



CONTRACTOR EHS HANDBOOK

CARLSBAD, CA

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1 Applicability

This handbook applies to all Contractors, Service/Technical Representatives, Vendors & Suppliers performing work/service or delivering goods on Viasat Carlsbad owned or operated facilities. For purpose of brevity the above categories of workers will be referred to in this document as “Contractor”. Nothing in this Handbook shall create any employment relationship between Viasat and Contractor or Contractor’s subcontractors or employees.

2 Policy Statement

It is a Viasat policy to provide a safe and healthy working environment. The purpose of this handbook is to make all Contractor personnel aware of the critical need to maintain a safe workplace, to eliminate causes of accidents and provide direction on environmental, safety, health, and fire requirements.

Viasat is registered to ISO 14001 Environmental Management System.

3 Purpose and Scope

The California Occupational Safety and Health Administration (Cal/OSHA) requires each employer to provide a workplace that is free of recognized hazards that might cause serious injuries. This handbook establishes minimum Environmental Health and Safety (EHS) performance expectations for contractors, including construction contractors and those performing facility maintenance at the Viasat Carlsbad facility. Each contractor is expected to perform their work in a manner that minimizes the risk of injury and property damage. All contractors must comply at a minimum with the following:

- Compliance with applicable Federal, State and Local regulations (Cal/OSHA, Cal/EPA, OSHA, EPA and NFPA) and requirements of this document.
- Use of required safety equipment and personal protective equipment (PPE).
- Practice of safe work habits.
- Practice good housekeeping on the job site.
- Prompt reporting of injuries, incidents, and unsafe conditions.

Contractors shall verify that supervisors, employees, and sub-contractors all understand and comply with all applicable information in this handbook. If questions arise, contact the responsible Viasat Program Manager (PM) or Facilities Representative (FR).

Viasat PM/FR will periodically review the work of contractors. However, Viasat employee’s that are involved with the project will not direct the day-to-day activities of contractors or “supervise” contractor employees. Any noncompliance issues will be reported to the Viasat PM/FR, or EHS representative. If repeat violations are observed, work may be stopped, and the contractor may be asked to leave the property. If a contract company is observed in a pattern of noncompliance, contract arrangements with that company may be discontinued.

4 Roles and Responsibilities

All Contractors, Service/Technical Representatives, Vendors & Suppliers, including Subcontractor personnel, shall:

- Promote safe practices, comply with all Viasat requirements/regulations.
- Be familiar with and comply with all applicable Federal, State, and local and municipal environmental, safety & health, and fire regulations, statues, rules, and ordinances while working on Viasat Carlsbad property.
- Ensure environmental, health, and safety information, provided by Viasat is communicated to all their employees and subcontractors working on-site.
- Shall review the Viasat EHS brief and the applicable requirements of this handbook with their employees and Subcontractor employees before entering Viasat Carlsbad property.
- Provide proof that all contractor and subcontractor employees have read, understood, and comply with all EHS related information that is provided by Viasat.
- Upon entry onto Viasat Carlsbad property and before starting any work, contractors shall coordinate their activities with their assigned Viasat Point of contact. The Point of contact shall communicate with Viasat Carlsbad EHS, local fire protection services, facilities maintenance, and other appropriate functions to establish safety, health, fire, and environmental precautions.
- Holding safety meetings in accordance with their Injury and Illness Prevention Program (IIPP).
- Being properly trained and adequately certified/qualified for their specific line of work.
- Immediately notify construction supervisor, Viasat PM/FR, any code violations that would result from execution of the desired work or that occur inadvertently because of their work.
- Being aware of the surroundings and the impact of the work to be performed. It is the Contractor's responsibility to know and understand the systems being worked on.
- Providing the Viasat PM/FR a Site-Specific Safety Plan (SSSP) or the appropriate Permit to Work (PTW) forms for the projects involved on site and to ensure they are routed appropriately and posted at the build site.
- Verify tools and equipment are adequate and safe for use.
- Inspect the site daily to ensure it is hazard-free and to ensure that all hazardous materials and tools are put away or is secured.
- Ensure all instructions and guidance from Security escorts are followed and that at no time will contractor personnel leave/venture away from the immediate area without a security escort.

5 General

The following Viasat safety, health, fire, environmental, and transportation requirements and information are general requirements for safe performance and are not a complete list of regulatory requirements. Viasat point of contact, Project managers, Facilities representative and EHS can provide additional information, on request.

5.1 Emergency Procedures

Prior to the commencement of work, the contractor will confirm with the PM/FR the location of a designated assembly area.

Contractors shall adhere to all building evacuation alarms by evacuating to designated areas when:

- Either fire or smoke is visible.
- Any audible alarms are activated.
- Any visible alarms are activated.

- An announcement is made in the building.

During an evacuation:

- Leave the building immediately via the nearest exit.
- Proceed to the nearest designated assembly area away from the building.
- Remain at the designated assembly area; **DO NOT** leave or go back into the building until instructed to do so by Security or EHS.

5.2 Incident Reporting

Contractors are required to report all accidents involving their employees and/or subcontractors to the responsible PM/FR immediately. A written report delineating specifics of the accident must be prepared by the contractor and submitted to the EHS Department within 48 hours of each occurrence. The contractor must report any accidents that meet the reporting requirements to Cal/OSHA.

