RF exposure compliance and protection of rooftop workers and building occupants

October 21, 2026

The Honorable Robert F. Kennedy, Jr.
Secretary
U.S. Department of Health and Human Services
Attention Office of the Assistant Secretary for Health

Re: Docket HHS-OASH-2026-0397
Request for Information on Electromagnetic Fields, Radiofrequency Radiation, and Wireless Radiation Exposure

Dear Secretary Kennedy and HHS Review Team:

Spectrum Cellular Management, requests that HHS make real-world RF exposure assessment, worker notification, and independent compliance validation central to its evaluation of wireless radiation. We offer our radiofrequency engineering team as a technical resource to the Department. Our field experience identifies an urgent practical concern: people maintaining and occupying buildings may lack the information and control needed to avoid elevated RF exposure near transmitting antennas.

We are an electromagnetic energy compliance and RF engineering company. Our team brings approximately 40 years of RF engineering experience and experience across more than 10,000 cell sites designed, engineered, constructed, and installed. We consider SCM a national leader in independent 5G electromagnetic energy compliance and safety evaluation. We work for property owners and public-interest clients, independently of cellular carriers and tower companies.

This submission represents an engineering business and technical advisory perspective under question 2. We support counsel in litigation involving 5G safety concerns and claims concerning trespass and inverse condemnation. Those matters inform our observations; they are not presented as adjudicated findings. Our central request is for enforceable, understandable exposure controls that reach owners, workers, and occupants before a potentially hazardous encounter occurs.

We respond to questions 2, 3, 5, 7–11, 13, 15–18. The following pages integrate all thirteen supplied photographs, engineering graphics, and city inventory reviews. They distinguish our reported observations, illustrative models, recommendations, and unresolved evidence needs. References appear at the end. [1]

The HVAC worker incident and the need for advance warning

Response to HHS questions 3 5 7 8 9 11 and 18

In a survey that I recall as occurring in 2019, our engineer partner Kyle used a Narda NBM-520 broadband field meter beside a rooftop HVAC unit adjacent to a 4G LTE antenna. Our interpretation of the measurements was that a person at the evaluated position could exhaust the applicable time-averaged exposure allowance in approximately 30 seconds or less. This is our reported engineering interpretation, not a biological injury threshold or a direct instrument countdown.



Figure 1. SCM supplied Vero graphic showing Kyle with the Narda meter and the HVAC equipment. The original graphic says 2018; the submitting author recalls 2019. This date discrepancy remains unresolved in the materials available for this submission.

We were informed that an HVAC technician had worked on that unit for approximately three and a half hours, three days before our survey. According to our account, she had not been warned that antenna power reduction or shutdown might be necessary, and the property owner did not know such coordination could be required. The duration is a reported work history, not a reconstructed RF dose. We have no clinical diagnosis or documented health outcome to submit for this worker.

A properly selected NBM-520 probe permits field measurements and comparison with exposure standards; interpretation under FCC guidance requires the probe response, applicable limit, averaging method, location, and operating conditions. [2–4] Original measurement logs, calibration records, probe identification, antenna operating data, and the exposure-time calculation are not enclosed. HHS should treat the reported 30-second value as a field account pending those records.

