledge unacted upon, coordination of standards and certification activity, allocation of responsibility, renewal decisions, corrective decisions, representations made internally and externally, and the error, knowledge, agreement, coordination, or intent behind the B1 overwrite.

351. Plaintiff pleads the visible machine. He seeks discovery into its internal operation. The pleaded claims rest on the documentary record; discovery is not asked to determine whether a viable claim exists.

L. THE CERTIFICATION CHAIN

352. How a privately contracted certification becomes a public representation.

353. The chain below is factual before it is legal. A single certification travels through one continuous sequence from certifier to manufacturer, from the marked product to purchaser, and ultimately to user. That certification binds downstream through two channels. The contract channel originates in the manufacturer-certifier transaction and reaches the purchaser. The duty channel arises from the certification undertaking and public representation and reaches both purchaser and user. Plaintiff is the user and this Complaint pleads the duty channel alone. The contract channel is described here because it explains the creation, value, transmission, and commercial acceptance of the same certification whose duty reaches Plaintiff. The certificate does not change between channels. The legal mechanism does.

354. The duty channel described alone is incomplete and possibly confusing. Plaintiff presents the simplified full structure here and in a detailed brief. [Exhibit SSSS]

1. ORIGIN

355. **Manufacturer hires certifier to apply agreed upon standards to the device for testing.**

2. RESPONSIBILITY STANDARDS

356. **Certifier promises valid standards and accurate testing.**

3. RESPONSIBILITY PRODUCT

357. **The built machine is the manufacturer's product, not the certifier's.**

4. DOCUMENT

358. **Tested units are certified via a document explaining the tests and results.**

5. THE DOCUMENT CONFERS STATUS

359. **A certified device is substantially and identifiably different than an uncertified device.**

360. Two machines perform the same function. One is certified, the other is not. The certifier did not test the machine to see what it does, the certifier stated, "it must do this" then tested it to verify that it

complies. It is that action that transforms the device, adding value for all parties.

6. TRANSACTION COMPLETE

361. **Certification documents are held by the manufacturer, filed in a cabinet.**

7. THE INVENTION OF THE MARK

362. **Certifier realizes it can establish its brand to the public through the manufacturer with a public facing physical label, increasing value for both.**

363. UL began in 1894. Its own historical account says that in 1906, William Henry Merrill created the UL Label Service and introduced the first UL labels specifically to give consumers the ability to select products tested to UL's safety standards. The private laboratory existed first; the public-facing label came later as a deliberate mechanism for carrying the laboratory's conclusion to consumers.

8. THE OFFER OF THE MARK

364. **Certifier offers manufacturer a certifier branded sticker for the device.**

9. ACCEPTANCE OF THE MARK

365. **Manufacturer accepts.**

10. MARK IS BOUND TO THE CERTIFICATE

366. **The brand sticker is permanently bound directly to the paper in the file for that device.**

11. THE MARK TRANSMITS STATUS

367. **The sticker makes the status of the device, conferred through the certification document, public facing.**

12. BINDING THE CERTIFICATE TO THE CONSUMER

368. **The sticker's purpose is purely public-facing, representative of the held certification made by the certifier and manufacturer jointly to the consumer. The manufacturer already has the certification.**

369. **The mark does not inform the manufacturer who holds the certificate. It does not inform the certifier who wrote it. It is placed on**

the exterior of the product, facing outward, toward purchasers and users, bound to the certification in the filing cabinet. A symbol positioned to be read by the public is positioned for the public.

Placement is purpose.

13. COMMERCIAL TRANSACTION AND PRICE PASS-THROUGH

370. **Purchaser evaluates and buys, in part, for the value of the document in the drawer via the branded sticker advertisement.**

371. The purchaser pays a price that includes the certification. That money moves through the manufacturer to the certifier, every party informed. The certification fee is not absorbed out of goodwill; it is recovered in the price of the goods. It is recoverable because the mark increases the value of the product. The manufacturer already held the certificate before the mark was applied. The purchaser selects the marked product over the unmarked one and pays the difference. The certifier collects it.

14. DEPLOYMENT

372. **Purchaser puts the device, sticker on it, into use.**

15. BINDING BY DUTY

373. **Users see the sticker and trust the device, directly linked to the document in the drawer, amplified by brand reputation.**

16. RELIANCE

374. **Users assume certification for public facing products in public buildings.**

17. THE TEST

375. **Require the purchaser to remove the certification mark before installation.**

376. Nothing upstream changes. The manufacturer-certifier contract and certification are untouched. Contracted services have been rendered and the transaction is complete. The certifier's examination and determination of conformity within the certification's defined scope remain exactly what they were before the mark was removed. The purchaser has already selected and bought the certified device. The manufacturer has received the price and the certifier has received its fee. If the standards and testing are valid, every upstream party has

received exactly what it bargained for. No further upstream action is required.

377. Everything the mark communicates beyond the purchaser disappears.

378. User reliance collapses.

18. THE SECOND TEST

379. **Remove the user**

380. There is no product and no market, certified or uncertified, mark or no mark. Manufacturers do not seek certification, there are no certifiers.

381. Certifiers wrote standards about hands. The user is not peripheral. The user is the subject.

382. Remove the user and the entire chain collapses. The mark is user-facing. That is its purpose.

19. THE THIRD TEST

383. **Place a counterfeit.**

384. Remove the authentic mark and apply in its place a counterfeit - an unauthorized copy, visually identical. Nothing downstream changes.

~~The machine performs identically, the purchaser pays the same price~~
and the same premium; the same mark occupies the same housing and faces the same user, who forms the same belief and holds his hands in the same air. Every step from placement through reliance executes without change. Downstream indistinguishability is the definition of the offense.

385. Everything the substitution violates lives upstream. The missing pieces is the examination. If every downstream effect is unchanged under the substitution, the mark's entire value - everything the purchaser paid for and everything the user relied upon - is the upstream certification and nothing else. A mark is worth exactly the examination behind it and the public mark binds it to the examination irrevocably.

386. This test is not accusatory in this case. The marks on the machines in this record are authorized, and that is conceded. This test isolates meaning: authorization is the license to apply the mark; examination

is the content of what the mark says, the mark conveys that to purchasers and users.

M. THE MARK ENFORCED

387. The mark whose journey the Chain above traces from the certifier's desk to the user's hands is not an unattended symbol. It is guarded - publicly, aggressively, continuously, and at extraordinary expense - by the certifier that owns it, and the public record of that guardianship is the most complete, most consistent, and most authoritative statement in existence of what the certifier itself believes its mark to mean. UL itself deploys this record: its cease-and-desist letters cite these judgments by docket number and attach them.

388. UL polices its certification marks through a dedicated global anti-counterfeiting enforcement program it has operated for approximately three decades. UL's own consumer-facing materials state that more than 22 billion UL marks appear on products each year. [Exhibit TTT] Its public mission statements describe the mark to consumers as an assurance of safety and integrity. [Exhibit QQQ] In

2013, UL publicly described its marks as a “true representation of the safety testing and certification in which they have invested,”
~~protecting consumers against untested products. [Exhibit UUUU]~~ The
program is not ornamental, and its scale is sworn: UL’s Terrence Brady, later its President, testified to the United States Senate that in a single year the program conducted approximately 1,200 investigations, examined approximately 1.5 million product units, and made more than 230 test purchases, and that UL has furnished rapid mark-verification services to United States Customs since the early 1990s. [Exhibit YYYY] The same 2013 statement fixed the mark’s epistemic place: an authorized UL certification mark on a product is “the only means for consumers, retailers, distributors, manufacturers or jurisdictional authorities to determine” that goods have been certified by UL as compliant. [Exhibit UUUU]

389. When UL finds its mark on a product it did not examine, it sues - and in suing, it must tell a federal court, plainly and on the record, what the mark means. It has done so, in materially identical words, across a decade. In 2016, in a consent judgment so ordered by the United States District Court for the Northern District of Indiana, UL stated -

and the court entered as an admitted fact - that UL “certifies the goods of others using the UL Marks, following evaluation and testing” performed by UL. [Exhibit VVVV] In 2025, nine years later, in a consent judgment so ordered by the United States District Court for the Eastern District of New York, UL stated the same fact in substantially the same words, and a second federal court entered it again as an admitted fact. [Exhibit WWWW-1] That sentence is UL’s house definition of its own mark - drafted by UL, submitted by UL to two federal courts nine years apart, and entered by each as an admitted fact in a judgment UL itself sought: the mark means evaluation and testing, performed by the certifier, on the goods that carry it.

390. The definition also appears in operative judgment text UL sought. In 2019, on UL’s application for default judgment, the United States District Court for the Central District of California entered judgment reciting that the defendants’ counterfeit mark was used “to falsely suggest that their goods have been certified by UL” - and, after consolidation with a second UL enforcement action, entered the same sentence again in an amended judgment eight weeks later. The

defaulted defendants appeared for none of it; the description of the mark's meaning had one available author. Both judgments display the registered marks themselves in their operative text. [Exhibit BBBBB]

391. The meaning has also survived contest. In *UL LLC v. The Space Chariot Inc.*, 250 F. Supp. 3d 596 (C.D. Cal. 2017), on contested summary judgment, the court accepted as undisputed UL's sworn declaration of its machinery - evaluation and testing against "a safety, performance, or other standard" - found the marks renowned among the general public as symbols of UL's testing, inspection, and certification services, and entered judgment against the corporate and individual defendants for willful counterfeiting as a matter of law. The declaration was sworn in November 2016, the season in which the certifications at issue in this Complaint were being constructed.

392. UL's enforcement pleadings also identify, with unmistakable clarity, the person the mark protects. In its 2025 complaint UL alleged that products bearing its mark without its examination "may place the health and safety of the user at risk," that the offense is that such products "purport to have been tested by UL" when UL "never

performed any such testing,” and that consumers are likely to purchase marked products believing them to have been certified.

~~[Exhibit WWWW] In a 2015 consent decree - entered against a~~

defendant who sold the counterfeit stickers themselves, unattached to any product - UL obtained a judicial recital that counterfeit labels enable their purchasers to bypass UL’s rigorous processes and controls for testing and certifying products, and that the labels alone place the health and safety of the general public at risk. [Exhibit XXXX] Stickers, standing alone, with no machine attached:

dangerous, in UL’s own stated view, entirely because of what they falsely assert was done. And the unit of the assertion is the machine: the 2016 Swagway judgment enjoined causing purchasers to believe a product was “tested, inspected, or certified by Plaintiff, or guaranteed by Plaintiff,” and ordered surrendered every material suggesting the product “as a whole is certified or approved.” [Exhibit VVVV] The mark speaks about machines, not parts, and UL enforces it at the machine.

393. UL’s senior-most voice stated the meaning under oath. Testifying

before the Senate Committee on Finance in 2018, Mr. Brady swore

that consumers who see the mark “know that an independent third-party has determined that the manufacturer has demonstrated compliance with safety, performance, or other standards.” [Exhibit YYYY] Sworn, unqualified, and unpartitioned: independence, determination, and compliance - with safety, with performance, with other standards - communicated to the consumer by the mark alone. The oath had a decade-older twin: ten years earlier, UL’s anti-counterfeiting Vice President told the Senate Judiciary Committee the same machinery - products tested, compliance determined, and only then the authorization to apply the Mark - and named the audiences who look to it: consumers, retailers, regulators, manufacturers and distributors. [Exhibit CCCCC]

394. Five years after that oath, UL Solutions’ executive vice president and chief legal officer resolved the third term in public: UL Marks appear on billions of products globally “to demonstrate that these products meet scientific safety, performance or sustainability standards.” [Exhibit DDDDD]

395. The reliance is institutional, and it is dated. In 2016, a federal court entered as admitted fact that “the relevant code authorities routinely

look for certification marks, like the UL Marks, during their inspections of sign installations” - government inspectors’ routine reliance, recited as the reason the counterfeiting paid. [Exhibit EEEEE] Two years later, the Government Accountability Office, conducting undercover counterfeit purchases for the United States Senate, encountered a product advertised as UL-certified that arrived bearing no certification mark - and excluded it from its study as untestable, rather than verifying the claim against the certifier’s records. GAO-18-216 (Jan. 2018). Verification of a certification claim defeated the government’s own auditors.

396. UL’s enforcement pleadings define the mark to include its aftermath: the mark on a product is the manufacturer’s representation that the product complies with UL’s requirements and is “subject to UL’s Follow-Up Services” - random, unannounced factory visits, several times a year, in UL’s own description of its safety-listing program. That enforcement record supplies the general architecture of a UL certification - examination first, surveillance after, correction when the two diverge; the particular continuing obligations owed for the certifications at issue here are supplied by the Product Category Rule

and ISO 14025, and are pleaded in the counts. Measured against either - the architecture UL enforces or the obligations UL selected - the record is the same. On information and belief, in the years the certifications at issue in this Complaint have stood - through the 2012 test report, through the July 2022 expiration of UL's Excel declaration and the June 2023 Smart EPD declaration, through Plaintiff's written notices to every Defendant - no follow-up service of any kind was performed upon them: no re-verification, no audit, no review. The certification chain continued without disclosed follow-up examination.

397. When UL sued the seller of hoverboards bearing its mark, its complaint demanded recall of every marked product, reimbursement of every customer, published notice to the trade and to regulators disclaiming any connection with its testing, inspection, and certification services, destruction of inventory, a sworn compliance report, and punitive damages. UL LLC v. Swagway LLC, No. 3:16-cv-00075 (N.D. Ind.), Complaint (2016).

398. UL has also published, as formal protocol, precisely what a person should do when confronted with a mark that cannot be verified. UL

Release 20PN-24 instructs that where a product's certification cannot be confirmed, its compliance is unknown, and the product should be removed from service and replaced. [Exhibit ZZZZ] That is UL's own remedy, published in UL's own voice, for exactly one condition: a mark asserting an examination that cannot be shown to stand behind it. Its subjects were fire doors and door frames already installed in buildings; installation was no obstacle.

399. Nowhere in this long, loud, and meticulously documented enforcement record - not in the registrations, not in the sworn testimony, not in the so-ordered judgments, not in the public releases, not in the published protocols - does UL divide the meaning of its mark by program, by file, or by standard. The definitions are stated whole: evaluation, testing, determination, compliance. No document says the mark means one thing when the file behind it is electrical and something narrower when the file is environmental. No document says the meaning depends on which certificate sits in which drawer. The meaning UL enforces is unitary, and UL enforces it against the world. Scope and meaning are different things, and UL's own record keeps them different: every authorization is ferociously

scoped - this model, this manufacturer, this category, this period - while the meaning within that scope never varies. The certificate defines what was evaluated and against what standard; the mark's common meaning is that the named certifier independently evaluated it and determined conformity. UL's enforcement docket polices both at once and has never confused them.

400. The certifier that owns the mark has therefore stated, repeatedly and formally - in federal court, under oath to the United States Senate, and in its own published protocols - that the mark means an independent evaluation performed and successfully completed by the named certifier, with a determination of conformity against the standard its certificate names - the certificate defining the scope of the undertaking, the mark communicating the determination - that the person it protects is the user, and that a product whose certification cannot be verified should be removed from service. This Complaint measures the certifications standing behind that same mark, and behind NSF's, against the standards the certifiers themselves wrote. Either the marks carry the meaning their owners enforce, or they do not. Both answers are actionable, and Plaintiff

asks for nothing UL's own program does not ask. And if any Defendant answers that its environmental certification stands outside that family meaning - a separate instrument, with a separate constitution - the constitution it names is ISO 14025 and the Product Category Rule, and this Complaint measures the instrument against that constitution, clause by clause, in the counts that follow. The first road applies the meaning; the second applies the mandate. Both end here.