5.3 First Aid & Medical Emergencies

Except where agreed upon in advance by contract, the contractor is responsible for the provision of emergency medical treatment and transportation of injured contractor personnel to the contractor's designated medical facility. The contractor is responsible for ensuring that each contractor employee of these services before commencing work. The contractor must provide all necessary first aid supplies for their work.

5.4 Traffic and Parking

Vehicle traffic and parking at Viasat Carlsbad is regulated and enforced by Security. If your job requires special parking, check with your PM/FR. Do not park in restricted areas or reserve parking areas unless you have obtained the permission of the Security Department. Access for emergency response vehicles must be always maintained. Do not close or impede the use of any aisle, road, or exit without the PM/FR's approval. Personnel may not be transported in the rear of trucks or trailers. Secure all loads to prevent accidental spills. Vehicles with a body or haulage capacity of 2 ½ cubic yards or more shall be equipped with a backing-up alarm. Obey all traffic signs and be alert to traffic, pedestrians, and posted speed limits. Due to the number of vehicles and pedestrian traffic, Viasat Inc Carlsbad strictly enforces the traffic and parking rules.

5.5 Housekeeping

Contractors are responsible for keeping their work areas orderly and neat. If their work areas pose tripping or slipping hazards to Viasat employees, proper warning signs must be posted. At the close of each workday, contractors must clean and free the work area of all trash, debris, tools, equipment, dust, extension cords, and/or similar hazards.

For extremely dusty work, sweeping must be done throughout the day. Use moistened (non-kerosene based) sweep material when sweeping up dust.

Follow these general housekeeping rules:

- Compressed air shall not be used to clean floors, clothes, or any other surface.
- Contact the Viasat PM/FR for temporary storage areas.

- Never block any aisles or exits.
- Keep aisles free of trip/slip hazards. Ensure that any spills are properly cleaned up.
- **Consult with Viasat PM/FR for waste and trash disposal. Do not leave or dispose of hazardous materials or waste on Viasat Carlsbad property.**
- Use drip pans or mats for oily equipment (e.g., pipe thread equipment).
- Areas around fuse boxes, electrical switch panes, fire extinguishers, and other emergency equipment shall be always kept clear.

5.6 Warning Signs and Barricades

Erect and properly maintain necessary safeguards to protect Contractor personnel, Viasat employees, and others. Isolate work areas from Viasat employees and operations by using warning tape, barricades, or other effective means.

Before beginning work, inform the Viasat PM or Facilities representative of work posing a potential danger to Viasat employees and obtain authorization to proceed.

5.7 Occupied Areas

Performing demolition and construction work within occupied areas can present a variety of hazards to nearby personnel or make it difficult or impossible for nearby Viasat employees to accomplish necessary work. Activities that may potentially harm Viasat employees must be properly controlled.

Making provisions for these issues so that normal operations can continue safely and productively and to minimize interruptions to the construction project caused by employee complaints is critical to project success.

Performing demolition, repair work and construction within occupied areas can present a variety of hazards to nearby personnel. These activities include:

Project Activities	Potential EHS issues Affecting Nearby Personnel
Demolition/install walls; patch and paint	<p>Dust – disturbing ceiling tiles, drywall removal, patching, sanding, poor housekeeping.</p> <p>Noise – power tools, nailing, fastening, cutting.</p> <p>Vibration – power tools, impact tools, air powered tools.</p> <p>Chemical/odors – Paints, thinners, cleaners.</p> <p>Fire – flammable paints, thinners, power tools, grinding, combustible materials (paper, cardboard, etc.), poor housekeeping.</p> <p>Physical injury – Nail/staple guns, moving wall sections and materials in/out of work area, poor housekeeping.</p>
Removing/install carpet	<p>Dust – carpet and padding handling, accumulated dust in carpeting.</p> <p>Noise / Vibration – ripping, nailing, power tools, chipping out carpet tacking.</p> <p>Chemical / odors – adhesive for carpet and baseboard.</p> <p>Fire – flammable/combustible adhesive</p> <p>Physical injury – nailing, power tools, poor housekeeping, moving materials in/out of work area.</p>
Relocate/modify HVAC	<p>Dust – removing/reinstalling ceiling tiles (fiberglass), accumulated dust/dirt in ceiling spaces, moving materials in/out of the enclosure.</p>

	<p>Noise – cutting, fastening, power tools.</p> <p>Fire – proper installation/protection of electrical service</p> <p>Physical injury – poor housekeeping</p>
Relocate/install electrical services, fire/life safety system, lighting, and computer cabling	<p>Dust – removing/reinstalling ceiling tiles (fiberglass), accumulated dust/dirt in ceiling spaces, moving materials in/out of the enclosure.</p> <p>Noise – cutting, fastening, power tills.</p> <p>Fire – proper installation/protection of electrical service</p> <p>Physical injury – poor housekeeping.</p>
De-install cubicles / office furniture	<p>Noise – power tools.</p> <p>Physical injury – poor housekeeping.</p>
Install cabinets/sinks	<p>Dust – wood dust from sawing, sanding.</p> <p>Noise – sawing, nailing, power tools.</p> <p>Chemicals/odor – painting, applying adhesives.</p> <p>Fire – wood dust, power tools.</p> <p>Physical injury – moving materials in/out of area, housekeeping, nail/staple guns.</p>
Overhead work	Physical injury – parts or tools striking employees working below.
Other	Waste management

The following steps are required unless written approval to do otherwise is obtained from the PM/FR and EHS to ensure the protection/welfare of nearby occupants:

