



August 25, 2023

**VPM Media Corporation**

Engineering Statement:

WVPT and WVPY-TV, VPM Media Corporation (Educational Broadcaster), hereby submits the **license to cover** C.P. construction of 0000055362, Facility 60111 for a minor change to digital DTS TV channel 15.

**Construction:** VPM has completed all construction detailed in the construction permit. All special conditions, defined in the construction permit, have been met. Hospitals and local health authorities have been notified (**see Certification of Medical Facilities Notification – attachment A.**) For up to twenty (20) days after commencing operations, if WVPT-TV should become aware of any instances of medical devices malfunctioning or that such devices are likely to malfunction due to DTV operations, WVPT-TV will cooperate with the healthcare facility so that it is afforded an opportunity to resolve the interference problem.

**TPO Calculation:** The application form contains a description of the calculations for determining the TPO.

**Discrepancies with the C.P.** The facility was built according to all requirements of the C.P. including the notification requirement. There are no variations from the C.P, except for the clarification provided herein of the WVPT-1 antenna pattern that has its second maxima at 212- degrees rather than 206 degrees, and this is consistent with the tabular data. The correction of that number makes no material change to the application other than correcting a typo.

**Environment:** As stated in the construction permit application, the applicant's construction uses existing authorized towers that have not been the target of environmental objections. There will be no changes to tower heights or other changes that may call for further environmental analysis.

The Commission's rules for protection of the public within an uncontrolled environment are met. As shown in the C.P. application, the calculation of the EMR shows the WVPT-1 facility meets all requirements except for the prediction 11 horizontal meters from the tower base, where the maximum percentage is over the desired limit for an uncontrolled area. This figure is based on the manufacturer's provided vertical elevation field tables and the formulas expressed in the OET Bulletin, No. 65, August 1997 as amended, "Evaluating Compliance with FCC guidelines for Human Exposure to Radio Frequency Electronic Magnetic Fields", published by the Federal Communications Commission's Office of Science and Engineering. The area within this point is not on the road and is over a strip of tall vegetation along the steep hillside, so this

effectively isolates it from the public. The applicant will post signs clearly readable from a distance in this area to warn workers. This is the only point along the horizontal from the tower base that is above the maximum. Therefore, this proposal continues to be in compliance with the Commission's rules.

**Coordination**, this application has been coordinated with NRQZ. WVPT-TV has received conditioned approval, (Copy attached as attachment B.) and a copy of this application for license to cover will be submitted to NRQZ.

A handwritten signature in blue ink, appearing to read "Doug Levin". The signature is written in a cursive style with a large initial "D" and a horizontal line extending to the right.

# DTVNotification

28274 Three Notch Road, Mechanicsville, MD 20659

## **CERTIFICATION OF MEDICAL FACILITY NOTIFICATION**

### **EXHIBIT FCC FORM 2100 SCHEDULE B**

#### **Legal Certifications – Obligations**

##### **WVPT Staunton, VA**

##### **FCC Facility ID # 60111**

The undersigned hereby certifies that notifications of Commencement of Operations were sent to approximately 113 medical facilities within the coverage area of WVPT on July 20th, 2023.

These medical facility notifications follow the requirements of the FCC Construction Permit for station WVPT (File Number 0000201196) (Facility ID 60111). The station retained our company to notify medical facilities of the commencement of operations of station WVPT using new technical parameters listed below:

The medical facility notifications included the following technical information:

#### **STATION INFORMATION:**

##### **WVPT in Staunton, VA (Site 1)**

FCC File Number: **0000201196**

FCC Facility ID: 60111

DTV Channel: 15

Frequency band: 476-482 MHz

Estimated broadcast commencement date: August 17, 2023 at 12:00 AM

Antenna Effective radiated power: 195 kW

Antenna Height: 1333 meters above mean sea level (AMSL)

Antenna Location: 38° 09' 54.4" N+ 079° 18' 50.1" W- (NAD83)

##### **WVPT in Charlottesville, VA (Site 2)**

FCC File Number: **0000201196**

FCC Facility ID: 60111

DTV Channel: 15

Frequency band: 476-482 MHz

Estimated broadcast commencement date: August 17, 2023 at 12:00 AM

Antenna Effective radiated power: 15.0 kW

Antenna Height: 493.1 meters above mean sea level (AMSL)

Antenna Location: 37° 59' 00.0" N+ 078° 29' 01.0" W- (NAD83)

