

ENGINEERING STATEMENT
IN SUPPORT OF AN AMENDMENT TO APPLICATION
(BPCDT-20080222AEF) FOR CONSTRUCTION PERMIT
FOR THE PROPOSED DIGITAL TV OPERATION OF
WDHS-DT, IRON MOUNTAIN, MICHIGAN
CHANNEL 8 – 22 kW - 171 METERS
JUNE 2008

This engineering statement has been prepared on behalf of W. Russell Withers, JR., licensee of TV station, Iron Mountain, Michigan, in support of an amendment of its application (BPCDT-20080222AEF) for construction permit for post-transition digital TV (DTV) operation on Channel 8.

At present , station WDHS, Facility ID Number 15498, is licensed to operate its analog TV facilities on Channel 8 (180-186 MHz) with 316 kW effective radiated power (ERP) and 171 meters antenna height above average terrain (HAAT) using a non-directional TV antenna. WDHS also holds a construction permit (CP) to operate its digital TV facility on Channel 22 (518-524 MHz) with 37 kW ERP, 171 meters HAAT and a directional TV antenna. The Commission has allotted channel 8 for digital TV operation of WDHS. WDHS is filing this instant application to amend its CP application and request operation on channel 8 with 22 kW ERP and 171 meters HAAT from the existing antenna site. The existing antenna and transmitter site will be utilized with no change in the overall tower height.

The following information provides pertinent data for the proposed WDHS-DT operation.

Name of the Licensee:	W. Russell Withers, JR.
Station Location:	MI-Iron Mountain
Channel:	8
Hours of Operation:	Unlimited
Transmitter:	Type Accepted
Antenna Type:	RCA, TE-6AH

Beam Tilt:	None			
Antenna Coordinates:	North Latitude:	45 deg	49 min	10 sec
	West Longitude:	88 deg	02 min	35 sec
Transmitter output power:	As required to achieve authorized ERP			
Maximum effective radiated power (Average):	22 kW 13.42 dBk			
Elevation of site above mean sea level:	465 meters			
Overall height of the tower above ground:	60 meters			
Height of radiation center above ground (meters):	49 meters			
Height of radiation center above mean sea level (meters):	514 meters			
Height of radiation center above average terrain (meters):	171 meters			
Antenna Structure Registration Number:	Tower Pending Registration FAA Review Completed			

Response to questions listed on the FCC Form 301, Section III-D-DTV

Engineering

Question 1. (a)

WDHS will operate its DTV operation on Channel 8 as established in 47 C.F.R.

Section 73.622.

Question 1. (d)

WDHS is proposing to modify its application for CP to operate on its analog channel 8 from the existing antenna site. The proposed noise limited contour would extend, in all directions, beyond the facilities established in Appendix B of the Seventh Report and Order (MB Docket No. 87-268). However, an interference study conducted (see attached Table I) according to the FCC OET Bulletin 69 using 1 kilometer cell size

indicates the proposed WDHS-DT operation would not cause any interference to other DTV stations exceeding the Commission's guidelines.

Question 1. (e)

The proposed DTV operation would serve 181,000 people within the noise limited service area as compared to 112,000 predicted population defined in the new DTV Table in Appendix B. As such, WDHS-DT proposed noise limited contour would serve 69,000 more people than listed in the new DTV Table in Appendix B.

Question 2.

The attached environmental statement demonstrates that there will not be any significant environmental impact from the proposed DTV operation in accordance with 47 C.F.R. Section 73.1307.

Question 3.

The attached map shows the proposed WDHS-DT contour will encompass the allotted principal community of Iron Mountain, Michigan (see Figure 1).

Question 4.

The proposed WDHS-DT facility complies with Section 73.1030 of the Commission's rules; therefore, notification to radio astronomy installations, radio receiving installations and FCC monitoring stations is not required.

Question 5.

The existing WDHS-DT tower is over 20 years old and less than 200 feet above ground level and did not require registration. However, FCC review of the recent WDHS application (BPCDT-20080222AEF) revealed that the tower height did not pass the "Towair" slope calculations and requires registration. The existing tower has

an FAA “No Hazard” determination in aeronautical study No. 2008-AGL-2544-OE issued June 17, 2008. The tower will be registered following the 30 day waiting period for the FAA study to appear in the FCC’s ASR database.