1. Post a project notice at various observation points around the work area advising of the work underway, expected duration of the project and a name and office and mobile phone number for the PM/FR. These notices should be developed by the PM/FR.
2. For work that involves construction/deconstruction/rearrangement:
 - a. Perform work off-shift whenever possible.
 - b. Prior to any deconstruction, inspect the area for signs of mold growth or water damage. Contact the PM/FR if such signs are observed. These areas must be assessed and corrected before deconstruction is begun.
 - c. Enclose demolition/construction areas (floor to ceiling) with fire retardant plastic sheeting.
 - i. Ensure that the enclosure provide adequate sealing around the work area and that the integrity of the enclosure is maintained for the duration of the project. When necessary, use a separate contractor who is trained to construct these enclosures. Acceptable Fire-Retardant Sheeting must meet NFPA 701 Test Standard and Class 1, Class A flame spread rating per UBC-42 and ASTM E-8.
 - ii. Provide an enclosure vestibule or separate arrangement with provision for project personnel to clean their shoes before exiting the enclosure.
 - iii. Provide HEPA filtered negative air systems to control dust and provide fresh air into the enclosure during project work.
 - iv. Inspect the enclosure integrity daily.

- d. Protect the HVAC from dusts, fumes, odors, etc. that may be produced during the project.
- e. Wet mop, wet sweep using a dust control product, or HEPA vacuum the work areas inside of the enclosure daily.
- f. Package and transport materials and debris taken out of the project area daily to the designated, covered waste disposal container. All material taken out for disposal cannot be left outside of the disposal container.
- g. Do not store flammable materials in the enclosure when work is not in progress.
- h. Cover desks, chairs, bookcases, etc. in the enclosure with fire retardant plastic sheeting.
- i. Have the contractor or designee inspect the work area daily to ensure that these work procedures are effective.
- j. Coordinate with PM/FR during operations which may generate dust, fumes, or chemical vapors such as the removal or installation of ceiling tiles, drywall, or flooring; the application of paint or adhesives; or hot work.
- k. There may be small construction or demolition projects in occupied areas where the dust control measures listed above are not necessary. In that case, a deviation from these practices will require the approval of the program manager or the facilities representative and EHS.

5.8 Facility Damage

Contractors will be held liable for the cost of any interruption of Viasat work due to contractor negligence. Activities that may potentially harm Viasat employees must be properly controlled, and any area where Viasat employees may be exposed to such potentially hazardous activities must be secured as outlined in the Occupied areas section of this handbook. Contractors will also be held liable for hardware, i.e., any Viasat property or product, damage due to negligence. The PM/FR must be advised immediately of all damage that occurs.

6 Environmental Requirements

6.1 Environmental Permits, Registrations and Notifications

In the event an environmental permit, registration or notification is required for work by a contractor on Viasat Carlsbad property, the contractor shall provide such documentation to EHS for review and approval.

6.2 Air Emissions

Any operation or activity which involves the release of significant quantities of dust, vapors, fumes, mist, shall be approved by Viasat EHS prior to start of work. Examples are large applications of floor, wall or roof coatings, spray applications, cement cutting, sandblasting, etc. All San Diego County Air Pollution Control District rules and regulations shall be followed.

For portable, non-road engines (e.g., generators) rated at 50 Hp or greater brought onsite, the contractor must have a documented log sheet that shows start and stop hours for each day of use, in addition to total hours used. Engine stack exhaust must not exceed 20 percent opacity/visible emissions

after startup. If opacity/visible emissions exceed 20 percent, as determined using [EPA's Method 9](#) testing, the equipment must be shut down and removed from the site until repaired or replaced.

For generators that are brought on site for temporary use, (e.g., events, parties, concerts, etc.) documented log sheets are not required, however, the mobile generator must have a current California Air Resource Board (CARB), Portable Equipment Registration Program (PERP) certificate placard on the generator.

6.3 Stormwater and Sewers Drains

To comply with the Federal Clean Water Act and the State Water Resources Control Board (SWRCB), Viasat Carlsbad maintains a No Exposure Certification permit. This permit prohibits the discharge of any liquid, solid, and other waste products into any storm drains or sewer systems throughout the property.

Liquid or solid material(s) must not be discharged onto the ground or into an on-site storm drain and/or sanitary sewer system(s). Rinsing of an area (or piece of equipment) **must not** be used as a cleaning method for work residues, including metal filing, spilled material, or leaks from equipment. Contractors must follow proper cleanup procedures to remove work residue from the area.

Care must be taken during chemical storage and transfer to prevent the possibility of accidental spillage of chemical products. If storage of chemical products on-site is approved by Viasat, secondary containment must be used and the containment must have 110 percent containment capacity of the largest container. All industrial materials, activities, and waste shall be protected by a storm-resistant shelter to prevent exposure to rain and/or runoff.

Any person performing a construction activity resulting in a land disturbance of one acre or more, or less than one acre but part of a larger common plan of development or sale must obtain coverage under the SWRCB's General Permit for Storm Water Discharges Associated with Construction Activity (General Construction Permit). Construction activity includes clearing, grading, excavation, stockpiling, and reconstruction of existing facilities involving removal and replacement of soil.

