

**Before the
Federal Communications Commission
Washington, D.C. 20554**

In the Matter of Application of)	
)	
VULCAN MATERIALS COMPANY)	FCC File No. 0003328258
)	
Request for Waiver of 47 C.F.R. § 90.173(i))	

ORDER

Adopted: March 17, 2009

Released: March 19, 2009

By the Deputy Chief, Mobility Division, Wireless Telecommunications Bureau:

1. *Introduction.* We have before us the above-captioned application and waiver request filed by Vulcan Materials Company (Vulcan).¹ Vulcan seeks authorization to operate on frequencies in the 450-470 MHz band waiver without the standard five megahertz separation between transmit and receive frequencies set forth in Section 90.173(i) of the Commission's Rules,² either as a matter of right or pursuant to waiver. We conclude that Section 90.173(i) does not permit the proposed operations. Based on the record before us, however, we grant Vulcan's waiver request.

2. *Background.* On February 18, 2008, Vulcan filed an application for a new trunked Industrial/Business Pool station at two locations in Lexington, Kentucky. While Section 90.173(i) provides that "[i]n the 450-470 MHz band, the frequencies are ordinarily assigned in pairs, with the mobile station transmit frequency 5 MHz above the paired base station transmit frequency,"³ Vulcan proposes to pair 451 MHz base frequencies with 469 MHz mobile frequencies. Vulcan proposes to utilize the frequencies to communicate between mine personnel within two underground mines, and between personnel in each mine and a surface dispatcher.⁴ Vulcan explains that the eighteen megahertz split is needed to help eliminate intermodulation interference within the confined space of the mines.⁵ Consequently, Vulcan seeks authorization to operate with non-standard channel separation.

3. *Discussion.* Vulcan suggests that Section 90.173(i) permits its proposed operations, because the rule provides that 450-470 MHz band frequencies "ordinarily" are assigned in pairs with 5 MHz spacing, but does not mandate such spacing. We disagree. The rule provides that 450-470 MHz band frequencies "ordinarily" are assigned in pairs, but permits assignment of unpaired simplex frequencies.⁶

¹ See FCC File No. 0003328258, Request for Assignment of Other Than 5 MHz Paired 450 MHz Channels or, in the Alternative, for a Waiver of FCC Rule Section 90.173(i) (filed Feb. 18, 2008) (Waiver Request).

² See 47 C.F.R. § 90.173(i).

³ *Id.*

⁴ See Waiver Request at 1, 3.

⁵ *Id.* at 3. Vulcan also states that frequencies in the 150 MHz band, which generally is not subject to any particular spacing between base and mobile frequencies, are less suitable for use in the confined underground environment than 450-470 MHz band frequencies due to their propagation characteristics. *Id.*

⁶ See Douglas R. Thompson d/b/a Cara Enterprises, *Memorandum Opinion and Order*, 15 FCC Rcd 2816, 2819 ¶ 10 (WTB PSPWD 2000).

When the frequencies are paired, however, the rule mandates five megahertz spacing.⁷ Consequently, Vulcan requires a waiver of Section 90.173(i).⁸

4. To obtain a waiver of the Commission's Rules, a petitioner must demonstrate either that the underlying purpose of the rule(s) would not be served or would be frustrated by application to the present case and that grant of the waiver would be in the public interest; or that, in view of unique or unusual factual circumstances of the instant case, application of the rule(s) would be inequitable, unduly burdensome, or contrary to the public interest, or the applicant has no reasonable alternative.⁹ We conclude that Vulcan has shown that a waiver is warranted under the circumstances presented.

5. Specifying a uniform separation between base and mobile operations is intended, *inter alia*, to standardize the frequency bands on which base and mobile station operations will occur, which facilitates reuse of the spectrum by other licensees.¹⁰ We conclude that the underlying purpose of the rule would not be frustrated by a waiver in the present case. We note that Vulcan proposes to operate primarily underground, and at relatively low power. The proposed frequency configuration therefore appears to have little potential for interference to other users, or to preclude reuse of the frequencies.¹¹ We also conclude that a waiver will serve the public interest, by contributing to the safety and well-being of all mine personnel.

6. Accordingly, IT IS ORDERED, pursuant to Section 4(i) of the Communications Act of 1934, as amended, 47 U.S.C. § 154(i), and Section 1.925 of the Commission's Rules, 47 C.F.R. § 1.925, that the waiver request filed by Vulcan Materials Company filed on February 18, 2008 IS GRANTED and application FCC File No. 0003328258 SHALL BE PROCESSED in accordance with this *Order* and the Commission's Rules.

7. This action is taken under delegated authority pursuant to Sections 0.131 and 0.331 of the Commission's Rules, 47 C.F.R. §§ 0.131, 0.331.

FEDERAL COMMUNICATIONS COMMISSION

Scot Stone
Deputy Chief, Mobility Division
Wireless Telecommunications Bureau

⁷ See Amendment of Parts 21, 89, 91, and 93 of the Rules to Reflect Availability of Land Mobile Channels in the 470-512 MHz Band in the 10 Largest Urbanized Areas in the United States, *Notice of Further Proposed Rulemaking*, Docket No. 18261, 27 F.C.C. 2d 371, 372 ¶ 5 (1971) ("In the proceeding . . . which dealt with the 450-470 MHz band, we . . . adopted requirements for uniform 5 MHz separation between base and mobile channels.") (citing Amendment of Parts 89, 91, 93, and 95 (Formerly 10, 11, 16, and 19) of the Commission's Rules to Reduce the Separation Between the Assignable Frequencies in the 450-470 Mc/s Band, *Second Report And Order*, Docket No. 13847, 11 F.C.C. 2d 648, 649-50 ¶¶ 6-7 (1968)).

⁸ See Cavalier Operating Company, LLC, *Order*, 22 FCC Rcd 7322, 7322-23 ¶ 3 (WTB MD 2007) (*Cavalier*).

⁹ See 47 C.F.R. § 1.925(b)(3).

¹⁰ See *Cavalier*, 22 FCC Rcd at 7323 ¶ 5 (citing Amendments to the Amateur Service Rules Including Amendments for Examination Credit, Eligibility for a Club Station License, Recognition of the Volunteer Examiner Session Manager, a Special Event Call Sign System and a Self-Assigned Indicator in the Station Identification, *Memorandum Opinion and Order*, WT Docket No. 95-57, 14 FCC Rcd 8812, 8813 ¶ 3 (1999)).

¹¹ See *id.* (permitting non-standard channel pairing in a sports arena).