What the warning sign tells workers and owners

Response to HHS questions 5 9 11 and 18

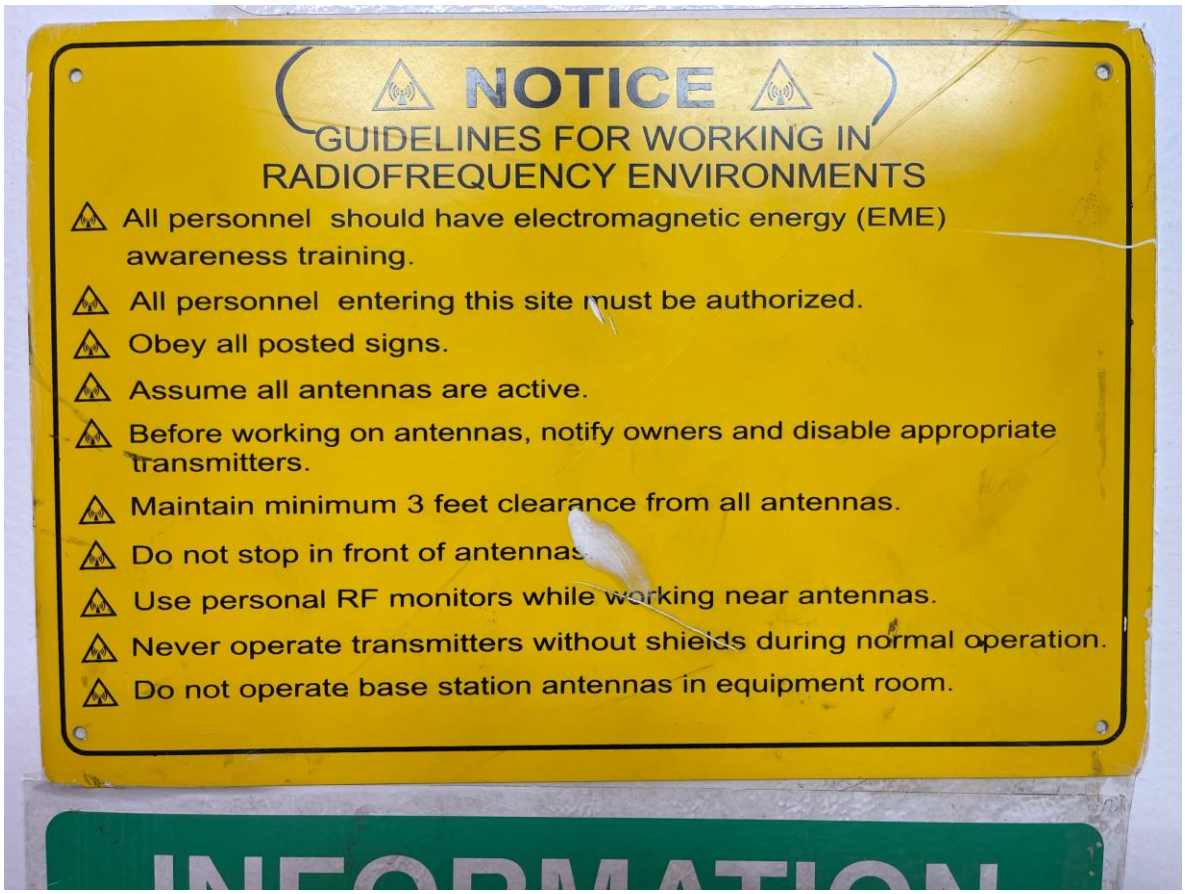


Figure 2. Photograph of a carrier RF notice at a rooftop access location. The notice addresses EME awareness training, authorization, active antennas, RF monitors, and transmitter coordination.

The yellow notice states: “All personnel should have electromagnetic energy (EME) awareness training.” It also instructs personnel to assume antennas are active and to coordinate transmitter disabling before working on antennas. These warnings show the importance of a practical training and access-control system. A posted sign does not establish that a landlord or visiting HVAC technician has received effective training or can arrange a timely shutdown.

In our work with dozens of HVAC repair personnel, painters, roofers, facilities staff, and property owners, we repeatedly encounter people who do not understand RF exposure restrictions or the process for making work areas accessible. We request direct notice to owners and contractors, a current shutdown contact, and a documented work authorization process.

A sign or lease cannot substitute for an accurate site-specific exposure assessment. Employment alone does not qualify a person for occupational exposure limits; awareness and the ability to control exposure matter. [2]

Rooftop maintenance requires workable access controls

Response to HHS questions 5 8 9 11 and 18



Figure 3. Antenna installations and a chain-and-post boundary near a rooftop work area. The photograph documents physical layout; it does not establish measured RF levels.

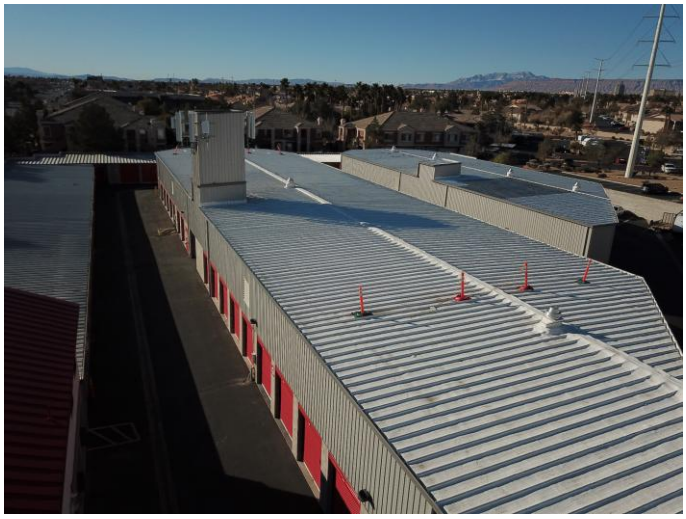


Figure 4. An extensive rooftop boundary on a metal roof. Such boundaries should be tied to a validated RF assessment and an accessible maintenance plan.

Rooftop maintenance is foreseeable. HVAC repair, roofing, painting, leak response, inspections, and building operations bring workers close to equipment that may appear ordinary or inactive. We ask HHS to examine how antenna operators communicate RF restrictions to these workers and how operators verify that shutdown and power-reduction procedures actually function.

Restricted areas should be mapped at working heights, connected to identifiable equipment, and re-evaluated after antenna changes. Controls should address access paths, ladders, rooftop hatches, and emergency work. A worker should not have to improvise an exposure-time calculation in order to complete routine building maintenance.

A photograph of barriers is the beginning of an assessment

Response to HHS questions 7 8 9 10 and 11



Figure 5. Additional rooftop photograph showing antennas and a marked boundary. The image is preserved in its supplied orientation.

Our recommendation is to pair every restricted rooftop area with a current engineering record: antenna inventory, operating assumptions, assessed work locations, boundary rationale, and instructions for safe access. Photographs help document the setting and communication practices, but do not alone establish a violation, a person's exposure, or a health effect.

A useful federal initiative would compare the restrictions described in carrier reports with the actual conditions encountered by building workers. Audits should assess whether signs are visible from every entry, barriers are intact, access routes remain usable, and responsible personnel can obtain a verified power reduction before entering a restricted location.

For occupational surveillance, HHS should consider standardized recording of unintended entries, failed shutdown requests, missing training, and inconsistencies between plans and field conditions. These records can identify preventable exposure situations without treating every report as proof of injury.

The Newport Beach barricade and loss of building access

Response to HHS questions 5 9 11 15 and 18



Figure 6. The building identified by SCM as the Newport Beach Union Bank property. Posts and chains occupy a substantial rooftop area near the stair structure. The photograph does not independently establish the dimensions of an RF exclusion zone.

SCM is concerned that the RF restriction associated with this installation may extend into or across the staircase used to reach the roof. Our concern includes the possibility that allowable time at some locations could be measured in minutes or less. No staircase measurement record, three-dimensional model, or time calculation is enclosed; we therefore ask HHS to treat that duration as an unverified site concern requiring independent assessment, not a measured finding.

Where an operator restricts space beyond the agreed lease area, the owner may lose access to property needed for building operation. Counsel with whom we work have characterized some such circumstances as potential trespass or unauthorized occupation. The extent of the property right, consent, and any inverse-condemnation theory require review of the particular lease, facts, and applicable law.

These conditions also create liability and insurance questions. A barricade does not automatically establish a breach of every owner's general liability policy. Coverage, exclusions, notice obligations, and responsibility require the actual policy and insurer review. HHS should examine the public-health consequences when owners inherit exposure-management responsibilities without clear disclosure or operational control.

