

practicable and permitted by law, to make environmental justice part of their mission by identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects of their programs, policies, and activities on minority populations and low-income populations in the United States.

## 2. Does Executive Order 12898 Apply to This Rule?

EPA has determined that this proposed rule will not have disproportionately high and adverse human health or environmental effects on minority or low-income populations because it does not affect the level of protection provided to human health or the environment. As this rule does not impose any enforceable duty upon State, tribal or local governments, this rule will neither increase nor decrease environmental protection.

### List of Subjects in 40 CFR Part 300

Environmental protection, Air pollution control, Chemicals, Hazardous substances, Hazardous waste, Intergovernmental relations, Natural resources, Oil pollution, Penalties, Reporting and recordkeeping requirements, Superfund, Water pollution control, Water supply.

**Authority:** 33 U.S.C. 1321(c)(2); 42 U.S.C. 9601–9657; E.O. 12777, 56 FR 54757, 3 CFR, 1991 Comp., p. 351; E.O. 12580, 52 FR 2923, 3 CFR, 1987 Comp., p. 193.

Dated: February 24, 2010.

**Mathy Stanislaus,**

*Assistant Administrator, Office of Solid Waste and Emergency Response.*

[FR Doc. 2010–4328 Filed 3–3–10; 8:45 am]

**BILLING CODE 6560–50–P**

## FEDERAL COMMUNICATIONS COMMISSION

### 47 CFR Part 15

[ET Docket Nos. 10–23; 07–96; 06–216; FCC 10–14]

### Tank Level Probing Radars in the Frequency Band 77–81 GHz

**AGENCY:** Federal Communications Commission.

**ACTION:** Proposed rule.

**SUMMARY:** In this document the Commission proposes to modify its rules to allow tank level probing radar (TLPR) devices to operate in the 77–81 GHz frequency band on an unlicensed basis under the provisions of part 15 of the Commission's rules. Specifically, the Commission proposes to modify

§ 15.205 of the rules to remove the prohibition on intentional emissions in the 77–81 GHz band for TLPR devices used in closed storage tanks and vessels made of metal, concrete, or material with similar attenuating characteristics, at fixed locations at petroleum and chemical production and storage facilities, and similar commercial and industrial sites. The Commission believes that its proposals will enable the development and deployment of high frequency technology that operates more effectively and reliably than existing tank level measuring radar technology in certain applications where precision measurements are needed, and in certain tanks which cannot now accommodate existing technology. The Commission believes that, with appropriate restrictions, such high frequency TLPR devices can operate on an unlicensed basis without causing harmful interference to authorized services in the 77–81 GHz band.

**DATES:** Comments must be filed on or before June 2, 2010, and reply comments must be filed on or before July 2, 2010.

**ADDRESSES:** You may submit comments, identified by ET Docket Nos. 10–23; 07–96 and 06–216, by any of the following methods:

- *Federal eRulemaking Portal:* <http://www.regulations.gov>. Follow the instructions for submitting comments.

- *Federal Communications Commission's Web Site:* <http://www.fcc.gov/cgb/ecfs/>. Follow the instructions for submitting comments.

- *E-mail:* [Optional: Include the E-mail address only if you plan to accept comments from the general public]. Include the docket number(s) in the subject line of the message.

- *Mail:* [Optional: Include the mailing address for paper, disk or CD-ROM submissions needed/requested by your Bureau or Office. Do not include the Office of the Secretary's mailing address here.]

- *People with Disabilities:* Contact the FCC to request reasonable accommodations (accessible format documents, sign language interpreters, CART, etc.) by e-mail: [FCC504@fcc.gov](mailto:FCC504@fcc.gov) or phone: 202–418–0530 or TTY: 202–418–0432.

For detailed instructions for submitting comments and additional information on the rulemaking process, see the **SUPPLEMENTARY INFORMATION** of this document.

**FOR FURTHER INFORMATION CONTACT:** Anh Wride, Office of Engineering and Technology, (202) 418–0577, *e-mail:*

[Anh.Wride@fcc.gov](mailto:Anh.Wride@fcc.gov), TTY (202) 418–2989.

**SUPPLEMENTARY INFORMATION:** This is a summary of the Commission's *Notice of Proposed Rule Making and Order*, ET Docket Nos. 10–23; 07–96; and 06–216, FCC 10–14, adopted January 14, 2010, and released January 19, 2010. The full text of this document is available for inspection and copying during normal business hours in the FCC Reference Center (Room CY–A257), 445 12th Street, SW., Washington, DC 20554. The complete text of this document also may be purchased from the Commission's copy contractor, Best Copy and Printing, Inc., 445 12th Street, SW., Room, CY–B402, Washington, DC 20554. The full text may also be downloaded at: <http://www.fcc.gov>.

Pursuant to §§ 1.415 and 1.419 of the Commission's rules, 47 CFR 1.415, 1.419, interested parties may file comments and reply comments on or before the dates indicated on the first page of this document. Comments may be filed using: (1) The Commission's Electronic Comment Filing System (ECFS), (2) the Federal Government's eRulemaking Portal, or (3) by filing paper copies. See *Electronic Filing of Documents in Rulemaking Proceedings*, 63 FR 24121 (1998).

- *Electronic Filers:* Comments may be filed electronically using the Internet by accessing the ECFS: <http://fjallfoss.fcc.gov/ecfs2/> or the Federal eRulemaking Portal: <http://www.regulations.gov>.