N. THE MARK DEFENDED

401. The same certification system has a second public record. When UL enforces its marks, it describes examination, testing, conformity, surveillance, public reliance, and protection of the user as the substance and value of certification. When UL has been called to answer for its own certification activity, it has repeatedly described the undertaking and its responsibility more narrowly. Plaintiff presents that answering record here for what UL and the courts actually said and did. It is not offered as a holding that every

certification creates liability. It is the other public record of the same institution explaining its own responsibility.

402. In 1967, when a fireman injured by an exploding extinguisher sued over a product labeled "Underwriters Laboratories, Inc., Inspected," UL argued that it did not approve product designs and could be under no liability to the plaintiff even if UL were negligent. The court rejected the distinction: "It is straining at words to say that Underwriters does not approve the design of a product ... when Underwriters lists it, it thereby tacitly impresses its approval upon the design." The court denied UL's renewed motion for summary judgment. *Hempstead v. General Fire Extinguisher Corp.*, 269 F. Supp. 109, 117 (D. Del. 1967).

403. In 2003, UL defended a different claim by narrowing the undertaking. In *Dekens v. Underwriters Laboratories, Inc.*, UL obtained summary judgment by establishing that it "never undertook to test small appliances for medical safety or to certify the appliances would not cause cancer." UL's manager also explained how UL treated risks outside the undertaking: "toxicity is one of them - we use a disclaimer, indicating that we have not looked into toxic effects." 107

Cal. App. 4th 1177 (2003). The successful defense was not that certification carries no responsibility. It was that the claimed harm was outside the certification UL had undertaken and had been affirmatively disclaimed.

404. In 2007, when UL's own client sued over testing and certification activity, the engagement terms in the record provided that UL bore "no obligation or liability for damages ... arising out of or in connection with the use of ... the information resulting from this investigation." *Kikson v. Underwriters Laboratories, Inc.*, 501 F.3d 672 (7th Cir. 2007). The same opinion records the boundary of the dispute. UL did not contest that it owed Kikson a duty, and the court stated that Kikson would have had a "strong case against UL for negligent testing. However, that is not what was tried here." The verdict was reversed on the claim that was tried, not on a rule that UL's testing creates no duty.

405. The narrowing posture appears in Defendants' own governing documents as well. NSF Protocol P335 names the user, defines hygienic performance at the user's hands, requires annual audits and periodic re-testing, and authorizes a public mark reading

"Hygienic Commercial Hand Dryers." The same protocol states that NSF "shall not be responsible to anyone for the use of or reliance upon this protocol." [Exhibit X] The certification addresses the public; the disclaimer denies responsibility for reliance upon the instrument that creates it.

406. The same posture appears in the present record after notice. On April 27, 2026, Defendant Anna Lasso stated by telephone that she was not responsible for verifying the drying-time claims in the certifications she issued and was not responsible for the hygienic performance of the dryers she certified. [Exhibit KKK] She appears on the current Smart EPD declaration as Program Operator, Independent Critical Reviewer, and Independent External Verifier, on a declaration stating that the XLERATOR dries hands completely in eight seconds. The representation remains public. The responsibility for verifying it was denied when challenged.

407. Placed beside the enforcement record above, the difference in posture is plain. When UL protects its mark, the mark is consequential because examination occurred, testing matters, surveillance matters, the public relies, the user is protected, and a

product whose certification cannot be verified is removed from service. When responsibility for certification is asserted against the certifier, the public record narrows to scope, disclaimers, no design approval, and limits on liability for the information produced.

408. Plaintiff pleads both records because both are part of the factual history of certification. One describes what the mark does when the certifier is protecting it. The other describes what certification does when the certifier is defending itself. Both records belong to the certifiers. The Counts below state the legal consequences.

V. CONTROLLING AUTHORITIES

A. STANDARDS

409. NSF Protocol P335 - NSF's hygienic commercial hand dryer certification protocol; the standard defining NSF's undertaking.
(Lead standard - the certification whose hygiene requirements NSF wrote and then failed.)

410. UL Product Category Rule (Hand Dryers) / EPD - UL's authored product category rule and the resulting Environmental Product Declaration; the standard defining UL's undertaking.

411. ISO 14025 - International standard establishing the Type III

Environmental Product Declaration framework, including PCR and declaration requirements addressing human health and hazard-and-risk, the toxicity-related subject matter described in this Complaint, and the standard's verification requirements. ISO 14025:2006 governed the challenged PCR and declarations when issued.

412. ISO 14001 - International standard for environmental management systems (EMS), providing a framework for organizations to improve environmental performance, ensure compliance, and achieve sustainability goals.

413. ISO 14040 / ISO 14044 - The life-cycle assessment principles, framework, and requirements that ISO 14025 incorporates by reference.

414. ISO 14067 - Standard for the quantification of the carbon footprint of a product. It addresses "only a single impact category: climate change," and expressly "does not assess any social or economic aspects or impacts, or any other environmental aspects and related impacts." The carbon-only path available to, and not selected by, UL.

415. EN 15804 - European standard providing the core product category rules for construction-product EPDs, including the use-stage (B-module) requirements.

B. GOVERNING LAW - PENNSYLVANIA STATUTES & FEDERAL REGULATION

416. Pennsylvania Unfair Trade Practices and Consumer Protection Law (UTPCPL), 73 P.S. § 201-1 et seq. - Pennsylvania's consumer-protection statute; the basis of Count III.

417. 29 C.F.R. § 1910.7 - OSHA regulation defining a Nationally Recognized Testing Laboratory (NRTL); the source of UL's and NSF's recognized certifier status.

418. 15 U.S.C. § 1064(5) - Lanham Act; legitimate control over the use of a certification mark is a condition of its registration, enforceable by cancellation. The statutory basis of the control obligation construed in *Midwest Plastic Fabricators*.

C. GOVERNING LAW - THE RESTATEMENT RULES (adopted as Pennsylvania law)

419. Restatement (Second) of Torts §552 (Negligent Misrepresentation) - Liability for one who, in the course of business, supplies false

information for the guidance of others. Adopted as Pennsylvania law by Bilt-Rite (2005).

420. Restatement (Second) of Torts §324A (Negligent Undertaking) -

Liability to third persons for the negligent performance of an undertaking to render services one should recognize as necessary for their protection. Long-standing Pennsylvania law; first applied in *Cantwell v. Allegheny County*, 506 Pa. 35, 483 A.2d 1350 (1984), and held in *Farabaugh*, 911 A.2d 1264, 1283 (Pa. 2006), to encompass the rendering of inspection services.

D. CASES

421. *Bilt-Rite Contractors, Inc. v. The Architectural Studio*, 866 A.2d 270 (Pa. 2005) - Pennsylvania Supreme Court adopts Restatement §552 for those in the business of supplying information, without a privity requirement.

422. *Brand Marketing Group LLC v. Intertek Testing Services, N.A.*, 801 F.3d 347 (3d Cir. 2015) - Third Circuit, applying Pennsylvania law, affirms a §552 verdict against a testing/certification laboratory.

423. FNS Mortgage Service Corp. v. Pacific General Group, Inc., 24 Cal.

App. 4th 1564 (1994) - Negligent-undertaking liability of a certifier for services necessary to protect downstream consumers who will acquire the product.

424. Hempstead v. General Fire Extinguisher Corp., 269 F. Supp. 109 (D.

Del. 1967) - A certifier that impresses its approval upon a product's design owes a duty to a foreseeable user.

425. Cantwell v. Allegheny County, 506 Pa. 35, 483 A.2d 1350 (1984) - First

Pennsylvania Supreme Court application of Restatement §324A.

426. Farabaugh v. Pennsylvania Turnpike Commission, 911 A.2d 1264 (Pa.

2006) - Pennsylvania Supreme Court; §324A encompasses the rendering of inspection services, and reaches negligent performance of a contractual inspection obligation. Id. at 1283-84.

427. Hanberry v. Hearst Corp., 276 Cal. App. 2d 680 (1969) - An endorser

who lends its reputation to a product owes a duty of care to consumers who rely on the endorsement.

428. *The T.J. Hooper*, 60 F.2d 737 (2d Cir. 1932) - Custom is not a defense; an entire industry may be negligent in failing to adopt an available precaution.

429. *Hutchison v. Luddy*, 870 A.2d 766 (Pa. 2005) - Pennsylvania standard for punitive damages requiring subjective appreciation of and conscious disregard for the risk of harm.

430. *Gregg v. Ameriprise Financial*, 245 A.3d 637 (Pa. 2021) - Pennsylvania UTCPL standard; deceptive conduct is measured by its capacity to deceive, without regard to the actor's state of mind, under the statute's remedial construction.

431. *Lujan v. Defenders of Wildlife*, 504 U.S. 555 (1992) - Supreme Court; the injury-in-fact standard: an invasion of a legally protected interest that is concrete and particularized, actual or imminent.

432. *Spokeo, Inc. v. Robins*, 578 U.S. 330 (2016) - Supreme Court; concreteness and particularization are distinct requirements, and a concrete injury is one that is real, not abstract.

433. *Huertas v. Bayer US LLC*, 120 F.4th 1169 (3d Cir. 2024) - Third Circuit; benefit-of-the-bargain economic injury is concrete at the pleading

stage without physical injury; a product that did not perform as represented is worth less. (Binding standing anchor.)

434. *Cottrell v. Alcon Labs.*, 874 F.3d 154 (3d Cir. 2017) - Third Circuit; a consumer who pays for a product he cannot use as paid for suffers an actual, non-speculative injury; standing is separate from the merits. (Binding standing anchor.)

435. *Czyzewski v. Jevic Holding Corp.*, 580 U.S. 451 (2017) - Supreme Court; a loss of even a small amount of money is ordinarily an injury for standing purposes.

436. *John v. Whole Foods Market Group, Inc.*, 858 F.3d 732 (2d Cir. 2017) - overpayment for a product lacking a represented characteristic is a concrete injury in fact.

437. *Cantor v. Beech-Nut Nutrition Co.*, No. 25-821-cv (2d Cir. Feb. 5, 2026) (summary order) - the requirements for pleading an economic injury do not change because the misrepresentation concerns a product's safety.

438. *Toman v. Underwriters Laboratories, Inc.*, 532 F. Supp. 1017 (D. Mass. 1982), rev'd in part on other grounds, 707 F.2d 620 (1st Cir.

1983) - UL-specific; the certifier answers for its own negligent certification conduct, independent of the manufacturer's liability for the build.

439. UL LLC v. The Space Chariot Inc., 250 F. Supp. 3d 596 (C.D. Cal.

2017) - UL-specific; on contested summary judgment, UL's sworn description of its certification machinery accepted as undisputed and judgment entered for willful counterfeiting as a matter of law.

440. Warren Technology, Inc. v. UL LLC, 962 F.3d 1324 (11th Cir. 2020) -

Eleventh Circuit; identified failure to meet its own standards for testing, inconsistent interpretation or application of the standard, and lack of independence as bases on which a nationally recognized testing laboratory may be held answerable.

441. Midwest Plastic Fabricators, Inc. v. Underwriters Laboratories Inc.,

906 F.2d 1568 (Fed. Cir. 1990) - Federal Circuit; UL's own successful defense of its certification-mark registrations. Certification marks set forth specific representations about the manufacture and characteristics of the goods, and the registrant bears an affirmative obligation to control the mark's use. Cited for the representational

character of certification marks and the statutory control condition;
its footnote 2 expressly reserves tort-duty questions, which this

Complaint pleads under the authorities above.

442. *Rempel v. Nationwide Insurance Co.*, 471 Pa. 404, 370 A.2d 366

(1977) - Pennsylvania Supreme Court; justifiable reliance does not
require the relying party to conduct an independent investigation.

443. *Ingrassia Construction Co. v. Walsh*, 486 A.2d 478 (Pa. Super. 1984) -

the objective theory of contracts: outward and objective
manifestations of assent govern, not undisclosed subjective
intentions.

444. *Lincoln Benefit Life Co. v. AEI Life, LLC*, 800 F.3d 99 (3d Cir. 2015) -

Third Circuit; a plaintiff may allege an LLC's member citizenship in
good faith after reasonable inquiry into the available public records.

(Jurisdictional pleading for Smart EPD LLC.)

VI. PLAINTIFF'S STANDING AND INJURIES

A. ONE INJURY SUFFICES

445. Standing requires one injury that is concrete, particularized,

traceable to the defendant, and redressable by the Court. One

suffices; a defendant seeking dismissal for want of standing must defeat the ground on which standing rests. Plaintiff's standing rests on a single sufficient ground: the economic loss he sustained paying for certified performance the products did not deliver, established below by binding authority. Pleading independently and in the alternative, the completed physical deposition set out below is a concrete injury in its own right; the Court need not reach it. The remaining matters - investigative costs and the continuing character of the violation - are pleaded as corroboration, not as independent grounds on which standing depends.

B. ECONOMIC INJURY

446. Plaintiff, a consumer, paid for hand-drying services that Defendants certified as compliant with their own specifications and received services that were not.

447. The Certification Chain explains how Defendants' conduct reaches Plaintiff. The certification begins as a private transaction between manufacturer and certifier, becomes public through the willful offer or requirement to place a physical mark on the device that is bound

to the certification document - a promise of proper standards and testing applied to the device. Unlike an ordinary advertising mark, a certification mark is tied to defined characteristics. "Be Like Mike" is an aspiration, and a good one, but it is not tangible. The NSF, UL and other certifier marks explicitly state what the purchaser is getting, increase the status and value of the device, exist only to persuade purchasers, users, and some select others, reach the purchaser in commerce, and reach the user only after the purchaser installs the marked machine.

448. The simplest test is to require the purchaser to remove the certification mark before installation. Nothing upstream changes. The manufacturer-certifier transaction remains complete; the underlying certification remains what it was; the purchaser still owns the same certified machine and has paid the price that carried the certification value. What disappears is the certification's communication beyond the purchaser. After installation the mark performs no manufacturing, testing, procurement, or internal certification function. It faces outward, carrying the certifier's representation to the persons who use the machine. For more than

thirty years UL has told courts, Congress, regulators, purchasers, and users that its mark signifies examination, testing, conformity, certification, trust, and protection. [Exhibits EEEE, SSSS]

449. Plaintiff is the user at the end of that Chain. He does not claim the purchaser's contract. The duty reaches him through the public-facing representation the certifier deliberately carried beyond it.

450. That same Chain supplies Article III traceability. Plaintiff paid the purchaser for goods and services that included the certified hand-drying service, received that service at the end of the Chain, and received materially less than the performance Defendants certified. The purchaser is not an unrelated intervening actor; it is the deployment link the certification system requires.

451. He paid for products certified to dry hands to a residual-moisture threshold in approximately eight seconds; the products in fact require sixty to ninety seconds, a level of non-performance Plaintiff's 462 drying trials establish at zero-percent compliance. That same shortfall took Plaintiff's time as well as his money: because the product delivered sixty to ninety seconds of drying where it certified

approximately eight, each use extracted sixty or more seconds beyond the represented time - an involuntary loss, imposed by the gap between the certified representation and the actual performance, repeated across years of compelled use. He paid for products certified and marketed as hygienic; the products amplify microbial contamination in their output by median factors of 49.6 times under the original LB-agar methodology and 110 times under broader-spectrum TSA methodology. Repeated use via the Use Cycle and Functional Unit expresses the material outward, generating visible persistent contamination of the device and surrounding surfaces. The difference between the certified performance Plaintiff paid for and the performance the products delivered is a concrete, particularized, ascertainable economic loss, personal to Plaintiff. It is the injury on which Plaintiff's standing principally rests.