Changes in antenna configuration require a fresh evaluation

Response to HHS questions 5 8 13 15 and 18

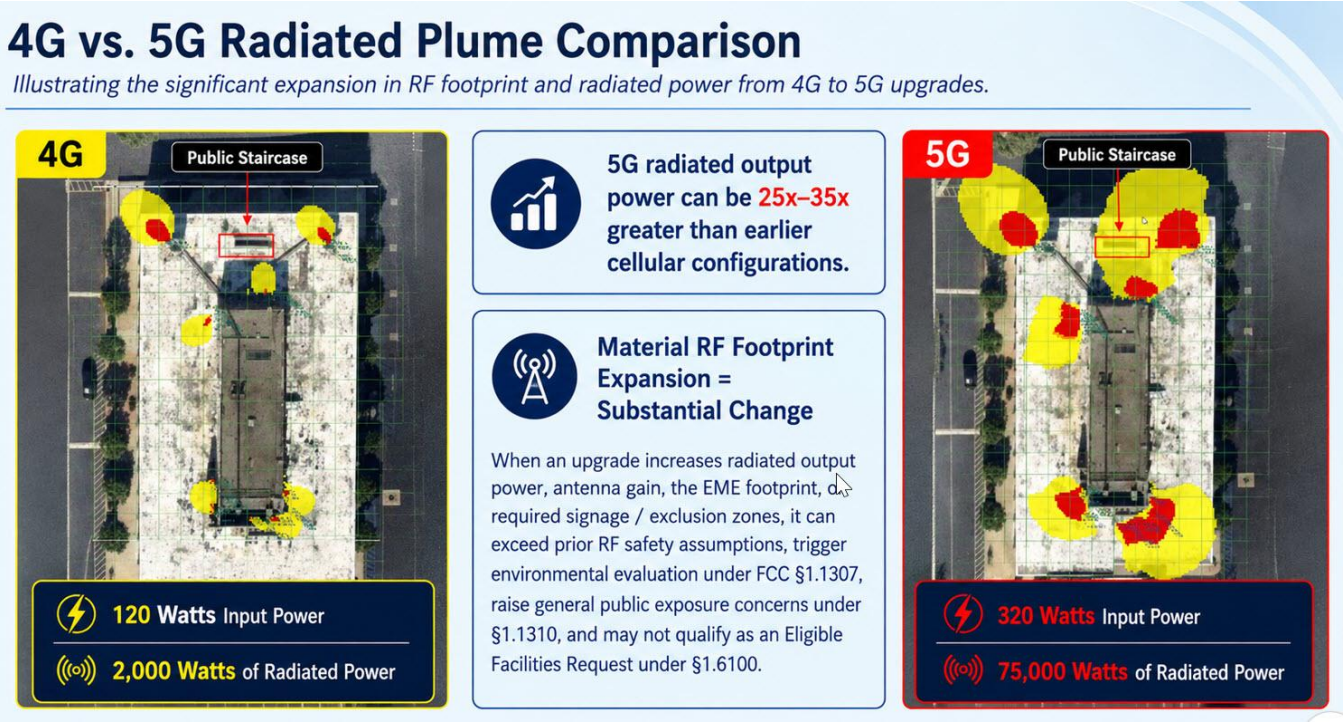


Figure 7. SCM supplied comparison of modeled 4G and 5G rooftop RF footprints. The numerical power comparison and legal conclusions printed in the graphic are illustrative assertions, subject to the qualifications below.

Our concern is that a replacement antenna system can change the location and extent of restricted areas, including previously usable work areas and access routes. A previous compliance report should not be assumed to describe a changed installation. The assessment should reflect the equipment and operating envelope actually authorized and deployed.

The supplied graphic compares 2,000 watts with 75,000 watts of stated radiated power, a ratio of 37.5, while its banner refers to approximately 25–35 times. These figures are not independently validated here. Transmitter input power, total radiated power, and directional effective radiated power are different quantities and must be identified consistently before a comparison is used.

We do not assert that every 5G installation produces 30–35 times the exposure of every 4G installation. Local exposure depends on configuration, traffic, beamforming, antenna pattern, distance, and other sources. Likewise, an RF footprint change alone does not resolve eligibility under Section 6409(a); that legal determination requires the relevant regulatory criteria and project facts.

For the Vero example, a hypothetical 30-second exposure allowance divided by a 30–35-fold increase in local power density yields approximately 1.0–0.86 seconds, assuming the same limit, averaging method, and negligible other exposure. This illustrates why reassessment matters. It is not a measured 5G result, an operational permission, or proof that a person is safe for that interval.