- *Paper Filers:* Parties who choose to file by paper must file an original and four copies of each filing. If more than one docket or rulemaking number appears in the caption of this proceeding, filers must submit two additional copies for each additional docket or rulemaking number.

Filings can be sent by hand or messenger delivery, by commercial overnight courier, or by first-class or overnight U.S. Postal Service mail. All filings must be addressed to the Commission's Secretary, Office of the Secretary, Federal Communications Commission.

- All hand-delivered or messenger-delivered paper filings for the Commission's Secretary must be delivered to FCC Headquarters at 445 12th St., SW., Room TW–A325, Washington, DC 20554. The filing hours are 8 a.m. to 7 p.m. All hand deliveries must be held together with rubber bands or fasteners. Any envelopes must be disposed of before entering the building.

- Commercial overnight mail (other than U.S. Postal Service Express Mail and Priority Mail) must be sent to 9300

East Hampton Drive, Capitol Heights, MD 20743.

- U.S. Postal Service first-class, Express, and Priority mail must be addressed to 445 12th Street, SW., Washington, DC 20554.

*People with Disabilities:* To request materials in accessible formats for people with disabilities (braille, large print, electronic files, audio format), send an e-mail to [fcc504@fcc.gov](mailto:fcc504@fcc.gov) or call the Consumer & Governmental Affairs Bureau at 202-418-0530 (voice), 202-418-0432 (tty).

### Summary of Notice of Proposed Rulemaking

In the *Notice of Proposed Rule Making* (NPRM), the Commission proposes to modify its rules to allow the 77–81 GHz frequency band to be used for the operation of TLPR equipment installed inside closed storage tanks made of metal, concrete or other material with similar attenuating characteristics. The Commission proposes a limit of +43 dBm on the transmitter's peak equivalent isotropically radiated power (EIRP) and +23 dBm on the transmitter's average EIRP levels for fundamental emissions when measured in a laboratory setting, *i.e.*, not installed in a tank. The Commission proposes to limit the radiated emissions from a TLPR device, when installed in representative tanks of each material type, to the general radiated emission limits for intentional radiators in § 15.209(a) of our rules when measured outside of the TLPR tank enclosure in any direction and at any frequency below 200 GHz. The Commission proposes that installation of TLPR devices be limited to commercial usage in fixed locations. It further proposes that in order to receive certification, the device be subjected to a compliance test procedure that includes (a) testing of the transmitter's characteristics (fundamental emissions and emissions at band edges, etc.); and (b) radiated emission testing of the radar installed inside representative storage tanks for each type of tank material. The Commission believes that these proposals have the potential to foster the development of a variety of tank level radar measuring products that will benefit industry by providing better accuracy and reliability in target resolution to identify critical levels of materials such as fuel, water, sewer treated waste and high risk substances, thereby reducing storage tank overflow and spilling while minimizing exposure of maintenance personnel to high risk materials. These proposals would promote greater utility for the 77–81 GHz band without increasing the

interference risk to authorized services in the band.

Additionally, the Commission is waiving § 15.205(a) of our rules, subject to certain conditions, to allow Siemens Milltronics Process Instruments Inc. (Siemens), Ohmart/VEGA Corp. (Ohmart/VEGA), and any other responsible party marketing equipment that complies with these conditions (*e.g.*, Endress+Hauser GmbH+Co. KG (Endress+Hauser)) to manufacture, certify, and market TLPR devices in the 77–81 GHz band for a period of two years or until 180 days following the adoption of a Report and Order in this proceeding, whichever is longer. This action will allow the new TLPR technology to be utilized in the near term while the Commission considers modifying the general part 15 rules.

Siemens filed a Petition for Rulemaking requesting that the Commission amend its rules to allow TLPR devices to operate in the restricted 77–81 GHz frequency band. The Commission issued a Public Notice soliciting comments on Siemens's request on December 6, 2006. Ohmart/VEGA and Krohne America, Inc. (Krohne) filed comments that generally supported Siemens petition. Krohne suggests that the Commission should consider allowing TLPR devices to operate in a larger portion of the spectrum, *i.e.*, 75–85 GHz band, to harmonize with European rules for such devices.

Concurrent with its rulemaking petition, Siemens filed a request for waiver of § 15.209(a) to allow TLPR operation in the 78–79 GHz frequency band, subject to certain conditions. Ohmart/VEGA and Krohne filed in support of the Siemens' request. Subsequently, Ohmart/VEGA also filed a request for waiver of § 15.209(a) to allow TLPR operation in the 77–81 GHz band, subject to certain conditions. Endress+Hauser filed in support of the Ohmart/VEGA waiver request and asked that it be granted the same relief. The National Radio Astronomy Observatory (NRAO) states that it would not object to the Ohmart/VEGA waiver if it

*Frequency Band of Operation.* Authorized operations in the 77–81 GHz band currently include radio astronomy (Federal and non-Federal at 76–85 GHz), radiolocation (Federal and non-Federal at 76–77.5 GHz and 78–81 GHz), space research (Federal and non-Federal at 74–84 GHz), amateur (non-Federal at 76–81 GHz), and amateur satellite (non-Federal at 77–81 GHz). These services typically employ highly directional antennas because propagation loss is significant over short distances at these frequencies.