452. Article III injury-in-fact requires a "concrete and particularized, actual or imminent" invasion of a legally protected interest. *Lujan v. Defenders of Wildlife*, 504 U.S. 555, 560 (1992); *Spokeo, Inc. v. Robins*, 578 U.S. 330, 340 (2016) (concreteness and particularization are distinct requirements, and a concrete injury is one that is real,

not abstract). Plaintiff's economic loss is both: a concrete, actual, monetary injury, particularized to him. This economic injury is concrete at the pleading stage as a matter of binding law, and Plaintiff pleads it as a present, completed monetary loss - money paid for certified performance that was never delivered, in every transaction, the loss complete upon each transaction - not as a risk of future harm.

453. The Third Circuit holds that a consumer who receives a product worth less than what was bargained for states a concrete economic injury without any allegation of physical harm, and that one way to show a product is worth less is to allege that it did not perform as represented. *Huertas v. Bayer US LLC*, 120 F.4th 1169 (3d Cir. 2024). That is precisely Plaintiff's injury: he paid for drying certified to a residual-moisture threshold and received drying that failed that threshold in every use. The Third Circuit likewise holds that a consumer who pays for a product he cannot use as paid for suffers an actual, non-speculative injury, and that the standing inquiry is separate from the merits. *Cottrell v. Alcon Labs.*, 874 F.3d 154 (3d Cir. 2017). The size of the loss is immaterial: "a loss of even a small

amount of money is ordinarily an ‘injury’” for standing purposes.

Czyzewski v. Jevic Holding Corp., 580 U.S. 451 (2017). And

overpayment for a product that lacks a represented characteristic is itself a concrete injury. John v. Whole Foods Market Group, Inc., 858 F.3d 732 (2d Cir. 2017); accord Cantor v. Beech-Nut Nutrition Co., No. 25-821-cv (2d Cir. Feb. 5, 2026) (summary order) (economic-injury pleading requirements do not change because the misrepresentation concerns a product’s safety). Plaintiff’s injury sits squarely within this authority: a present, particularized, monetary loss from certified performance not delivered.

454. This injury is particularized and Plaintiff’s own. It rests on his documented patronage of specific facilities on specific dates (Exhibits V and Va), on his own repeated transactions at those facilities, and on an ascertainable loss cognizable under Pennsylvania’s Unfair Trade Practices and Consumer Protection Law. It is the loss of a bargain Plaintiff personally paid for and did not receive. Pennsylvania’s Unfair Trade Practices and Consumer Protection Law affords a private right of action to any person who purchases goods or services primarily for personal, family, or

household purposes and thereby suffers an ascertainable loss of money or property. 73 P.S. § 201-1 et seq. The Pennsylvania Supreme Court has confirmed that justifiable reliance and ascertainable loss, not physical harm, are the operative elements. *Gregg v. Ameriprise Financial, Inc.*, 245 A.3d 637 (Pa. 2021).

455. The certification's quantifiable commercial value independently corroborates the injury but is not the ground on which it rests. UL's Environmental Product Declaration for the Xlerator hand dryer is a documented input to the U.S. Green Building Council's LEED v4 rating system. Excel Dryer's own LEED documentation states that the Xlerator may contribute to the LEED "Building Product Disclosure and Optimization - Environmental Product Declarations" credit on the strength of its UL-certified EPD, and to the LEED energy-performance prerequisite and credit, worth up to eighteen points, on the strength of a certified consumption figure of 3.68 watt-hours per eight-second cycle. [Exhibit HH] A second manufacturer's hand dryer is marketed into the same LEED energy credits. [Exhibit II] The certified eight-second figure is the figure Plaintiff's 462 drying trials show to be false at zero-percent compliance. The defective

certification is therefore not ornamental; it is the literal data input by which buildings claim LEED credit. Commercial facilities pursue LEED certification for competitive and market advantage, and the costs of pursuing it - including the specification and installation of products selected for their certified contribution to LEED credits - are reflected in the occupancy and operating costs those facilities pass through to their tenants and patrons. Plaintiff patronized such facilities. [Exhibit V] This commercial-value chain is pleaded as corroboration; it is not the ground on which Plaintiff's standing rests, which is the direct consumer loss set out above.

C. INDEPENDENT AND ALTERNATIVE: THE COMPLETED PHYSICAL DEPOSITION

456. Plaintiff's standing rests on the economic injury set out above, which is sufficient on its own and independently secures Plaintiff's standing. The Court need not reach this ground. Pleased independently and in the alternative, the following is a concrete injury-in-fact in its own right.

457. This case presents a convergence that does not occur in an ordinary contract or duty case: the Defendants themselves defined the harm, quantitatively, in three particulars, and their own certified product delivered all three onto Plaintiff's body in a single completed physical event. The defining of harm is the existential purpose of the Defendants' business; it is what they are mandated to do by contract, by duty, and by government authority. They do not exist without it. The Defendants fixed the moisture boundary at less than one-tenth of one gram of residual water per drying (NSF Protocol P335 §3.4, §4.3.3); they fixed the microbial boundary at approximately one airborne culturable organism per operating cycle (§6.4); and they required that the surfaces contacting the emitted air be treated to inhibit the growth of bacteria and mold (§4.3.2). They mandated regular inspections after installation. These are not Plaintiff's characterizations of harm. They are the boundaries the certifiers - bodies that exist precisely to define exactly these limits - wrote and certified. Violations, in this instance, are harmful by definition as the single function of the product is to increase hygiene. It has no other purpose.

458. This distinction matters. Ordinarily, violation of a standard

establishes nonconformity and the plaintiff must separately

establish that the nonconformity caused harm. That is not the

structure of these particular standards. They do not merely prescribe

how a machine should be built, tested, or documented. They define

the physical condition the certification exists to prevent at the user:

excessive residual water on the hands, energy efficiency generating

less environmental impact, microbial contamination carried to the

hands by the drying air, and bacterial or mold growth on surfaces

contacting that air. For these provisions, the standard and the harm-

line are the same line. Crossing it is not evidence that some different

harm may occur later, although it may. Crossing it is the occurrence

of the physical condition Defendants themselves identified as

unacceptable and, by virtue of the unique nature of this product,

inherently harmful.

459. The difference can be seen by comparison. If a manufacturer violates

a recordkeeping rule, uses the wrong test form, or torques a bolt

outside a specified range, the violation alone does not establish that

anyone was harmed. Something else must happen. Here, something

else is not required. The specified condition itself occurred on Plaintiff's body during use. The hands remained wetter than the certified limit; the drying air delivered microbial contamination beyond the level the certifier defined; and the surrounding certified-use environment exhibited the growth the standard required the system to inhibit. The violation and the completed physical harm are therefore not two separate events. In these provisions, they are the same event.

460. Defendants NSF and UL established an identical use cycle: the drying of a pair of wet hands to a specified dryness level by the dryer. UL's Product Category Rule normalizes its environmental results to 100,000 completed hand dryings, and NSF cannot deny subsequent uses, because a hand dryer is not used once and discarded. The minimum elements required to complete one iteration of that use cycle are a dryer, electricity, a wall, a floor, air, hands, water, time, and dryness. Remove one and the cycle fails. Each element is therefore a mandatory subject of the certification as written, and the wall and the floor are within the certified cycle, not incidental to it.

461. The certified product fails at the air, the time, the water, the wall, and the floor in NSF's and UL's standards as written, for every use cycle, and it delivered that result to Plaintiff physically. A commercial hand dryer completes its function by driving the residual wash water off the user's hands with a high-velocity airstream. Hands leave the sink carrying a median of approximately seven grams of water. The certification requires that drying reduce this to less than one-tenth of one gram at the specified time; Plaintiff's trials measured an average of 2.83 grams still remaining at that time, some twenty-eight times the certified limit. That water does not disappear. It is deposited upon the user, upon the user's clothing, and upon the walls and floor of the room, carrying the microbial load the same testing measured at a median of 200 colony-forming units per minute of exposure against an ambient of two - an amplification of 49.6 to 110 times the surrounding air, in a product certified as hygienic. Plaintiff was subjected to that deposition personally, at identified facilities, on documented dates, repeatedly, across the period pleaded. NSF and UL never addressed downdraft-dryer water contamination or spraying, in violation of their own claims, in their standards as

written. The condition is not prospective: Plaintiff examined 127 certified dryers and found visible mold at the air outlet of every one, in products the certification required to be treated against precisely that growth. Each use deposits its load upon what prior uses left; the next user meets the accumulated remainder.

462. These are completed physical harms that have already occurred, repeatedly. The harm is not a future illness and it is not merely an increased risk that something may happen later. Defendants themselves defined the unacceptable physical conditions because this somewhat unique device's sole purpose is to prevent them before they occur: residual water above their specified limit, microbial contamination above their specified limit, and bacterial or mold growth on surfaces they required to be protected against it. During Plaintiff's use of the certified machines, those conditions were physically delivered to him. The cycle ended. The harm was complete. Nothing further had to happen.

463. The distinction is ordinary. If water is required to contain no more than a defined level of contamination and a person is given water containing twenty times that level, the contaminated-water event is

complete when he drinks it; a later diagnosis of illness would be an additional injury, not the event that makes the contamination real. If a surgical instrument required to remain sterile is contaminated, the loss of sterility is complete before anyone develops an infection. Here the Defendants themselves drew the relevant lines. Their certified machines crossed those lines during actual use and deposited the resulting water, microorganisms, and contaminated material upon Plaintiff.

464. This case is unusual because the parties denying the harm are the same parties that defined it in advance. They fixed the physical boundaries, certified that the products remained on the acceptable side of them, and Plaintiff alleges that the products crossed those boundaries during completed use cycles. A party that defines the prohibited condition cannot make its occurrence contingent upon a later disease. Plaintiff pleads no illness because none is necessary to complete the harm he alleges. The harm occurred when the certified cycle delivered the physical condition the certification existed to prevent before illness can happen from a failure.

465. The completed harm is therefore actual, not threatened; concrete, because physical matter reached Plaintiff's body; and particularized, because it happened to him at identified facilities on documented occasions. Any later illness would be consequential harm beyond the completed injury pleaded here, not a prerequisite to it.

466. Investigative costs, pleaded as corroboration only. Plaintiff did not set out to build a lawsuit. In September 2023 Plaintiff encountered, by chance, a physical condition - visible mold at the air outlet of a commercial hand dryer - that called for investigation, and conducted the testing that ultimately disclosed the certification failures alleged here. For approximately eighteen months Plaintiff sought to have the condition addressed by others before turning to litigation as a last resort. The investigation produced the case; the case did not require the investigation. Plaintiff does not plead these self-generated costs as an independent ground of standing; they are pleaded, if at all, as consequential damages. Plaintiff's standing rests on the economic injury set out above and, independently, on the completed physical deposition set out here.

D. CONTINUING VIOLATION AND ONGOING HARMS

467. The Defendants issued the certifications, the Defendants maintain

them, and the Defendants have not withdrawn, corrected, or updated them notwithstanding the documented failure and despite having received notice. The violation continues.

468. The injury is likewise ongoing. Hand dryers bearing the challenged certifications remain in widespread use throughout Pennsylvania, and Plaintiff continues to encounter them in the ordinary course of daily life. Plaintiff ceased placing his hands in commercial hand dryers in 2024 after discovering the conditions pleaded here; he did not cease encountering the certified system or the physical conditions it creates. He continues to patronize the same facilities. After washing his hands, he is presented with the same existing choice: use the challenged certified dryer supplied by the facility or forego the hand-drying service the facility provides. Avoiding the machine does not remove the machine or its accumulated operational environment from the room. Plaintiff continues to enter restrooms containing installed dryers and to encounter the water deposition, persistent mold, and contaminated surrounding surfaces

documented above. The future encounter does not depend on a hypothetical decision to repurchase or resume using a product he abandoned; the certified machines remain installed in facilities he actually patronizes. For prospective relief, Article III requires facts showing a substantial likelihood of future injury. *Durham v. Kelley*, 82 F.4th 217, 226 (3d Cir. 2023). Plaintiff pleads that likelihood from repeated present encounters, not from a possible future purchase. So long as the certifications remain in force, they continue to govern procurement, pricing, and the hand-drying service supplied at facilities Plaintiff actually uses, and Plaintiff continues to bear the economic consequence of paying for certified performance the certified products do not deliver. Correction, withdrawal, reverification, and accurate public reporting would redress that continuing injury by correcting the certified service and the information on which its continued procurement and use rest.

E. DOCUMENTED EXPOSURE AND RELIANCE

469. Plaintiff reasonably and foreseeably relied on Defendants' certification marks, standards, testing representations, and public

assurances in deciding to use certified hand dryers and in refraining from alternative hand-drying methods. Defendants' marks and certifications were designed, marketed, and maintained precisely for that purpose: to induce trust and reliance by users, purchasers, facility operators, and regulators.

470. Plaintiff encountered Defendants' certification marks repeatedly over more than a decade in public restrooms, including facilities operated by national retailers and food-service establishments. Plaintiff understood these marks to signify that the certified products had been independently tested, complied with published standards, and were safe, hygienic, and environmentally responsible as represented. Plaintiff relied on those representations in using the products as intended. The marks were physically present and outward-facing on the installed machines. [Exhibits SSS, TTTT, UUU]

471. Plaintiff relied on Defendants' certifications by not taking additional protective actions. Plaintiff did not bring personal paper towels, did not avoid certified dryers, and did not treat certified dryers as potential contamination sources, because Defendants' marks communicated that such precautions were unnecessary. This

reliance resulted in repeated exposure to conditions that

Defendants' own standards purported to prevent.

VII. JOINDER OF DEFENDANTS

472. Joinder is proper under Federal Rule of Civil Procedure 20(a)(2).

473. Same Series of Transactions or Occurrences. The connection is printed on the manufacturer's own current document. Excel's technical data sheet, dated May 2026, carries the UL Product Category Rule mark, the Smart EPD certification mark, and the attribution of drying-time testing to SGS, on a single page. [Exhibits PPPP, QQQQ] All claims arise from an interconnected certification network. NSF created P335. SGS produced performance data under a proposed P335 revision. UL later created a PCR that considered P335 and issued an EPD using disputed drying-time inputs. Smart EPD adopted UL's PCR and issued the current declaration while citing the SGS testing. Anna Lasso participated in the UL PCR system and later operated, reviewed, and verified the Smart EPD declaration. Each Defendant's conduct is a traceable stage of the same certification history.

474. Common Questions. All claims present common questions: whether certified products meet certified specifications; whether certification creates duties to consumers; whether certifiers are liable for false certifications.

475. The Two Chains. The certifications at issue travel two separate chains: NSF's P335 certification of Dyson, and the UL - SGS - Smart EPD sequence certifying Excel. Two manufacturers. Two chains. One result: certified specifications that 462 independent trials cannot reproduce. Both chains hung on the walls of the establishments Plaintiff entered - 127 restroom environments across five states and the District of Columbia. When two independent certification chains certify the same impossibility, the failure is not one certifier's accident; it is what the system produces, and every link in both chains is a Defendant here.

VIII. COUNTS

A. COUNT I

NEGLIGENT MISREPRESENTATION

476. (Against All Defendants)

477. Plaintiff incorporates Sections I through VII of this Complaint as though fully set forth herein; no Count incorporates any other Count.