Interpreting the 5G beam and the illustrated distance

Response to HHS questions 5 7 8 11 13 and 15

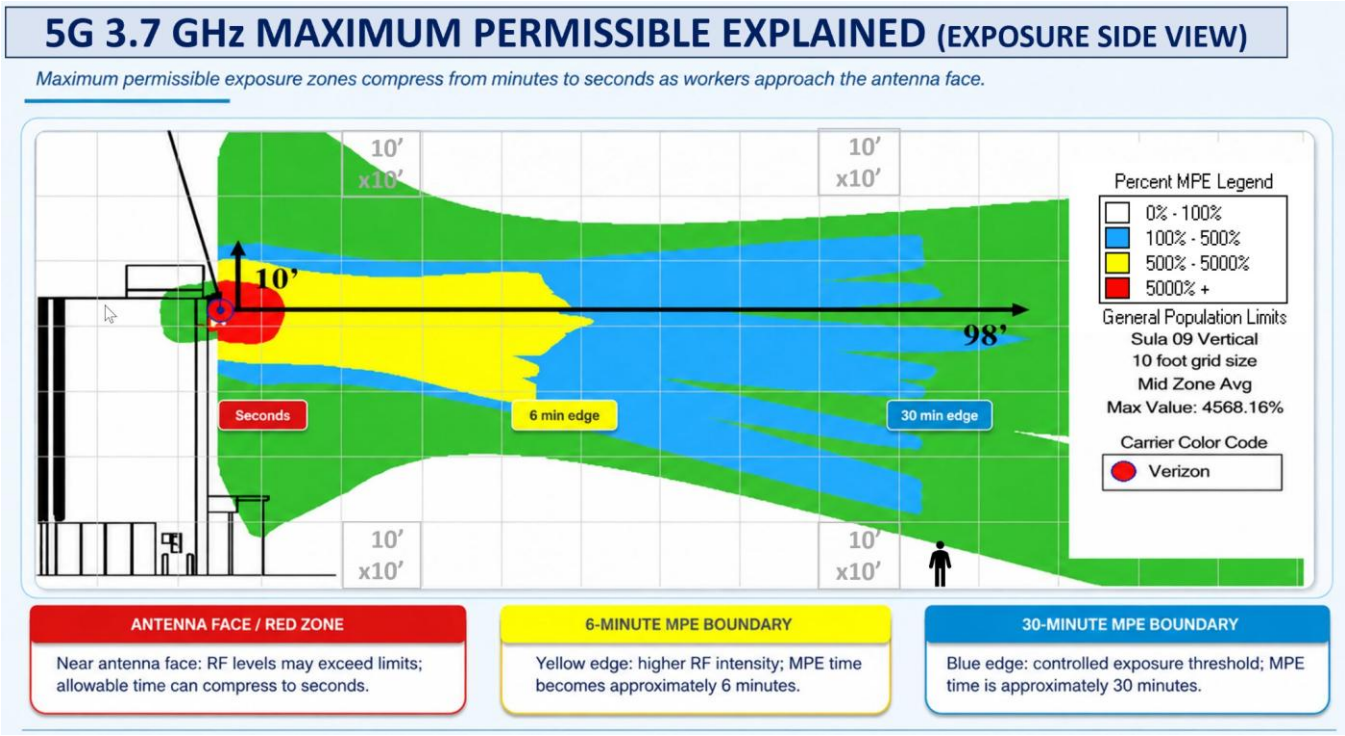


Figure 8. SCM supplied 3.7 GHz side-view model with a 10-foot grid and a 98-foot horizontal annotation. Colored contours portray modeled percentages of MPE; they are not visible radiation or field measurements.

The 98-foot annotation shows the illustrated horizontal extent of the arrow along the modeled beam. It must not be treated as a universal safe setback, the exact compliance contour, or a guarantee of safety at 98 feet. The figure also prints a maximum of 4,568.16% while its legend includes a 5,000%+ category; that internal inconsistency requires checking against the original model. The model inputs and calculation report are not enclosed.

The graphic's "6 min edge," "30 min edge," and "Seconds" labels are explanatory shorthand and should not be interpreted as approved occupancy times. Its blue callout also describes a controlled threshold, although the plot legend references general-population limits. For this submission, the applicable exposure category and actual percent-MPE contour must be established from the underlying model, rather than inferred from those callouts.

FCC averaging periods are compliance assessment periods, not automatic countdowns to injury. A person at or below an applicable limit is not limited to six or thirty minutes merely because that averaging period is used. Conversely, brief entry into an area of elevated fields is not automatically acceptable. [2–3]

At a constant normalized exposure ratio R, a simplified time-budget illustration is T/R, where T is the applicable averaging period, assuming zero exposure for the remainder of the interval. Prior exposure, multiple sources, field nonuniformity, and other applicable limits must also be considered. We recommend engineered controls and verified shutdowns rather than worker reliance on short time budgets.

Residents windows and antenna side and rear lobes

Response to HHS questions 8 9 11 13 and 15



Figure 9. Antennas close to occupied building features, including windows and an elevated outdoor area. The photograph identifies locations for assessment, not a measured exceedance.

Antenna exposure evaluation should consider occupied rooms, windows, balconies, terraces, and neighboring buildings at relevant heights. Directional antennas can have side and rear lobes; a location outside the main forward beam is not automatically free of RF exposure. Actual exposure requires the antenna pattern, frequency, operating assumptions, aggregate contributions, and relevant building attenuation to be evaluated.

Residents and ordinary building users generally cannot control transmitter operation. We recommend clear owner-facing and occupant-facing information describing evaluated areas, applicable assumptions, changes to the installation, and a contact for independent review. The presence of a nearby antenna alone does not establish an adverse health effect or noncompliance.

HHS should prioritize research and field assessment in buildings with residential occupancy and where children, older adults, or people with implanted medical devices may be present. Research on health outcomes and device interference should use appropriate methods and should be distinguished from whether a particular installation meets an RF exposure limit.