The Commission believes that the proposed TLPR operation will not cause harmful interference to incumbent services in the 77–81 GHz band, based on several factors. First, the general emission limits are 39.6 dB below the emission levels that the Commission previously determined is sufficient to prevent harmful interference in this frequency range. Second, emissions in this band should attenuate more rapidly than the rate predicted by free space propagation due to the greater attenuating effects on radio waves from oxygen, water and any intervening objects at these frequencies; thus, the risk for harmful interference is minimal. Third, TLPR devices would be installed inside tanks which attenuate the radiated emissions so that they would not exceed our general emission limits outside of the tank. Further, because TLPR antennas would be pointing down toward the material inside closed storage tanks, side beam leakage should be minimal given the tank enclosure's attenuation coefficient and the absorption characteristics of the material to be measured (liquid or solid); thus, reflected signals should be contained within the tank. Finally, the Commission is proposing certain operational conditions (regarding emission limits, tank materials, and site locations) that would further reduce the likelihood of harmful interference to authorized services. Accordingly, the Commission believes that TLPR devices would be able to share spectrum with authorized services in the 77–81 GHz band, and it seeks comment on what impact, if any, our proposal to allow TLPR operations in this band would have on authorized services.

Regarding radio astronomy, the Commission observes that NRAO submitted comments in response to the Ohmart/VEGA petition to request special considerations to protect radio astronomy services, such as a mandatory 2 kilometer distance separation, between any permanent TLPR installation and radio astronomy site. Although radio astronomy has a primary allocation in the entire 77–81 GHz band proposed for TLPR operations, the Commission notes that, the part 15 rules currently allow spurious emissions approximately 39.6 dB higher than the radiated emission limit allowed in § 15.209 which the Commission proposes to apply to TLPR devices. In addition, vehicle radars, which are subject to the higher emission limits, are more likely to be operating in the vicinity of radio astronomy sites than TLPR devices in tanks at fixed locations. The Commission already

determined that the higher spurious emissions would not result in harmful interference, even without requiring a minimum separation distance from radio astronomy sites; operation at a level 39.6 dB lower also should not be a source of harmful interference. Furthermore, radio astronomy stations manage the RF systems used on their properties, and thus they may choose to exclude TLPR devices on their properties. The Commission further notes that TLPR devices currently operate under the general non-interference requirements of § 15.5 of our rules as would those proposed in this NPRM. Under these rules, the operator of a TLPR device is responsible for eliminating any harmful interference that may occur or must cease operation upon notification by a Commission representative that the device is causing harmful interference. Thus, the Commission believes that radio astronomy sites would be sufficiently protected. Accordingly, it tentatively concludes that it is not necessary to require any separation distance between a TLPR installation and a radio astronomy site. The Commission seeks comment on this tentative conclusion.

The 75–85 GHz frequency band encompasses many more incumbent licensed operations than the 77–81 GHz band requested by Siemens. In addition to those services authorized in the 77–81 GHz band identified, the authorized services in the 75–85 GHz band include fixed/mobile/fixed satellite (Federal and non-Federal at 74–76 GHz and 81–85 GHz), mobile satellite (Federal and non-Federal at 81–84 GHz), and broadcast and broadcast satellite (non-Federal at 74–76 GHz). In addition, unlicensed vehicle radars are allowed to operate in the 76–77 GHz band. Krohne notes that these regions of the spectrum are similarly allocated in Europe and in the U.S., and ETSI studies have shown that there is little risk of interference from devices which emit at or below the general emission limits for unlicensed radiators. Moreover, Krohne states that TLPR antennas, by design, are directed downward and operate only inside of tank structures which further reduce any risk of harmful interference to other spectrum users. Accordingly, Krohne believes that there is little reason for the Commission not to consider adopting the same spectrum policies for TLPR devices as those that are being followed in Europe. The Commission seeks comment on whether it should allow TLPR devices to operate in the 75–85 GHz band, including what impact, if any, such operations would have on authorized users in the band. The

Commission invites commenters to submit into the record any technical studies on the feasibility of allowing TLPR devices to operate in the 75–85 GHz frequency band.

*Radiated emission limits.* Siemens requests that the Commission establish a peak EIRP level of +43 dBm for fundamental emissions for TLPR devices at 77–81 MHz, with 10 dB attenuation requirement at band edges and 20 dB attenuation requirement for peak spurious emissions. Siemens proposes that when a TLPR device is installed in a storage tank, the radiated emissions outside the TLPR tank enclosure at any frequency in the range of 40 to 250 GHz be limited to a level of –41.3 dBm/MHz, which is an equivalent isotropically radiated power (“EIRP”) level that approximates the general radiated emission limits for intentional radiators under § 15.209(a) of the rules. Siemens states that protection of co-channel users as well as other spectrum users in the harmonically related bands is assured by compliance of the TLPR device with the part 15 requirement for intentional radiators (i.e., attenuated to an EIRP level of –41.3 dBm/MHz), as measured *in-situ* outside the tank, and by attenuation of emissions at band edges and spurious emissions, as measured on tests on the radar transmitter by itself.