478. The theory of this Count. Certifiers are free to test whatever they choose, for whomever hires them; that is not in dispute. What is in dispute is narrower and of Defendants' own making: a standard exists to define the harms that occur if it is not met; testing and certification exist to prevent them. Failed testing, failed certifications and failed standards execute those harms, and a harm named and never measured is a harm never prevented. The measure of each is the certifier's own document - the one it wrote, and the one it bound itself to. Each Defendant defined a harm, fixed the level at which it occurs, prescribed a test or prescribed none, and then declared the level not exceeded. The certification then traveled. The complete two-channel analysis of how it binds each downstream party - contract to the purchasers, duty to the user - is Exhibit SSSS; this Count proceeds on the duty channel alone.

479. Certifiers answer for their own conduct, not for the build. The hand dryer belongs to the manufacturer, which answers for it. *Toman v. Underwriters Laboratories, Inc.*, 532 F. Supp. 1017, 1019 (D. Mass.

1982), rev'd in part on other grounds, 707 F.2d 620 (1st Cir. 1983).

Plaintiff adopts that rule and pleads no product defect. A certifier

nonetheless remains answerable for what it did itself. And the

Eleventh Circuit has identified failure to meet its own standards for

testing, inconsistent interpretation or application of the standard,

and lack of independence as bases on which a nationally recognised

testing laboratory may be held answerable. Warren Technology, Inc.

v. UL LLC, 962 F.3d 1324, 1329 (11th Cir. 2020).

480. What a certification mark is has been adjudicated - in a case UL won.

Defending its certification-mark registrations against cancellation

before the Federal Circuit, UL prevailed, and the court's opinion fixes

the representational character of the instrument at the center of this

Complaint: certification marks make "specific representations about

the manufacture and characteristics of the goods," the risk of a

misleading certification mark "may be even greater" than that of an

ordinary trademark, and the registrant therefore bears an

"affirmative obligation" to control the mark's use - "reasonable

steps, under all the circumstances of the case, to prevent the public

from being misled." Midwest Plastic Fabricators, Inc. v. Underwriters

Laboratories Inc., 906 F.2d 1568, 1571-73 (Fed. Cir. 1990). Federal law makes that control a condition of holding the registration itself: a certification mark is subject to cancellation if its registrant "does not ... exercise legitimate control over the use of such mark." 15 U.S.C. § 1064(5)(A). The representations this Count pleads are the class of representations the certification mark exists - by federal adjudication and federal statute - to make.

481. The obligation. One who, in the course of his business or in any transaction in which he has a pecuniary interest, supplies false information for the guidance of others in their business transactions is liable for pecuniary loss caused by their justifiable reliance, if he fails to exercise reasonable care in obtaining or communicating the information. Restatement (Second) of Torts §552. Pennsylvania adopted §552 in *Bilt-Rite Contractors, Inc. v. The Architectural Studio*, 866 A.2d 270, 280 (Pa. 2005), for "those in the business of supplying information to others for pecuniary gain." A certification body manufactures nothing; its business is the supplying, for a fee, of a representation that confers status - the declaration that a product conforms to a standard - which §552 reaches as information

supplied for the guidance of others in the paradigm case, because supplying such representations for pecuniary gain is its entire

commercial purpose. The Third Circuit applied the rule to a testing and certification laboratory and, in doing so, accepted the path by which the loss reaches the consumer: the cost of certification "was passed through ... as part of the per-unit price." *Brand Marketing Group LLC v. Intertek Testing Services, N.A.*, 801 F.3d 347, 360 (3d Cir. 2015). The pecuniary loss §552 requires is therefore not remote. It is the certification premium, carried in the price of the certified product and in the price of the goods and services sold at the facilities where that product was installed.

482. Privity is not required. "[T]he economic loss rule does not apply to claims of negligent misrepresentation sounding under Section 552." *Bilt-Rite*, 866 A.2d at 288. The section reaches circumstances "where it is foreseeable that the information will be used and relied upon by third persons, even if the third parties have no direct contractual relationship with the supplier." *Id.* at 287. The Third Circuit has applied the rule to a testing laboratory, affirming a \$6,045,000 verdict including \$5,000,000 in punitive damages. *Brand Marketing Group*

LLC v. Intertek Testing Services, N.A., 801 F.3d 347 (3d Cir. 2015).

The duty pleaded in this Count arises from the law, not from any contract, and does not depend on the existence of one anywhere in the chain.

483. The relying party need not be identified. Intertek "needed to know only that somebody aside from [the submitting entity] would rely on it." *Id.* at 360. The Restatement states the rule twice: "it is not necessary that the maker should have any particular person in mind as the intended, or even the probable, recipient," and "it is not required that the person who is to become the plaintiff be identified or known to the defendant as an individual." Restatement (Second) of Torts §552 cmt. h. Illustration 9 imposes liability in favor of a subcontractor two steps removed, never identified, who never received the document. *Id.* illus.

484. No physical injury is required. "What matters is that Intertek acted in reckless disregard of the risk of harm; that the risk did not come to fruition is a product of chance for which Intertek should not be rewarded." *Brand Marketing*, 801 F.3d 347 n.4.

485. The fourth link. The certification travels four links. First, the manufacturer contracts with the certifier, which writes the standard, specifies the test, evaluates, and issues the certificate. The certificate states what the machine must do and declares that it complies; the device carrying it is a different commercial object from the identical device that does not. The status is conferred there, in private, where no purchaser or user can see it. Second, the certifier makes that status visible, offering the manufacturer a public-facing mark bound exclusively to the certificate. The mark confers nothing and states no specification; its function is to make a private status legible to people who will never see the document that created it. Third, marked product enters commerce and reaches purchasers, each paying a price that includes the certification. Fourth, a purchaser installs the certified product for the use of the people it serves, and the certification arrives at them - whether or not they read the mark, whether or not they know the certifier's name, because the machine is on the wall and the machine is on the wall because it was certified.

486. The fourth link is why the first three occur. A commercial hand dryer is bought to be used by someone other than the buyer. A coffee retailer does not install a hygienic hand dryer because the retailer has hands. The certified quality the retailer purchased can only be delivered to a third party. A certification of hygienic hand drying has no value to a purchaser who will never use the device; its entire value is its effect on the people the purchaser serves. The purchaser is a conduit. The certification's destination is the user.

487. The duty runs to every party the certification reached. The certifier supplied a determination of conformity within a defined scope. The manufacturer relied when it built a product line around the certification. Distributors and retailers relied when they stocked marked goods. Facility operators relied when they selected machines certified as hygienic for rooms where customers wash their hands. Users relied when they placed their hands in the machine. Four positions, one certification, one defined determination. Reliance by multiple parties does not divide the obligation; it establishes the foreseeability §552 requires.

488. What §552 requires. Section 552 requires false information supplied for the guidance of others, justifiable reliance, pecuniary loss, and a failure of reasonable care. It does not require that the relying party receive the document, read it, know the certifier's name, or stand in privity. *Bilt-Rite*, 866 A.2d at 287; Restatement (Second) of Torts §552 cmt. h & illus. 9.

489. The transaction the information was intended to influence. Section 552(2)(b) limits liability to loss suffered through reliance "in a transaction that [the supplier] intends the information to influence ... or in a substantially similar transaction." The certifications identify that transaction themselves. NSF Protocol P335 is titled "Hygienic Commercial Hand Dryers"; §1.1 states it "establishes minimum requirements for health and sanitation characteristics"; §3.4 defines dry hands as "[a]dult human hands with less than 0.1 g residual moisture"; §4.3.3 requires that "[t]he unit must dry the user's hands to a satisfactory level"; §4.3.2 requires surfaces contacting emitted air to "be designed or treated to inhibit the growth of bacteria and mold"; §6.4 states "[t]he operational intent of a hygienic commercial hand dryer is to prevent the hand dryer from using air contaminated

with microbes to dry a user's hands." UL's Product Category Rule fixes the Functional Unit at 100,000 completed dryings of human hands. Every term describes something that happens to a person who is not the purchaser.

490. The persons owed this duty are defined by the certifiers. The class is not the public at large. It is the persons who use a commercial hand dryer that a purchaser selected, bought, and installed in reliance on the mark - a class the Defendants defined themselves, in documents speaking of "the user's hands" and counting completed dryings. Section 552 does not limit liability by headcount; it limits liability by the transaction the supplier intended to influence, Restatement §552(2)(b), and comment h forecloses any requirement that the plaintiff be identified. Plaintiff pleads his own injury, at facilities he identifies, measured across 462 trials, and seeks relief for himself.

491. How the certification reached Plaintiff. Plaintiff did not read UL's Environmental Product Declaration, its Product Category Rule, or NSF Protocol P335, and had never heard of a Product Category Rule until he began the work that produced this Complaint. He used hand dryers, unquestioningly, for decades, trusting they had been tested.

That is not a defect in his reliance; it is the product the certifiers sell.

The purpose of a certification system is to make verification

unnecessary at the point of use. The certifiers do not sell documents to readers. They sell the assurance that permits an uninformed person to use a machine without checking.

492. Reliance is justifiable. Implicit in a seal and certification "is the representation [the certifier] has taken reasonable steps to make an independent examination of the product endorsed, with some degree of expertise, and found it satisfactory"; because "the very purpose of [the] seal and certification is to induce consumers to purchase," the certifier owes a duty of ordinary care to consumers who rely. *Hanberry v. Hearst Corp.*, 276 Cal. App. 2d 680, 683, 685 (1969). Justifiable reliance does not require independent verification. *Rempel v. Nationwide Ins. Co.*, 471 Pa. 404, 370 A.2d 366 (1977) (reliance question for jury notwithstanding that plaintiffs "could have simply read the policy"). A facility operator does not reproduce a microbial-kill protocol; a user does not audit a Product Category Rule before drying his hands. The certification exists so that they need not.

493. The presence of a UL sticker bears directly on reliance even when the user does not know which numbered standard or program produced it. The document defines the scope of UL's actual undertaking. The public mark communicates that UL performed and successfully completed an independent evaluation. Plaintiff understood UL to mean tested, professionally evaluated, and safe for ordinary certified use. Nothing on any machine disclosed which certification program stood behind the mark, which file it invoked, or where one program's undertaking ended and another's began, and no public document of any Defendant partitions the mark's meaning by program. The marks are physically present and outward-facing on the installed machines: the NSF mark on Dyson units and UL marks on Excel units, photographed in Pennsylvania facilities Plaintiff patronizes. [Exhibits SSS, TTTT, UUU]

494. Reasonable care. The standard is the certifier's document, the test method its design, the evaluation its execution of its own protocol. Across 462 drying trials conducted under the certifiers' stated method, zero achieved the certified specification. Residual moisture measured 2.83 grams against certifications of 0.1 to 0.25 grams.

Bacterial amplification measured 49.6 to 110 times ambient in products certified as hygienic. Visible mold appeared at 100% of

Dispersal-Type installations, in products required to have surfaces "designed or treated to inhibit the growth of bacteria and mold." NSF Protocol P335 §4.3.2.

495. No expert is required to construct that standard. The certifiers wrote it. Where a party writes the specification, prescribes the test method, and executes its own procedure, the measure of reasonable care is that party's own document, and the question for the Court is whether the party did what its document requires.

496. Plaintiff entered that transaction and paid for it. The price Plaintiff paid at commercial establishments included the cost of providing the premises - the restroom the establishment is required to provide, and the hand-drying service it selected, purchased, and installed for his use. He paid for hand drying certified to reach a stated threshold within a stated time and to leave his hands more hygienic than it found them. He received hand drying requiring sixty to ninety seconds that amplifies microbial contamination by factors of 49.6 to 110, and exposure to environmental mold originating at the dryer in

100% of tested installations. The difference is his loss. It is pecuniary, it is his, and it is measurable. This Count does not depend upon the independently pleaded physical harm. Brand Marketing, 801 F.3d at 365 n.4.

497. Where the harm lands. The first three links are commerce. The fourth is the reason the certification exists. A certification of hygienic hand drying that never reaches a user has certified nothing. Every threshold the Defendants wrote - 0.1 grams, 0.25 grams, fifteen seconds, one operating cycle, four logs, six logs - measures what happens to a user. The certifiers did not write standards about procurement. They wrote standards about hands. The certified event is the event Plaintiff experienced, tested, and documented 462 times, at zero-percent compliance. Plaintiff is not a bystander to the Defendants' transaction with the manufacturers. He is the person the transaction was about.

498. Each Defendant acted within its own professional role. NSF and UL conferred status by authoring their standards and certifying under them; SGS supplied information by testing; Smart EPD conferred status by certifying under the PCR; and Anna Lasso participated in

that conferral. NSF issued hygienic certification and model listings under P335. SGS supplied drying-performance test results. UL wrote the PCR, verified or accepted the challenged performance input, and issued the earlier EPD. Smart EPD issued the current EPD. Anna Lasso personally participated in the development, review, verification, authorization, or publication alleged above. Plaintiff does not attribute one Defendant's statements to another merely because they appear in the same chronology.

499. What each Defendant supplied - whether status-conferring certification or the test data supporting it - was materially false or incomplete. The certified residual-moisture endpoints were not achieved at the certified times, as pleaded above; UL and Smart EPD's energy and carbon results were derived from that false time, as pleaded above; and the challenged declarations and certifications omitted performance and use-stage information required by the undertakings each Defendant selected.

500. Plaintiff justifiably relied on the certification system and public marks. In reliance, he entered transactions at facilities using the certified products [Exhibits V, Va], paid for the goods and services

supplied there, used the marked machines, and refrained from precautions because the certifications communicated that independent professionals had competently evaluated the products. Exhibit V documents repeated patronage and exposure.

501. Plaintiff suffered pecuniary loss from paying for certified performance not delivered and suffered the additional injuries pleaded above. The reliance and loss are present, documented, and repeated; they do not depend upon a hypothetical future transaction.

B. COUNT II

NEGLIGENT UNDERTAKING (RESTATEMENT §324A)

502. (Against All Defendants)

503. Plaintiff incorporates Sections I through VII of this Complaint as though fully set forth herein; no Count incorporates any other Count.

504. One who undertakes to render services to another which he should recognize as necessary for the protection of a third person is subject to liability to the third person for physical harm resulting from failure to exercise reasonable care, where that failure increases the risk of harm. Restatement (Second) of Torts §324A. A standards-writing

certifier that lists conforming products “has undertaken to render the service of inspecting ... and delisting those ... unable to adhere to standards it has promulgated,” services “necessary for the protection of third persons, consumers who will acquire the [product]”; and “an unlisted pipe ... is unmarketable.” FNS Mortgage Service Corp. v. Pacific General Group, Inc., 24 Cal. App. 4th 1564, 1572 (1994). “It is straining at words to say that Underwriters does not approve the design of a product ... when Underwriters lists it, it thereby tacitly impresses its approval upon the design.” Hempstead v. General Fire Extinguisher Corp., 269 F. Supp. 109, 117 (D. Del. 1967).

505. Certifiers are free to undertake whatever they choose, in contract with whomever hires them; that is not in dispute. The scope of this undertaking is what the certifier defined - and having defined it, the certifier is bound by it. Liability is measured by what the certifier undertook - and the undertaking’s path to the user, traced step by step in Exhibit SSSS, runs on the duty channel this Count pleads. Neither certifier disclaimed hygiene; each defined it. UL’s Product Category Rule states the product’s function, as ISO 14025 §6.7.1(a)

requires, as a hygienic method to dry hands in public washrooms.

ISO 14025 mandates reporting of human-health impacts within the

Functional Unit. None were provided. NSF titled its protocol

"Hygienic Commercial Hand Dryers" and stated that it "establishes minimum requirements for health and sanitation characteristics."