Independent validation and informed property owner consent

Response to HHS questions 5 8 9 15 and 18

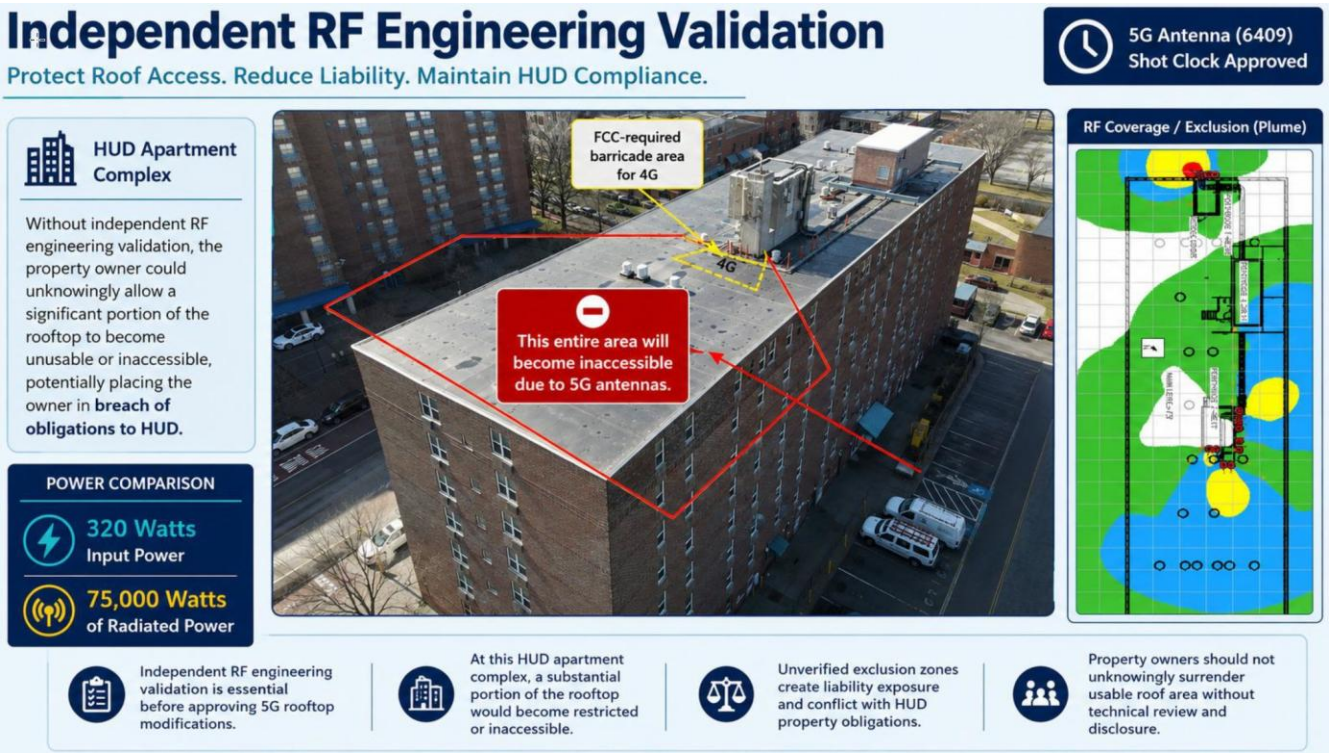


Figure 10. SCM supplied graphic illustrating potential loss of rooftop access at an apartment property and an example modeled exposure map. Power, HUD, and legal statements within the graphic require project-specific support.

The graphic illustrates our concern that an owner may agree to an antenna installation without understanding how a later RF restriction could affect the rest of the roof. We request independent engineering review of the usable building area and access routes before construction and again after significant antenna changes. A particular HUD obligation or violation must be evaluated against the property's actual program requirements and facts.

In leases and owner communications we have reviewed, we repeatedly find inadequate explanation of RF training, signage, exclusion zones, shutdown procedures, and the practical consequences for the landlord's retained property. We cannot substantiate the broader proposition that none of an estimated 1.4 million nationwide leases contains such provisions; we therefore ask HHS to investigate disclosure practices through a representative review rather than rely on that absolute claim.

Owners should receive a readable map and written explanation before granting approval for restrictions outside the equipment footprint. The documents should identify who supplies training and signs, who pays for surveys, who controls transmitter operation, and how emergency building work proceeds. Contractual consent and insurance review should accompany, rather than replace, the technical assessment.

Real world exposure mapping and reproducible measurements

Response to HHS questions 7 8 10 13 15 and 16

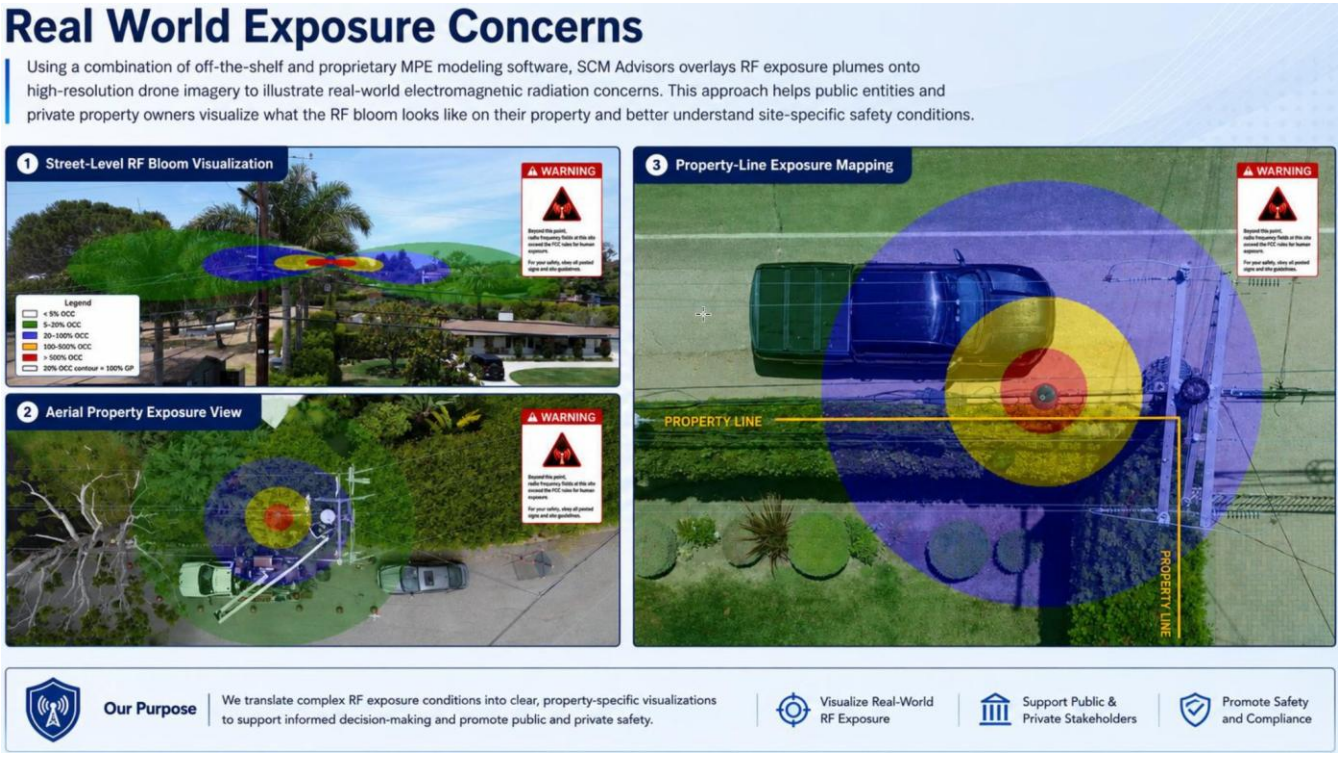


Figure 11. SCM supplied examples of modeled RF contours overlaid on imagery, including property boundaries and occupied surroundings. These are engineering visualizations, not direct photographs of radiation.