Table I

Percent allowed new interference: 0.500
 Percent allowed new interference to Class A: 0.500
 TW Census data selected 2000
 Post Transition Data Base Selected /space/software/cdb/pt_tvdb.sff

TV INTERFERENCE and SPACING ANALYSIS PROGRAM

Date: 06-13-2008 Time: 09:32:38

Record Selected for Analysis

WDHS USERRECORD-01 IRON MOUNTAIN MI US
 Channel 08 ERP 22. kW HAAT 171. m RCAMSL 00515 m
 Latitude 045-49-10 Longitude 0088-02-35
 Status APP Zone 2 Border
 Last update Cutoff date Docket
 Comments
 Applicant

Cell Size for Service Analysis 1.0 km/side

Distance Increments for Longley-Rice Analysis 1.00 km

Facility meets maximum height/power limits

Azimuth (Deg)	ERP (kW)	HAAT (m)	36.0 dBu F(50,90) (km)
0.0	22.000	147.6	87.5
45.0	22.000	171.7	89.7
90.0	22.000	192.3	91.5
135.0	22.000	215.7	93.6
180.0	22.000	181.8	90.5
225.0	22.000	148.0	87.5
270.0	22.000	159.6	88.7
315.0	22.000	147.8	87.5

Evaluation toward Class A Stations

No Spacing violations or contour overlap to Class A stations

Class A Evaluation Complete

SPACING VIOLATION FOUND BETWEEN STATION

WDHS 08 IRON MOUNTAIN MI USERRECORD01

and station

SHORT TO: WDHS 08 IRON MOUNTAIN MI BLCT 20010625ABS
 045-49-10 0088-02-35
 Req. separation 273.6 Actual separation 0.0 Short 273.6 km

SHORT TO: WDHS 08 IRON MOUNTAIN MI DTVPLN DTVP0134
 45 -49-10 88 -02-35

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Req. separation 273.6 Actual separation 0.0 Short 273.6 km

Proposed facility OK to FCC Monitoring Stations

Proposed facility OK toward West Virginia quiet zone

Proposed facility OK toward Table Mountain

Proposed facility is within the Canadian coordination distance
Distance to border = 228.3km

Proposed facility is beyond the Mexican coordination distance

Proposed station is OK toward AM broadcast stations

Start of Interference Analysis

Channel	Proposed Station Call	City/State	ARN
08	WDHS	IRON MOUNTAIN MI	USERRECORD01

Stations Potentially Affected by Proposed Station

Chan	Call	City/State	Dist(km)	Status	Application	Ref. No.
07	WPBN-TV	TRAVERSE CITY MI	217.8	PLN	DTVPLN	-DTVP0071
07	WSAW-TV	WAUSAU WI	163.0	PLN	DTVPLN	-DTVP0106
08	WWMT	KALAMAZOO MI	406.5	PLN	DTVPLN	-DTVP0135
08	WGTQ	SAULT STE. MARIE MI	305.1	PLN	DTVPLN	-DTVP0136
08	WDSE-TV	DULUTH MN	331.3	PLN	DTVPLN	-DTVP0137
08	WKBT	LA CROSSE WI	322.5	PLN	DTVPLN	-DTVP0170
08	WMVS	MILWAUKEE WI	302.9	LIC	BLEDT	-20041207AAL
08	WMVS	MILWAUKEE WI	302.9	PLN	DTVPLN	-DTVP0171
09	WAOW-TV	WAUSAU WI	163.0	PLN	DTVPLN	-DTVP0233

Analysis of Interference to Affected Station 1

Analysis of current record

Channel	Call	City/State	Application	Ref. No.
07	WPBN-TV	TRAVERSE CITY MI	DTVPLN	-DTVP0071

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application	Ref. No.
07	WLS-TV	CHICAGO IL	358.7	PLN	DTVPLN	-DTVP0061
07	WJBK	DETROIT MI	325.2	PLN	DTVPLN	-DTVP0069
07	WOOD-TV	GRAND RAPIDS MI	232.7	LIC	BLCDT	-20040625ABO
07	WOOD-TV	GRAND RAPIDS MI	232.7	PLN	DTVPLN	-DTVP0070
07	WSAW-TV	WAUSAU WI	316.2	PLN	DTVPLN	-DTVP0106
08	WDHS	IRON MOUNTAIN MI	217.8	PLN	DTVPLN	-DTVP0134
08	WGTQ	SAULT STE. MARIE MI	187.5	PLN	DTVPLN	-DTVP0136
08	WDHS	IRON MOUNTAIN MI	217.8	APP	USERRECORD-01	

Proposal causes no interference

Analysis of Interference to Affected Station 2

Analysis of current record

Channel	Call	City/State	Application	Ref. No.
07	WSAW-TV	WAUSAU WI	DTVPLN	-DTVP0106