As requested by Siemens, the Commission proposes to allow TLPR devices to operate in the 77–81 GHz band at a maximum peak EIRP of +43 dBm. It is also proposing a maximum average EIRP of +23 dBm. This is consistent with the existing provision in our rules which specifies a limit on peak power that is 20 dB greater than the average limit. The Commission also proposes to require that when the radar is installed inside a storage tank, the device shall comply with the general radiated emission limits in § 15.209(a), in any direction outside the tank enclosure. The Commission proposes to apply the field strength emission limits in § 15.209(a), rather than the limit on EIRP requested by the petitioners to regulate emissions radiated from the enclosure. The specification of a limit based on EIRP is appropriate when discussing the level of emissions from a transmitter. However, the Commission believes that the levels of emissions radiated from an enclosure are more accurately characterized by a field strength specification. The Commission seeks comment on the proposals.

Siemens suggests limits on radiated emissions outside the TLPR tank enclosure at any frequency in the range 40 GHz to 250 GHz. The Commission notes that its current part 15 rules

require measurements of a transmitter from the lowest fundamental frequency up to the fifth harmonic or 200 GHz, whichever is lesser. Measuring above 200 GHz, as Siemens proposes, could require additional specialized measurement instrumentation which may not be readily available. The Commission seeks comments on potential problems that might be encountered in measuring emissions above 200 GHz. It further notes that if a radar transmitter generates any radio frequency signals below 40 GHz, *e.g.*, if it contains digital circuitry such as a microprocessor, our rules require that measurements be made at frequencies lower than Siemens’ proposed 40 GHz lower limit. Similar requirements would apply to digital circuitry associated with the radar’s receiver. As such, the Commission believes that the part 15 rules concerning emissions above and below 40 GHz are adequate for TLPR devices and do not think that it is necessary to extend the upper measurement frequency to 250 GHz from 200 GHz. The Commission seeks comments on this tentative conclusion.

*Radar Technique.* The Commission observes that currently TLPR devices typically use either pulsed radar waves or frequency-modulated continuous waves (FMCW). In pulsed radars, short duration pulses are transmitted toward the target and the target distance is calculated using the transit time. In FMCW radars, a continuous frequency-modulated signal is transmitted, and the frequency difference caused by the time delay between transmission and reception indicates the target distance. The Commission believes that there should be no restriction to the type of radar technique used by the device, because the radar technique used does not appear to affect the interference potential of the device, as long as the device is compliant with the emission limits. The Commission notes that ETSI does not differentiate between radar equipment using FMCW or pulse in its standard. The Commission therefore proposes to make available the 77–81 GHz frequency band for use by TLPR devices incorporating any radar technique, subject to the operational restrictions discussed in the NPRM. The Commission seeks comment on this proposal.

*Operational Restrictions.* The Commission proposes to require that TLPR devices in the 77–81 GHz band be installed in tanks made of metal, concrete or material of similar characteristics that attenuate radiated emissions to the levels we proposed. It also proposes to require that a TLPR device be operated only when the tank

is closed. The Commission notes that in allowing the emission levels for the transmitter, the ETSI standard specifically states that the TLPR device must be installed in closed metallic tanks or reinforced concrete tanks, or similar enclosure structures made of material with comparable attenuating characteristics. In closed tanks made of metal or concrete material, the main emissions outside the tank typically result only from the leakage of the escaping radar signal through the transmitter enclosure or through the mounting flange of the TLPR devices. However, if the tank is open when the radar is operating, the radar signal can escape through any such opening. The Commission also observes that there is a large difference in attenuation coefficient between metal/concrete and plastic or fiberglass material. The Commission is therefore concerned that an open tank or a tank made of material other than metal and/or concrete may allow higher leakage of the radar signals through any opening and through the tank walls, which could potentially cause harmful interference to other radio services. The Commission seeks comment on these proposals to restrict the types of tanks these devices can be installed in.

While the Commission is proposing to restrict the types of tank materials to metal and concrete, it is also requesting comment on Siemens' request that the Commission allow the tank enclosure to be of any material type (e.g., plastic, fiberglass, etc.) The Commission notes that at the proposed +23 dBm EIRP average transmitted level, the TLPR signal must be attenuated by at least 64.3 dB in order to meet the equivalent -41.3 dBm EIRP of § 15.209 radiated emission limit of 500  $\mu\text{V}/\text{m}$  at 3 meters. The Commission therefore seeks comment on whether it should also allow installation of TLPR devices in tanks made of other types of material of lesser attenuation coefficient, including open-air installations, and if so, what additional measures it should adopt to ensure that TLPR devices installed in such enclosures comply with the limit for radiated emissions outside the tank. Comments should address what additional limitations the Commission should place on such use and any supplemental parameters and measurement procedures it should consider. For example when other tank materials are employed, should a more stringent EIRP limit be imposed on the radar transmitter, and how can it be demonstrated that the material employed provides sufficient

attenuation to ensure that the emissions do not exceed the limits in § 15.209?

The Commission also proposes to limit installations of TLPR devices to fixed locations in commercial or industrial environments to minimize proximity to authorized services operating in the same frequency band. It seeks comment on this proposal.