NSF Protocol P335 §1.1. Its Scope identifies the hazards addressed:

dryers "discharge ambient air that could also contain bacteria, mold spores or viruses"; insufficient drying leaves "residual moisture ...

[that] could facilitate transmission of transient microorganisms";

dryers "can promote distribution of potentially pathogenic bacteria

and allergenic mold spores or recontaminate hands." *Id.* §1.2. The

harm alleged is the undertaking, unperformed.

506. Section 324A of the Restatement (Second) of Torts is the law of

Pennsylvania. *Cantwell v. Allegheny County*, 506 Pa. 35, 483 A.2d

1350 (1984) ("the essential provisions of this section have been the

law in Pennsylvania for many years"); *Farabaugh v. Pennsylvania*

Turnpike Commission, 911 A.2d 1264, 1283 (Pa. 2006). In *Farabaugh*

the Pennsylvania Supreme Court held that §324A's requirement of an

undertaking to "render services to another" encompasses "the

rendering of inspection services,” and rejected the argument that the section cannot reach negligent performance of a contractual

inspection obligation. *Id.* at 1283-84. A party that undertakes services necessary for the protection of others must exercise reasonable care in the undertaking. *FNS Mortgage Service Corp. v. Pacific General Group, Inc.*, 24 Cal. App. 4th 1564 (1994), and *Hempstead v. General Fire Extinguisher Corp.*, 269 F. Supp. 109 (D. Del. 1967), apply the principle to standards and certification activity.

507. NSF undertook hygienic certification and continuing model approval.

SGS undertook product-performance testing. UL undertook PCR development, program operation, EPD verification, and declaration issuance. Smart EPD undertook present program operation, review, verification, and issuance. Anna Lasso undertook the personal development, review, verification, and certification acts attributed to her above.

508. Each undertaking was performed for a limited and foreseeable class including manufacturers, purchasers, facility operators, patrons, and product users. Reliance is not incidental to certification; it is the reason certification has commercial and regulatory value.

509. Each Defendant failed to exercise reasonable care within the scope of its own undertaking. The physical condition against which those undertakings were directed is not a matter of inference; the standards under which each Defendant acted define it. NSF Protocol P335 provides that "the operational intent of a hygienic commercial hand dryer is to prevent the hand dryer from using air contaminated with microbes to dry a user's hands," §6.4; identifies as the hazards it addresses that commercial hand dryers "discharge ambient air that could also contain bacteria, mold spores or viruses that could be entrapped on the users' hands" and "can promote distribution of potentially pathogenic bacteria and allergenic mold spores or recontaminate hands," §1.2; and requires that surfaces contacting the emitted air "be designed or treated to inhibit the growth of bacteria and mold," §4.3.2. [Exhibit X] UL's Product Category Rule defines the product's function as "a hygienic method to dry hands in public washrooms," §1.2, and UL's Environmental Product Declaration states on its face that hand dryers provide "a hygienic and sustainable method to dry hands in public washrooms." [Exhibits W, CC]

510. Protocol P335 further quantified the level of that condition it treated

as acceptable. Its acceptance criterion derives a threshold from

published indoor air data and states the result: at an operating cycle

of fifteen seconds, a plenum leak rate of eight litres per minute

"would result in 1 airborne culturable bacteria being emitted per

operating cycle." §6.4. [Exhibit X] The certified products emit a

median of 200 colony-forming units per one-minute exposure,

measured against an ambient of 2. [Exhibits A, I]

511. The deposition is a completed physical event. A commercial hand

dryer performs its function by driving the wash water off the user's

hands with a high-velocity airstream. That water does not disappear.

It is deposited upon the user, upon the user's clothing, and upon the

walls and floor of the room, carrying the microbial load measured

above. Plaintiff was subjected to that deposition repeatedly, at the

facilities identified above, across the period pleaded. The condition

is not prospective and it does not abate between uses: Plaintiff

tested 127 dryers and found visible mold at the air outlet of every

one, in products the certifications required to have surfaces

"designed or treated to inhibit the growth of bacteria and mold." NSF

Protocol P335 §4.3.2. Each use deposits its load upon what the prior uses left; the next user meets the accumulated remainder. Plaintiff

does not plead a risk of future illness, does not allege that he has become ill, and does not rely upon any latent or future condition. The harm pleaded is the deposition, which occurred, from a product whose sole purpose is to prevent it.

512. The increased-risk element is satisfied. Section 324A(a) reaches a failure of care that “increases the risk of such harm.” A completed deposition of the defined contaminant, at the magnitude pleaded, is the maximal case of that requirement: a risk that has been realized is a risk that was increased. The element is met not by probability but by occurrence. Plaintiff pleads the completed harm, and the completed harm establishes the increased risk a fortiori.

513. Defendants defined the condition as the harm, and defining it is the service they sell. A certifier’s function - the reason it exists, and the reason the government authorizes it and grants it the privileges of that status - is to define the boundaries of harm and to certify they are not crossed, whether the subject is electrical safety, energy, carbon, hygiene, or, for UL and Smart EPD, the human-health toxicity

question their governing documents identify. The certifier chooses what to evaluate. Having chosen, it must perform and report the evaluation its governing documents require. That is the service it sells. A party whose function is certainty about the harm-line cannot be heard to say the line is unknowable. Defendants drew this line themselves: Protocol P335 fixes the acceptable level at one airborne culturable bacterium per operating cycle, §6.4, and the certified products emit a median of 200 colony-forming units per one-minute exposure against an ambient of two. Whether the condition Plaintiff experienced is harm is not a question this Court must answer in the abstract, because Defendants answered it in the documents under which they certified: it is the precise condition they undertook to prevent, at a magnitude they fixed as unacceptable.

C. COUNT III

PENNSYLVANIA UNFAIR TRADE PRACTICES AND CONSUMER PROTECTION LAW

514. (Against All Defendants)

515. Plaintiff incorporates Sections I through VII of this Complaint as though fully set forth herein; no Count incorporates any other Count.

516. Defendants engaged in unfair or deceptive acts in the conduct of trade or commerce in violation of 73 P.S. § 201-1 et seq. Defendants' conduct falls squarely within the practices the statute declares unlawful, including 73 P.S. § 201-2(4)(ii) (causing a likelihood of confusion or misunderstanding as to the approval or certification of goods or services), §201-2(4)(iii) (causing a likelihood of confusion or misunderstanding as to certification by another), and §201-2(4)(v) (representing that goods or services have approval, characteristics, or benefits that they do not have).

517. Under *Gregg v. Ameriprise*, 245 A.3d 637 (Pa. 2021), the catch-all provision imposes liability without proof of the actor's state of mind: deceptive conduct is measured by its capacity to deceive, judged objectively, and Defendants' conduct was deceptive regardless of their mental state. Defendants' disclaimer of their marks is no defense. What the mark communicates to the public is an outward, objective manifestation; a certifier's private reservation about what its mark "really" means is an undisclosed subjective intention the

law disregards. *Ingrassia Construction Co. v. Walsh*, 486 A.2d 478, 483 (Pa. Super. 1984).

518. Plaintiff suffered ascertainable loss as a result of Defendants' conduct. He paid for hand-drying services certified and marketed as hygienic and as performing to stated specifications, and received services that were neither. The difference between the certified performance he paid for and the performance delivered is the ascertainable loss the statute requires, and it is pecuniary.
519. Plaintiff is within the class the statute permits to sue. Section 201-9.2 affords a private action to any person who purchases goods or services primarily for personal, family or household purposes and thereby suffers an ascertainable loss. Plaintiff purchased goods and services for personal use at facilities that supplied the certified hand-drying service as part of the transaction. He did not purchase a hand dryer and does not claim to have. He purchased the goods and services in whose price the certified service was included, and the loss he suffered is the difference between that certified service and the service delivered.

520. The deceptive act is the false or misleading certification

representation communicated through the public-facing instrument

each Defendant actually supplied. A mark communicates successful

independent evaluation and conformity; a declaration, listing, or test

attribution communicates the result stated in that instrument. Each

is measured against the standard, method, or undertaking of the

Defendant who made it. Plaintiff does not attribute one Defendant's

statement to another. The challenged certifications, declarations,

and testing representations do not match the performance or

requirements they represent. Every measurement Plaintiff made of a

certified downdraft dryer failed against Defendants' claims,

independent of brand or model.

521. Plaintiff is entitled to actual damages, and the Court may award up to

three times the actual damages sustained, together with costs and

reasonable attorneys' fees if incurred, as authorized by 73 P.S. § 201-

9.2(a).

D. COUNT IV

BREACH OF DUTY AS AN ACCREDITED CERTIFICATION BODY

522. (Against NSF International)

523. Plaintiff incorporates Sections I through VII of this Complaint as though fully set forth herein; no Count incorporates any other Count. The allegations supporting this Count appear principally at Sections IV.A, IV.B, IV.C, IV.D, IV.H, IV.J, and IV.K, and concern NSF International's authorship of Protocol P335, its certification of products under that protocol, and its maintenance of those certifications.

524. The measure of reasonable care is NSF's own protocol, and the breadth of evaluation the field treats as reasonable. P335 is titled Hygienic Commercial Hand Dryers. Section 1.1 states that it establishes minimum requirements for health and sanitation characteristics. Section 6.4 states that the operational intent of a hygienic commercial hand dryer is to prevent the hand dryer from using air contaminated with microbes to dry a user's hands, and derives a threshold on the order of one culturable organism per

operating cycle. NSF prescribed no test that measures the air a functioning machine emits. Its front matter states what it declined to cover: provisions for safety were not included because other bodies supply them. NSF named safety and carved it out. It did not name hygiene, and could not have.

525. The protocol states its own test and its own passing mark. §4.3.3 requires 0.1 gram of residual moisture within one normal operating cycle or fifteen seconds, whichever is lower. §6.3 requires 95 percent effectiveness across not fewer than twenty trials. Plaintiff conducted 462 trials, more than twenty times the certification sample, and recorded zero compliance at manufacturer-specified times, with mean residual moisture of 2.83 grams against a 0.1 gram threshold. [Exhibits B, E, H, L] Measured against §6.4's acceptance criterion of approximately one culturable organism per operating cycle, Plaintiff's broad-spectrum testing recorded a median of 200 at the output of certified machines against a measured ambient of 2. [Exhibit I] §4.3.2 requires that surfaces contacting the emitted air be designed or treated to inhibit the growth of bacteria and mold. That

requirement is unconditional, and NSF prescribed no test of those surfaces.

526. NSF defined the event it was certifying. P335 describes a single operating cycle: hands, wet, dried to a stated endpoint within a stated time, in the room where the machine is installed. UL later defined the same event on its own terms and repeated it 100,000 times. Neither definition was supplied by a regulator. The cycle NSF described requires a dryer, electricity, a wall, a floor, air, hands, water, time and dryness, and P335 prescribes a test for three of them. Its certified Dyson downdraft dryers fail all three.

527. A harm a certifier names and never writes a measure for is a harm the certification cannot detect. P335 names contaminated air as the condition it exists to prevent, fixes the level at which that condition is unacceptable, and prescribes a test of the intake filter. It requires that surfaces contacting the emitted air be treated, and prescribes no test of those surfaces. It requires six-log disinfection of removed handwash water where a machine collects it, and requires nothing where a machine discharges it into the room. The absence of a required measure is not an answer to the want of one.

528. Annex A.2 further provides that no change in design, construction or materials may be made without NSF's prior approval. Beginning in

2013 the certified line moved from the insert architecture P335 was drafted around to the downdraft-Dispersion architecture now certified under it. That is a change in design within Annex A.2, and under the protocol's own terms it could not be made without NSF's approval. Plaintiff does not allege what NSF knew when it approved the change. Plaintiff alleges that the protocol required NSF to approve it, and that NSF has certified the changed architecture ever since.

529. NSF operates as an accredited certification body. By undertaking to certify products for public health and safety, NSF assumed duties to conduct competent initial evaluation, ensure ongoing compliance through surveillance testing, and maintain certification integrity by revoking certifications for non-compliant products. A body that undertakes to certify a product for public health, and impresses its approval upon that product, owes a duty of reasonable care to the foreseeable users who rely on the certification. *Hempstead v. General Fire Extinguisher Corp.*, 269 F. Supp. 109 (D. Del. 1967); *Hanberry v. Hearst Corp.*, 276 Cal. App. 2d 680 (1969); see

Farabaugh v. Pennsylvania Turnpike Commission, 911 A.2d 1264 (Pa. 2006).

530. Protocol P335 provides at Annex A.2 that NSF "shall conduct audits of all facilities and production locations at least annually," and that those audits shall cover any change in design, construction or materials, which may not be made "without prior approval by NSF." Annex A.3 provides that "re-testing of certified systems shall occur every five years." [Exhibit X] Both provisions are mandatory in their terms and both are continuing. NSF breached these duties by maintaining certification, across nineteen years, for products that achieve zero percent compliance with the certified specification. The annual audit reports, the approvals of each change in design, construction or materials, and the five-year re-test records capable of establishing whether NSF performed what Annex A requires remain exclusively within NSF's possession and undisclosed.

531. Plaintiff paid for hand-drying services certified by NSF International as meeting the specifications of Protocol P335 and received services that did not meet them. The difference between the certified performance he paid for and the performance delivered is an

ascertainable pecuniary loss, personal to him and repeated in every transaction pleaded above. He further sustained the involuntary time loss pleaded above. The damages sought under this Count are pecuniary.

E. COUNT V

NEGLIGENT TESTING

532. (Against SGS North America, Inc.)

533. Plaintiff incorporates Sections I through VII of this Complaint as though fully set forth herein; no Count incorporates any other Count. The allegations supporting this Count appear principally at Sections IV.B, IV.D, IV.G, IV.J, and IV.K, and concern SGS North America's performance and reporting of hand dryer drying-time testing and the use of that testing in the challenged declarations.

534. The undertaking, stated narrowly. SGS was retained to test hand-dryer drying performance and energy consumption. SGS did not write NSF Protocol P335, author UL's Product Category Rule, or issue any environmental declaration. Plaintiff does not contend otherwise, and pleads no failure by SGS outside the testing it performed. [Exhibits

FFFF, PPPP, QQQQ] This complaint is structured around the three blocks: before the 2012 report, in 2012, and after 2012. Because of the numerical density of this document SGS testing is the most difficult to properly parse beyond the claims pleaded here.

535. SGS' test reports are proprietary. Plaintiff, despite repeated comprehensive internet scrapes, found only one: an exhibit buried in a filing in the 2012 Excel V Dyson false advertising case. [Exhibit BB] For clarity: manufacturers and certifiers report SGS testing before and after 2012, Plaintiff's only report, offered under oath in a court case, is a single snapshot in time. UL, Smart EPD, and Excel continue to report on unseen testing as validating the current 8 second drying time but none of it can be viewed for confirmation.

536. The controlling authority for that testing was the hygiene protocol itself. SGS's report identifies its governing method as NSF Protocol P335 - in a version then submitted for committee review. The report applied a threshold of 0.1 gram per hand, 0.2 gram total: the revision Excel proposed and NSF rejected. SGS described that revision as a protocol NSF was developing. The document SGS tested against is titled Hygienic Commercial Hand Dryers.

537. The breach is inside the undertaking. Plaintiff does not adopt the figures in the SGS report; he cannot reproduce any of them, for any manufacturer, at any tested time, including those least favourable to the products. Taken at face value and without adoption, the report records World Dryer Smartdri at fifteen seconds producing 0.770 to 0.774 grams of residual moisture - more than three times the 0.25 gram threshold UL would later adopt, and the XLERATOR at 0.108 gram at fifteen seconds against a P335 threshold of 0.1. Fifteen seconds is longer than any drying time since claimed for these products. Plaintiff's 462 trials, using comparable gravimetric methodology, recorded approximately 2.5 to 3.0 grams at equivalent times. The SGS figures and Plaintiff's measurements differ by one to two orders of magnitude and have not been independently reconciled or reproduced.