##### **WVPT in New Market, VA (Site 3)**

FCC File Number: **0000201196**

FCC Facility ID: 60111

DTV Channel: 15

# DTVNotification

28274 Three Notch Road, Mechanicsville, MD 20659

Frequency band: 476-482 MHz

Estimated broadcast commencement date: August 17, 2023 at 12:00 AM

Antenna Effective radiated power: 0.016 kW

Antenna Height: 962.1 meters above mean sea level (AMSL)

Antenna Location: 38° 36' 03.9" N+ 078° 37' 56.8" W- (NAD83)

Technical Contact: Austin Wright, CBT Technology Manager/Chief Engineer, WVPT  
Ph. 540-323-0966, Email: [awright@wvpt.net](mailto:awright@wvpt.net)

This certification may be used as an exhibit for the station's FCC Form 2100 Schedule B Application to demonstrate compliance with the conditions of the underlying Construction Permit.

Affirmed this 20th Day of July, 2023

A handwritten signature in black ink, appearing to read "Dennis Wallace", written in a cursive style.

Dennis Wallace, C.B.T.E.  
DTVNotification.com



# NATIONAL RADIO ASTRONOMY OBSERVATORY

POST OFFICE BOX 2  
 GREEN BANK, WV 24944-0002  
 NRQZ OFFICE TELEPHONE (304) 456-2107  
 HTTP://WWW.GB.NRAO.EDU/

FAX (304) 456-2276  
 NRQZ@NRAO.EDU

August 11, 2022  
 Page 1 of 2  
 NRQZ ID: 13157

WVPT  
 298 PORT REPUBLIC ROAD  
 HARRISONBURG, VA 22801

Application Reason/Purpose	Prior coordination notification
File Number	13157
Applicant Name	WVPT
Call Sign	
Site Name or Loc	['WVPT1', 'WVPT4']
Previous NRAO Coordination No.	
Current NRAO Coordination No.	13157-01, 13157-04

Dear Applicant:

The National Radio Quiet Zone (NRQZ) has evaluated these facilities to determine the interference impact on our highly sensitive radio astronomy operations.

### **NRAO Special Condition Statement:**

The National Radio Astronomy Observatory (NRAO), Green Bank, Pocahontas County, WV, objects unless the Applicant's license is restricted to an Effective Radiated Power (ERP) of Watts per MHz unit bandwidth at Azimuth degrees True North in the Site-Specific Data Below.

### **Sugar Grove Research Station Special Condition Statement:**

The Sugar Grove Research Station, formerly Naval Radio Research Observatory (NRRO) located at Sugar Grove Pendleton County, WV, objects unless the Applicant's license is restricted to an Effective Radiated Power (ERP) of Watts per MHz unit bandwidth at Azimuth degrees True North in the Site-Specific Data Below.

### **NRQZ Office Special Condition Statement**

The NRQZ Office objects unless the activation of WVPT 1, 2, and 4 is coordinated with NRAO and SGRS to ensure proper installation and antenna manufacturer specifications meet the proposed thresholds under active transmission. Order of activation, under coordination, to be WVPT 1, 4, and lastly, 2.

To meet this Special Condition, the Applicant shall:

1. Use the final engineering submitted by the applicant or their designated technical representative indicating that all facilities meet the ERP restriction.
2. Arrange for the requested site inspection to verify the implementation of this Special Condition.
3. Coordinate activation of WVPT 1, 2, and 4 as addressed in the NRQZ Office Special Condition.
4. Post a copy of this document and associated attachments at the Transmit facility.
5. Provide a Construction Notification as defined by the FCC for your specific radio service.



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NRQZ@NRAO.EDU

The NRQZ Office requests that:

1. This Letter of Concurrence be attached to the FCC application.
2. The FCC application should indicate to the FCC that the assignment should be modified to include the current NRQZ ID in the supplementary details line (e.g. "SUP: NRQZ COORD COMPLETE 2022 AUG 11/NRQZ ID 13157").
3. The applicant provides the NRQZ Office ([nrqz@nrao.edu](mailto:nrqz@nrao.edu)) with notice of its official filing with the FCC per section 47CFR1.924 (a) (2).
4. The FCC should email the NSF Electromagnetic Spectrum Management Unit ([esm@nsf.gov](mailto:esm@nsf.gov)) when the supplemental details have been modified to include the NRQZ ID as this will facilitate faster approval of the application.

The National Radio Astronomy Observatory (NRAO) site located at Green Bank, Pocahontas County, WV, has no objection to this frequency assignment provided the special conditions are met.

The Sugar Grove Research Station, the former Naval Radio Research Observatory (NRRO), located at Sugar Grove, Pendleton County, WV has no objections to this frequency assignment provided the special conditions are met.

This letter constitutes coordination of assignment in the National Radio Quiet Zone as required by the FCC Rules and Regulations 47CFR1.924.

