



LEED Certification Challenges and the Northland Pines High School Incident

By Christopher W. Cheatham

From May 5 to June 21, 2010, [Green Building Law Update](#) ran a series of nine blog posts written by Christopher W. Cheatham highlighting the LEED certification challenge policy and the first known challenge under this policy. These nine posts have been combined into the following white paper. Contact green building consultant and attorney Chris Cheatham if you have questions at chris@cheathamconsulting.com or 202-553-3181.

[Did You Know You Can Challenge LEED Certification?](#)

I am going to be honest with you, I have been sitting on some LEEDigation-related stories. I sat on these stories because I wanted to understand the implications before writing about them.

Take our first story from Wisconsin. As was first reported at the Green Real Estate Law Journal, a group of [Wisconsin residents filed a challenge to a project's LEED certification](#):

"[A]ccording to an article that appeared last week in Eagle River, Wisconsin's Vilas County News-Review, a group of local residents have filed a 125-page complaint with USGBC that challenges the award of LEED Gold certification to the [Northland Pines High School](#), which was completed in the fall of 2006 and earned formal certification under LEED for New Construction Version 2.0/2.1 on May 10, 2007. It's unclear when the complaint was filed or what specific allegations it asserts. However, according to the article, the residents initially raised concerns about the project during the design phase, claiming that a more efficient HVAC system was available and should have been specified by Hoffman LLC, the Appleton, Wisconsin-based firm that designed the school."

You may recall that back in July 2009, we discussed the concept of [LEED Decertification in the LEED 2009 rating system](#) if a project fails to attain Minimum Project Requirements. The Wisconsin project was actually certified under a prior LEED rating system and was challenged under the "Certification Challenge Policy."

When I first learned of this story, I asked a question that many of you may also be



asking. There's a LEED Certification Challenge Policy? Yes, according to the Green Building Certification Institute (GBCI) [LEED Policy Manual](#) (.pdf):

"GBCI may revoke previously granted LEED certification or take other action regarding LEED certification such as determine to reduce points or category of LEED certification previously granted, if GBCI determines that credits/prerequisites for LEED certification were granted based on erroneous determinations or inaccurately or falsely submitted documentation. Persons concerned with possible inaccurately granted LEED certification are encouraged to contact the GBCI, provided, however that GBCI reserves the right to institute an investigation and review of such possible errors or inaccuracy or veracity of documentation without third party complaint.

Persons desiring to make a complaint may submit a written statement identifying the persons alleged to be involved and the facts concerning the alleged conduct in detail, and, to the extent available, the statement shall be accompanied by any available documentation. The statement shall identify others who may have knowledge of the facts and circumstances concerning the allegation. The person making the complaint shall identify him/herself by name, address, and telephone number.



Upon receipt of a complaint or upon the finding of concern, the GBCI President shall confer with legal counsel. The GBCI President shall direct a detailed technical review of documentation submitted in connection with the project which served as basis of award of credit/prerequisite. GBCI may request supplemental information from the person(s) making the complaint.

If GBCI determines that the complaint is frivolous or not relevant to credits required for LEED certification, no further action will be taken. Should GBCI determine that the allegation appears credible and the allegation is founded on the error or inaccuracy of GBCI or veracity of the documentation submitted in support of the credits/prerequisites in question, GBCI shall proceed with its investigation, requesting information from the Project Manager and/or the Owner or others involved in the project."

What do you think was the result of the first LEED challenge?

[First Ever LEED Challenge Denied](#)

Up in Wisconsin, a group of concerned citizens [challenged the LEED certification of a high school](#) under the Green Building Certification Institute's (GBCI) Certification



Challenge Policy. The LEED challenge came to light in December 2009 although it was originally filed in 2008. Last week, the United

States Green Building Council (USGBC) denied the LEED challenge. The following is a description of the ruling that I received from Susan Dorn, USGBC and GBCI General Counsel:

"(On April 28, the) USGBC concluded its review of a challenge to the certification of a Gold LEED for Schools, that of Northland Pines High School (NPHS) in Eagle River, Wisconsin. In the process of its review, USGBC engaged two extraordinarily qualified engineering consultants (Taylor Engineering and Horizon Engineering) to review the technical merits of the prerequisites and credits in question. Further, USGBC staff performed a site visit of the school. After an exhaustive review of the final engineering reports and documentation submitted by NPHS, USGBC concluded that there was sufficient evidence to show that the school's prerequisites and credits had been met. Thus, no adverse action will be taken as to the LEED certification of NPHS. Challenges to LEED certification advanced in the future will be undertaken by GBCI; the challenge to NPHS was reviewed by USGBC as a legacy project."