**Compliance Testing.** Siemens suggests a 2-tiered testing approach to ensure compliance of TLPR devices. It proposes that we require the transmitter's output power to be tested to show compliance with the emission limits both in-band and at band edges and with unwanted emission limits. It further proposes that we require that the tank assembly be tested with the transmitter installed inside a representative storage tank at three representative customer's sites for *in-situ* testing. Ohmart/VEGA suggests that testing for compliance with the limits when the TLPR is installed inside the tank could be performed at an open area test site (OATS) as well, rather than *in-situ* at customers' sites. The Commission observes that testing the tank assembly at a test site raises a question of the types of tanks that can be provided by the testing organization, and whether they would be representative enclosures of comparable dimensions. It notes that ETSI allows the use of a metallic test tank at a test site. On the other hand, *in-situ* testing would require compliance tests to be performed on a representative tank made of each material type at three representative sites (e.g., a representative metallic tank at three representative sites, a representative concrete tank at three representative sites, etc.), which could prove burdensome to the applicant depending on the various enclosure types that are intended to be used with the radar.

The Commission proposes to require that TLPR devices be subjected to a compliance test procedure that includes (a) testing of the transmitter's characteristics (fundamental emissions and emissions at band edges, etc.); and (b) radiated emission testing of the radar installed inside representative storage tanks for each type of tank material. The Commission seeks comment on this proposal. It also seeks comment on whether testing should be performed *in-situ* with the radar installed inside representative storage tanks at three installations for each type of tank material or if the *in-situ* testing could be replaced by measuring the attenuation characteristics of the type of material proposed to be used for the tank; and performing a radiated emission test at an open area test site (OATS) to demonstrate that the emissions that

emanate from any part of the transmitter which is external to the tank, *i.e.*, the portion of the transmitter that is not shielded by the tank material, comply with the § 15.209 emission limits in all directions. This alternative procedure would substitute for *in-situ* measurements, reducing the burden for the applicant, while ensuring that the system complies with the applicable emission limits.

The Commission also proposes to require that TLPR devices designed to operate in the 77–81 GHz band be approved under the Commission's certification procedures and that certification be performed by the Commission rather than by Telecommunications Certification Bodies (TCB). Because a standard test procedure for TLPR devices has not yet been devised, this will enable the Commission to develop appropriate measurement guidelines for devices operating in this frequency band. After the Commission has developed measurement guidelines and gained experience with these devices, it may allow certification by the TCBs. The Commission seeks comment on this proposal.

The Commission is also granting waivers of the restriction on spurious emissions in the 77–81 GHz band set forth in § 15.205(a) to Siemens, Ohmart/VEGA, and any other responsible party (e.g., Endress+Hauser) that meets the waiver conditions specified in this NPRM. The Commission finds that a waiver of the spurious emissions restriction of § 15.205(a) as requested by these petitioners will serve the public interest because it will allow deployment of TLPR devices with improved accuracy and reliability and will reduce risks caused by overfilling and accidental spillage of storage tanks, while the Commission considers modifying our general part 15 rules in the rulemaking proceeding that it is initiating. The Commission concludes that, with appropriate operational and technical restrictions, a waiver of the restriction on intentional emissions in § 15.205(a) can be granted for a limited time pending the conclusion of our rule making without increasing the potential for harmful interference, and is therefore in the public interest. These findings apply equally to the requests of Siemens and Ohmart/VEGA.

The Commission exempts TLPR devices from the restriction on intentional emissions in the 77–81 GHz band, it is requiring them to comply with our existing average radiated emissions limit for devices operating above 960 MHz, *i.e.*, 500  $\mu\text{V}/\text{m}$  or the equivalent of -41.3 dBm/MHz EIRP, as

measured at 3 meters. Further, the Commission requires that TLPR devices mandated and operated under the waiver meet all part 15 requirements, except for § 15.205(a), including the 20 dB peak-to-average requirement of § 15.35(b) which is also a controlling factor on peak emissions.

Accordingly, with the exception of § 15.205(a), the Commission will require TLPR devices operating under this waiver to comply with all applicable standards of part 15. The Commission further finds that allowing controlled deployments of TLPR devices operating under the waiver at fixed locations at industrial sites in metal or reinforced concrete storage tanks will serve the public interest by providing a reliable means of protecting the environment and the safety of employees in industrial processes from the risks of accidental spillage and exposure to high risk materials. These areas would include those that are critical to the country's infrastructure, such as petrochemical and nuclear plants. Deployment of TLPR devices will enhance the security procedures of these areas, thereby facilitating homeland security efforts. The Commission will limit TLPR devices operating under this waiver to closed tanks made of metal or concrete only, for the reasons elaborated in conjunction with our proposed rule changes.

In addition, the storage tanks in which the TLPR devices are to be mounted will be at fixed locations, thus increasing the likelihood that they will be located away from and thus not likely to interfere with authorized users in the band. Further, since TLPR installations will be limited to commercial/industrial applications, the Commission believes that such installations will be maintained by trained professionals, as noted by Siemens. Finally, the Commission finds that our compliance test procedure will provide assurance that not only the TLPR device's design itself meets the fundamental emissions and spurious emissions requirements in our rules, but that the installation (TLPR device and storage tank) also comply with the rules. The Commission therefore concludes that the operational restrictions constitute good controlling factors on the scope and scale of use of TLPR devices operating under this waiver, thus minimizing their impact on authorized radio users in the band.

The Commission has already determined that spurious emissions at 39.6 dB higher than the limit in § 15.209 would not result in harmful interference, even without separation

requirements from radio astronomy sites. Further, NRAO states that it does not expect that TLPR devices will cause harmful interference to radio astronomy. The Commission believes that any concerns that NRAO has in this regard are adequately addressed with the other operational restrictions it is imposing (e.g., fixed location, commercial/industrial applications) and if harmful interference does occur despite our expectation to the contrary, the TLPR device will be required to be shut down.