7 Hazardous Materials and Wastes

7.1 Policy

Contractors will be expected to submit a comprehensive list of all hazmat that will be brought, stored, and used on site to be reviewed by the EHS department. Contractors will also need to provide all manufacturers' Safety Data Sheets (SDS) for hazardous materials listed. All hazardous materials used on Viasat Carlsbad property must have appropriate identification and warning labels as outlined in both the OSHA Hazard Communication Standard ([29 CFR 1910.1200](#)) and the California Code of Regulations ([CCR Title 8, Section 5194](#)) respectively.

All hazardous materials must be transported and stored properly within the facility and comply with all Department of Toxic Substances Control (DTSC) laws and regulations. Incompatible hazardous materials must be stored and/or used separately. Contractors must ensure that their employees read and understand and have access to the SDS's for the hazardous materials they are using. Contractors shall remove unused hazardous materials from Viasat's Carlsbad property at the end of each project. Used hazardous materials shall not be disposed of on Viasat Carlsbad property.

7.2 Paints, Sealant, Adhesives, and Mastics

Contractors shall only use approved paints, sealant, adhesives, and mastics on Viasat Carlsbad property. This group of materials (water and/or solvent based) should not be applied in occupied areas. Adequate ventilation must be used to minimize off gassing of these products during construction. Mastics containing asbestos must not be used.

7.3 Flammable, combustible, toxic and other hazardous materials

Hazardous materials shall be contained in approved containers and used, stored, and transported in accordance with local, state, and federal regulations. Contractors shall coordinate with the PM/FR or Viasat EHS, for compliance with these regulations.

For all hazardous materials used on Viasat Carlsbad property, contractors shall maintain SDS's on site or be able to obtain them immediately and produce them on request.

Flammable and combustible liquids, such as solvents, paint thinners, and paints shall be stored and handled in a safe manner. Not more than 25 gallons of flammable or combustible liquids may be stored in a room or worksite outside of an approved storage cabinet. All flammable materials shall be removed from the work site or properly stored at the end of each day.

Adequate ventilation and/or respiratory protection shall be provided and maintained when flammable or toxic liquids are used, especially in enclosed areas. This precaution also applies to spray and/or brush painting.

7.4 Spent, Unused, or Surplus Hazardous Materials

All spent, unused, and surplus hazardous materials or contaminated materials (such as contaminated rags, containers, brushes, etc.) remains the property of the contractor and must be removed from Viasat Carlsbad property. Viasat does not assume responsibility or liability for the materials identified above. The contractor is responsible for the proper management (packing, collection, transportation, and applicable disposal of these hazardous materials in compliance with applicable city, county, state, and federal regulations.) Spent, unused, or surplus hazardous materials and contaminated materials shall not be disposed of in non-authorized dumpsters, left onsite, or dumped down the drain.

7.5 Hazardous Material Release or Spills

The contractor shall immediately call the Viasat emergency phone number (760) 476-2202 when chemicals, paints, resins, or other hazardous substances belonging to and under the control of the contractor are spilled on Viasat Carlsbad property, storm drains or dumped into the septic system. In case of a spill, the PM/FR must notify EHS, and EHS will determine if regulatory or emergency response agencies are required to be notified to protect employee health and safeguard the environment. The contractor shall be responsible for the management of any spilled material, which includes cleanup costs, containers, and movement of the material offsite under the contractor's name. Contractors shall assume all liability for hazardous materials used/abandoned, spilled, and/or released while working on Viasat Carlsbad property.

7.6 Construction and Demolition Wastes and Containers

Construction and demolition waste accumulation is coordinated through the site supervisor and the PM/FR. A designated waste container, e.g., roll-off container shall be used for all non-hazardous waste.

This container must be covered and closed* at the end of the workday. All construction and demolition waste must be placed in the designated container. No waste materials shall be placed or stored outside of the container. Containers will not be placed near storm drains. Containers will also be labeled with a point-of-contact name in addition to a contact phone number.

*" Keep covered and closed" refers to closing all roll-off doors and placing a cover (e.g., tarp) on the roll-off such that the entire top of the container is covered. (i.e., end to end)

7.7 Storm Drains/Sanitary Sewer/Industrial Sewer

No liquid or solid material(s) shall be discharged to the on-site storm drain and/or sewer system(s).

Care must be taken to locate chemical storage and transfer areas to prevent the possibility of accidental spillage of chemical products.

8 Equipment and Tools

8.1 Policy

Contractors shall not operate Viasat owned equipment such as forklifts, tools, company vehicles, ladders, work stands, or any other Viasat owned equipment unless authorized by Viasat in the PO/contract prior to the use of the equipment in question. If authorized by contract, the contractor will be required to provide appropriate training to contract personnel. If contractors use Viasat owned equipment, they do so at their own risk and liability.

8.2 Hand and Portable Tools

Because damaged tools may result in injuries, all tools brought onto the Viasat Carlsbad property must be in good working order. Only use tools that are made for that specific job. All tools must be secured and put away at the end of the workday. Tools requiring certification for use (i.e., power-actuated tools) must be used in accordance with the manufacturer's certification, and their users properly certified.

When using hand tools, follow these rules:

- Tools shall be in good condition. Electrical cords shall not be frayed or damaged.
- Portable tools must be connected to the electrical supply by means of a 3-wire cable and 3-pin plug and socket (double insulated tools excepted). Where a 3-phase supply is to be used, 4-wire cable and 4 pin plugs and sockets with ground connections must be used.
- Only non-sparking tools shall be used in areas when an ignition source may cause a fire or explosion (e.g., flammable liquid storage areas).
- Wear eye protection when using powered hand tools.
- Never remove any safety devices or guards from power tools.
- Ground-fault circuit interrupter protection must be used when operating power tools outdoors, on roofs, and/or in damp or wet areas.
- Tools that have been altered or modified must not be used.