So there you have it, the first official LEED Certification Challenge has been denied. Until a copy of the Wisconsin residents' complaint is made public, I don't have much to add on this particular challenge. This is another example of a [green school that has resulted in a dispute](#), which further supports my theory that schools will be the hotbed of LEEDigation.

I do have plenty to add regarding the general concept of the LEED Certification Challenge policy.

[Cranks, Gadflies and Rivals Can Challenge LEED Status](#)

A few weeks ago, after a green building legal presentation, I remarked to a colleague that I was growing tired of discussing [Shaw Development v. Southern Builders](#), the prime example of LEEDigation. Less than one week later, along came the [Wisconsin LEED challenge](#) and the discovery of the LEED Certification Challenge Policy.

The LEED Certification Challenge Policy is the most significant legal





risk for LEED certified projects that I have seen to date. You may recall the discussion of Minimum Project Requirements last year and [the possibility of LEED decertification](#). The risks inherent in

the LEED Certification Challenge Policy substantially dwarf the LEED decertification issue.

There are three reasons why the LEED Certification Challenge Policy creates new risks for all parties involved in a LEED-certified project:

- (a) Any person can challenge certification;
- (b) Any and all LEED points can be challenged; and
- (c) A LEED certification challenge can be brought at any time.

Lets start with "anyone can challenge certification" - i.e. standing to bring a LEED challenge.

In order to bring a lawsuit, most American courts require a person to have standing. A person has standing if he or she can show three things:

- (1) Injury - the person was harmed;
- (2) Causation - the injury was caused by the conduct of the other party; and
- (3) Redressability - a favorable court decision can remedy the injury.

Under the LEED Certification Challenge Policy, any person can challenge any project's LEED certification without demonstrating additional standing requirements. Here's the key language from the policy:

"Persons concerned with possible inaccurately granted LEED certification are encouraged to contact the GBCI, provided however that GBCI reserves the right to institute an investigation and review of such possible errors or inaccuracy or veracity of documentation without third party complaint.

Person desiring to make a complaint may submit a written statement identifying the person alleged to be involved and the facts concerning the alleged conduct. . . . The person making the complaint shall identify him/herself by name, address, and telephone number."

As [Will Clark recently put it](#), this opens the door to for "cranks, gadflies, or rivals" to bring LEED challenges. Here are some examples of "persons" likely to bring LEED challenges:

- Environmental groups could challenge a corporations' achievement of LEED certification in order to protest corporate actions.
- Concerned citizens could challenge local projects' LEED certification if the citizens want a greener project or a less expensive project.



- Rival developers could challenge each other's LEED certification in order to develop a business advantage.

The possibilities for "persons" that will bring LEED challenges seem limitless.

[LEED Certification Challengers Speak Out](#)

News continues to emerge about the challenge to the [LEED Gold certification received by the Northland Pines High School](#). Green Building Law Update previously reported on a statement made by United States Green Building Council (USGBC) General Counsel Susan Dorn that the [certification challenge had been denied](#).



There is so much more to this story.

First off, the LEED challengers are not satisfied with the result, and they are not going away quietly. This past weekend the challengers and their experts released a statement and documentation surrounding the LEED challenge. The LEED challengers are five individuals from the community surrounding the high school:

- Mr. Ronald Ritzer, an architectural design professional and local builder of high performance homes
- Mr. Roderick McKinnon, a commercial property developer
- Mr. Patrick Smith, a construction professional
- Dr. Kevin Branham, a Doctor of Chiropractic with a Masters degree in Public Health
- Mr. Curt Hartwig, a local businessman and community leader

Since I previously published the USGBC's statement regarding the challenge, here is the other side of the story, as told by the five LEED challengers:

“What is all the ruckus about Northland Pines?”

In 2004, the voters of Vilas County Wisconsin voted to approve the sale of \$28,535,000 worth of bonds to finance a new High School for the Northland Pines district.