HHS can help close the gap between a compliance report and the places people actually use. We recommend three-dimensional assessments at working and occupied heights, validated against appropriately designed field measurements. Inputs should account for antenna patterns, maximum relevant operating conditions, beamforming behavior, multiple transmitters, terrain, and building geometry.

A reproducible record should identify the antenna configuration, frequencies, powers and power definitions, probe model and calibration, survey time and locations, spatial and temporal averaging, measurement uncertainty, traffic conditions, and any extrapolation to maximum operation. A broadband result should not be assigned to a single antenna or carrier without technical support.

The figures submitted here are case illustrations and engineering communication materials, not a controlled epidemiological study. The underlying model files, calibration records, and raw readings are not included. We offer to work with HHS on a documented protocol and an appropriately authorized process for reviewing further records while protecting confidential client information.

Pasadena demonstrates the need for independent inventory reconciliation

Response to HHS questions 8 9 10 15 16 and 18

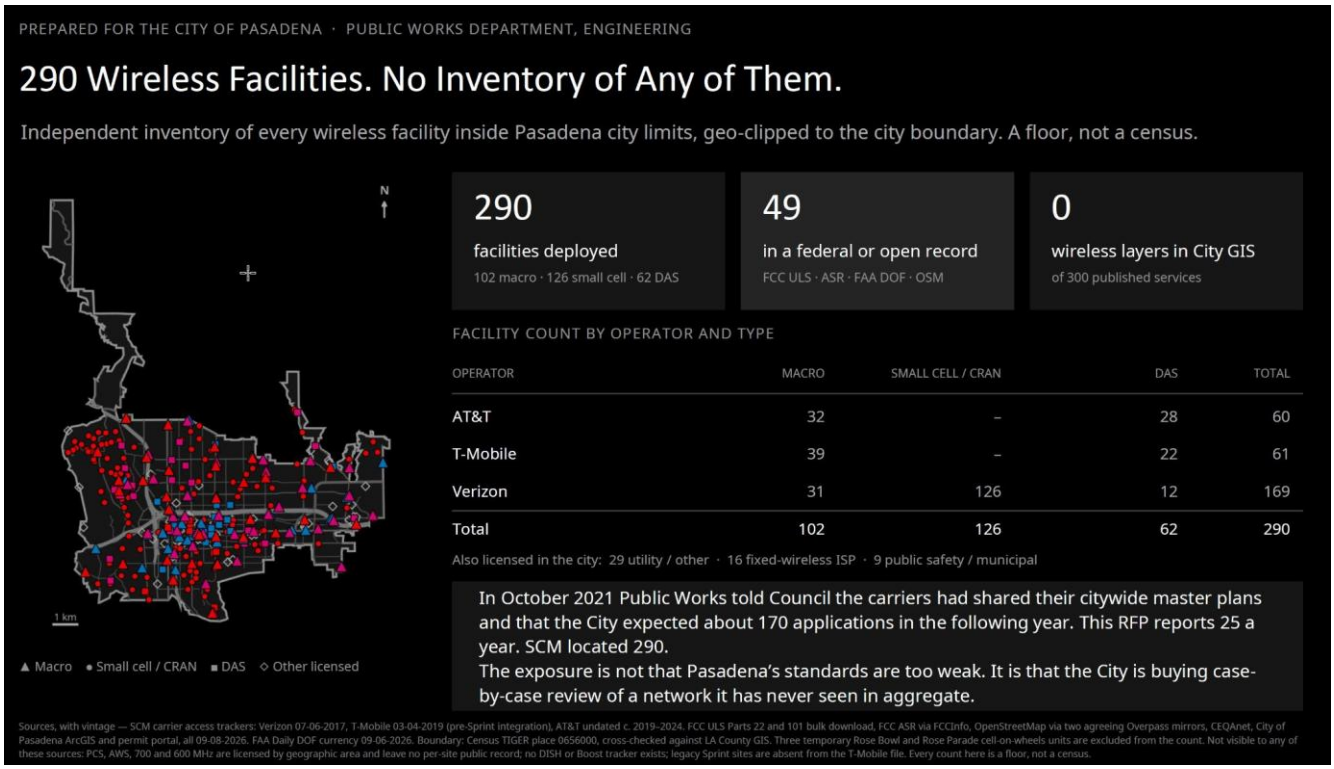


Figure 12. SCM supplied Pasadena inventory review. The slide reports 290 deployed facilities, 49 matches in the federal or open records reviewed, and no wireless layer among 300 published City GIS services. These are SCM findings from the stated sources and review period.

Our Pasadena review identified 290 facilities: 102 macro facilities, 126 small-cell facilities, and 62 distributed antenna system facilities. The reported carrier totals are 60 AT&T, 61 T-Mobile, and 169 Verizon. The slide describes the inventory as a minimum count rather than a complete census. Its sources have different dates and include carrier access trackers, FCC datasets, FAA information, mapping sources, and City GIS and permit resources.