8.3 Elevated Work Platforms and Aerial Devices

All elevated work platforms and aerial devices, including boom lifts, man lifts, and scissor lifts must be in good working order and their inspection certificates up to date when required. Only trained and authorized personnel shall operate these vehicles on Viasat Carlsbad property. Daily pre-use inspection documentation is required on all mobile lifts. Documentation must be maintained on-site. If fall protection is required to operate mobile lifts the contractor will provide the appropriate fall protection system and train employees as required. No standing on guard rails; personnel must always remain on the working platforms.

Contractors utilizing scissor lifts and man lifts will implement procedures (i.e., barricades, signs, or a spotter) to protect employees working below from falling objects as required.

8.4 Noisy Equipment

Equipment that emits enough noise to disturb Viasat employees or exceed OSHA action levels (85 decibels or more) must be used in isolated areas, off-site, or off hours. Such equipment includes grinders, saws, drills, power-actuated tools, and jackhammers. Contractors/subcontractors operating noisy equipment shall wear appropriate hearing protection. Use of power-actuated tools (i.e., nail guns) requires posting of 8 X 10-inch warning signs. The contractor must ensure that employees using power-actuated tools are trained and currently certified.

8.5 Cranes, Hoists, and Rigging

Any lifts over buildings, floors, over parking lots, over potentially populated and/or pedestrian areas, must be coordinated with a Viasat PM/FR, Security and EHS. All required barricades and warning signs must be used. Tag lines and proper rigging are required. Only crane operators certified by the National Commission for the Certification of Crane Operators (NCCCO) or who meet equivalent training and certification requirements for the type of crane they will be operating may operate cranes or hoists on Viasat Carlsbad property. Contractors performing rigging shall be trained and capable of safely performing the rigging operations. All loads shall be rigged by a qualified person (rigger) or by a trainee under the direct visual supervision of a qualified person (rigger) **DO NOT** operate cranes and hoists within 15 feet of electrical power lines. If applicable, all permits required by Palomar airport authority must be obtained.

A Viasat Carlsbad secondary critical lift permit is required to be filled out unless the designated crane company, to perform the lift, provides a Site Lift Plan (SLP) to the PM/FR. The contractor will supply the SLP at a minimum of two business days prior to the lift to EHS for review and approval. Contractor must provide information including the name and contact information of the Person in Charge of the lift; equipment required for the lift; personnel required for the lift (including identification of the Crane Operator and proof of current license) and their roles for the lift; step by step instructions for the lift; communication method to be used for the lift; contingency and rescue plans.

9 Personal Protective Equipment

9.1 Policy

Personal protective equipment (PPE) such as hard hats, respiratory protection, hearing, or eye protection must be worn if required for the job and when Viasat signage requires such. Furnishing PPE is

the responsibility of the contractor, not Viasat It is the contractor's responsibility to train their employees in the proper use of PPE, provide required medical surveillance, and enforce the wearing of PPE. The equipment provided must be in good condition and carry the appropriate American National Standards Institute (ANSI) or National Institute of Safety and Health (NIOSH) approvals.

9.2 Eye and Face Protection

ANSI compliant safety glasses or goggles must be worn when cutting, drilling, spraying, mixing hazardous material, or during any type of work that has the potential to cause eye injury. Face shields may also be required in conjunction with safety glasses for tasks that present a severe impact hazard.

9.3 Hearing Protection

Hearing Protection Devices (HPDs) shall be worn when performing any work which emits loud noise at or above an 85 decibel (dBA) time weighted average (TWA) or when a contractor's employee is expected to receive a daily noise dose of greater than or equal to 50% of the Cal/OSHA Permissible Exposure Limit (PEL) for noise. All HPDs shall be tested and labeled according to the EPA Regulation [40 CFR Part 211](#). The HPDs attenuation efficiency shall be evaluated using one of the three NIOSH methods. Any Contractor's employees whose noise exposure equals or exceeds an 8hour TWA of 85 dBA, shall be included in the Contract company's Cal/OSHA approved hearing conservation program.

9.4 Foot Protection

Safety shoes with safety toes and impermeable soles must be worn when moving heavy objects, working in the presence of metal fragments, using heavy tools, etc. All safety shoes must meet ASTM International Standard ASTM F 2413-11 requirements.

9.5 Hand Protection

Appropriate hand protection shall be used when welding, using hazardous materials, handling sharp objects, conducting electrical and high voltage work, and/or other hazardous operations.

9.6 Head Protection

An ANSI approved hard hat shall be worn while working in areas where overhead demolition or construction is being conducted. Hard hats or bump caps must also be worn when there is a low ceiling or the potential of workers bumping their heads.

9.7 Respiratory Protection

Respirators and dust masks must be worn when sanding, spraying, and/or applying a material which requires such equipment. All respirators must be NIOSH approved and employees must be properly certified and included in a Cal/OSHA compliant respiratory protection program.