538. Two certifiers name SGS as the source of the eight-second figure. UL's Environmental Product Declaration states on its face that the reported dry time rests on SGS testing. [Exhibit CC] The Smart EPD certificate cites SGS testing performed under UL's Product Category Rule. [Exhibit AA] Excel's current technical data sheet, dated May

2026, states that dry time and energy use testing was performed by SGS International to 0.25 gram or less residual moisture pursuant to the UL Product Category Rules for Hand Dryers. [Exhibits PPPP, QQQQ] No public SGS report tests these products at eight seconds, and the identified 2012 report could not have tested under a Rule not published until 2016. Excel reports current and ongoing SGS testing held proprietary and withheld from public view. Either additional SGS testing exists and must be produced and reconciled with the public report, or the present attribution lacks disclosed support. Plaintiff does not know which, and the records are in the Defendants' possession.

539. The measure of that care is the method SGS was retained to execute. A laboratory that reports a drying-time result under a named protocol is answerable for testing to that protocol's threshold, within the times the protocol states, and for reporting the time at which each measurement was taken.

540. SGS failed to exercise reasonable care in applying an unadopted threshold, reporting results that have not been independently reproduced, and supplying a professional test record later used to

support an eight-second claim even though the public report tested at twelve and fifteen seconds.

541. Plaintiff paid for hand-drying services certified to performance figures resting upon the SGS test record, and received services that did not meet those figures. The difference between the certified performance he paid for and the performance delivered is an ascertainable pecuniary loss, personal to him and repeated in every transaction pleaded above. The damages sought under this Count are pecuniary.

F. COUNT VI

NEGLIGENT STANDARD CREATION AND CERTIFICATION

542. (Against UL Solutions Inc.)

543. Plaintiff incorporates Sections I through VII of this Complaint as though fully set forth herein; no Count incorporates any other Count. The allegations supporting this Count appear principally at Sections IV.B, IV.C, IV.D, IV.E, IV.I, IV.J, IV.K, IV.L, and IV.M, and concern UL Solutions' authorship of the Product Category Rule for Hand Dryers,

its selection of the governing standards, and its issuance and verification of the resulting Environmental Product Declaration.

544. The module substitution. EN 15804 designates module B1 for emissions arising from the product during use and module B6 for operational energy. UL's Product Category Rule recites both definitions correctly and states in its own footnote that it will do otherwise, placing operational energy in B1. The module reserved for emissions was occupied by electricity, and the emissions were not reported anywhere in the declaration.

545. UL also declared the harm and then declined to measure it. Its own rule states the product's function as a hygienic method to dry hands in public washrooms, as ISO 14025 §6.7.1(a) requires. Its conformance table lists electrical and electromagnetic standards and no hygiene standard at all. The function was declared; the evaluation of that function was not performed.

546. The module reserved for what the product releases in use was covered over by a pre-existing block for reporting electricity,

eliminating the ability of a reader of the EPD to know it was ever there.

547. UL chose its governing standards. UL chose ISO 14025 and declared compliance with it in the Rule itself. It selected EN 15804 as the framework for organizing the life-cycle stages it would report. Those documents establish the scope of environmental evaluation UL undertook. A narrower scope was available and ordinary: ISO 14067 governs the carbon footprint of products alone and provides a carbon-only product-assessment path available across the industry. UL did not select it. UL instead selected the system carrying the human-health and hazard-and-risk obligations that frame the toxicity issue its own declaration names. [Exhibits W, Y, CC, NNNN, FFFF]

548. What the operating cycle contains. UL fixed its Functional Unit at 100,000 completed hand dryings to 0.25 gram of residual water or less. A single cycle of that unit requires a dryer, electricity, a wall, a floor, air, hands, water, time and dryness. Every one of those is present in the operation UL declared and none is refusable. UL accumulated electricity across 100,000 repetitions and reported the environment as though it retained nothing from any of them.

549. Custom is no defense. "[A] whole calling may have unduly lagged in the adoption of new and available devices ... [T]here are precautions so imperative that even their universal disregard will not excuse their omission." *The T.J. Hooper*, 60 F.2d 737, 740 (2d Cir. 1932) (L. Hand, J.). That the industry has certified hand dryers this way since 2007 establishes the practice, not that the practice was careful. And the absence of a required standard is no answer to the want of one. A harm a certifier named and never wrote a measure for is unmeasured for the same reason, and with the same consequence, as a harm measured against a standard that was wrong: both leave the condition the certification exists to exclude undetected. NSF prescribed no test of the air a functioning dryer emits. UL declared the function hygienic and its conformance table lists electrical and electromagnetic standards and no hygiene standard at all.

550. UL created Product Category Rules for Hand Dryers that are relied upon by testing organizations, certification bodies, and consumers. UL certified products under those rules from 2017 to present. UL's certification of Excel Dryer expired in July 2022. UL continues to

certify hand dryers, including Hokwang products certified through April 2027 at 30-35 seconds drying time.

551. UL failed to exercise reasonable care in standard creation by allowing manufacturers to hold ten of the twelve seats on the PCR committee, four of them Excel's, and allowing Excel to chair it; excluding public health officials and consumer representatives entirely; mentioning hygiene once in 37 pages; and omitting water dispersal - the primary public health mechanism - entirely. [Exhibit RRRR]
552. UL failed to exercise reasonable care in certification by issuing EPD No. 4787137936.102.1 certifying 8-second drying times and 3.68 Wh energy consumption; by certifying a drying time its own Product Category Rule required to be third-party tested and verified, without obtaining or identifying that testing in the form the Rule prescribes. The Rule requires third-party verification by a certified body testing laboratory recognized in the IECEE CB Scheme; provides that the dry time test "shall be performed in full by the certified third party"; prohibits the use of "manufacturer's employees, vendors and affiliates" as hand drying test panelists; and requires the results to be

documented by individual test panelist. [Exhibit W, §3.2, §5.1, App. I]

The Declaration attributes the reported dry time to testing by SGS

International in 2016 and identifies no report, no laboratory accreditation, no panel, and no test record. [Exhibit CC] UL further failed to exercise reasonable care by maintaining certification for five years without identifying or disclosing surveillance testing. The machinery that did not act on these certifications is the machinery UL proved in 1990 and enforces today - testing before listing, follow-up inspection, variation notices that block shipment, correction, and removal of the mark. Sections I.F, IV.M, above. UL continues to exercise negligent certification by maintaining active EPDs for products that operate for 30-35 seconds per drying cycle without addressing water dispersal [Exhibit RRRR], output air contamination, or mold formation that occurs during that extended operation.

553. Plaintiff paid for hand-drying services certified under the Product Category Rule UL wrote and the Environmental Product Declaration UL issued, and received services that did not meet the certified figures. The difference between the certified performance he paid for and the performance delivered is an ascertainable pecuniary loss,

personal to him and repeated in every transaction pleaded above. He further sustained the involuntary time loss pleaded above. The damages sought under this Count are pecuniary.

G. COUNT VII

EPD VERIFICATION NEGLIGENCE

554. (Against Smart EPD LLC and Anna Lasso)

555. Plaintiff incorporates Sections I through VII of this Complaint as though fully set forth herein; no Count incorporates any other Count. The allegations supporting this Count appear principally at Sections IV.E, IV.F, IV.G, IV.J, and IV.K, and concern Smart EPD's issuance of the current Environmental Product Declaration under UL's Product Category Rule and Anna Lasso's roles in its preparation, review, and verification.

556. Smart EPD certifies Environmental Product Declarations for hand dryer manufacturers. It does so under the Product Category Rule UL wrote; the declaration at issue states on its face that its Core PCR is the "UL PCR for Hand Dryers v.1." [Exhibit AA] A program operator that issues a public declaration under a published rule owes a duty

of reasonable care to the persons that declaration is issued to reach, including the users of the certified product. Restatement (Second) of Torts §552; Brand Marketing Group LLC v. Intertek Testing Services, N.A., 801 F.3d 347 (3d Cir. 2015).

557. The measure of that duty is the Rule under which Smart EPD certifies.

That Rule requires the reported dry time to be third-party tested and verified, requires the declaration to carry a statement of that verification, and provides that where verification is internal the verifier “must not have been connected in any manner with the EPD or LCA.” [Exhibit W, §3.2, §5.1, Table 8] ISO 14025 separately requires that an independent verifier not have participated in execution of the LCA or development of the declaration and not have a conflict of interest, and requires third-party verification for business-to-consumer declarations. ISO 14025 §§8.2.1, 9.4. The verification undertaking extends to conformity of the declaration with its governing Rule and standard, including the human-health and hazard-and-risk requirements underlying the toxicity issue. ISO 14025 §§8.1.3-8.1.4. Smart EPD failed to exercise reasonable care by publishing an energy figure ten times the value its own stated inputs

produce and by certifying Environmental Product Declarations based on drying-time claims its own governing Rule required to be

independently tested. The certificate also identifies Anna Lasso simultaneously as program operator, independent critical reviewer, and independent external verifier. Those titles alone do not establish a violation; they make the specific independence requirements governing the work she actually performed material to this Count and to discovery. [Exhibit AA]

558. Adoption is the measure. Smart EPD did not write the rule and does not answer for having written it. It answers for having adopted it and for what adoption requires: third-party testing of the reported dry time, a statement of that verification on the face of the declaration, a verifier not connected in any manner with the declaration or the underlying assessment, and the ISO 14025 human-health and hazard-and-risk obligations that frame the toxicity issue. The rule Smart EPD chose is the document by which Smart EPD is measured.

559. The requirements Smart EPD adopted are not satisfied by adoption.

The Rule requires third-party testing of the reported dry time and a statement of that verification in the declaration. The declaration

issued names SGS as the source and identifies no report, no accreditation, no panel, and no test record. The obligation the Rule creates was inherited; the performance it requires was not.

560. The inherited substitution. Smart EPD issued its declaration under UL's Product Category Rule and bound by its terms, reporting energy in module B1 and covering over the room-emissions block, with no footnote, no mention of EN 15804 or B6, and no disclosure of the deviation anywhere in the declaration itself. [Exhibit AA] The deviation UL at least recorded in its rule, Smart EPD's declaration conceals entirely - and its verifier certified the document in three roles the governing standard requires to be independent.

561. Anna Lasso administered UL's certification standards as its PCR Project Manager and EPD Product Manager. The UL EPD with the 8 second dry time claim expired in July 2022, was not renewed, and Lasso was headed to Smart EPD. UL had certified Hokwang dryers at thirty to thirty-five seconds under the methodology she administered. Plaintiff reviewed UL's currently published hand dryer declarations in 2025 and none claimed an eight-second dry time. Plaintiff's data makes the Hokwang dryer time unlikely, but it trends in a reasonable

direction. Eleven months later Smart EPD certified the same product at eight seconds under UL's own Product Category Rule. The figure had left UL's library and returned under UL's rule.

562. Ms. Lasso participated in creating the UL PCR methodology while employed at UL, formed Smart EPD to certify products under that methodology, and appears on the current certification as Program Operator, Independent Critical Reviewer, and Independent External Verifier. The underlying LCA separately identifies her as chair of an External Independent Third-Party Review Panel. [Exhibits AA, EE] Whether the work she performed in those roles complied with ISO 14025 §§8.2.1 and 9.4 depends on the preparation, review, verification, and conflict records in Defendants' possession and is a subject for discovery.

563. Plaintiff paid for hand-drying services certified by the declaration Smart EPD issued and Anna Lasso verified, and received services that did not meet the certified figures. The difference between the certified performance he paid for and the performance delivered is an ascertainable pecuniary loss, personal to him and repeated in

every transaction pleaded above. The damages sought under this Count are pecuniary.

H. COUNT VIII

DECLARATORY JUDGMENT

564. (Against All Defendants)

565. Plaintiff incorporates Sections I through VII of this Complaint as though fully set forth herein; no Count incorporates any other Count.

566. An actual controversy exists between Plaintiff and Defendants regarding whether the certifications at issue conform to the standards under which they were issued, whether the certified performance figures are accurate, whether the challenged declarations omit the human-health and hazard-and-risk requirements that frame the toxicity issue, and whether Defendants owed Plaintiff a duty of reasonable care in issuing them. Standards first written in 2007 and then in 2016 feed certifications that remain in force. The controversy is old, is present and is continuing. Every day these certifications remain unretracted, products bearing them

are specified, purchased, installed, and used in reliance on figures no unit achieves.

567. Plaintiff seeks a declaratory judgment. The declarations sought are set out in the Prayer for Relief below. They concern the conformity of the challenged Product Category Rule and the declarations issued under it to the standard those documents name, including the human-health and hazard-and-risk requirements underlying the toxicity issue; the accuracy of the certified drying-time and energy figures; the sufficiency of the testing on which those figures rest; the independence of the verification roles ISO 14025 requires to be independent; and the duty owed to the class the certifiers themselves defined.

IX. PRAYER FOR RELIEF

568. WHEREFORE, Plaintiff requests judgment and the following relief against each Defendant as applicable to the claims and conduct established against that Defendant:

A. DEMONSTRATION

569. Plaintiff requests leave, at the appropriate stage of proceedings, to

conduct an in-court demonstration under judicial supervision.

Plaintiff and Defendants may provide commercial hand dryer unit(s)

mounted on portable backboard. Using the methodology set forth in

Paragraph 1, the Court and jury can verify whether certified products

achieve 0.1 gram or 0.25 grams of residual moisture at the specified

times.

B. INJUNCTIVE RELIEF

570. Plaintiff holds that the primary remedy for this problem is simply that

the Defendants publicly report the data they have ignored and

accurately, publicly, report the data that is false. Then the market

can decide based on an honest view of hand dryer performance -

once again - per their own standards and mandate governing

standards. A proper PCR requiring a proper EPD issued by UL, fully

reporting every mandated bloc; a proper NSF report; publicly

available SGS testing; Independent certification oversight on Smart

EPD and Anna Lasso fully reporting every mandated block and

updating the current LCA and EPD to reflect the changes would resolve the issue by informing buyers and users what they are

actually about to purchase or use. The record further establishes that white paper towels provide an existing, commercially available alternative without the performance failures pleaded here. Plaintiff asks the Court to consider that available replacement in fashioning equitable relief. This frames Plaintiff's requests to the court:

571. The injunctions below fall into two categories. Several begin with obligations the affected Defendant already adopted or wrote for itself: the standard UL declared in its own rule that it complies with, the test NSF's protocol prescribes, the audits Annex A of that protocol requires, the third-party testing the Product Category Rule requires, and the threshold the governing certifying document specifies. Those requests ask that existing substantive obligations be performed and made objectively verifiable. Other provisions impose additional transparency and verification conditions as equitable relief: public documentation of testing relied upon for certification and measurement of microbial performance in installed operation. Plaintiff does not characterize those added conditions as pre-

existing duties. He requests them because the challenged certifications remain publicly operative while the testing and verification needed to confirm compliance are not publicly ascertainable. UL has stated, in its own enforcement, why verifiable records matter. “In order to protect the integrity of the UL Marks,” UL “routinely polices the marketplace for infringing activity and enforces its rights.” [Exhibit FFFFFF] When it does so, it certifies to the target that it searched its own files and “not found” the product in its program; the absence of a record is the violation UL asserts. [Exhibit FFFFFF] Plaintiff asks that the same evidentiary discipline be applied to the certifications at issue here: testing behind any certification maintained after judgment must exist, be identifiable, and be capable of verification.