The appellants in this case all served on the Building Committee for the new school and each brought specific talents and experience in design and construction of large buildings. Each was dedicated to the proposition of creating the most efficient structure possible.

The design team and school board discouraged any outside input and set forth to design and construct the school as they saw fit.

As the design developed, the appellants questioned whether the facility would indeed meet the prerequisites for LEED® Certification and were told that it would despite what appeared to be glaring shortfalls with respect to these requirements.

The appellants retained the service of two highly regarded consulting engineers to review the plans. Both of them determined that the facility as designed would not qualify for LEED® Certification.

In December 2008, the appellants filed an appeal with the USGBC challenging the award of the Gold Certification given to Northland Pines. Some 16 months later the appellants were notified that the USGBC had looked into the matter and found everything to be fine. They based this on reports from two more consulting engineers who said that the building did not meet the prerequisites but concluded that “pretty close” is close enough. When the appellants' engineers asked for the back up data to the USGBC reports, they were told that they were pretty busy and would address that request when they have time. Time has passed and the requested materials have not been forthcoming. Why?

On behalf of the taxpayers of Vilas County who would like to know with certainty whether they got what they paid for or not, we ask the engineering community to look at this file and tell us, did we miss something here? How can it be alright to certify a building that doesn't fully comply with the rules set forth by the body that is doing the certifications?

We would love to hear what you think. We are only in search of the truth which ultimately will be what is best for Northland Pines.”

[What Motivates a LEED Certification Challenge?](#)

As we begin our review of the challenge to the Northland Pines High School LEED certification, the most obvious [starting point is the LEED challenge](#) itself.

The challenge was prepared by two engineers - Mark Lentz and Lawrence Spielvogel - on behalf of five appellants. By just the second paragraph, my jaw was on the floor:



"The engineering professionals preparing this appeal were originally retained to review the design for non-compliance with LEED prerequisites due to litigation threats made by the design team against the appellants for publicly expressing their concerns for the design provided."

Think about that sentence for a minute. According to the LEED challenge, the threat of LEEDigation - "litigation threats made by the design team" - led to LEEDigation - the LEED challenge.

The challenge then explains that the grounds for the LEED protest are the design and construction of the project did not meet LEED prerequisites EA1, EA2 and EQ1:

“EA1, Prerequisite, Fundamental Building Systems Commissioning was not complied with. The first three steps of the Commissioning Process include review of design intent, basis of design

documentation, and incorporation of commissioning requirements into the Construction Documents. All are required prior to bidding and construction. The reviewing professionals have been unable to confirm that any were performed. Had a competently executed Design Review been performed by the Commissioning Agent, as required by LEEDTM NC 2.1, ANSI/ASHRAE/IESNA Standard 90.1-1999 and ASHRAE Guideline 1-1996, the majority of the EA2 and EQ1 violations identified by the reviewing professionals should have been identified by the Commissioning Agent and corrected by the design team prior to the issuance of the Construction Documents for bid.

EA2, Prerequisite, Minimum Energy Performance: The design of the HVAC systems and other listed elements of the building do not comply with all of the requirements of ANSI/ASHRAE/IESNA Standard 90.1-1999. The scope and number of prerequisites violations was pervasive.

EQ1, Prerequisite, Minimum IAQ Performance: The design of the HVAC systems failed to comply with ANSI/ASHRAE Standard 62.1-1999, Ventilation for Acceptable Indoor Air Quality. Validation computations were performed to determine the actual basis for ventilation rates and to determine what the actual ventilation requirements would have been had the required Ventilation Rate Procedure computations been performed. These computations established that the actual basis for ventilation was the Wisconsin Enrolled Code, which produces significantly lower ventilation rates at both individual zones and at the system level than those which would have otherwise been required to comply with ANSI/ASHRAE Standard 62.1-1999.





What are your thoughts on the grounds for the LEED challenge? Have you witnessed problems with these credits?

Photo Credit: [Jinho.Jung](#)

Breaking: USGBC Stands By Its LEED Challenge Decision

Welcome to our first afternoon edition of Green Building Law Update.

No one is quite sure whether the challengers to the Northland Pines High School LEED certification have grounds for an appeal. But I figured two statements by the United States Green Building Council (USGBC) regarding the "appeal" warranted a special blog post. First, Brendan Owens, USGBC's vice president, was quoted yesterday in [ENR regarding the LEED challenge controversy](#):

"Brendan Owens, USGBC's vice president of LEED technical development, says USGBC is using the challenge as a case study for the certification team, noting, 'We can do continuous improvement and still have been right in the past.'"