If I may be of assistance, please feel free to contact me.

Sincerest regards,

Sheldon Wasik  
NRQZ Program Administrator

cc: [nrqz@nrao.edu](mailto:nrqz@nrao.edu), [esm@nsf.gov](mailto:esm@nsf.gov), Sugar Grove Research Station Spectrum Management Group

Attachments:

Site-Specific Data

SGRS ERP Limits

Recognition of WVPT2 and WVPT3

Site Inspection Worksheet(s)

This concurrence remains valid provided the data contained within is consistent with the applicant's filing at the Commission. Any discrepancy in system parameters, such as geographical coordinates (Latitude, Longitude, AMSL), antenna height above ground level (AGL), antenna gains or directivity (orientation), channel (operating frequency or frequency bands), emission type, and power requires re-coordination. If the Commission has questions regarding the validity of this or any concurrence, please direct inquiries to [nrqz@nrao.edu](mailto:nrqz@nrao.edu) or 304-456-2107.

NROZ ID	Site Name	Lat N NAD83	Lon W NAD83	MSL (m)	Max TX Pwr (W)	# TX per Sector	# TX per Facility	Freq Low (MHz)	Freq High (MHz)	Bandwidth (MHz)	Max Gain (dBi)	Antenna Model	AGL (m)	Az ° True	Mechanical-DT	Electrical-DT	Max eRPd of facility (W)	NRAO ERPd Limit (W)
13157-04	WVPT 4	38 36 3.900	-78 37 56.800	901.834	250.0	1	1	476.0	482.0	5.38	2.15	Die-TUL-C2SP-15 COS 66_33	60.2	260.335	0	0	250.0	4.4e-01
13157-01	WVPT 1	38 09 54.400	-79 18 50.100	1323.0	263000.0	1	1	476.0	482.0	5.38	2.15	Dielectric TUL-BP2 6/12M 1	10.0	303.05	0	2	263000.0	3.8e+00

Site ID	Bearing of Antenna (DEG)	Mechanical + Electrical Down Tilt (DEG)	Bearing to SG (DEG)	Elevation to 1st Obstacle (DEG)	Off-axis Angle Azimuth (DEG)	Off-Axis Angles Elevation (DEG)	Main Beam Gain (dBi)	Antenna Gain towards Sugar Grove (dBm)	Maximum Allowed ERP(dBd) towards Sugar Grove (WATTS)	Distance to 1 <sup>st</sup> Obstacle (km)	Height of 1 <sup>st</sup> obstacle (m)
13157-01	152	2	4	12	-148	12	2.1	-42.4	7.4	.1	1355



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 NRQZ@NRAO.EDU

The NRQZ Office recognizes that:

1. NRQZ ID 13157-02 (Site WVPT2) is located outside of the NRQZ. The Site-Specific data below is a representation of the conditions that could be set if the site were to be located in the NRQZ. The NRAO and SGRS would appreciate any voluntary coordination for NRQZ ID 13157-02.

NRQZ ID	Site Name	Lat N NAD83	Lon W NAD83	MSL (m)	Max TX Pwr (W)	# TX per Sector	# TX per Facility	Freq Low (MHz)	Freq High (MHz)	Bandwidth (MHz)	Max Gain (dBi)	Antenna Model	AGL (m)	Az ° True	Mechanical-DT	Electrical-DT	Max eRPd of facility (W)	NRAO ERPd Limit (W)
13157-02	WVPT2	37.59000	-78.29100	427.1	1000.0	1	1	476.0	482.0	5.38	2.15	Dielectric TUL-BP2-1/2M-1-K	68.0	293.215	0	0	1000.0	9.6e-01

Site ID	Bearing of Antenna (DEG)	Mechanical + Electrical Down Tilt (DEG)	Bearing to SG (DEG)	Elevation to 1st Obstacle (DEG)	Off-axis Angle Azimuth (DEG)	Off-Axis Elevation (DEG)	Main Beam Gain (dBi)	Antenna Gain towards Sugar Grove (dBm)	Maximum Allowed ERP(dBd) towards Sugar Grove (WATTS)	Distance to 1st Obstacle (km)	Height of 1st obstacle (m)
13157-02	289	0	310	1	22	1	2.1	-4.1	1.6	34	884

2. NRQZ ID 13157-03 (Site WVPT3) will remain on the previously coordinated channel 12, thus is being dropped from this application in a change to channel 15. The NRQZ office requests any status updates in the FCC filing process of these conditions, and requires coordination for any future alterations.