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Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application	Ref. No.
07	KWWL	WATERLOO IA	329.2	PLN	DTVPLN	-DTVP0059
07	WLS-TV	CHICAGO IL	376.6	PLN	DTVPLN	-DTVP0061
07	WOOD-TV	GRAND RAPIDS MI	417.3	LIC	BLCDDT	-20040625ABO
07	WOOD-TV	GRAND RAPIDS MI	417.3	PLN	DTVPLN	-DTVP0070
07	WPBN-TV	TRAVERSE CITY MI	316.2	PLN	DTVPLN	-DTVP0071
08	WDHS	IRON MOUNTAIN MI	163.0	PLN	DTVPLN	-DTVP0134
08	WKBT	LA CROSSE WI	159.7	PLN	DTVPLN	-DTVP0170
08	WDHS	IRON MOUNTAIN MI	163.0	APP	USERRECORD-01	

Proposal causes no interference

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Analysis of Interference to Affected Station 3

Analysis of current record

Channel	Call	City/State	Application	Ref. No.
08	WWMT	KALAMAZOO MI	DTVPLN	-DTVP0135

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application	Ref. No.
07	WLS-TV	CHICAGO IL	191.9	PLN	DTVPLN	-DTVP0061
07	WJBK	DETROIT MI	191.2	PLN	DTVPLN	-DTVP0069
07	WOOD-TV	GRAND RAPIDS MI	6.5	LIC	BLCDDT	-20040625ABO
07	WOOD-TV	GRAND RAPIDS MI	6.5	PLN	DTVPLN	-DTVP0070
08	951215KK	GALESBURG IL	426.1	PLN	DTVPLN	-DTVP0126
08	WDHS	IRON MOUNTAIN MI	406.5	PLN	DTVPLN	-DTVP0134
08	WGTQ	SAULT STE. MARIE MI	396.7	PLN	DTVPLN	-DTVP0136
08	WJW	CLEVELAND OH	345.7	PLN	DTVPLN	-DTVP0152
08	WLIO	LIMA OH	239.8	CP MOD	BMPCDT	-20060517ABE
08	WLIO	LIMA OH	239.7	PLN	DTVPLN	-DTVP0153
08	WMVS	MILWAUKEE WI	199.6	LIC	BLEDT	-20041207AAL
08	WMVS	MILWAUKEE WI	199.6	PLN	DTVPLN	-DTVP0171
09	WWTW	CADILLAC MI	168.0	PLN	DTVPLN	-DTVP0201
08	WDHS	IRON MOUNTAIN MI	406.5	APP	USERRECORD-01	

Proposal causes no interference

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Analysis of Interference to Affected Station 4

Analysis of current record

Channel	Call	City/State	Application	Ref. No.
08	WGTQ	SAULT STE. MARIE MI	DTVPLN	-DTVP0136

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application	Ref. No.
07	WPBN-TV	TRAVERSE CITY MI	187.5	PLN	DTVPLN	-DTVP0071
08	WDHS	IRON MOUNTAIN MI	305.1	PLN	DTVPLN	-DTVP0134
08	WWMT	KALAMAZOO MI	396.7	PLN	DTVPLN	-DTVP0135
08	WDHS	IRON MOUNTAIN MI	305.1	APP	USERRECORD-01	

Total scenarios = 1

Result key: 1
Scenario 1 Affected station 4
Before Analysis

Results for: 8A MI SAULT STE. MARIE DTVPLN DTVP0136 PLN
HAAT 288.0 m, ATV ERP 24.0 kW
POPULATION AREA (sq km)
within Noise Limited Contour 103895 24649.9

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not affected by terrain losses	98780	23551.5
lost to NTSC IX	0	0.0
lost to additional IX by ATV	48	34.8
lost to ATV IX only	48	34.8
lost to all IX	48	34.8

Potential Interfering Stations Included in above Scenario 1

8A MI IRON MOUNTAIN	DTVPLN	DTVP0134	PLN
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After Analysis

Results for: 8A MI SAULT STE. MARIE DTVPLN DTVP0136 PLN
HAAT 288.0 m, ATV ERP 24.0 kW

	POPULATION	AREA (sq km)
within Noise Limited Contour	103895	24649.9
not affected by terrain losses	98780	23551.5
lost to NTSC IX	0	0.0
lost to additional IX by ATV	496	256.7
lost to ATV IX only	496	256.7
lost to all IX	496	256.7

Potential Interfering Stations Included in above Scenario 1

8A MI IRON MOUNTAIN	USERRECORD01	APP
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Percent new IX = 0.4538%

Worst case new IX 0.4538% Scenario 1

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Analysis of Interference to Affected Station 5

Analysis of current record

Channel	Call	City/State	Application	Ref. No.
08	WDSE-TV	DULUTH MN	DTVPLN	-DTVP0137

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application	Ref. No.
08	WDHS	IRON MOUNTAIN MI	331.3	PLN	DTVPLN	-DTVP0134
08	WKBT	LA CROSSE WI	306.4	PLN	DTVPLN	-DTVP0170
09	KAWB	BEMIDJI MN	205.0	PLN	DTVPLN	-DTVP0202
09	KMSP-TV	MINNEAPOLIS MN	207.7	PLN	DTVPLN	-DTVP0203
08	WDHS	IRON MOUNTAIN MI	331.3	APP	USERRECORD-01	