With respect to Ohmart/VEGA's offer to maintain a database of TLPR installations, we note that Siemens did not make a similar offer. The Commission recognizes that TLPR devices operating under this waiver will be fixed installations at commercial or industrial locations, where there likely would be few, if any, radio astronomy sites. Although the Commission believes that interference to radio astronomy is very unlikely under these conditions, it nonetheless will require that, for the duration of the waiver, Siemens and Ohmart/VEGA maintain lists of TLPR installations that will be available to the Commission in the event that an interference complaint is raised by an authorized user. Because customer information is competitively sensitive, the Commission will not require that the lists be publicly available.

The Commission will not limit the number of TLPR installations during the waiver period, as Ohmart/VEGA offers. It is imposing a number of conditions on TLPR operation that reduces the likelihood of interference, e.g., fixed location, closed tank operation, metal or reinforced concrete storage tanks, and commercial/industrial locations.

The Commission will allow other responsible parties, such as Endress+Hauser, to request certification of TLPR devices in the 77–81 GHz band, provided they meet the conditions described in the Order for operation in these bands. The certification application shall state that the party is seeking approval under the terms and conditions of the Order, and approved devices will be subject to these terms and conditions. If a responsible party cannot attest that its TLPR device meets the terms and conditions of this Order, the Commission will not consider its certification application unless that party has requested a waiver of applicable rules.

Accordingly, for a period of two years or for a period of 180 days following the adoption of a Report and Order in this proceeding, whichever is longer, the Commission is waiving the intentional emissions restriction of § 15.205(a) to allow any TLPR manufacturer to obtain

FCC certification for its TLPR devices to operate in the 77–81 GHz band subject to compliance with the following provisions:

(1) The TLPR device shall comply with all the technical specifications applicable to operation under part 15 of 47 CFR with the exception of § 15.205(a), and shall be certified by the Commission.

(2) The TLPR device shall be subjected to compliance testing to demonstrate that:

i. The TLPR device's fundamental emissions shall comply with a peak radiated EIRP limit of +43 dBm and an average EIRP limit of +23 dBm in the 77–81 GHz band.

ii. Emissions from the device appearing outside of the 77–81 GHz band shall be attenuated to at least 20 dB below the highest level of the fundamental emission. The –20 dB bandwidth of the device must be contained within the 77–81 GHz band, under all conditions of operation including the effects from pulsing or other modulation techniques that may be employed as well as the frequency stability of the transmitter over the temperature range –20 to +50 degrees Celsius and an input voltage variation of 85% to 115% of rated input voltage.

iii. When installed in a storage tank, emissions radiated in any direction from the TLPR shall not exceed the general limits in § 15.209 of the rules. Testing in a storage tank shall be performed on each type of representative tank.

(3) The TLPR device shall be installed in storage tanks made of metal, concrete or material with similar attenuating characteristics only. The tank shall be closed when the radar device is operating. Care shall be taken to ensure that gaskets, flanges, and other openings are sealed to eliminate signal leakage outside of the structure.

(4) The TLPR device shall be installed only at fixed locations.

(5) The applicant shall maintain a record of installations of the devices it operates or sells under this waiver, including the identity of the customer and the address or geographical coordinates of each installation, for the duration of the waiver. This record shall be made available to the Commission upon request.

#### Ordering Clauses

Pursuant to §§ 1, 4(i), 303(f), 303(g), and 303(r) of the Communications Act of 1934, as amended, 47 U.S.C. 151, 154(i), 303(g), and 303(r), the *Notice of Proposed Rule Making is adopted* and the Petition for Rule Making by Siemens Milltronics Process Instruments, Inc.

filed on November 3, 2006, is hereby *granted* to the extent described herein.

Pursuant to authority in § 1.3 of the Commission's rules, 47 CFR 1.3, and §§ 4(i), 302, and 303(e), of the Communications Act of 1934, as amended, 47 U.S.C. 154(i), 302, and 303(e), the Request for Waiver filed by Siemens Milltronics Process Instruments, Inc. filed on November 3, 2006, is *granted*, consistent with the terms of this Order. This action is effective upon release of the Order.

Pursuant to authority in § 1.3 of the Commission's rules, 47 CFR 1.3, and §§ 4(i), 302, and 303(e), of the Communications Act of 1934, as amended, 47 U.S.C. 154(i), 302, and 303(e), the Request for Waiver filed by Ohmart/VEGA Corp. filed on April 30, 2007, is *granted* in part and *denied* in part consistent with the terms of the Order. This action is effective upon release of the Order.

Pursuant to authority delegated in § 0.241 of the Commission's rules, 47 CFR 0.241, the Office of Engineering and Technology may approve equipment certification applications consistent with the terms and conditions of the waivers granted by the Order for any responsible party that attests and demonstrates in its application that it seeks approval under and satisfies the terms and conditions of the Order.

The Commission's Consumer and Governmental Affairs Bureau, Reference Information Center, shall send a copy of the *Notice of Proposed Rule Making and Order*, including the Initial Regulatory Flexibility Analysis to the Chief Counsel for Advocacy of the Small Business Administration.