REV 2/11/2021

NRQZ# 13157-01

3/25/2022 DATE of submission

Magnetic Declination Correction 9.8833333 ° West (Value only)

(03) Go to the URL indicated here to have NGDC calculate the the magnetic declination associated with these coordiantes. (04) Value only of the magnetic declination as provided by going the URL provided in (3)

Go to this URL and calculate declination https://www.ngdc.noaa.gov/geomag/calculators/magcalc.shtml#declination

Site Name WVPT1 Latitude (N): 38 09 54.4 (dd mm ss.s)
Location Elliott Knob Longitude (W): 79 18 50.1 (dd mm ss.s)
City/State AMSL: 1323 Meters 4340.50 Ft
HAGL (centerline): 10 Meters 32.81 Ft
Frequency: 476 MHz 4373.31 Ft

(06 and 07) Please provide either a 1A/2C survey or Google Earth KML file to verify the site location. Note format for LAT/LONG - No special characters, numerals only
(08) AMSL or height above mean sea level
(09) HAGL or antenna height above ground level (Not sea level) to centerline

NRAO AERP (watts) 3.8 watts at 303.1 ° True (Φd)
Bandwidth in MHz 5.38 watts at 303.1 ° True
Dominant Path Defraction watts at 303.1 ° True

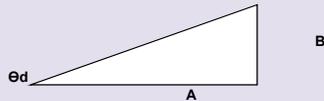
(12) AZ bearing toward the GBT from your fixed facility
(13) Specify the bandwidth allowance associated with this submission
(14) If dominant path is Diffraction limited, then you can use additional attenuation due to Mechanical Down Tilt

Table with 3 columns (1, 2, 3) and rows for Sector Name or Indicator, Antenna Type, Electrical Tilt, Maximum Antenna Gain, Antenna Azimuth, Az to GBT on Antenna Pattern, Antenna Gain to GBT, Antenna Gain to GBT Below Maximum, Mechanical Downtilt, Loss to GBT Due to Mechanical Downtilt, Transmitter Output Power, System Losses, Lightning Arrestor, Main Line, RF Filter, Misc. connectors, etc., System Loss, Power to Antenna, Main Beam Power, ERPd to GBT.

(17) This is the model number of your antenna and its associated ET. Please attach antenna datum (H/V) to verify your values.
(18) Maximum antenna gain associated with specified antenna model number
(19) Indicate the AZ bearing of each sector in degrees True North
(20) Equals your AZ + - 8° or 9° degrees more due to magnetic declination
(21) A calculated value of the Horizontal offset AZ bearing from your facility to GBT
(23) Antenna gain at offset Horizontal AZ bearing. If value in Row (19) indicates an AZ bearing between two values, provide the lesser attenuation.
(24) Provide values only if using Mechanical Tilt AND site is not SCATTER diffraction limited!
(25) Antenna gain at offset Vertical AZ bearing (within +/- Row 24 values)
(26) Watts per transmitter. If you are utilizing multiple transmitters (RRH's) per sector, you need to download Site Inspection Worksheet #2 or #3.
(27) Values for system losses are to be indicated as a negative value
Note: If site is troposcatter, use only the Vertical ET antenna attenuation value at 0 degrees

Power at output of duplexer 263000.00 #NUM! #NUM!
263000.00 #NUM! #NUM!

1.10 Congratulations. Meets NRAO Power Density Limits!



Enter 1st Obstacle Information provided by NRQZ office

0.1 Distance to 1st Obstacle (km) 328
4373.36 TX AMSL (ft) B = Ant Ht AMSL minus Ht of 1st Obs -35.51041996
4408.87 AMSL of 1st Obstacle (Ft) Φd = arctan(B/A) = -6.18 °

(51) Distance to first obstacle as provided by the NRQZ office.

(53) Height of first obstacle as provided by the NRQZ office.

Effective mechanical downtilt adjustment:
Effective Elevation = Φd - Φbt cos(Φd - Φbt) = 0.0 0.0 0.0
Effective Elevation Adjustment = 0.0 ° 0.0 ° 0.0 °

(57) Calculated AZ bearing on the vertical pattern based upon offset AZ bearing to GBT

(58) Check the antenna pattern at this offset AZ bearing. If AZ bearing is between two values, provide the lesser attenuation.