Total scenarios = 1

Result key: 2
Scenario 1 Affected station 5
Before Analysis

Results for: 8A MN DULUTH DTVPLN DTVP0137 PLN
HAAT 290.0 m, ATV ERP 17.4 kW

	POPULATION	AREA (sq km)
within Noise Limited Contour	282976	28523.3
not affected by terrain losses	272606	27465.5
lost to NTSC IX	0	0.0
lost to additional IX by ATV	2257	259.5
lost to ATV IX only	2257	259.5
lost to all IX	2257	259.5

Potential Interfering Stations Included in above Scenario 1

8A WI LA CROSSE	DTVPLN	DTVP0170	PLN
8A MI IRON MOUNTAIN	DTVPLN	DTVP0134	PLN

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After Analysis

Results for: 8A MN DULUTH DTVPLN DTVP0137 PLN
 HAAT 290.0 m, ATV ERP 17.4 kW

	POPULATION	AREA (sq km)
within Noise Limited Contour	282976	28523.3
not affected by terrain losses	272606	27465.5
lost to NTSC IX	0	0.0
lost to additional IX by ATV	3091	311.6
lost to ATV IX only	3091	311.6
lost to all IX	3091	311.6

Potential Interfering Stations Included in above Scenario 1

8A WI LA CROSSE	DTVPLN	DTVP0170	PLN
8A MI IRON MOUNTAIN	USERRECORD01		APP

Percent new IX = 0.3085%

Worst case new IX 0.3085% Scenario 1

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Analysis of Interference to Affected Station 6

Analysis of current record

Channel	Call	City/State	Application Ref. No.
08	WKBT	LA CROSSE WI	DTVPLN -DTVP0170

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application Ref. No.
07	KWWL	WATERLOO IA	192.3	PLN	DTVPLN -DTVP0059
07	WSAW-TV	WAUSAU WI	159.7	PLN	DTVPLN -DTVP0106
08	KCCI	DES MOINES IA	314.3	PLN	DTVPLN -DTVP0123
08	951215KK	GALESBURG IL	318.6	PLN	DTVPLN -DTVP0126
08	WDHS	IRON MOUNTAIN MI	322.5	PLN	DTVPLN -DTVP0134
08	WDSE-TV	DULUTH MN	306.4	PLN	DTVPLN -DTVP0137
08	WMVS	MILWAUKEE WI	297.7	LIC	-20041207AAL
08	WMVS	MILWAUKEE WI	297.7	PLN	DTVPLN -DTVP0171
09	KCRG-TV	CEDAR RAPIDS IA	201.7	PLN	DTVPLN -DTVP0194
09	KMSP-TV	MINNEAPOLIS MN	177.7	PLN	DTVPLN -DTVP0203
09	WAOV-TV	WAUSAU WI	159.7	PLN	DTVPLN -DTVP0233
08	WDHS	IRON MOUNTAIN MI	322.5	APP	USERRECORD-01

Total scenarios = 2

Result key: 3
 Scenario 1 Affected station 6
 Before Analysis

Results for: 8A WI LA CROSSE DTVPLN DTVP0170 PLN
 HAAT 462.0 m, ATV ERP 20.3 kW

	POPULATION	AREA (sq km)
within Noise Limited Contour	770039	37727.4
not affected by terrain losses	727919	36117.9
lost to NTSC IX	0	0.0
lost to additional IX by ATV	14805	860.0
lost to ATV IX only	14805	860.0
lost to all IX	14805	860.0

Potential Interfering Stations Included in above Scenario 1

7A IA WATERLOO	DTVPLN	DTVP0059	PLN
8A IA DES MOINES	DTVPLN	DTVP0123	PLN
8A IL GALESBURG	DTVPLN	DTVP0126	PLN
8A MN DULUTH	DTVPLN	DTVP0137	PLN
8A WI MILWAUKEE	BLEDT	20041207AAL	LIC

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9A MN MINNEAPOLIS	DTVPLN	DTVP0203	PLN
8A MI IRON MOUNTAIN	DTVPLN	DTVP0134	PLN

After Analysis

Results for: 8A WI LA CROSSE DTVPLN DTVP0170 PLN
 HAAT 462.0 m, ATV ERP 20.3 kW

	POPULATION	AREA (sq km)
within Noise Limited Contour	770039	37727.4
not affected by terrain losses	727919	36117.9
lost to NTSC IX	0	0.0
lost to additional IX by ATV	14857	867.9
lost to ATV IX only	14857	867.9
lost to all IX	14857	867.9