Only 49 of the 290 facilities were matched in the federal or open records described on the slide. That leaves 241 unmatched in those sources, approximately 83.1 percent. This measures a record-matching gap. It is not a count of proven unpermitted facilities: some cellular authorizations are geographic licenses rather than individual site records, and approvals may exist in municipal archives or other records not captured by the comparison.

In SCM's assessment, these gaps indicate that municipal staff may lack a consolidated view of the infrastructure deployed within their jurisdiction. To determine which facilities were built without the City's knowledge or required approval, the next step is a documented reconciliation with the City's permit, planning, zoning, and other applicable approval records. This distinction is important for both defensible enforcement and an accurate public-health inventory.

For HHS, the practical implication is immediate: assessment of infrastructure-related exposure needs a geographically complete starting inventory, with the provenance and confidence of each record visible. A collection of carrier submissions or a single public registry may leave important locations unrecognized.

Montebello illustrates a repeatable national audit method

Response to HHS questions 8 9 10 15 16 and 18

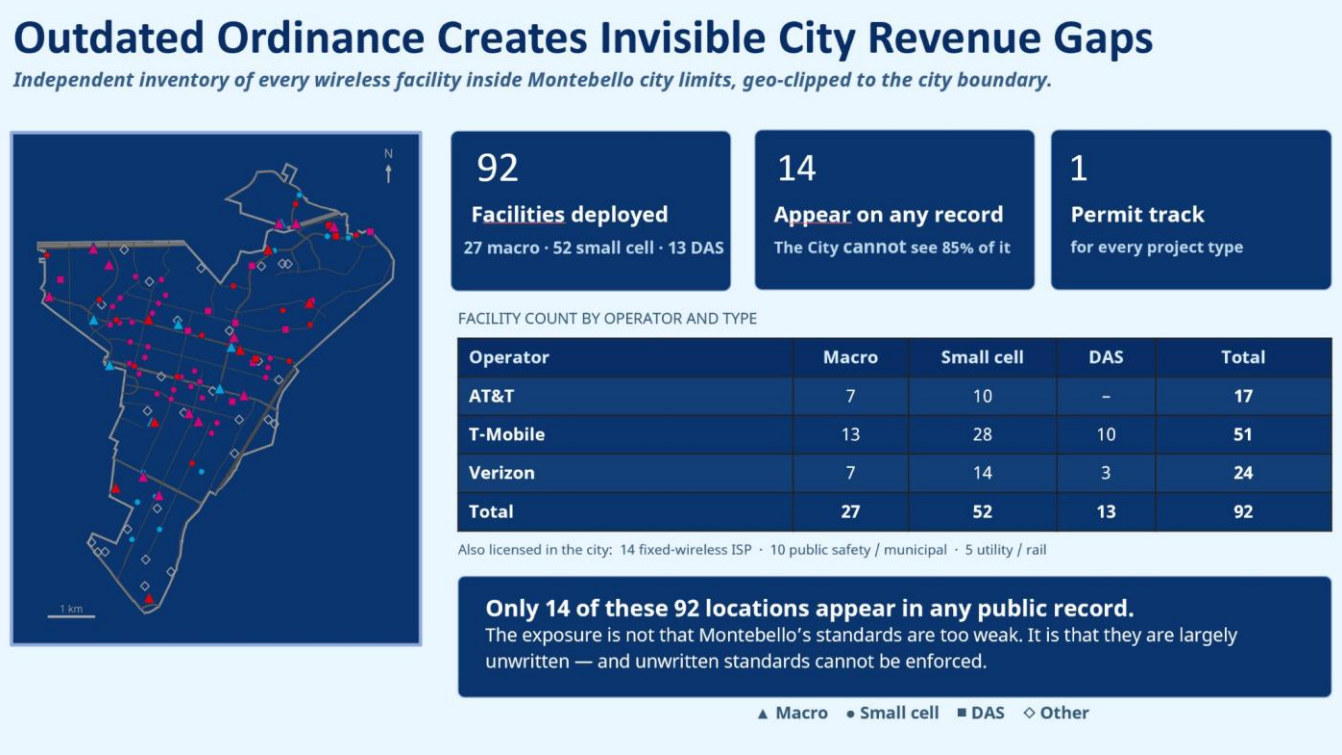


Figure 13. SCM supplied Montebello inventory review reporting 92 deployed facilities and 14 locations appearing in the public records reviewed. Statements within the slide about City visibility and permitting require reconciliation with the complete municipal record.

The Montebello review reports 92 facilities: 27 macro facilities, 52 small-cell facilities, and 13 distributed antenna system facilities. Its carrier totals are 17 AT&T, 51 T-Mobile, and 24 Verizon. With 14 locations matched in the reviewed records, 78 locations, approximately 84.8 percent, were unmatched. These results illustrate how SCM can organize a city inventory by carrier and facility type and direct further records review.

Based on our broader field and records experience, SCM's preliminary estimate is that more than two-thirds of U.S. cell sites may lack documented applicable municipal planning, zoning, or other local approval. This is an unvalidated national estimate, not a statistically established rate. The two city slides alone do not prove it. Required approvals vary by facility and jurisdiction; a separate city council vote is not necessarily required for every installation.

We ask HHS to support a national audit that tests this estimate through transparent sampling and records reconciliation. Findings should distinguish confirmed approval, approval record not located, unresolved jurisdiction or approval requirement, and a confirmed deficiency after the appropriate authority's review. This would prevent an incomplete database from being mistaken for proof of unlawful construction.

The recurring concern is the independence of oversight. Relying exclusively on an operator to identify every facility, define every exposure boundary, and certify its own completeness leaves public agencies without a reliable independent check. SCM offers a way to establish that check using documented source records and engineering review.

Actions we ask HHS to advance

Response to HHS questions 5 7–11 and 15–18

We request that HHS pursue the following actions within its authority and coordinate with the FCC, occupational safety agencies, and other appropriate departments where responsibilities are shared.