I also received the following statement from Susan Dorn, USGBC General Counsel, regarding the recent "appeal" by the LEED challengers:

"USGBC stands by its conclusion that the Northland Pines High School project and project team complied with all the requirements necessary to achieve LEED Gold certification. In response to a complaint, USGBC followed its certification challenge policy, which requires a thorough and technically rigorous review of the project. Given the vociferous and confrontational nature of the complaint, we further asked for two additional and separate technical reports detailing the expert professional opinions of highly regarded independent consultants. Their findings agreed with ours.

Anyone who has actually been through a LEED certification review knows that it is a dialogue between the project team and the reviewer. After reviewing the documentation submitted by a project team, the reviewer issues a request for more information in a "Preliminary Review". The project team responds to any reviewer comments and resubmits. The reviewer then reassesses the project and issues a 'Final Review'.

The process USGBC used to deal with this appeal was similar to our standard process but in addition to having the original submission and reviewing everything we normally review we also had the complaint document. There were issues in the complaint document that were not (from our independent consultant's point of view) adequately addressed by the 2007 submission so we asked for and received additional clarifying documentation from the project team. This additional documentation answered all open



questions and made it possible for USGBC and the independent consultants hired to provide their expert technical opinions to conclude that the project does in fact comply with LEED Gold requirements.

LEED's intent, and USGBC's mission, is about helping people learn about and understand how to design, build and operate better buildings. Buildings are complex systems of systems and any of the 100,000 of decisions associated with design, construction and operation can always be second-guessed. We are confident that our due diligence has been more than sufficient to put these issues to rest, and we are moving forward to focus our efforts where they do the most good -- advancing the market uptake of green buildings and communities that is at the heart of our work."

As Stephen Del Percio has said, this has been a [wild week for LEEDigation](#).

Questions Remain Regarding LEED Certification Challenge

If you have taken a look at the Northland Pines High School LEED certification challenge documents, you know that the documents are extremely technical. I am not an engineer but I will share with you some of the more interesting parts of the documents that caught my attention.

Taylor Engineering was retained by the United States Green Building Council (USGBC) to review the challenge allegations. I was immediately drawn to the first substantive paragraph of the Taylor Engineering report:

"While I disagree with most of the complainants' claims, there were several violations of Standard 62.1 and Standard 90.1 requirements in the design as originally documented. As such, the original design did not meet Indoor Environmental Quality (EQ) Prerequisite 1 and Energy and Atmosphere (EA) Prerequisite 2 of LEED NC version 2.1. However, based on follow-up documentation provided by the design team in response to our comments, I feel the project provides a sufficient level of compliance with these Standards and hence the LEED prerequisites. While I am not fully confident the project merits all of the EA Credit 1 Enhanced Energy Performance points awarded to it, the design team diligently responded to several rounds of comments based on our detailed review of the DOE-2.2 simulations and it appears that they reasonably followed the modeling rules established by ASHRAE Standard 90.1. Hence I accept their EA Credit 1 claim of 7 points."

The most important statement to me in the preceding paragraph is that the original design did not meet the LEED requirements: "the original design did not meet Indoor Environmental Quality (EQ) Prerequisite 1 and Energy and Atmosphere (EA)

Prerequisite 2 of LEED NC version 2.1." After reading this paragraph, I have many unanswered questions:



- What additional documentation was provided - "the design team diligently responded to several rounds of comments" - to satisfy Taylor Engineering?
- How can follow-up documentation ensure that a project is in compliance with ASHRAE standards and LEED prerequisites when it was determined that there were violations in the original design?
- What are the standards for LEED certification? Is "diligently" responding to comments and "reasonably" following ASHRAE energy modeling rules enough?