Potential Interfering Stations Included in above Scenario 1

7A IA WATERLOO	DTVPLN	DTVP0059	PLN
8A IA DES MOINES	DTVPLN	DTVP0123	PLN
8A IL GALESBURG	DTVPLN	DTVP0126	PLN
8A MN DULUTH	DTVPLN	DTVP0137	PLN
8A WI MILWAUKEE	BLEDT	20041207AAL	LIC
9A MN MINNEAPOLIS	DTVPLN	DTVP0203	PLN
8A MI IRON MOUNTAIN	USERRECORD01		APP

Percent new IX = 0.0073%

Result key: 4
 Scenario 2 Affected station 6
 Before Analysis

Results for: 8A WI LA CROSSE DTVPLN DTVP0170 PLN
 HAAT 462.0 m, ATV ERP 20.3 kW

	POPULATION	AREA (sq km)
within Noise Limited Contour	770039	37727.4
not affected by terrain losses	727919	36117.9
lost to NTSC IX	0	0.0
lost to additional IX by ATV	14805	860.0
lost to ATV IX only	14805	860.0
lost to all IX	14805	860.0

Potential Interfering Stations Included in above Scenario 2

7A IA WATERLOO	DTVPLN	DTVP0059	PLN
8A IA DES MOINES	DTVPLN	DTVP0123	PLN
8A IL GALESBURG	DTVPLN	DTVP0126	PLN
8A MN DULUTH	DTVPLN	DTVP0137	PLN
8A WI MILWAUKEE	DTVPLN	DTVP0171	PLN
9A MN MINNEAPOLIS	DTVPLN	DTVP0203	PLN
8A MI IRON MOUNTAIN	DTVPLN	DTVP0134	PLN

After Analysis

Results for: 8A WI LA CROSSE DTVPLN DTVP0170 PLN
 HAAT 462.0 m, ATV ERP 20.3 kW

	POPULATION	AREA (sq km)
within Noise Limited Contour	770039	37727.4
not affected by terrain losses	727919	36117.9
lost to NTSC IX	0	0.0
lost to additional IX by ATV	14857	867.9
lost to ATV IX only	14857	867.9
lost to all IX	14857	867.9

Potential Interfering Stations Included in above Scenario 2

7A IA WATERLOO	DTVPLN	DTVP0059	PLN
8A IA DES MOINES	DTVPLN	DTVP0123	PLN
8A IL GALESBURG	DTVPLN	DTVP0126	PLN
8A MN DULUTH	DTVPLN	DTVP0137	PLN
8A WI MILWAUKEE	DTVPLN	DTVP0171	PLN
9A MN MINNEAPOLIS	DTVPLN	DTVP0203	PLN

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8A MI IRON MOUNTAIN USERRECORD01 APP

Percent new IX = 0.0073%

Worst case new IX 0.0073% Scenario 1

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Analysis of Interference to Affected Station 7

Analysis of current record

Channel	Call	City/State	Application	Ref. No.
08	WMVS	MILWAUKEE WI	BLEDT	-20041207AAL

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application	Ref. No.
07	WLS-TV	CHICAGO IL	137.1	PLN	DTVPLN	-DTVP0061
07	WOOD-TV	GRAND RAPIDS MI	200.2	LIC	BLCDDT	-20040625ABO
07	WOOD-TV	GRAND RAPIDS MI	200.2	PLN	DTVPLN	-DTVP0070
08	951215KK	GALESBURG IL	284.3	PLN	DTVPLN	-DTVP0126
08	WDHS	IRON MOUNTAIN MI	302.9	PLN	DTVPLN	-DTVP0134
08	WWMT	KALAMAZOO MI	199.6	PLN	DTVPLN	-DTVP0135
08	WLIO	LIMA OH	406.7	CP MOD	BMPCDDT	-20060517ABE
08	WLIO	LIMA OH	406.6	PLN	DTVPLN	-DTVP0153
08	WKBT	LA CROSSE WI	297.7	PLN	DTVPLN	-DTVP0170
08	WDHS	IRON MOUNTAIN MI	302.9	APP	USERRECORD-01	

Total scenarios = 1

Result key: 5

Scenario 1 Affected station 7

Before Analysis

Results for: 8A WI MILWAUKEE BLEDT 20041207AAL LIC

HAAT 354.0 m, ATV ERP 25.0 kW	POPULATION	AREA (sq km)
within Noise Limited Contour	3121166	31724.2
not affected by terrain losses	3076710	31121.4
lost to NTSC IX	0	0.0
lost to additional IX by ATV	55632	1661.3
lost to ATV IX only	55632	1661.3
lost to all IX	55632	1661.3