10 Elevated Work

10.1 Policy

All elevated work must be coordinated in advance with the PM/FR. A Viasat Carlsbad secondary Working at Heights permit is required to be filled out and provided to the PM/FR for review, sign off and posting at the job site within the Viasat Carlsbad property. If access to the roof is required, the Viasat Carlsbad Roof training/brief shall be completed before roof access can be granted. Contractors must be trained in

the use of such equipment and must wear appropriate PPE. All equipment must be in good working order.

10.2 Overhead Work

All overhead work, including roof top work, must be coordinated with the PM/FR. Areas below elevated work sites must be properly barricaded, and appropriate signs must be posted prior to starting work. All work above ceiling tiles, in catwalks, or on roof tops is to take place when areas below are unoccupied, or when coordinated carefully with your PM/FR. When ceiling tiles are removed for access, they shall be replaced each day unless special permission is granted by the PM/FR. Any loose objects such as tools or other equipment, must be secured to ensure that they cannot fall onto ceiling tiles or onto the floor below.

10.3 Fall Protection Systems

Safety harnesses with compatible shock absorbing lanyards must be worn by employees exposed to fall hazards four feet or greater. Contractors working at least 6 feet but less than 15 feet from the unprotected roof edge must use a safety harness and shock absorbing lanyard. Safety harnesses must be tied off to a certified anchorage point, designed or approved by a qualified Person considering peak dynamic loading with a safety factor of 2 or a non-certified anchorage point, with an unquestionable strength, at least 5,000 lbs., chosen by a Competent Person. Safety harnesses will **NOT** be tied off to a ladder, scaffold, or other such equipment.

Engineering controls such as guardrails shall be used in lieu of fall protection systems whenever possible.

10.4 Ladders

Ladders should be placed in a position in which all feet/shoes have a secure footing and contact the floor or ground surface evenly.

A ladder shall not be placed in front of doorways unless the door is secure or blocked open and appropriate warning signs are posted. If blocking a primary fire exit, ladders shall only be set up to conduct the work then taken down immediately.

Standing on the top two (2) rungs of a stepladder and the top three (3) rungs of an extension ladder is prohibited.

Cones must be placed around ladders or other climbing equipment used near occupied areas or pedestrian walkways.

When ladders are set up to access the roof from the exterior of a Viasat Carlsbad building, the ladder must be tied off at the top with at least three (3) feet extension past the top support. Contractors ascending or descending the ladder must have three-point contact with the ladder. If the ladder is tied off at an un-parapeted ledge of a building, safety harnesses must be worn, and while transiting from the ladder to the top, immediately tied off to a selected anchor point. Ladders must be taken down at the end of the workday and secured unless prior authorization from the PM/FR is given. In the case where ladders are allowed to remain erected after working hours, a ladder guard will be used to prevent unauthorized access.

When using a ladder near electrical energy sources, the ladder shall be made of nonconductive material (i.e., fiberglass, etc.)

When not in use, store the ladder in an appropriate storage space.

10.5 Scaffolding

All scaffolding must be constructed in accordance with the California Code of Regulations Title 8, Sections [1637](#), [1644](#), and [1658](#). Contractors must be licensed to erect and dismantle scaffolding. A copy of the scaffold safety checklist will be provided to the PM/FR and reviewed by the EHS department. The regulations include the following:

- All scaffold 7 – 12 ft. or higher be equipped with standard guardrails, top rail and mid rail, and toe boards on all sides and ends.
- All four wheels of rolling scaffolds must be locked. Riding moving scaffold is prohibited.
- Scaffold may be required to have outriggers if over 7 – 12 ft. high. Platforms must be planked solid. Slippery platforms are prohibited. An approved ladder, with handholds provided, must be used to gain access to a scaffold.

The used of Suspended Scaffolds must meet all California Code of Regulations Title 8 section [1658](#) requirements. Securing suspended scaffolds must be in compliance with section 1658(j)(1).

11 Electrical Work

11.1 Policy

Electrical work must comply with the National Electric Code (NEC), Cal/OSHA, and any other applicable codes.

Safe electrical work practices shall always be adhered to in accordance with NFPA 70E Latest edition, Cal/OSHA Electrical Safety Orders, and OSHA CFR 1910 Subpart R and S for further information. When working on a de-energized electrical circuit, a circuit breaker, or other electrical disconnect, the device must be locked out/tagged out with a personal lock. When personnel might be exposed to open boxes or live conductors, barriers must be erected. Covers must be replaced every night and/or when work is suspended for a day or more. Unused conductors must be properly identified and terminated. All circuit breaker boxes must have each circuit identified. Disconnects must identify the branch circuit of equipment that they control. A CPR trained safety observer shall stand outside the flash protection boundary any time a worker is testing live or potentially live circuits. The operating voltage of equipment and lines shall be determined before working on or near energized parts.

Live electrical work is prohibited unless necessary. In such instances, a Viasat secondary live electrical work permit is required to be filled out and provided to the PM/FR for review, sign off and posting at the job site within Viasat Carlsbad property.

11.2 Electrical Protection – Ground Fault Protection

Ground-fault protection shall be used by personnel using temporary wiring installations to supply power to equipment used during construction, remodeling, maintenance, repair, or demolition of buildings, structures, equipment, or similar activities. All 125 volt, single-phase 15, 20, and 30 ampere receptacle

outlets that are not part of the permanent wiring of the building or structure. And are being used by personnel shall have ground-fault circuit interrupter (GFCI) protection provided.

