

## **EA STATEMENT AND RFR EXHIBIT**

### **Station WPPT, Philadelphia, Pennsylvania**

**Attached is an exhibit prepared for the application filed and filed by Station WBPH, Bethlehem, Pennsylvania, in support of that station's application to relocate its "Sharer" facilities on Channel 9 to the WFMZ Site. Station WPPT is a "Sharee" on Channel 9 and seeks a construction permit to utilize the same site and technical facilities as the Sharer WPBH. Thus, the attached exhibit applies equally to Station WPPT's application.**

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**SONSHINE FAMILY TELEVISION CORPORATION**

**LICENSEE OF WBPH-DT**

**DTV CHANNEL 9**

**BETHLEHEM, PENNSYLVANIA**

**FAC ID# 60850**

**FCC FILE # 60850**

**AMENDED EA STATEMENT AND RFR EXHIBIT**

**June 13, 2018**

**SONSHINE FAMILY TELEVISION CORPORATION**

**LICENSEE OF WBPH-DT**

**DTV CHANNEL 9**

**BETHLEHEM, PENNSYLVANIA**

**FAC ID# 39884**

**FCC FILE # 60850**

**ENVIRONMENTAL CONSIDERATIONS**

**FCC Rule, Section 1.1307**

An environmental assessment (“EA”) is categorically excluded under Section 1.1306 of the FCC Rules and Regulations because the tower structure is existing and will not be modified so as to invoke the need for environmental analysis. The existing tower is registered with the FCC, and approved by the FAA, and neither the ASR nor FAA approval will require modification. It was not constructed during 2001-2005 and thus is not a “twilight tower.”

**Interference Analysis**

A TV Study of predicted interference caused by the proposed WBPH-TV operation on Channel 9 has previously been performed by this office utilizing TVStudy 2.2.3 and submitted to the Commission<sup>1</sup>. TVStudy utilized the standard FCC 2 sec grid cells of approximately 1 sq. km. Using one-second terrain data sampled approximately every 1.0 km at one-degree azimuth intervals with 2010 census centroids, all studies are based upon data in the Commission’s current Licensing and Management System (“LMS”) database update of the FCC's engineering database as of November 3<sup>rd</sup>, 2017..

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<sup>1</sup> This application does not involve changes that impact other proposed or licensed facilities that were already considered and analyzed and therefore does not require a new tvixstudy to be submitted.

## **EVALUATION OF CALCULATED RFR LEVELS FROM WBPH-TV BEFORE AND AFTER**

The instant application is excluded under 1.1306. There are no physical changes proposed to the existing pre 2002 tower or immediate surrounding area. Using the procedures outlined in OET Bulletin 65, Edition 97-01 and specifically Appendix A, Table 1 and Equation 10, Page 21, I have evaluated the RFR energy from the antenna system of WBPH-TV, CH 9 before and after the relocation and power increase as follows:

**WBPH-TV (CH 9) PROPOSED:** WBPH-TV is relocating to the WFMZ tower which is located 2.19 km distant from its currently licensed facility. The RF Safety environment at the WFMZ tower was not affected by the previous WBPH-TV operation. WBPH-TV is proposing a 6 bay medium gain CH 9 directional antenna with a center of radiation 197.6 meters above ground. With the resulting medium elevation gain, the RFR energy at depression angles between 0 and 60 degrees below the horizon are expected to be at least 10 dB below that of the main lobe. Utilizing Appendix A, Table 1 the maximum occupational/controlled exposure level at CH 9 is  $1.0 \text{ mW/cm}^2$ . Using Equation 10, Page 21, the distance to the  $1.0 \text{ mW/cm}^2$  contour is 20.1 meters. For general population/uncontrolled environment the maximum exposure level is  $200 \text{ uW/cm}^2$ . Again using Equation 10, Page 21, the distance to the  $200 \text{ uW/cm}^2$  contour is 44.7 meters. Since the base of the antenna is approximately 192 meters above ground, the height of the structure limits the possible excessive RFR levels to at least 148 meters above ground. Again using Equation 10, the maximum predicted RFR energy levels at and near the minor lobe at -68 degrees and at 2 meters above ground (285 meters slant distance) is calculated at  $31 \text{ uW/cm}^2$  or 15.4% of the FCC OET 65 allowable RFR energy exposure for the general population/uncontrolled environment. Proposed WBPH-TV (CH 9) is calculated to contribute less than 16% of the total RFR energy level in this multi-station environment.

Therefore the total levels of RFR energy from the proposed WBPH-TV operation with increased ERP at all points on the ground are below that required for protection of both the

employees and the general public as required by ANSI 95.1-1992 or FCC OET 65, Edition 97-01. The RFR level from WBPH-TV (Proposed) is calculated not to not exceed 16% of the FCC allowable for the general public/uncontrolled environment anywhere on the ground in the immediate area of the tower. Neither workers nor the general public will be inadvertently exposed to RFR energy levels from the relocated Channel 9 transmission system exceeding the maximum permissible exposure (MPE) levels set forth in Section 1.1310 of the Rules.

With this predicted 16% of allowable RFR energy, after the new facilities are activated, Sonshine will commission a complete RFR Measurement campaign around the tower and out to 300 meters to determine the levels of RF Energy measured and will, if needed, take whatever steps are necessary to place signage and restricted areas to prevent excessive exposure to RFR Energy.

Where radio frequency fields in excess of FCC guidelines are predicted to be encountered (very near the station's transmission antenna), signs and protective devices are in place to secure the area affected from the general public. With respect to direct employees of this licensee, OSHA RFR guidelines will be observed. Contractors and other outside workers potentially exposed to such areas shall be advised of the hazard by posted notices or other means. The station will reduce power or cease operation, if necessary, in order to protect workers on the tower.

With these procedures in place, we believe the proposed WBPH-TV relocated operation will be in compliance with the RFR energy requirements of 47 CFR 1.1307(b).