

## **ENGINEERING STATEMENT**

This exhibit supports this application to modify FCC File Number 0000027761, a construction permit for WBYD-CD, Channel 19, Pittsburgh, PA, licensed to the Applicant herein.

The Applicant proposes to move from channel 30 to channel 19 at the existing authorized facility with a different antenna. There is no change in the antenna height or the ERP. The F(50,90) 51 dBu contours of the proposed facility overlaps with the F(50,90) 51 dBu contours of the existing licensed facility. The proposed facility was studied using TVStudy v2.2.3 using the following parameters:

- Study cell size: 1.0 km
- Profile point spacing: 0.1 km

And the results are as follow:

- Distance to Canadian border: 216.7 km
- Distance to Mexican border: 2244.8 km
- Conditions at FCC monitoring station: Laurel MD  
Bearing: 116.9 degrees Distance: 303.8 km
- Proposal is not within the West Virginia quiet zone area
- Conditions at Table Mountain receiving zone:  
Bearing: 277.4 degrees Distance: 2134.3 km

It is believed that the proposed facility complies with the requirements of Sections 74.709, 74.793(e), 74.793(f), 74.793(g), 74.793(h) and other applicable parts of the Rules and Regulations of the Federal Communications Commission.

### **Land Mobile Protection**

In order to minimize any potential interference to adjacent channel land mobile, we are going to use an 8 section sharply tuned cross-coupled mask filter being designed by Dielectric specially to protect land mobile on adjacent channel. We recognize in any event that our channel 19 facility interferes with the land mobile facilities on 18 in the area, we will utilize all possible methodologies to minimize interference to those facilities, such remedies may include reducing power, directionalizing our antenna, additional filtering, changing channels or terminating the facility.

### **Digital TV and Class A Station Protection and Interference Acceptance**

The proposed facility causes less than 0.5% interference to surrounding digital and Class A television stations and allotments and facilities (i.e., “*de minimis*”) based on TVStudy v2.2.3. It is believed that the proposed operation is in compliance with the spirit and intent of the FCC’s interference standards.

### **Low Power TV and TV Translator Station Protection**

Based on TVStudy v2.2.3 with the Build Option to Protect LPTVs, the proposed facility causes less than 2.0% interference to surrounding low power assignments and allotments (i.e., “*de minimis*”). It is believed that the proposed operation is in compliance with the spirit and intent of the FCC’s interference standards.

### **Environment Effect**

The proposed facility is deemed individually and cumulatively to have no significant effect on the quality of the human environment and are categorically excluded from environmental processing as defined by 47 C.F.R. § 1.1306. Additionally, the Applicant certifies that it will reduce power or cease operation as necessary to protect any persons from having RF exposure in excess of FCC guidelines.