Potential Interfering Stations Included in above Scenario 1

7A IL CHICAGO	DTVPLN	DTVP0061	PLN
8A IL GALESBURG	DTVPLN	DTVP0126	PLN
8A MI KALAMAZOO	DTVPLN	DTVP0135	PLN
8A WI LA CROSSE	DTVPLN	DTVP0170	PLN
8A MI IRON MOUNTAIN	DTVPLN	DTVP0134	PLN

After Analysis

Results for: 8A WI MILWAUKEE BLEDT 20041207AAL LIC

HAAT 354.0 m, ATV ERP 25.0 kW	POPULATION	AREA (sq km)
within Noise Limited Contour	3121166	31724.2
not affected by terrain losses	3076710	31121.4
lost to NTSC IX	0	0.0
lost to additional IX by ATV	59228	1717.2
lost to ATV IX only	59228	1717.2
lost to all IX	59228	1717.2

Potential Interfering Stations Included in above Scenario 1

7A IL CHICAGO	DTVPLN	DTVP0061	PLN
8A IL GALESBURG	DTVPLN	DTVP0126	PLN

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8A MI KALAMAZOO	DTVPLN	DTVP0135	PLN
8A WI LA CROSSE	DTVPLN	DTVP0170	PLN
8A MI IRON MOUNTAIN	USERRECORD01		APP

Percent new IX = 0.1190%

Worst case new IX 0.1190% Scenario 1

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Analysis of Interference to Affected Station 8

Analysis of current record

Channel	Call	City/State	Application	Ref. No.
08	WMVS	MILWAUKEE WI	DTVPLN	-DTVP0171

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application	Ref. No.
07	WLS-TV	CHICAGO IL	137.1	PLN	DTVPLN	-DTVP0061
07	WOOD-TV	GRAND RAPIDS MI	200.2	LIC	BLCDDT	-20040625ABO
07	WOOD-TV	GRAND RAPIDS MI	200.2	PLN	DTVPLN	-DTVP0070
08	951215KK	GALESBURG IL	284.3	PLN	DTVPLN	-DTVP0126
08	WDHS	IRON MOUNTAIN MI	302.9	PLN	DTVPLN	-DTVP0134
08	WWMT	KALAMAZOO MI	199.6	PLN	DTVPLN	-DTVP0135
08	WLIO	LIMA OH	406.7	CP MOD	BMPCDDT	-20060517ABE
08	WLIO	LIMA OH	406.6	PLN	DTVPLN	-DTVP0153
08	WKBT	LA CROSSE WI	297.7	PLN	DTVPLN	-DTVP0170
08	WDHS	IRON MOUNTAIN MI	302.9	APP	USERRECORD-01	

Total scenarios = 1

Result key: 6
 Scenario 1 Affected station 8
 Before Analysis

Results for: 8A WI MILWAUKEE DTVPLN DTVP0171 PLN
 HAAT 354.0 m, ATV ERP 25.0 kW

	POPULATION	AREA (sq km)
within Noise Limited Contour	3121166	31724.2
not affected by terrain losses	3076710	31121.4
lost to NTSC IX	0	0.0
lost to additional IX by ATV	55632	1661.3
lost to ATV IX only	55632	1661.3
lost to all IX	55632	1661.3

Potential Interfering Stations Included in above Scenario 1

7A IL CHICAGO	DTVPLN	DTVP0061	PLN
8A IL GALESBURG	DTVPLN	DTVP0126	PLN
8A MI KALAMAZOO	DTVPLN	DTVP0135	PLN
8A WI LA CROSSE	DTVPLN	DTVP0170	PLN
8A MI IRON MOUNTAIN	DTVPLN	DTVP0134	PLN

After Analysis

Results for: 8A WI MILWAUKEE DTVPLN DTVP0171 PLN
 HAAT 354.0 m, ATV ERP 25.0 kW

	POPULATION	AREA (sq km)
within Noise Limited Contour	3121166	31724.2
not affected by terrain losses	3076710	31121.4
lost to NTSC IX	0	0.0
lost to additional IX by ATV	59228	1717.2
lost to ATV IX only	59228	1717.2
lost to all IX	59228	1717.2

Potential Interfering Stations Included in above Scenario 1

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7A IL CHICAGO	DTVPLN	DTVP0061	PLN
8A IL GALESBURG	DTVPLN	DTVP0126	PLN
8A MI KALAMAZOO	DTVPLN	DTVP0135	PLN
8A WI LA CROSSE	DTVPLN	DTVP0170	PLN
8A MI IRON MOUNTAIN	USERRECORD01		APP

Percent new IX = 0.1190%

Worst case new IX 0.1190% Scenario 1

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Analysis of Interference to Affected Station 9

