

Dr. Steve Gallon III, Board Member

**SUBJECT: LIGHTNING DETECTION SYSTEM AT ATHLETIC EVENTS**

**COMMITTEE: PERSONNEL, STUDENT, SCHOOL & COMMUNITY SUPPORT**

**LINK TO STRATEGIC**

**PLAN: SAFE, HEALTHY & SUPPORTIVE LEARNING ENVIRONMENT**

Miami-Dade County Public Schools (M-DCPS) remains committed to the health, safety, and wellness of its students. In fact, one of the most critical roles and responsibilities of the School Board is to ensure that all appropriate provisions, protocols, and safeguards are in place to protect and if needed, save the lives of students, staff, and spectators at all District sponsored events. As a District committed to ensuring that students have access to and participate in a range of state and Board approved interscholastic sports and related activities, it must also remain cognizant of and vigilant in ensuring that all measures are contemplated to ensure their safety and welfare during students' participation in such activities, competitions, and/or events.

In addition, students' participation in interscholastic sports has been recognized by the state and Board as a mainstay of school districts, schools, and more important, the learning and life experiences of students. In fact, research has shown that athletics, specifically at the high school level, provides a vehicle that improves students' citizenship, sportsmanship, self-discipline, physical and emotional wellness, and their grade point averages. While the Board, pursuant to School Board Policy 2431, fully supports interscholastic athletics and related activities, it must continue to ensure that student safety remains at the forefront at any and all athletic and related events.

At the School Board Meeting of November 18, 2015, the School Board approved School Board Agenda Item H-19 (Revised), Lightning Detection Sensors/Alarms in Schools as proposed by School Board Member Susie Castillo. The item authorized the Superintendent to explore the feasibility of installing lightning detection sensors/alarms in all schools, as well as develop a plan for lightning safety.

Presently, school districts throughout the state and nation, specifically where high incidence of lightning events occur, have adopted policies and precautionary procedures to anticipate and detect lightning. In fact, Palm Beach County Public Schools adopted and implements a policy regarding the use of lightning detection systems. This policy reflects provisions that include but are not limited to specifications, quality, training, and maintenance for lightning detection systems. School Board Policy 8410, Emergency Management, Preparedness, and Response, and School Board Policy 8420.01, Severe Weather Emergency Management and Response address provisions and procedures for emergencies and severe weather conditions. The Emergency Operations Plan (EOP) Manual that is promulgated pursuant to Policy 8410, which includes references to responses for lightning/electrical storms also requires further review, and the EOP Manual does not specifically reference a requirement or a mechanism for lightning detection devices at school- and district-owned facilities. Neither the policies nor the EOP Manual specifically cites provisions and resources utilized to detect lightning at schools and/or district owned athletic facilities.

As M-DCPS is in South Florida, it is more susceptible to increased patterns of inclement weather, especially while football season is in session and with the prevalence of storm activity during the summer months. In fact, according to the National Lightning Detection Network (NLDN), Louisiana and Florida have the highest density of lightning strikes in the whole country. Such weather increases the likelihood of confronting serious inclement weather conditions including thunderstorms with dangerous lightning conditions. In fact, during the current 2023 high school football season, many games had to be either delayed, postponed, or cancelled altogether due to inclement weather conditions---specifically those that included dangerous lightning conditions. In making such determinations, M-DCPS school site officials are relegated to implementing a less than sophisticated and sub state of the art approach to determine the frequency and proximity of lightning. This approach is shouldered by school staff and increasingly susceptible to human error—an error that could pose a significant threat to student and staff safety and life. Athletic trainers use an application on their personal cell phones to make life or death decisions. This was personally observed by a School Board Member in a district-owned facility in which schools from across the county, despite their identified “home field,” may find themselves competing.

The importance of a lightning detector at school/district owned athletic facilities where lightning is a risk cannot be stressed enough. According to the *National Weather Service, NOAA*, about 20% of lightning fatalities were males and females of high school age or younger. Many children and young people are not aware of the risks of thunderstorms and will continue to engage in outdoor activities even as storms approach.

Even while being supervised, school aged children (as well as spectators) can still be at risk when school/district owned facilities do not have adequate lightning detection systems in place. M-DCPS is unique in the absence of a lightning detection system as stadiums and facilities owned by non-district operated schools and municipalities have lightning detection systems in place. Therefore, all schools should have a safety plan that includes policies and procedures when thunderstorms are close by, inclusive of an advance warning that a permanently installed lightning detector can provide, gives school officials, coaches and supervisors knowledge that can help to avert tragedies while students are engaged in outdoor activities.

This item seeks to direct the Superintendent to review School Board Policies, procedures, and provisions governing lightning detection at schools and district-owned athletic game and competition facilities, and where absent and/or appropriate, initiate rulemaking procedures to School Board Policy 8410 and/or 8420.01, to include provisions governing lightning detection at schools and/or district-owned athletic game and competition facilities; review the availability of lightning detection systems at all school/district owned athletic game and competition facilities, where none exists, pursuant to the provisions of School Board Policy 6320, and explore the feasibility to ensure the availability and procurement of lightning detection systems at school/district owned athletic game and competition facilities in M-DCPS; conduct an assessment of the school/district owned athletic game and competition facilities to ensure that all appropriate communication, radio, audio, amplifiers and related resources are available and fully operational; and provide an update to the School Board prior to the November 8, 2023 Committee Meeting.

This item has been reviewed by the General Counsel's Office as to form and legal sufficiency.

**ACTION PROPOSED BY  
DR. STEVE GALLON III:**

That The School Board of Miami-Dade County, Florida directs the Superintendent to:

1. review School Board Policies, procedures, and provisions governing lightning detection at schools and district-owned athletic game and competition facilities, and where absent and/or appropriate, initiate rulemaking procedures to School Board Policy 8410 and/or 8420.01, to include provisions governing lightning detection at schools and/or district-owned athletic game and competition facilities;
2. review the availability of lightning detection systems at all school/district owned athletic game and competition facilities, where none exists, pursuant to the provisions of School Board Policy 6320, and explore the feasibility to ensure the availability and procurement of lightning detection systems at school/district owned athletic game and competition facilities in M-DCPS;
3. conduct an assessment of the school/district owned athletic game and competition facilities to ensure that all appropriate communication, radio, audio, amplifiers, and related resources are available and fully operational; and
4. provide an update to the School Board prior to the November 8, 2023, Committee Meeting.