#### Initial Regulatory Flexibility Analysis

As required by the Regulatory Flexibility Act of 1980, as amended (RFA), the Commission has prepared this present Initial Regulatory Flexibility Analysis (IRFA) of the possible significant economic impact on a substantial number of small entities by the policies and rules proposed in the NPRM. Written public comments are requested on this IRFA. Comments must be identified as responses to the IRFA and must be filed by the deadlines for comments provided on the first page of the NPRM. The Commission will send a copy of the NPRM, including this IRFA, to the Chief Counsel for Advocacy of the Small Business Administration (SBA).

#### A. Need for, and Objectives of, the Proposed Rules

The rule making proposal was initiated to obtain comments regarding

proposed changes to the regulations for radio frequency devices that do not require a license to operate. The Commission seeks to determine if the standards should be amended to permit intentional emissions in the 77–81 GHz by tank level probing radars (TLPR) to provide better accuracy and reliability in target resolution to identify critical levels of materials such as fuel, water and sewer treated waste and high risk substances. Specifically, we propose to allow intentional emissions in the 77–81 GHz restricted band for TLPR devices used in closed storage tanks and vessels made of metal, concrete or comparable material, at petroleum and chemical production and storage facilities and similar industrial sites. The Commission believes that our proposals herein would enable TLPR devices to provide better accuracy and reliability in target resolution to identify critical levels of materials such as fuel, water and sewer treated waste and high risk substances. The proposed amendments to our rules will permit these devices to operate effectively and reliably, reducing storage tank overflow and spilling while minimizing exposure of maintenance personnel to high risk materials, all without increasing the risk of interference to authorized services.

#### B. Legal Basis

The proposed action is taken pursuant to §§ 4(i), 301, 302, 303(e), 303(f), 303(r), 304 and 307 of the Communications Act of 1934, as amended, 47 U.S.C. 154(i), 301, 302, 303(e), 303(f), 303(r), 304 and 307.

#### C. Description and Estimate of the Number of Small Entities to Which the Proposed Rules Will Apply

The RFA directs agencies to provide a description of and, where feasible, an estimate of the number of small entities that may be affected by the proposed rules, if adopted. The RFA generally defines the term "small entity" as having the same meaning as the terms "small business," "small organization," and "small governmental jurisdiction." In addition, the term "small business" has the same meaning as the term "small business concern" under the Small Business Act. A small business concern is one which: (1) Is independently owned and operated; (2) is not dominant in its field of operation; and (3) satisfies any additional criteria established by the SBA.

*Radio and Television Broadcasting and Wireless Communications Equipment Manufacturing.* The Census Bureau defines this category as follows: "This industry comprises establishments primarily engaged in manufacturing

radio and television broadcast and wireless communications equipment. Examples of products made by these establishments are: transmitting and receiving antennas, cable television equipment, GPS equipment, pagers, cellular phones, mobile communications equipment, and radio and television studio and broadcasting equipment." The SBA has developed a small business size standard for Radio and Television Broadcasting and Wireless Communications Equipment Manufacturing, which is: all such firms having 750 or fewer employees. According to Census Bureau data for 2002, there were a total of 1,041 establishments in this category that operated for the entire year. Of this total, 1,010 had employment of under 500, and an additional 13 had employment of 500 to 999. Thus, under this size standard, the majority of firms can be considered small.

*Wireless Service Providers.* The SBA has developed a small business size standard for wireless firms within the two broad economic census categories of "Paging" and "Cellular and Other Wireless Telecommunications." Under both categories, the SBA deems a wireless business to be small if it has 1,500 or fewer employees. For the census category of Paging, Census Bureau data for 2002 show that there were 807 firms in this category that operated for the entire year. Of this total, 804 firms had employment of 999 or fewer employees, and three firms had employment of 1,000 employees or more. Thus, under this category and associated small business size standard, the majority of firms can be considered small. For the census category of Cellular and Other Wireless Telecommunications, Census Bureau data for 2002 show that there were 1,397 firms in this category that operated for the entire year. Of this total, 1,378 firms had employment of 999 or fewer employees, and 19 firms had employment of 1,000 employees or more. Thus, under this second category and size standard, the majority of firms can, again, be considered small.

The Commission does not expect that the rules proposed in the NPRM will have a significant negative economic impact on small businesses.

#### D. Description of Projected Reporting, Recordkeeping, and Other Compliance Requirements

Part 15 transmitters already are required to be authorized under the Commission's certification procedure as a prerequisite to marketing and importation. The reporting and recordkeeping requirements associated

with these equipment authorizations would not be changed by the proposals contained in this Notice. The changes to the regulations would permit operation of radar devices used in specific industrial applications in a higher frequency band (77–81 GHz).

*E. Federal Rules That May Duplicate, Overlap or Conflict With the Proposed Rules*

None.

**List of Subjects in 47 CFR Part 15**

Communications equipment, Radio, Reporting and recordkeeping requirements.

Federal Communications Commission

**Marlene H. Dortch,**

*Secretary.*

**Rule Changes**

For the reasons discussed in the preamble, the Federal Communications Commission proposes to amend 47 CFR part 15 to read as follows:

**PART 15—RADIO FREQUENCY DEVICES**

1. The authority citation for part 15 continues to read as follows:

**Authority:** 47 U.S.C. 154, 302(a), 303, 304, 307, 336 and 544a.

2. Section 15.205 is amended by revising paragraph (d)(4) to read as follows:

**§ 15.205 Restricted bands of operation.**

\* \* \* \* \*

(d) \* \* \*

(4) Any equipment operated under the provisions of § 15.253, § 15.255, § 15.256 or § 15.257 of this part.