Definitions:
Φd = Azimuth to GBT
Φbt = Azimuth of mechanical beam tilt (verticle)
Φd = Elevation to 1st obstacle (negative above horizon)
Φbt = Elevation of antenna mechanical beam tilt (neg. above horizon)

Note: No adjustments for electrical beam tilt are required because the pattern data already accounts for this

Effective azimuth on horizontal pattern = Φd - Antenna Azimuth (True) {If AZ<0, then add 360}
Effective elevation on vertical pattern = Φd - Φbt cos(Φd - Φbt) {IF ELEV<0, then add 360}

Antenna Gain = HPAT(Eff AZ) + VPAT(Eff ELEV) + Max Gain

REV 2/11/2021

NRQZ# 13157-04

3/25/2022 DATE of submission

Magnetic Declination Correction 9.13333333 ° West (Value only)

(03) Go to the URL indicated here to have NGDC calculate the the magnetic declination associated with these coordiantes. (04) Value only of the magnetic declination as provided by going the URL provided in (3)

Go to this URL and calculate declination https://www.ngdc.noaa.gov/geomag/calculators/magcalc.shtml#declination

Site Name WVPT4 Latitude (N): 38 36 03.9 (dd mm ss.s)
Location Big Mountain Longitude (W): 78 37 56.8 (dd mm ss.s)
City/State AMSL.: 901.834 Meters 2958.74 Ft
HAGL (centerline) 60.2 Meters 197.50 Ft
Frequency: 476 MHz 3156.24 Ft

(06 and (07) Please provide either a 1A/2C survey or Google Earth KML file to verify the site location.

Note format for LAT/LONG - No special characters, numerials only

(08) AMSL or height above mean sea level

(09) HAGL or antenna height above ground level (Not sea level) to centerline

NRAO AERP (watts) 0.4 watts at 0.4 ° True (Φd)
Bandwidth in MHz 5.38 watts at 0.4 ° True
Dominant Path Diffraction watts at 0.4 ° True

(12) AZ bearing toward the GBT from your fixed facility

(13) Specify the bandwidth allowance associated with this submission

(14) If dominant path is Diffraction limited, then you can use additional attenuation due to Mechanical Down Tilt

Table with 3 columns (1, 2, 3) and rows for antenna type, gain, azimuth, pattern, etc. Includes values like 2.2 dBd, 89.1 °Mag, 280.4 °, etc.

(17) This is the model number of your antenna and its associated ET. Please attach antenna datum (H/V) to verify your values.

(18) Maximum antenna gain associated with specified antenna model number

(19) Indicate the AZ bearing of each sector in degrees True North

(20) Equals your AZ + ~ 8° or 9° degrees more due to magnetic declination

(21) A calculated value of the Horizontal offset AZ bearing from your facility to GBT

(23) Antenna gain at offset Horizontal AZ bearing. If value in Row (19) indicates an AZ bearing between two values, provide the lesser attenuation.

(24) Provide values only if using Mechanical Tilt AND site is not SCATTER diffraction limited!

(25) Antenna gain at offset Vertical AZ bearing (within +/- Row 24 values)

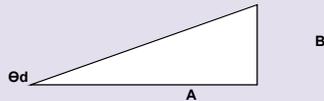
(26) Watts per transmitter. If you are utilizing multiple transmitters (RRH's) per sector, you need to download Site Inspection Worksheet #2 or #3.

(27) Values for system losses are to be indicated as a negative value

Note: If site is troposcatter, use only the Vertical ET antenna attenuation value at 0 degrees

0.16 Congratulations. Meets NRAO Power Density Limits!

Power at output of duplexer table with values 250.00, #NUM!, #NUM!



Enter 1st Obstacle Information provided by NRQZ office

Table for obstacle info: 44.5 Distance to 1st Obstacle (km), 3156.28 TX AMSL (ft), 3989.91 AMSL of 1st Obstacle (Ft)

(51) Distance to first obstacle as provided by the NRQZ office.

(53) Height of first obstacle as provided by the NRQZ office.

Effective mechanical downtilt adjustment:

Effective Elevation = Φd - Φbt cos(Φd - Φbt) = 0.0, Effective Elevation Adjustment = 0.0 °

(57) Calculated AZ bearing on the vertical pattern based upon offset AZ bearing to GBT

(58) Check the antenna pattern at this offset AZ bearing. If AZ bearing is between two values, provide the lesser attenuation.

Definitions:

- Φd = Azimuth to GBT
Φbt = Azimuth of mechanical beam tilt (verticle)
Φd = Elevation to 1st obstacle (negative above horizon)
Φbt = Elevation of antenna mechanical beam tilt (neg. above horizon)

Note: No adjustments for electrical beam tilt are required because the pattern data already accounts for this

Effective azimuth on horizontal pattern = Φd - Antenna Azimuth (True) {If AZ<0, then add 360}
Effective elevation on vertical pattern = Φd - Φbt cos(Φd - Φbt) {IF ELEV<0, then add 360}

Antenna Gain = HPAT(Eff AZ) + VPAT(Eff ELEV) + Max Gain