

**ENGINEERING REPORT
MINOR CHANGE APPLICATION**

For FM Station

**WCSY-FM – South Haven, MI
Channel 252A – 98.3 MHz**

License No. BLH-19920828KA

Change in City of License to
Hartford, MI in response to
Report and Order
MB Docket No. 03-257
RM-10814.

May, 2006

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(Exhibit Numbering is in response to FCC Online Form 301, Section III-B)

DISCUSSION OF REPORT

This firm was retained to prepare the required engineering report in support of a minor change for FM Station WCSY-FM, South Haven, MI, License BLH-19920828KA. WCSY-FM is currently licensed to operate with 1.9 kW ERP (H)&(V) at 123 m HAAT as a Class A facility on CH252A, 98.3 MHz. It is requested to modify the licensed parameters to a new site location with 3.7 kW at 130 meters HAAT. The facility will serve the new community of Hartford, MI, pursuant to Report and Order MB Docket No. 03-257, RM-10814.

The proposed site for the Class A operation meets all domestic spacing requirements of 47 C.F.R. §73.207 toward other stations in the allocation with the allowable rounding of spacing distances enforced. A tabulation of the existing and required spacing toward each of the other relevant stations is found in **Exhibit 25.1**.

The proposed service contours have been calculated in accordance with the Rules, and the data obtained has been tabulated and plotted in this report. The plotted contours are found as **Exhibit 22.4** of this report. This exhibit shows the 3.16 mV/m contour which serves approximately 81% of the new community of license of Hartford. While 81% coverage of Hartford is believed sufficient, use of the Longley-Rice alternate propagation method has been employed. **Exhibit 23.1** details the Longley-Rice alternate propagation study showing full 100% community coverage of Hartford, MI. The tabulation of the distances to the respective contours shown in this discussion is based on the use of the standard eight cardinal bearings, which were also used for the computation of the HAAT. However, the plotted contours shown in **Exhibit 22.4**, are based on the use of a full 360 terrain radials. The USGS 03 second terrain database has been used in calculation of both HAAT and contour distance computations.

The antenna will be mounted on a new tower to be constructed. FAA Form 7460-1 has been filed concurrently and Antenna Structure Registration will be filed upon receipt of FAA "Determination of No Hazard". A portion of USGS topographic mapping showing the site has been supplied in **Exhibit 22.1**. A copy of the vertical antenna plan has been included as **Exhibit 22.2**.

The remainder of the information in this report and exhibit numbering is responsive to the Rules of the Commission, and provides the data for FCC Online Form 301, Section III-B.

The FM Broadcast facility proposed in this application is within the controlled and uncontrolled limits as set forth in the RF Exposure Compliance Worksheets, Worksheet #3, issue May 1999. A copy of Worksheet #3 will be supplied upon request. The RF radiation will not result in human exposure to radiofrequency radiation in excess of the applicable safety standards specified in §1.1307(b) of the Commission's rules. The facility will be properly marked with signs, and entry will be restricted by means of fencing with locked doors and/or gates. Any other means as may be required to protect employees and the general public will be employed.

DISCUSSION OF REPORT (continued)

In the event work would be required in proximity to the antenna such that the person or persons working in the area would be potentially exposed to fields in excess of the guidelines set forth in OET Bulletin No. 65 (Edition 97-01), the transmitter power will be reduced or the station will cease operation during the critical period.

DISTANCES TO CONTOURS: The table below shows the distances to the 3.16 mV/m and 1.0 mV/m contours from the proposed facility using an ERP of 3.7 kW at an HAAT of 130 meters. These distances have been calculated based on the FCC F(50-50) curves.

N. Lat. = 42 15 14 W. Lng. = 86 20 09							
HAAT and Distance to Contour - FCC Method - USGS-03 Arc Sec.							
Azi.	AV EL	HAAT	ERP kW	dBk	Field	60-F5	70-F5
000	177.5	142.5	3.6190	5.59	0.989	29.44	17.10
045	199.5	120.5	2.6263	4.19	0.842	25.56	14.28
090	206.4	113.6	0.7897	-1.03	0.462	18.72	10.35
135	201.9	118.1	0.9121	-0.40	0.496	19.80	10.91
180	204.0	116.0	2.8718	4.58	0.881	25.66	14.34
225	179.1	140.9	3.4563	5.39	0.966	28.99	16.78
270	176.0	144.0	1.9395	2.88	0.724	25.74	14.49
315	176.0	144.0	2.0813	3.18	0.750	26.14	14.76
Ave El= 190.05 M HAAT= 129.95 M AMSL= 320 M							