11.3 Energized Electrical Work

A Viasat secondary live electrical work permit is required when performing modification or repair to energized electrical components or systems. Energized work shall be permitted if the Viasat PM/FR, and the electrical contractor concur that de-energizing introduces additional or increased hazards or de-energizing is infeasible due to equipment design or operational limitations. The permit must be completed and signed by a Viasat Site Expert Electrical Person or Authorized Designee and reviewed by a Viasat PM/FR and a representative from the EHS department before work may begin. Justification for energized electrical work permits shall meet the regulatory requirements stated within NFPA 70E.

11.4 Temporary Wiring

A temporary wiring management plan for all voltages 240V or higher shall be developed to the Viasat PM/FR. Content shall include management, control, oversight, field marking, protection, and inspection. Temporary wiring shall be: Strung at least seven feet (1.5 meters) above the floor or working surface and meet all the electrical safety requirements and removed after it is no longer needed.

When placed on the floor or ground shall be kept out of traffic areas or protected by covering or burying. If buried, the lines shall be marked.

11.5 Lock Out / Tag Out

Contractors must inform their assigned Viasat PM/FR of their lock-out/tagout procedures. Contractors must follow all applicable safety regulations, as well as Viasat internal Hazardous Energy Control equipment specific procedures. A contractor's failure to comply with all applicable regulations and internal site safety programs may result in immediate termination. Contractors must implement and maintain an effective lock-out/tagout program to protect employees from the unexpected energization, activation, or start-up of machines (e.g., lathes, drill presses, etc.) and/or equipment during service or maintenance.

Contractor personnel must provide/use their own lock-out/tagout accessories (locks, tags, nylon ties, multi-hasps, etc. to perform general and specific lock-out/tagout procedures.

Locks should be personally identifiable to the Authorized Employee and company. An approved tag shall be attached with every contractor lock and shall include the following:

- Reason for the lockout.
- Name of the contractor (and Viasat contact) who is working on the equipment.
- Method by which that person can be reached (i.e., via cell phone).
- Date and time when the tag was put in place.
- Estimated date and time the lock-out/tagout (procedure) will be removed.
- Signature of the contractor.

Lock-out/tagout information concerning the service or maintenance of machines and/or equipment will be provided by the Viasat PM/FR upon request. **At no time will contractors be allowed to utilize Viasat Carlsbad Lock-out locks and Tags.**

12 Hot Work

12.1 Policy

The purpose of the Hot Work program is to ensure that all hot work at Viasat Carlsbad is conducted safely in a manner to prevent fires. All hot work (such as cutting, welding, brazing, grinding, and soldering/sweating and/or use of open flame devices) must be coordinated in advance with the Viasat PM/FR. All Viasat Carlsbad secondary Hot Work permits must be completed and posted before any hot work begins.

12.2 Hot Work (cutting, brazing, welding etc.)

Once a Hot Work permit has been obtained, signed, and posted, ensure that conditions are safe and hazard free before commencing hot work. All contractors must possess the appropriate equipment required to complete the task, as well as possess any required safety equipment to include Personal Protective Equipment (PPE), Fire extinguishers, etc. Hot work shall be completed in compliance with the OSHA Hazard Communication Standard Subpart Q ([29 CFR 1910.251-255](#) Welding, Cutting, and Brazing).

Prior to hot work operations, the contractor performing the hot work shall, as applicable to the job:

- Coordinate with the Program Manager or Facilities representative to isolate, if necessary, the HVAC system for interior work and to locate intake vents on the exterior of the building.
- Inspect the hot work area to identify any fire hazards.
- Identify the location of sprinkler shut offs and fire alarms.
- If necessary and where practicable, remove all flammable or combustible materials within a 35-foot radius of the hot work.
- Properly shield combustibles that cannot be removed from the area with non-combustible blankets or other non-combustible material(s) that will provide equivalent protection.
- Seal all cracks and openings through which hot sparks or slag may enter. As an alternate means, a fire-resistant shield may be used to block the openings.
- Protect ducts and conveyor systems that may carry sparks or slag to other parts of the building.
- Sweep the floor of all loose combustible debris (such as paper clippings, wood shavings, or textile fibers) within a 25-foot radius of the hot work area.
- Place non-combustible or flame-resistant screens to protect personnel in adjacent work areas from heat, flames, radiant energy, and welding splatter.
- Ensure a fire extinguisher is readily available and accessible.
- If hot work is done in an open area where a passer-by may be present, shielding to protect from associated hazards such as arc flash must be used.

Entire building smoke detection and alarm systems cannot be shut down, although they may be placed in "Test". Contractors will coordinate with Viasat PM/FR to ensure that sprinkler heads and smoke detectors directly above the hot work area will be covered with wet rags or non-combustible materials so they will not be triggered during hot work. After the hot work is complete, immediately remove covered sprinkler head(s) and smoke detectors. Ensure that local and state fire codes are followed.

12.3 Fire Watch

Fire watch personnel must be provided by the contractor and the fire watch must remain at the job location for at least 30 minutes following completion of the project. Appropriate fire extinguishing equipment shall be maintained near the hot work for its entire duration, plus 30 minutes after completion of work.