The remainder of the Taylor Engineering report highlights responses to each of the LEED challenge allegations. Much of the challenge focused on violations of ASHRAE Standard 90.1, which is essentially an energy modeling standard. One response in particular drew my interest, not based on substance, but because of the disclosure of revised energy models:

"Allegation: Violation of Standard 90.1-1999 6.2 Mandatory Provisions (page 18). The complaint says the chiller does not meet minimum requirements. Independent consultant review comments: Per Table 6.2.1C of the 1999 version, the minimum COP at ARI conditions is 2.8 and the minimum IPLV is 2.8. The chiller schedule on H1.1 shows a COP of 2.9. It is not clear from the schedule if this is at ARI or design conditions. The installed chiller per submittals has an ARI EER of 2.81. The IPLV is not scheduled, but if the full load efficiency is 2.8, it is almost certain that the IPLV will be higher. Thus the chiller does meet Standard 90.1-1999. (Note that the chiller efficiency in the energy model, according to EAp2 documentation, has a COP of 3.0, which is not consistent with the equipment schedule. This was corrected in a revision to the energy models starting with the version dated December 10, 2009 that USGBC requested to fix this and other inconsistencies between the model of the proposed design and the actual design.) No apparent violation."

Again, I am not an engineer. From these descriptions, I understand that after the school's LEED certification was challenged, the USGBC determined that the energy modeling was inadequate and requested revisions. Based on these revised energy models, Taylor Engineering and the USGBC determined the school was reasonably in compliance with LEED.

Do I have that right?

Should LEED Be More Stringent?

I recently read the book [Greed to Green](#), by David Gottfried, which describes how the United States Green Building Council (USGBC), and the LEED rating system, were launched. You can tell that Gottfried is quite proud - and rightfully so - of the USGBC's accomplishments.



But with the Northland Pines High School LEED certification challenge, the USGBC faced a difficult question. The LEED rating system has morphed into a green building monster. In fact, the LEED rating system is now bigger than the organization that tries to manage it. With the recent LEED

challenge, the USGBC had to decide what to do if a project did not comply with LEED certification requirements when it initially received its certification.

Should the USGBC revoke LEED certification?

Or should the USGBC allow revisions to the original LEED submittals?

The USGBC chose to allow revisions through subsequent submittals, as highlighted in the Taylor Engineering report: "This was corrected in a revision to the energy models starting with the version dated December 10, 2009 that USGBC requested to fix this and other inconsistencies between the model of the proposed design and the actual design."

I can see both sides. On the one hand, the USGBC was dealing with a "legacy" project. The Northland Pines High School was the first public high school in the country to receive LEED Gold certification. The USGBC has focused much of its marketing prowess on schools, and the [Northland Pines High School had been highlighted](#) in at least one USGBC publication. Most importantly, the USGBC's primary goal is to create more green buildings.

On the other hand, the LEED certification process must have some teeth. At some point, the USGBC will have to administer its rating system more stringently or LEED will become a diluted brand. [Rob Watson - the "father of LEED"](#) - made similar comments yesterday regarding the challenge: "As I was helping shape the system in its early days, I believe that LEED's initial job was to achieve market penetration and to then become increasingly more stringent in its technical and compliance requirements as the market became more capable."

I just hope the USGBC does not wait too long.

[Green Building Challenge Policy Requires Fixes](#)

I thought I would end my discussion of the Northland Pines High School LEED certification challenge with some constructive suggestions. The LEED challenge issue is not going away anytime soon and clearly requires some fixes.



1. Appeals of LEED certification challenges most go to an independent body. It is not appropriate for the United States Green Building Council (USGBC) or the Green Building Certification Institute (GBCI) to review and decide LEED certification challenges when these two parties are responsible for deciding certification initially. There may also be constitutional authority issues if a party is forced to challenge a federal project's LEED certification to the USGBC/GBCI.

2. The LEED Policy Manual absolutely must be incorporated into the LEED reference manuals. This is a no-brainer.



3. Energy modeling is fuzzy math. LEED certification for new construction must be tied to actual energy usage as quickly as possible. I realize it takes years to change the LEED rating system, but the next version that comes out should include a re-certification requirement based on actual energy use.

4. Standing and timeliness requirements must be created for the LEED challenge process. Otherwise, the USGBC/GBCI will be overwhelmed with challenges.

5. Most importantly, if you are a contractor, architect or engineer, you absolutely must consider the implications and liabilities created by the LEED certification challenge process. If you guarantee some level of certification, you may be responsible if a subsequent LEED challenge proves successful. Will you be responsible to defend against the challenge?

Contact green building consultant and attorney Chris Cheatham if you have questions at chris@cheathamconsulting.com or 202-553-3181.