572. Plaintiff asked for corrective relief before filing. On April 23, 2026 he delivered to each Defendant the research, a draft of this Complaint, and a proposed resolution, signed for on April 27. He asked that the standards and certifications be revised to reflect actual product performance. UL Solutions responded twice and declined. NSF International and SGS North America did not respond. The relief

requested here follows the corrective relief Plaintiff sought privately first.

573. Absent that relief the certifications remain in force. They continue to govern procurement and specification, they continue to carry the premium the mark commands, and Plaintiff continues to encounter the certified machines at facilities he patronizes. Monetary damages cannot correct a certification that remains publicly operative after judgment. The prospective relief below is directed first to correction or reverification of those existing representations and then to objective verification of compliance so that the same certification failure does not recur.

574. Defendants wrote or adopted the drying-time standards and tests they invoke and represent that certification rests on compliance with them. The complete testing record underlying the challenged current claims is not publicly verifiable. Plaintiff's testing is public. Where the Court requires correction, reverification, or future compliance, publication of the evidence supporting that compliance provides an objective record by which the decree can be enforced. When UL compels correction of a mark, it requires notice to be published "to

all customers or members of the trade... as well as to the appropriate regulatory bodies.” [Exhibit WWWW] The publication requirement

below applies to each Defendant only to the extent that Defendant performs, supplies, verifies, relies upon, issues, or maintains testing or certification within the scope of the judgment.

575. Enter a permanent injunction requiring each Defendant, as applicable to any certification, declaration, model listing, verification, or testing representation it issued, supplied, verified, or presently maintains, to correct, withdraw, suspend, or reverify any challenged representation adjudged materially false or nonconforming with the governing standard or method; and prohibiting that Defendant from continuing to issue, maintain, renew, verify, or republish the adjudged representation unless and until the corrective action required by the judgment has been completed and the resulting public record accurately states the verified performance.

576. Enter a permanent injunction requiring that any commercial hand dryer test performed after judgment and relied upon by any Defendant to issue, maintain, renew, reverify, or support a

certification or declaration be recorded on video from setup through final measurement, and that the complete recording, raw

measurements, governing method and version, model and date of manufacture of the unit tested, identity of the person conducting the test, and written test report be published. The written report shall be made under oath and shall set forth in detail the testing performed and the results obtained. Publication may omit only material the Court specifically orders withheld under applicable law. This is the standard of compliance UL itself demands of those it enjoins, requiring a “written report... under oath, setting forth in detail the manner in which” its target has complied. [Exhibit WWWW]

577. Enter a permanent injunction requiring UL Solutions Inc. to correct any adjudged nonconformity in the challenged Product Category Rule for Hand Dryers so that the Rule contains the requirements ISO 14025 makes applicable to the PCR, including §6.7.1(f)’s requirement for additional environmental information and associated methodologies such as hazard-and-risk assessment, §6.7.1(g)’s requirement concerning materials and substances to be declared, including substances that can adversely affect human

health or the environment, and any applicable requirement concerning omitted life-cycle stages under §6.7.1(j). Require UL

Solutions Inc. and Smart EPD LLC, as to any commercial hand dryer Environmental Product Declaration each issues or maintains under that Rule as conforming to ISO 14025, to correct the challenged declaration so that it satisfies §5.3's requirement concerning relevant environmental aspects; §7.2.1(i)'s core declaration-content requirement, subject to its stated proprietary-information exception; §7.2.3's where-relevant additional-information provision, including toxicity related to human health or the environment, environmentally significant product performance, geographical aspects, and hazard-and-risk assessment; §7.2.4's accuracy and non-misleading-omission requirements; any applicable requirement that omitted life-cycle stages be stated under §7.2.1(j); and §9.2.1's requirement that no content required by the PCR be omitted or simplified in a business-to-consumer Environmental Product Declaration. Any corrected declaration shall state the verified drying-time and energy inputs actually used and shall identify the test record supporting those inputs. UL itself described the issue in its declaration as

“human health toxicity.” [Exhibit CC] Any resulting test record shall be published pursuant to the verification requirements above.

578. Enter a permanent injunction requiring Smart EPD LLC, before maintaining, renewing, or issuing any business-to-consumer hand dryer Environmental Product Declaration under the UL Product Category Rule, to obtain and document the independent and third-party verification required by ISO 14025 §§8.2.1 and 9.4 and by the Product Category Rule. The verifier shall not have participated in execution of the LCA or development of the declaration and shall not have a conflict of interest within the meaning of those provisions. Smart EPD shall not maintain or renew the current EPD unless the underlying LCA inputs and the EPD are corrected or reissued as necessary, including, without limitation, the claimed drying time, to reflect any corrected testing, verification, or required disclosures. Any verification performed by Anna Lasso and represented as independent shall satisfy those same requirements; if those requirements cannot be satisfied, the independent verification shall be performed by a qualified verifier who can satisfy them. Any

resulting test record shall be published pursuant to the verification requirements above.

579. Enter a permanent injunction requiring NSF International, before certifying or continuing to certify any commercial hand dryer under Protocol P335, to conduct or cause to be conducted the drying test that protocol prescribes - drying to 0.1 grams residual moisture or less within one normal operating cycle or fifteen seconds, whichever is shorter, at 95% effectiveness across a minimum of twenty trials, per Sections 3.4, 4.3.3, and 6.3 - upon a currently manufactured unit of each certified model, and to publish the resulting test record pursuant to the verification requirements above.

580. Enter a permanent injunction requiring NSF International to produce and publish the annual facility and production-location audit records and the five-year re-test records Annex A of Protocol P335 requires for every model certified under that protocol since 2007, including each approval of a change in design, construction, or materials - and, as a condition of maintaining or issuing any certification thereafter, to publish each such audit, re-test, and approval when made. The publication shall include a complete written accounting of each test

and audit and the supporting documentation on which it rests,
except material the Court specifically orders withheld under

applicable law. UL demands the same type of compliance record
when it enforces its marks, requiring a target to provide “a complete
written accounting... and copies of all back-up documentation...
including but not limited to invoices and purchase orders.” [Exhibit
FFFFF] The representation was made to the public; the record
supporting its continued certification must be capable of verification.

581. Enter a permanent injunction requiring UL Solutions Inc. and Smart
EPD LLC, before certifying or continuing to certify any commercial
hand dryer to a drying-time figure, to require, obtain, and verify a
drying-time test performed in full by the certified third party the
Product Category Rule prescribes, upon a currently manufactured
unit of each certified model; to document the results by individual
test panelist as the Rule requires; and to identify the resulting test
record in the declaration and publish that record pursuant to the
verification requirements above. [Exhibit W, §3.2, §5.1, App. I]

582. Enter a permanent injunction requiring SGS North America, Inc.,
whenever it performs a hand dryer drying-time or energy-use test that

it knows or should know will be relied upon for certification, to test to the threshold, time limits, and method specified by the governing certifying document; to identify the governing method and version, the model tested, the time at which each measurement was taken, and the raw measurements underlying each reported result; and, when the test is relied upon for certification, to publish the complete test record pursuant to the verification requirements above.

583. Further require, to the extent any challenged certification remaining operative after judgment relies upon SGS testing performed before judgment, production of the underlying SGS report and raw test record supporting that certification, including any testing represented as supporting an eight-second drying-time result. The Defendant maintaining the certification shall identify that supporting record in the public certification file. If no such supporting test record exists, the public certification record shall state that fact and the unsupported certification figure shall be corrected, withdrawn, suspended, or reverified under the corrective injunction above. Publication may omit only material the Court specifically orders withheld under applicable law.

584. Enter a permanent injunction requiring NSF International, UL

Solutions Inc., and Smart EPD LLC, as a condition of maintaining any

certification that represents a commercial hand dryer as hygienic, to

obtain and publicly report installed-use microbial performance

sufficient to substantiate that representation. Plaintiff proposes the

following protocol as an adequate and objectively verifiable method;

the Court may order this protocol or another method it finds

scientifically capable of measuring the same amplification factor

under installed operating conditions. The amplification factor is the

ratio of the microbial colony count in the air the device expels to the

microbial colony count in the ambient air of the room in which it

operates. The determination shall be made as a study of twenty units

of the certified model, each installed and operating in a functioning

public restroom. Each device shall be sampled before four weeks in

service, again at approximately six months, and at one year. Every

year thereafter twenty different, randomly selected units of each

model shall be tested, reported, and published, for so long as the

certification remains in force. At each sampling, one sterile culture

medium shall be held in the ambient air of the room, mirroring the

actual drying time to standard of the device; a second shall be held two inches from the device's air outlets with the medium facing the airstream for the same duration; and a third shall be retained sealed as a control and incubated alongside the others. The colony counts, the resulting ratio, the model and date of manufacture of each unit, the location and date of each sampling, and the identity of the person conducting the test shall be published, together with photographs of each dish and the video required above, in the same public directory in which the certification itself is listed.

585. This test requires no external comparator and no hygiene threshold set by this Court. The room supplies its own control. There are three possible results: the device expels fewer organisms than the room contains, the device expels the same number of organisms as the room air, or the device expels more organisms than the tested room air. The relief requested is measurement and accurate disclosure of that result, not creation of a new pass-fail threshold by the Court.

C. DECLARATORY RELIEF

586. As to NSF International:

587. Declare that the P335-certified downdraft Dispersal-Type products identified and tested in the record do not achieve the drying-time specification Protocol P335 requires at the certified times, and that Protocol P335 prescribes no test of the functioning dryer output air capable of measuring the condition §6.4 identifies as the protocol's operational intent.

588. As to SGS North America, Inc.: Declare that Performance Test Report No. 2774929EFF-001 does not establish an eight-second drying-time result because it tested at twelve and fifteen seconds and predates the UL Product Category Rule, and declare, on the evidentiary record developed in this action, whether any later SGS testing relied upon for the challenged eight-second certifications validly supports that figure under the governing threshold and method.

589. As to UL Solutions Inc. and Smart EPD LLC: Declare whether the challenged Product Category Rule for Hand Dryers and the Environmental Product Declarations issued under it conform to the specific ISO 14025 requirements pleaded in this Complaint, including relevant environmental aspects, human health, hazard-and-risk, accuracy, omission, verification, and the toxicity issue

identified in UL's own declaration; and declare whether the challenged drying-time and use-stage energy figures in those declarations reflect the performance required to complete the certified Functional Unit.

590. As to Anna Lasso: Declare the rights and obligations created by the independence requirements governing any verification work she performed on the current Smart EPD declaration, including ISO 14025 §8.2.1's prohibition on verifier participation in execution of the LCA or development of the declaration and on conflicts of interest, and §9.4's third-party-verification requirement for business-to-consumer declarations; and declare, on the evidence developed in this action, whether the verification represented as independent complied with those requirements.

591. As to each Defendant according to the undertaking and public representation attributable to that Defendant:

592. Declare, upon the evidentiary record developed in this action, whether the challenged drying-time figure that Defendant supplied, adopted, verified, certified, or maintained was achieved by the

product to the governing residual-moisture threshold at the represented time, and whether continued reliance on that figure after judgment conforms to the governing undertaking.

593. As to the Defendants responsible for the challenged Environmental Product Declarations and energy inputs, declare, upon the evidentiary record developed in this action, whether the use-stage energy and carbon figures derived from the represented drying time accurately reflect the energy required to complete the certified Functional Unit.

594. Declare that each Defendant owed Plaintiff a duty of reasonable care within the scope of the testing, standards-writing, certification, declaration, review, or verification undertaking attributable to that Defendant; and that the public-facing certifications and certification marks at issue were representations of compliance directed to the limited and foreseeable class of purchasers, facility patrons, and product users whose transactions and use decisions those instruments were intended to influence.

D. DAMAGES

595. Award compensatory damages for the economic loss Plaintiff

sustained in paying for certified performance the products did not deliver, and for the time injury the false certifications compelled.

596. Award the reasonable costs of the investigation that Defendants'

conduct made necessary - the testing, analysis, and documentation by which the certification failures alleged in this Complaint were established - to the extent recoverable as consequential damages under applicable law, in an amount to be proven at trial.

597. Award punitive damages, which Pennsylvania permits a plaintiff

sounding in negligence to pursue, *Hutchison v. Luddy*, 870 A.2d 766 (Pa. 2005), against each Defendant whose conduct reflected a subjective appreciation of the risk of harm to which Plaintiff was exposed and a conscious disregard of that risk. Pennsylvania law permits punitive damages for negligent misrepresentation, and the Third Circuit has affirmed such an award against a nationally recognized testing laboratory on materially analogous facts. See *Brand Marketing Group LLC v. Intertek Testing Services, N.A.*, 801

F.3d 347 (3d Cir. 2015). There, the court held that “what matters is that Intertek acted in reckless disregard of the risk of harm; that the risk did not come to fruition is a product of chance for which Intertek should not be rewarded.” *Id.* at 365 n.4. UL’s own enforcement practice treats this sequence - written notice, demand, and continued conduct - as aggravation: its pleadings recite seizure notices and cease-and-desist letters followed by continued sales as escalating culpability, and treat broken removal promises followed by expanded use as warranting enhanced remedies. *UL LLC v. A.F.G. Distribution, Inc.* (N.D. Ill. 2019); *UL LLC v. Fly-E Group, Inc.*, No. 1:25-cv-01405 (E.D.N.Y. 2025). Each Defendant here received written notice on April 27, 2026, and the certifications, testing representations, declarations, or verification acts attributable to that Defendant remained unretracted or uncorrected thereafter as pleaded above. Plaintiff seeks punitive damages only for conduct attributable to each Defendant and directly connected to the certifications and injuries pleaded in this action, not for unrelated companywide conduct or hypothetical claims of nonparties.

598. Award up to three times the actual damages sustained under 73 P.S.

§ 201-9.2(a), as the Court deems appropriate.

599. Award pre-judgment and post-judgment interest.

600. Award taxable costs and reasonable attorneys' fees, if incurred, to
the extent authorized by law.

601. Grant such other relief as the Court deems just and proper.

X. JURY TRIAL DEMAND

602. Plaintiff demands trial by jury on all issues so triable.

Dated: 9/3/26

Respectfully submitted,



Ronald A. Blouch Jr.

107 East Locust Street

Mechanicsburg, PA 17055

(717) 319-2550

rjbr05@gmail.com

Pro Se Plaintiff

VERIFICATION

I, Ronald A. Blouch Jr., verify that I am the Plaintiff in the above-captioned action. Pursuant to 28 U.S.C. § 1746, I declare under penalty of perjury that the statements in the foregoing Complaint are true and correct to the best of my knowledge, information, and belief.

Dated: 9/3/26



Ronald A. Blouch Jr.