Independent field validation

Develop a pilot program comparing RF compliance reports with measured and modeled conditions at rooftops, residential buildings, schools, and public facilities. Prioritize locations where ordinary workers approach antennas or where an exclusion zone may interfere with access.

Practical worker protection

Promote standardized owner and contractor notification, effective RF awareness training, current warning signs, verified shutdown contacts, and documented procedures for HVAC, roofing, painting, inspections, and emergency work.

Disclosure before installation and upgrade

Recommend clear disclosure of exposure-related access restrictions, the assessed three-dimensional boundaries, and any change in the usable property area. Encourage informed owner review before restrictions are imposed outside an agreed lease footprint.

Better surveillance and research

Support consistent reporting of unintended RF exposure events and control failures. Study 5G beamforming, aggregate exposure, occupied building surfaces, and the reliability of compliance assumptions. Distinguish measured exceedances, reported symptoms, and clinically evaluated health outcomes.

Transparent responsibilities

Clarify who maintains signs and barriers, updates RF plans, communicates with workers, funds independent verification, and provides emergency transmitter control. Encourage owners to obtain legal and insurance review appropriate to their actual documents.

An engineering working group

Include independent RF engineers, building owners, maintenance trades, occupational health experts, researchers, and affected communities. SCM offers to participate as a radiofrequency engineering resource and assist with case review, survey protocols, technical interpretation, and staff education.

Our experience across more than 10,000 cell sites has taught us that RF protection must be implemented where people work and live. We welcome the opportunity to brief your team and help develop technically defensible, practical measures for protecting rooftop workers, property owners, and building occupants.

SCM offers HHS a national wireless infrastructure audit

Response to HHS questions 7 8 9 10 13 15 16 17 and 18

SCM offers to serve as HHS's independent RF engineering and national wireless inventory audit resource. We are capable of undertaking a nationwide audit, organized city by city and reconciled across jurisdictions, to establish what infrastructure exists, who operates it, which frequencies are documented, and where records or exposure assessments require further investigation.

We have developed a proprietary database and AI agent workflow that aggregates FCC public licensing and registration information with other documented public sources and available carrier and municipal records. We can apply this system to any city in the United States. The system uses FCC information; this does not imply an FCC partnership, endorsement, or privileged access. Source dates, coverage limitations, and record conflicts would be retained in the audit trail.

Carrier and frequency analysis

Our proposed inventory would identify operator or carrier, location and jurisdiction, facility type, documented frequency bands, source references, and the status of applicable local approvals. Frequency assignments would distinguish licensed spectrum available in an area from frequencies documented as deployed at an individual facility. Where site-level frequency or operator attribution is incomplete, we would flag it for reconciliation or measurement rather than present an inference as a verified fact.

Deliverables for HHS and participating cities

We propose a national GIS inventory, carrier and frequency summaries, city-level reconciliation reports, and a prioritized list of facilities requiring engineering review. An evidence file would link each conclusion to its supporting record and identify the date, confidence, and unresolved issues. Follow-up engineering work could assess aggregate exposure near occupied buildings and routine work areas, using documented modeling and field measurements where appropriate.

A practical path to national coverage

We recommend beginning with a representative pilot across several jurisdictions, agreeing on facility definitions and verification standards, and then scaling nationally. The audit would separately report database coverage, records reviewed, sites verified, and remaining gaps. No current public dataset should be represented as a complete census of every deployed cellular facility; nationwide completeness requires reconciliation, municipal cooperation, and targeted verification.

We respectfully request a technical meeting with HHS to demonstrate the proprietary platform and discuss a pilot scope, methodology, deliverables, and phased national implementation. Please contact SCM Advisors through Michael Flores at mflores@scmadvisors.net. We welcome the opportunity to become the Department's independent RF engineering resource for this effort.

Respectfully submitted,

Michael Flores
Founder and Chief Executive Officer
Spectrum Cellular Management | SCM Advisors

References and scope of submitted evidence

Response to HHS questions 2 and 18

[1] HHS Request for Information

Request for Information on Electromagnetic Fields, Radiofrequency Radiation, and Wireless Radiation Exposure. September 21, 2026. Docket HHS-OASH-2026-0397. Federal Register document 2026-19252.

https://www.federalregister.gov/d/2026-19252

[2] FCC exposure limits

47 CFR 1.1310. Consult the applicable exposure category, averaging provisions, and assessment requirements.

https://www.ecfr.gov/current/title-47/section-1.1310

[3] FCC evaluation guidance

OET Bulletin 65, Evaluating Compliance with FCC Guidelines for Human Exposure to Radiofrequency Electromagnetic Fields, Edition 97-01. Guidance should be read alongside current FCC rules and applicable technical guidance.

https://www.fcc.gov/general/oet-bulletins-line

[4] Narda instrument information

Narda NBM-520 product information, probe descriptions, and manufacturer downloads. Actual survey capability depends on the installed probe and survey configuration.

https://www.narda-sts.com/en/products/emf-measuring-devices-and-solutions/nbm-520/

Photographic and engineering evidence

Figures 1–13 are materials supplied by SCM for this comment. Photographs document visible conditions. Composite slides, colored contours, and city inventory reviews communicate SCM interpretations, illustrative models, and records-reconciliation findings. They do not independently establish RF exposure levels, individual dose, illness, liability, insurance coverage, or legal violations. Where printed slide statements differ from the accompanying narrative, the qualifications and corrections in this letter govern our submission.

The national two-thirds estimate and the distinction between unmatched records and missing required approvals also require further validation. The Vero date discrepancy, the precise 30-second calculation, the staircase exposure estimate, the modeled beam inputs and contour labels, the power comparison, and lease and insurance conclusions require underlying records for independent verification. We have identified those limitations expressly so HHS can assess the weight of the evidence. No confidential lease, insurance policy, medical record, or privileged litigation material is enclosed.

This is one organizational response. The integrated illustrations are part of the comment and should be considered with their adjacent captions and explanations. SCM offers further technical assistance subject to appropriate authorization and records review.