\* \* \* \* \*

3. Section 15.256 is added to read as follows:

**§ 15.256 Operation within the band 77–81 GHz.**

(a) Operation within the 77–81 GHz band is limited to tank level probing radars (TLPR) under the provisions of this section.

(1) TLPR transmitters must be operated only while mounted inside storage tanks or similar structures with antennas directed downward. Such storage structures shall be made of metal, concrete or other material with substantially similar attenuating characteristics. The tank shall be closed during the operation of the intentional radiator. Care shall be taken to ensure that gaskets, flanges, and other openings are sealed to eliminate signal leakage outside of the structure.

(2) Storage tanks or structures housing a TLPR device shall be installed only in

fixed locations and in commercial or industrial environments.

(b) The emission levels shall not exceed the following:

(1) Within the 77–81 GHz band, the equivalent isotropically radiated power (EIRP) of the TLPR transmitter without the storage tank shall not exceed +43 dBm peak and +23 dBm average.

(2) Emissions appearing outside of the 77–81 GHz band shall be attenuated to at least 20 dB below the highest level of the fundamental emission. The –20 dB bandwidth of the device must be contained within the 77–81 GHz band under all conditions of operation including the effects from pulsing or other modulation techniques that may be employed as well as the frequency stability of the transmitter over the temperature range –20 to +50 degrees Celsius and an input voltage variation of 85% to 115% of rated input voltage.

(3) Emissions radiated in any direction from the TLPR while installed in the storage tank or enclosure shall not exceed the general limits in 15.209 of this part.

(4) Compliance measurements for TLPR devices shall be made in accordance with the measurement guidelines specified by the Commission for TLPR devices operating in the 77–81 GHz band.

[FR Doc. 2010–4562 Filed 3–3–10; 8:45 am]

**BILLING CODE 6712–01–P**

**FEDERAL COMMUNICATIONS COMMISSION**

**47 CFR Part 73**

[MB Docket No. 09–52; FCC 10–24]

**Policies To Promote Rural Radio Service and To Streamline Allotment and Assignment Procedures**

**AGENCY:** Federal Communications Commission.

**ACTION:** Proposed rule.

**SUMMARY:** In this document, the Commission adopted a Further Notice of Proposed Rulemaking (FNPRM), in which it announced that it was considering, without proposing specific rules, two issues urged by commenters in this proceeding. First, the Commission is considering whether, how, and under what circumstances federally-recognized Native American Tribes and Alaska Native Villages (Tribes) should receive a bidding credit in auctions for new radio stations. Second, the Commission is considering whether and how the Tribal Priority adopted in the First Report and Order (First R&O) in this proceeding might be

claimed by Tribes that do not possess defined tribal lands.

**DATES:** Comments may be filed on or before May 3, 2010 and reply comments may be filed on or before June 2, 2010. Written comments on the Paperwork Reduction Act proposed information collection requirements must be submitted by the public, Office of Management and Budget (OMB), and other interested parties on or before May 3, 2010.

**ADDRESSES:** You may submit comments, identified by MB Docket No. 09–52, by any of the following methods:

- *Federal eRulemaking Portal:* <http://www.regulations.gov>. Follow the instructions for submitting comments.
- *Federal Communications Commission's Web Site:* <http://www.fcc.gov/cgb/ecfs/>. Follow the instructions for submitting comments.
- *E-mail:* [ecfs@fcc.gov](mailto:ecfs@fcc.gov). Include the docket number in the subject line of the message. See the **SUPPLEMENTARY INFORMATION** section of this document for detailed information on how to submit comments by e-mail.
- *Mail:* 445 12th Street, SW., Washington, DC 20554.
- *People with Disabilities:* Contact the FCC to request reasonable accommodations (accessible format documents, sign language interpreters, CART, etc.) by e-mail: [FCC504@fcc.gov](mailto:FCC504@fcc.gov) or phone: 202–418–0530 or TTY: 202–418–0432. For detailed instructions for submitting comments and additional information on the rulemaking process, see the **SUPPLEMENTARY INFORMATION** section of this document.

**FOR FURTHER INFORMATION CONTACT:**

Peter Doyle, Chief, Media Bureau, Audio Division, (202) 418–2700; Thomas Nessinger, Attorney-Advisor, Media Bureau, Audio Division, (202) 418–2700.

For additional information concerning the Paperwork Reduction Act information collection requirements contained in this document, contact Cathy Williams at 202–418–2918, or via the Internet at [Cathy.Williams@fcc.gov](mailto:Cathy.Williams@fcc.gov).

**SUPPLEMENTARY INFORMATION:** This is a summary of the Commission's Further Notice of Proposed Rulemaking, FCC 10–24, adopted January 28, 2010, and released February 3, 2010.

**Initial Paperwork Reduction Act of 1995 Analysis**

The FNPRM contains potential information collection requirements subject to the PRA, Public Law 104–13. OMB, the general public, and other Federal agencies are invited to comment on the potential new and modified information collection requirements