Analysis of current record

Channel	Call	City/State	Application	Ref. No.
09	WAOW-TV	WAUSAU WI	DTVPLN	-DTVP0233

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application	Ref. No.
08	WDHS	IRON MOUNTAIN MI	163.0	PLN	DTVPLN	-DTVP0134
08	WKBT	LA CROSSE WI	159.7	PLN	DTVPLN	-DTVP0170
09	KCRG-TV	CEDAR RAPIDS IA	337.9	PLN	DTVPLN	-DTVP0194
09	WWTW	CADILLAC MI	355.4	PLN	DTVPLN	-DTVP0201
09	KMSP-TV	MINNEAPOLIS MN	270.2	PLN	DTVPLN	-DTVP0203
10	WBUP	ISHPEMING MI	213.9	PLN	DTVPLN	-DTVP0265
08	WDHS	IRON MOUNTAIN MI	163.0	APP	USERRECORD-01	

Proposal causes no interference

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Analysis of Interference to Affected Station 10

Analysis of current record

Channel	Call	City/State	Application	Ref. No.
08	WDHS	IRON MOUNTAIN MI	USERRECORD-01	

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application	Ref. No.
07	WPNB-TV	TRAVERSE CITY MI	217.8	PLN	DTVPLN	-DTVP0071
07	WSAW-TV	WAUSAU WI	163.0	PLN	DTVPLN	-DTVP0106
08	WMTT	KALAMAZOO MI	406.5	PLN	DTVPLN	-DTVP0135
08	WGTQ	SAULT STE. MARIE MI	305.1	PLN	DTVPLN	-DTVP0136
08	WDSE-TV	DULUTH MN	331.3	PLN	DTVPLN	-DTVP0137
08	WKBT	LA CROSSE WI	322.5	PLN	DTVPLN	-DTVP0170
08	WMVS	MILWAUKEE WI	302.9	LIC	BLEDT	-20041207AAL
08	WMVS	MILWAUKEE WI	302.9	PLN	DTVPLN	-DTVP0171
09	WAOW-TV	WAUSAU WI	163.0	PLN	DTVPLN	-DTVP0233

Total scenarios = 2

Result key: 7

Scenario 1 Affected station 10
Before Analysis

Results for: 8A MI IRON MOUNTAIN USERRECORD01 APP

HAAT 171.0 m, ATV ERP 22.0 kW		
	POPULATION	AREA (sq km)
within Noise Limited Contour	203602	25221.0
not affected by terrain losses	184255	24167.5
lost to NTSC IX	0	0.0
lost to additional IX by ATV	3011	489.1
lost to ATV IX only	3011	489.1
lost to all IX	3011	489.1

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Potential Interfering Stations Included in above Scenario 1

8A MI SAULT STE. MARIE	DTVPLN	DTVP0136	PLN
8A MN DULUTH	DTVPLN	DTVP0137	PLN
8A WI LA CROSSE	DTVPLN	DTVP0170	PLN
8A WI MILWAUKEE	BLEDT	20041207AAL	LIC

Result key: 8
 Scenario 2 Affected station 10
 Before Analysis

Results for: 8A MI IRON MOUNTAIN USERRECORD01 APP

HAAT 171.0 m, ATV ERP 22.0 kW		
	POPULATION	AREA (sq km)
within Noise Limited Contour	203602	25221.0
not affected by terrain losses	184255	24167.5
lost to NTSC IX	0	0.0
lost to additional IX by ATV	3011	489.1
lost to ATV IX only	3011	489.1
lost to all IX	3011	489.1

Potential Interfering Stations Included in above Scenario 2

8A MI SAULT STE. MARIE	DTVPLN	DTVP0136	PLN
8A MN DULUTH	DTVPLN	DTVP0137	PLN
8A WI LA CROSSE	DTVPLN	DTVP0170	PLN
8A WI MILWAUKEE	DTVPLN	DTVP0171	PLN