FILING DOCUMENTS

Declarations

This Complaint is supported by contemporaneously filed declarations:

1. Declaration of Ronald A. Blouch Jr. in Support of Complaint
2. Affidavit of Ronald A. Blouch Jr. Regarding Artificial Intelligence

Collaboration

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

[EXHIBIT-Va] Home Depot purchase history export - 4,556 transactions at six stores, 28 June 2019 to 6 June 2026, with store numbers and dates

[EXHIBIT-Vb] Provenance of Plaintiff Exposure - Home Depot and Starbucks

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 Type III Environmental Standards Principles and Procedures

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

[EXHIBIT-Za] ISO 14040 ENVIRONMENTAL MANAGEMENT - LIFE CYCLE ASSESSMENT - PRINCIPLES AND FRAMEWORK

[EXHIBIT-Zb] ISO 14001 ENVIRONMENTAL MANAGEMENT SYSTEMS - REQUIREMENTS WITH GUIDANCE FOR USE

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

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] Not used

[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

ADDITIONAL EXHIBITS

[EXHIBIT-GGG] Not used

[EXHIBIT-HHH] Not used

[EXHIBIT-III] Not used

[EXHIBIT-JJJ] Not used

[EXHIBIT-KKK] Hand Dryer Demand Response Log - contemporaneous record of demand mailing and delivery, initial UL Solutions contact, and the April 27, 2026 Anna Lasso telephone call

[EXHIBIT-LLL] Comprehensive analysis of ULS PCR and EPD against the ISO 14025 standards series

[EXHIBIT-MMM] Not used

[EXHIBIT-NNN] Not used

[EXHIBIT-OOO] Smart EPD ISO 14025 standards attribution in the Xlerator EPD #1

[EXHIBIT-PPP] Smart EPD ISO 14025 standards attribution in the Xlerator EPD #2

[EXHIBIT-QQQ] UL mission statement consumer facing safety and integrity content screenshot 6/20/26

[EXHIBIT-RRR] NSF statement consumer facing health and standards content screenshot 6/20/26

[EXHIBIT-SSS] NSF stamp on a Dyson AB14 in a restroom May 2026

[EXHIBIT-TTT] UL 22 billion public facing marks website screenshot 6/20/26

[EXHIBIT-UUU] UL sticker on an extension cord 6/20/26

[EXHIBIT-VVV] Current Dyson NSF certification listing section 1.5.A

[EXHIBIT-WWW] Complete Quantis LCA for Xlerator dryer, 2009

[EXHIBIT-XXX] NSF 14025 compliant PCR division website screenshot 6/20/26

[EXHIBIT-YYY] Complete Dyson technical specifications for the Airblade V 6/21/26

[EXHIBIT-ZZZ] UL annual revenue and other financials Stock Analysis website, 6/12/26

[EXHIBIT-AAAA] UL quarterly filing for q1 2026 with current financials

[EXHIBIT-BBBB] NSF Annual Report 2025 with corporate employee verification and hundreds of consumer facing claims.

[EXHIBIT-CCCC] NSF form 990 financial reporting 11/14/25

[EXHIBIT-DDDD] Michigan State University Hand Washing Practices study with washing compliance reporting

[EXHIBIT-EEEE] NSF website screenshot of the PCR and EPD division 6/21/26

[EXHIBIT-FFFF] SGS AI website scrape of governing referenced documents 6/21/26

[EXHIBIT-GGGG] Summary document Testing Counts - validating testing numbers across multiple data sets 6/30/26

[EXHIBIT-HHHH] Comprehensive document Testing Counts - validating testing numbers across multiple data sets 6/30/26

[EXHIBIT-IIII] Excel Dryer claims the first rapidly drying hand dryer in 2002 - advertisement screenshot

[EXHIBIT-JJJJ] Initial Xlerator Dryer Patent, provisional 1999, issued 2006, Sol Aisenberg

[EXHIBIT-KKKK] Al Xlerator Dryer Patent Analysis with novel table data

[EXHIBIT-LLLL] ISO 14067 energy only LCA synopsis 2013 - ISO catalogue record for ISO/TS 14067:2013, showing scope limited to climate change and replacement by ISO 14067:2018

[EXHIBIT-MMMM] ISO 14067 energy only LCA COMPLETE 2018 - ISO 14067:2018, Greenhouse gases - Carbon footprint of products - Requirements and guidelines for quantification, complete text

[EXHIBIT-NNNN] Dyson website disclosure referencing ISO 14067

[EXHIBIT-OOOO] Certified public record for Smart EPD LLC, Virginia State Corporation Commission - articles of organization and amendments

[EXHIBIT-PPPP] Excel Dryer technical data sheet, detail - the UL Product Category Rule mark, the Smart EPD certification mark, and the attribution of drying-time testing to SGS International, shown together

[EXHIBIT-QQQQ] Excel Dryer technical data sheet, complete, dated May 2026 - including the certification block and the quantity recommendations stating dryers per washbasin

[EXHIBIT-RRRR] Aerosolization Video Comparison, Paper Towels Versus Hand Dryers - description sheet for high-speed video documenting water and aerosol dispersal from Dispersal-Type dryers compared with paper towel use

[EXHIBIT-SSSS] The Certification Chain - Complete Supporting Brief, July 2026 - the two-channel analysis (contract and duty) of how a certification binds each downstream party, from the certifier's desk to the user's hands, submitted in support of this Complaint

[EXHIBIT-TTTT] UL stickers on Excel Dryers in restrooms

[EXHIBIT-UUUU] UL public anti-counterfeiting statement, 2013 - the marks as a “true representation of the safety testing and certification in which they have invested”

[EXHIBIT-VVVV] UL LLC v. Swagway, LLC, No. 3:16-cv-75 (N.D. Ind.), Consent Judgment, so ordered April 18, 2016 - admitted facts including UL’s statement of what its marks mean

[EXHIBIT-WWWW] UL LLC v. Fly-E Group, Inc., No. 1:25-cv-01405 (E.D.N.Y.), Complaint (Dkt. 1), March 2025

[EXHIBIT-WWWW-1] UL LLC v. Fly-E Group, Inc., Consent Judgment and Permanent Injunction (Dkt. 27), so ordered June 6, 2025 - admitted facts including UL’s statement of what its marks mean

[EXHIBIT-XXXX] UL LLC v. Butson, No. 4:15-cv-00170-O (N.D. Tex.), Consent Decree and Permanent Injunction, so ordered June 22, 2015 - counterfeit-label bypass and public-safety recitals

[EXHIBIT-YYYY] Sworn testimony of Terrence Brady, UL, before the United States Senate Committee on Finance, March 6, 2018, with written responses, April 20, 2018

[EXHIBIT-ZZZZ] UL Release 20PN-24 (2020) - protocol for products whose certification cannot be verified: remove from service and replace

[EXHIBIT-AAAAA] UL Solutions Inc., Prospectus (Form 424(b)(4)), SEC Registration No. 333-275468 (CIK 1901440), filed April 15, 2024 (prospectus dated April 11, 2024) - complete filing (242 pp.).

[EXHIBIT-BBBBB] UL LLC v. Gangsong Group Corp., No. 2:17-cv-08166 DSF (C.D. Cal.), Amended Judgment (Dkt. 104), entered June 26, 2019 - operative judgment text entered on UL’s default application, reciting the counterfeit mark’s use “to falsely suggest that their goods have been certified by UL” and displaying the registered marks; supersedes the April 30, 2019 judgment (Dkt. 99) entered with the same sentence

[EXHIBIT-CCCCC] Sworn testimony of Brian Monks, Vice President, Anti-Counterfeiting Operations, Underwriters Laboratories Inc., before the United

States Senate Committee on the Judiciary, June 17, 2008 - the machinery and the audiences, ten years before Brady

[EXHIBIT-DDDDD] UL Solutions press release, March 2, 2023, announcing the Arizer/Greenlane consent decrees - the mark demonstrates “scientific safety, performance or sustainability standards”

[EXHIBIT-EEEEEE] UL LLC v. B&B Signs, No. 1:15-cv-10804 (N.D. Ill.), Consent Judgment and Permanent Injunction (Dkt. 57), so ordered September 15, 2016 - admitted facts including code authorities’ routine reliance on the marks

[EXHIBIT-FFFFFF] UL LLC v. A.F.G. Distribution, Inc., No. 1:19-cv-02724 (N.D. Ill.), Complaint and Exhibits, filed April 22, 2019 - including the cease-and-desist letter of Lisa J. Deere, UL Investigation Manager, Global Security & Brand Protection, dated December 19, 2018, stating UL’s demands and its file-lookup verdict that the target’s products were “not found” in UL’s program

END OF COMPLAINT

CIVIL COVER SHEET

The JS 44 civil cover sheet and the information contained herein neither replace nor supplement the filing and service of pleadings or other papers as required by law, except as provided by local rules of court. This form, approved by the Judicial Conference of the United States in September 1974, is required for the use of the Clerk of Court for the purpose of initiating the civil docket sheet. (SEE INSTRUCTIONS ON NEXT PAGE OF THIS FORM.)

I. (a) PLAINTIFFS

Ronald A. Blouch Jr.

(b) County of Residence of First Listed Plaintiff Cumberland County
(EXCEPT IN U.S. PLAINTIFF CASES)

(c) Attorneys (Firm Name, Address, and Telephone Number)

Ronald A. Blouch Jr., Pro Se
107 East Locust St., Mechanicsburg, PA 17055
(717) 319-2550

DEFENDANTS

NSF International; SGS North America, Inc.;
UL Solutions Inc.; Smart EPD LLC; Anna Lasso

County of Residence of First Listed Defendant _____
(IN U.S. PLAINTIFF CASES ONLY)

NOTE: IN LAND CONDEMNATION CASES, USE THE LOCATION OF
THE TRACT OF LAND INVOLVED.

Attorneys (If Known)

II. BASIS OF JURISDICTION (Place an "X" in One Box Only)

- ☐ 1 U.S. Government Plaintiff ☐ 3 Federal Question (U.S. Government Not a Party)
- ☐ 2 U.S. Government Defendant ☒ 4 Diversity (Indicate Citizenship of Parties in Item III)

III. CITIZENSHIP OF PRINCIPAL PARTIES (Place an "X" in One Box for Plaintiff and One Box for Defendant)

- | | PTF | DEF | | PTF | DEF |
|---|---------------------------------------|----------------------------|---|----------------------------|---------------------------------------|
| Citizen of This State | ☒ 1 | ☐ 1 | Incorporated or Principal Place of Business In This State | ☐ 4 | ☐ 4 |
| Citizen of Another State | ☐ 2 | ☐ 2 | Incorporated and Principal Place of Business In Another State | ☐ 5 | ☒ 5 |
| Citizen or Subject of a Foreign Country | ☐ 3 | ☐ 3 | Foreign Nation | ☐ 6 | ☐ 6 |

IV. NATURE OF SUIT (Place an "X" in One Box Only)

Click here for: [Nature of Suit Code Descriptions.](#)

CONTRACT	TORTS	FORFEITURE/PENALTY	BANKRUPTCY	OTHER STATUTES	
☐ 110 Insurance ☐ 120 Marine ☐ 130 Miller Act ☐ 140 Negotiable Instrument ☐ 150 Recovery of Overpayment & Enforcement of Judgment ☐ 151 Medicare Act ☐ 152 Recovery of Defaulted Student Loans (Excludes Veterans) ☐ 153 Recovery of Overpayment of Veteran's Benefits ☐ 160 Stockholders' Suits ☐ 190 Other Contract ☐ 195 Contract Product Liability ☐ 196 Franchise	PERSONAL INJURY ☐ 310 Airplane ☐ 315 Airplane Product Liability ☐ 320 Assault, Libel & Slander ☐ 330 Federal Employers' Liability ☐ 340 Marine ☐ 345 Marine Product Liability ☐ 350 Motor Vehicle ☐ 355 Motor Vehicle Product Liability ☒ 360 Other Personal Injury ☐ 362 Personal Injury - Medical Malpractice	☐ 365 Personal Injury - Product Liability ☐ 367 Health Care/Pharmaceutical Personal Injury Product Liability ☐ 368 Asbestos Personal Injury Product Liability PERSONAL PROPERTY ☐ 370 Other Fraud ☐ 371 Truth in Lending ☐ 380 Other Personal Property Damage ☐ 385 Property Damage Product Liability	☐ 625 Drug Related Seizure of Property 21 USC 881 ☐ 690 Other LABOR ☐ 710 Fair Labor Standards Act ☐ 720 Labor/Management Relations ☐ 740 Railway Labor Act ☐ 751 Family and Medical Leave Act ☐ 790 Other Labor Litigation ☐ 791 Employee Retirement Income Security Act IMMIGRATION ☐ 462 Naturalization Application ☐ 465 Other Immigration Actions	☐ 422 Appeal 28 USC 158 ☐ 423 Withdrawal 28 USC 157 INTELLECTUAL PROPERTY RIGHTS ☐ 820 Copyrights ☐ 830 Patent ☐ 835 Patent - Abbreviated New Drug Application ☐ 840 Trademark ☐ 880 Defend Trade Secrets Act of 2016 SOCIAL SECURITY ☐ 861 HIA (1395ff) ☐ 862 Black Lung (923) ☐ 863 DIWC/DIWW (405(g)) ☐ 864 SSID Title XVI ☐ 865 RSI (405(g)) FEDERAL TAX SUITS ☐ 870 Taxes (U.S. Plaintiff or Defendant) ☐ 871 IRS—Third Party 26 USC 7609	☐ 375 False Claims Act ☐ 376 Qui Tam (31 USC 3729(a)) ☐ 400 State Reapportionment ☐ 410 Antitrust ☐ 430 Banks and Banking ☐ 450 Commerce ☐ 460 Deportation ☐ 470 Racketeer Influenced and Corrupt Organizations ☐ 480 Consumer Credit (15 USC 1681 or 1692) ☐ 485 Telephone Consumer Protection Act ☐ 490 Cable/Sat TV ☐ 850 Securities/Commodities/Exchange ☐ 890 Other Statutory Actions ☐ 891 Agricultural Acts ☐ 893 Environmental Matters ☐ 895 Freedom of Information Act ☐ 896 Arbitration ☐ 899 Administrative Procedure Act/Review or Appeal of Agency Decision ☐ 950 Constitutionality of State Statutes
REAL PROPERTY ☐ 210 Land Condemnation ☐ 220 Foreclosure ☐ 230 Rent Lease & Ejectment ☐ 240 Torts to Land ☐ 245 Tort Product Liability ☐ 290 All Other Real Property	CIVIL RIGHTS ☐ 440 Other Civil Rights ☐ 441 Voting ☐ 442 Employment ☐ 443 Housing/Accommodations ☐ 445 Amer. w/Disabilities - Employment ☐ 446 Amer. w/Disabilities - Other ☐ 448 Education	PRISONER PETITIONS Habeas Corpus: ☐ 463 Alien Detainee ☐ 510 Motions to Vacate Sentence ☐ 530 General ☐ 535 Death Penalty Other: ☐ 540 Mandamus & Other ☐ 550 Civil Rights ☐ 555 Prison Condition ☐ 560 Civil Detainee - Conditions of Confinement			

V. ORIGIN (Place an "X" in One Box Only)

- ☒ 1 Original Proceeding ☐ 2 Removed from State Court ☐ 3 Remanded from Appellate Court ☐ 4 Reinstated or Reopened ☐ 5 Transferred from Another District (specify) ☐ 6 Multidistrict Litigation - Transfer ☐ 8 Multidistrict Litigation - Direct File

VI. CAUSE OF ACTION

Cite the U.S. Civil Statute under which you are filing (Do not cite jurisdictional statutes unless diversity):
28 U.S.C. 1332, 2201

Brief description of cause:

Negligent certification/testing/misrepresentation; PA consumer-protection; declaratory/injunctive relief.

VII. REQUESTED IN COMPLAINT:

☐ CHECK IF THIS IS A CLASS ACTION UNDER RULE 23, F.R.Cv.P.

DEMAND \$

> \$75,000 + injunction

CHECK YES only if demanded in complaint:

JURY DEMAND: ☒ Yes ☐ No

VIII. RELATED CASE(S) IF ANY

(See instructions):

JUDGE

DOCKET NUMBER

DATE 08/31/2026 9/3/26 SIGNATURE OF ATTORNEY OF RECORD

FOR OFFICE USE ONLY