

Radio Frequency – Electromagnetic Energy (RF-EME) Site Audit

Carson Middle School
13618 McLearen Road
Herndon, Virginia 20171

EBI Project No. 6221003898
August 11, 2021
September 1, 2021



Prepared for:
Milestone Towers
12110 Sunset Hills Road Suite 100
Reston, Virginia 20190

Prepared by:
 **EBI Consulting**
environmental | engineering | due diligence

EXECUTIVE SUMMARY

EnviroBusiness Inc. (dba EBI Consulting) has been contracted by Milestone Towers to conduct radio frequency electromagnetic (RF-EME) monitoring located at 13618 McLearen Road in Herndon, Virginia to determine RF-EME exposure levels from wireless communications equipment installed at this site. As described in greater detail in Appendix A of this report, the Federal Communications Commission (FCC) has developed Maximum Permissible Exposure (MPE) Limits for general population exposures and occupational exposures. This report summarizes the results of RF-EME monitoring in relation to relevant FCC RF-EME compliance standards for limiting human exposure to RF-EME fields.

EBI field personnel visited this site on August 11, 2021. This report contains a summary of the RF EME analysis for the site, including the following:

- Antenna Inventory
- Site Photographs
- Site Plan with antenna locations
- Graphic representation of on-site monitoring results

This document addresses the compliance of the site.

STATEMENT OF COMPLIANCE

The results of the RF emissions survey indicate that this site is compliant with the FCC regulations and guidelines.

I. SITE DESCRIPTION

RF transmitting antennas are installed at the following location (the “wireless telecommunications facility”):

13618 McLearen Road, Herndon, Virginia 20171

Facility Type:	Tower
Access Restriction(s):	School Grounds are Open to the Public
Signage	Yes
Type(s) and Location:	Caution – Base of Tower Crown Castle Information Sign and Notice - Compound Fence
Facility Area Classification:	Uncontrolled (General Population)
Access to Site:	Sign-In Needed to Access School Interior
Measurement Results	
Max RF Level at Interior Buildings:	0.3950% of FCC General Population MPE limit
Max RF Level at Ground Level Surrounding the Tower:	7.0000% of FCC General Population MPE limit
FCC Compliance Conclusion:	The site is in compliance with FCC limits and guidelines.

EBI Consulting performed an RF emission survey of the RF environment surrounding the telecom equipment installed at this location. The facility consists of a monopole telecommunications tower. Access surrounding the tower is open to the public.

A survey was performed on August 11, 2021 to determine the RF emission levels present at the site. Measurements were performed on the areas considered accessible to the general population at ground level surrounding the tower and the telecommunications facility.

To measure the RF emissions within the vicinity, EBI Consulting utilized a NARDA E Field Probe Model NARD-EA5091 Standard Shaped probe S/N 1041, Frequency Range 300 KHz-50 GHz with NARDA Electromagnetic Survey Meter Model NARDA-NBM-550 S/N E-0457. Probe calibration was performed on January 19, 2021 with meter calibration performed on January 19, 2021.

4. FIELD MEASUREMENTS

4.1 Ground-Level Measurements

An RF emissions survey was performed at the wireless telecommunications facility. This survey included walking around the structure and noting the maximum average spatial readings encountered.

Appendix B shows a table and map depicting the actual readings (% of the FCC MPE General Population standard limit) at various locations at the site. Various measurements were taken to indicate the RF emissions levels that can be encountered by an individual who gains access near the structure. Appendix B includes the actual readings overlaid on a map showing the actual locations of the readings.

5. CONCLUSION

EBI has prepared this Radiofrequency Emissions Compliance Report for telecommunications equipment installed at the site located at 13618 McLearen Road in Herndon, Virginia.

The results of the RF emissions survey indicate that the levels of RF emissions exposure do not exceed applicable FCC MPE limits.

The highest level of RF emissions measured surrounding the school was 7.0000% of the FCC's MPE limits based on the General Population standard. An uncontrolled/general population environment assumes that access to the facility is not generally restricted to authorized personnel and facility management and members of the general public will be able to access the school property.

6. LIMITATIONS

This report was prepared for the use of Milestone Towers. It was performed in accordance with generally accepted practices of other consultants undertaking similar studies at the same time and in the same locale under like circumstances. The conclusions provided by EBI are based solely on the information collected during the site visit and provided by the client. The observations in this report are valid on the date of the investigation. Any additional information that becomes available concerning the site should be provided to EBI so that our conclusions may be revised and modified, if necessary. This report has been prepared in accordance with Standard Conditions for Engagement and authorized proposal, both of which are integral parts of this report. No other warranty, expressed or implied, is made.

7. Certification

This report was prepared for Milestone Towers and serves as certification for compliance of the existing wireless telecommunications facility. The analysis and information provided is based on applicable FCC regulations concerning RF safety and the control of human exposure to RF emissions. The information and analysis contained in this report are accurate and complete to the best knowledge and belief of the undersigned.

Survey Completed by:



August 11, 2021

Ryan Eaton
Regional Operations Manager
EBI Consulting

Report Prepared by:



September 1, 2021

Ryan Eaton
Regional Operations Manager
EBI Consulting