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FINISHED FINISHED FINISHED FINISHED FINISHED FINISHED

ENVIRONMENTAL PROTECTION ACT

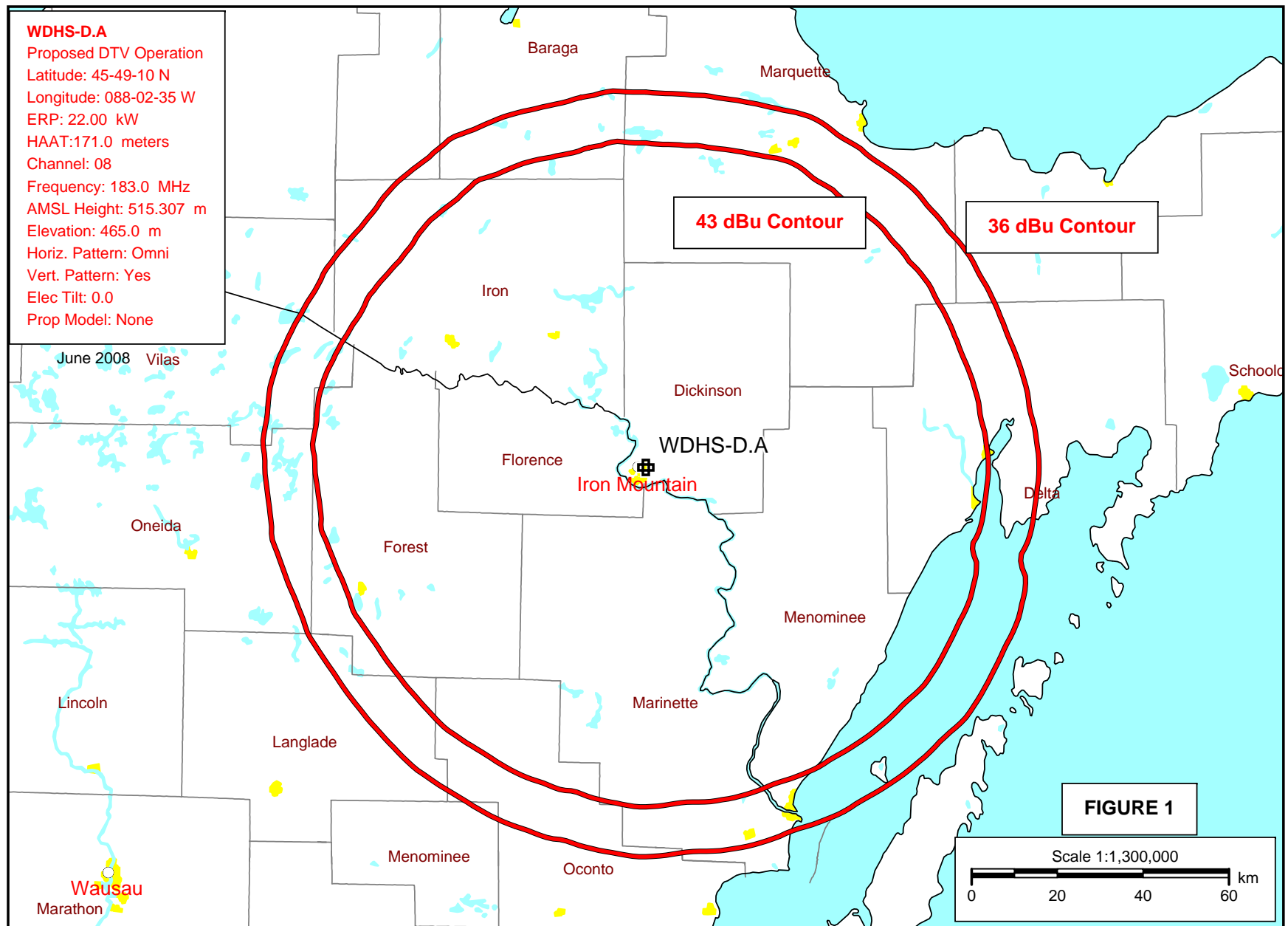
Since WDHS-DT will be using the existing tower for the DTV operation the environmental concerns listed in Section 1.1307(a) of the Commission's rules are not pertinent; therefore, those issues have not been addressed.

An evaluation has been made to determine compliance with the Commission's specified standards for human exposure to RF fields as set forth in the OET Bulletin No. 65 dated August 1997. For a maximum effective radiated power of 22 kW and a radiation center of 49 meters above ground level, the proposed Channel 8 DTV operation would have a maximum of 83.2 microwatts per square centimeter ($\mu\text{W}/\text{cm}^2$) RF field at 2 meters above the base of tower assuming an antenna field factor of 0.5 in the downward direction.

The Commission's guidelines for Channels 8 are $1,000 \mu\text{W}/\text{cm}^2$ for the occupational/controlled and $200 \mu\text{W}/\text{cm}^2$ for the general population/uncontrolled environment.

The above analysis indicates that members of the public and personnel working around the WDHS-DT tower would not be exposed to RF fields exceeding the Commission's guidelines. With respect to work performed on the tower, WDHS-DT has established procedures to ensure that workers are not exposed to RF fields above the Commission's guidelines, by reducing or turning off the power, as appropriate.

For the reasons stated above, it is believed this proposal complies with Section 1.1307(a) and (b) of the Commission's Rules; therefore, under Section 1.1306, it is categorically excluded from environmental processing.



COMPUTED NOISE LIMITED CONTOURS FOR THE PROPOSED OPERATION OF WDHS-DT, IRON MOUNTAIN, MI