13 Excavation and Confined Spaces

13.1 Policy

All excavations five feet or more in depth which are to be entered by personnel must be protected by a system of shoring, sloping of the ground, benching, or an alternative method which meets the requirements of Cal/OSHA construction. All excavations must be barricaded and/or appropriate warning signs posted. No excavation can be done without the knowledge of your Viasat PM/FR and a secondary Viasat Excavation Permit to Work needs to be filled out and processed. The excavation must be monitored by a competent person. The contractor must have current drawings for the job being performed. Utilities must be located and marked out before excavation can begin. Contractors will contact www.Digalert.org to coordinate identifying all underground lines and utilities.

13.2 Open Trenches and Pits

Open holes created by the removal of trench plates are to be appropriately barricaded with warning cones, warning signs, or the equivalent.

Appropriate means of entry and egress must be provided at all open trenches and pits for worker safe access. Entry/Egress ladders must be positioned and secured properly in accordance with Cal/OSHA Construction Safety Orders, Excavations Section [1541](#).

13.3 Barricades and Warnings

All excavations must have appropriate barricades and warnings to alert Contractors and Viasat employees to the danger on the immediate area and physically stop them from coming too close to the opening. Doors leading into the area must have warning signs.

13.4 Confined Space Entry “Permit”

All contractors whose employees may enter “Permit Required” confined spaces must submit their Confined Space Program to the Viasat PM/FR. If a contractor does not have a Confined Space Program, then a Viasat secondary Confined Space entry permit-to-work will be filled out signed and posted at the site. Entry into a pit or manhole requires advance testing for oxygen, toxic, and combustible vapors. Ventilation equipment, multiple workers (i.e., entreat, attendant, entry supervisor, and rescue team members), emergency retrieval equipment, and training in rescue operations are also required. Contractors are responsible for providing and using all required confined space entry safety equipment including, but not limited to air testing meters, fall protection, PPE, etc. Confined space entry permits issued to the contractor must be completed prior to entering a Permit Required Confined Space (PRCS) and posted at the job site. All contract employees conducting confined space operations will follow the Cal/OSHA Permit Required Confined Space Section [5157](#).

14 Definitions

1. **Competent Person** - One who can identify existing and predictable hazards in the surrounding or working conditions, which are unsanitary, hazardous, or dangerous to employees, and who is authorized to take prompt corrective measures to eliminate them. Work requiring a Competent Person shall not be performed on Viasat Carlsbad premises without a Competent Person present at the job site.
2. **Contractor** – Any agent/agency engaged by Viasat Carlsbad through written contract (or other written agreement) to perform work on Viasat Carlsbad owned or operated premises i.e., Contractors, Service/Technical Representatives, Vendors & Suppliers that are performing services, construction, renovation, facilities maintenance, or support tasks. This includes all tiers of Subcontractors bringing in workers and/or equipment to perform construction, renovation, and facilities maintenance or support tasks. For purposes of brevity the above will be referred to in this document simply as Contractors. Not included are Contract employees working under LM Aero’s direct supervision – they fall under LM Aero’s employee ESH programs.
3. **dba** – A-weighted decibel (dba or dB(A)) is an expression of the relative loudness of sounds as perceived by the human ear.
4. **Excavation** – Any man-made cut, cavity, trench, or depression in an earth surface, formed by earth removal.
5. **Injury and Illness Prevention Plan** – A safety plan required by Cal/OSHA for all employers in California as defined by Title 8, Section 3203.
6. **Permit** – An authoritative document or official certificate of permission; a written order granting special permission to proceed with a high-risk procedure or operation.
7. **Point of Contact** – A Viasat Carlsbad representative responsible for providing oversight of Contractors, to ensure compliance with the terms and conditions of the contract, Purchase Order, or other authorizing documents.
8. **Qualified Person** - One who by possession of a recognized degree, certificate, or professional standing, or who by extensive knowledge, training, and experience, has successfully demonstrated the ability to solve or resolve problems relating to the subject matter, the work, or the project.
9. **Training** - The process of becoming proficient on a specific area through instruction and practice, or developing or forming proper habits, thoughts, or behaviors on a specific area through discipline and instruction.
10. **Vehicles** – Any means of transportation used to transport personnel and/or property/equipment (e.g., automobiles, trucks, lift trucks, scooters, and golf carts).

15 Acronyms

ANSI - American National Standards Institute

ASTM – ASTM International, formerly known as American Society for Testing and Materials

Cal/EPA – California Environmental Protection Agency

Cal/OSHA – California Division of Occupational Safety and Health

CARB – California Air Resource Board

CCR – California Code of Regulations

CPR – Cardiopulmonary Resuscitation

dBA – A-weighted decibel

DTSC – Department of Toxic Substance Control

EHS – Environmental Health & Safety

EPA – Environmental Protection Agency

FR – Facilities Representative

GFCI – Ground-Fault Circuit Interrupter

HEPA – High Efficiency Particulate Air (filter)

Hp – Horsepower

HPD – Hearing Protection Devices

HVAC – Heating, Ventilation and Air Conditioning system

NCCCO – National Commission for the Certification of Crane Operators

NEC – National Electric Code

NFPA – National Fire Protection Association

NIOSH – National Institute for Occupational Safety and Health

OSHA – Occupational Safety and Health Administration

PEL – Permissible Exposure Limit

PERP – Portable Equipment Registration Program

PM – Program Manager

PO – Purchase Order

PPE – Personal Protective Equipment

PTW – Permit-to-Work

SDS – Safety Data Sheet

SLP – Site Lift Plan

SSSP – Site-Specific Safety Plan

SWRCB – State Water Resource Control Board

TWA – Time Weighted Average

UBC – Uniform Building Code