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TELECOMMUNICATIONS INDUSTRY FOUNDATION

Vegetation Management at Telecommunication Sites

PLANNING ADVISORY NOTICE

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This Planning Advisory Notice (PAN) is intended to give some background and areas of consideration when dealing with vegetation around structures and telecommunications sites. Addressing the structures also means caring for the compound where the structures are located; among other things, these compounds need to be maintained for unwanted vegetation. By definition, unwanted vegetation is any undesirable vegetation for the specific site as defined by the structure owner's maintenance and condition assessment program. This is commonly referred to as "Bare Ground Management." In general, clients do not want any vegetation in and directly around their structure compounds and, if applicable, the structure guy anchor compounds and guy wire paths. Additionally, vegetation should also be controlled or eradicated in and along the access road to the structure.

Figure 1

The reasons for vegetation control and bare ground management are to safeguard workers, vehicles, and the integrity of telecommunications structures. For instance, if vegetation is left un-checked it is likely to cause harm to structural components such as the guy anchors or turn buckles (See Figure 1). Vegetation can also damage structures and their components by encouraging rodent and insect infestations which damage fences and equipment and can overtake and damage structures in extreme cases. Untreated sites will get overgrown with grasses, broad leaf vegetation, brush, and trees, exposing workers to hazards such as bugs (ticks, spiders, bees, and wasps), animals, and trip hazards due to lack of visibility. The sight location should also be assessed; there have been a number of sites damaged by fire and while most vegetation starts out green and full of life, as it dries out it can become tinder.

Bare ground management is typically accomplished by some type of Integrated Pesticide / Vegetation Management (IPM/IVM). There is no silver bullet approach to bare ground maintenance and can vary greatly by client or due to geographies and site-specific conditions. There may also be laws and regulations that apply based upon where the site is located. Some may consider just using something like a glyphosate product like Roundup and think that would be sufficient, however, that type of product is a nonselective herbicide and does a pretty good job killing a variety of vegetation, not just unwanted vegetation such as weeds. It is absorbed via contact and kills most but not all weeds. Additionally, it does not prevent new weed growth. As a caution, while the EPA has provided certain exemption for FIFRA 25(b) products, most states still require a license to apply these pesticides/herbicides commercially. Moreover, some herbicides like Roundup

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(which contains glyphosate) are not considered 25(b) products due to concerns regarding their potential health effects.

To apply herbicides commercially, companies and individuals will typically need to obtain some type of herbicide applicators or pesticide contractor's license from the states they are working in.

Federal law requires any person who applies or supervises the use of restricted use pesticides (RUP) to be certified in accordance with EPA regulations and state law. States also have laws and regulations governing the licensing and registration of herbicide applicators and pesticide contractors. There may also be local requirements. While licensing requirements vary by state, some of the requirements that herbicide applicators/pesticide contractors may expect to encounter include: (a) satisfying eligibility requirements such as being at least 18 years old; (b) successfully complete a required course and pass a subsequent exam; (c) completing an application to receive your license; (d) annual or biennial licensing fees; (e) completing an apprenticeship program or working under the guidance of another individual who has a higher-level license for a period of time; (f) completing continuing education; (g) obtaining certifications of financial responsibility and/or certain mandatory insurance coverages; and (h) maintaining applications records which may require submission to state agencies annually or semi-annually. As an illustrative example, depending on the scope of a company's commercial operations, the State of California may require a Qualified Applicator Certificate or a Qualified Applicator License from the California Department of Pesticide Regulation (DPR) .

Care must be taken to avoid duplication of efforts by structure owners and carriers using different contractors. Caution and communication are important to avoid the application of herbicide and/or pesticide by multiple contractors over the course of a growing season on the same property because carriers and structure owners were unaware that someone else was having the service performed. Over application would lead to annual herbicide/pesticide maximums application exceedances and certainly is not a best practice for the environment or from an economic standpoint. In addition, it can expose all entities to various types of enforcement and potential penalties. It should be noted that most mature structure owners have adopted lease agreements that assign this responsibility, typically to the structure owner. It is very difficult to craft a scope of work for a portfolio of telecommunication structures across the country. Scopes of work should be developed regionally so weather, topography, and population/development can be evaluated. It is also important to be a good corporate steward; it may be necessary to keep certain sites more maintained and better looking than others where some minor growth is allowed. For instance, in some parts of the country it is possible, based on the owner's goals and location, to control vegetation with a single herbicide application, whereas other sites may require up to six applications depending on site conditions, owner's goals, and weather. Typically, herbicide application should focus on the seeding months that correspond with the time of the year where weeds and unwanted vegetation is emerging. In the end, clients should look at Integrated Vegetation Management (IVM) with the result being a site that is relatively weed free that is obtained by optimizing environmental, economic, and herbicide application considerations or IVM.

According to the EPA, Integrated Pest Management (IPM) is an effective and environmentally sensitive approach to pest management that relies on a combination of common-sense practices. IPM programs use current, comprehensive information on the life cycles of pests and their interaction with the environment. This information, in combination with available pest control methods, is used to manage pest damage by the most

Figure 2

economical means, and with the least possible hazard to people, property, and the environment. Some of the typical pest and animal infestations that are observed at telecommunications sites are racoons and similar mammals on structures, mice in warm areas such as power panels, and snake beds *(See Figure 2)*.

A quality vendor will work with the clients to understand their goals for their infrastructure. The vendor then will make recommendations that meet the environmental requirements while achieving the desired results in a cost-effective manner. The vendor should also have a means to update the program based on the owner's needs. Best practice is for clients to require the selected vendor to be in control of the means and methods of the work to ensure the program is properly administered. Most structure owners have programs for vetting vendors. For vendors doing this type of work it is strongly recommended that the vendor document their process meeting the federal, state, and local requirements as well as meeting all licensing requirements. The vendor should demonstrate that they are able to manage their license status for all of the applicators that will be utilized and the ability to provide for a safe work environment. This can be demonstrated by showing an understanding of the types of sites they will be working at and the nature of telecommunications infrastructure. An example of this would be the guy anchors, while there are many different licensed applicators it is recommended that you select one that understands the structures to avoid any damage to the guy system while the vendor is working (this includes product being applied to the wires or connecting hardware). The vendor should also maintain and submit all application records as required by state and local government. This is something that may be tough for a client to manage, so it is encouraged that organizations follow their internal contracting policies that seek to safeguard companies with indemnification clauses and express provisions requiring vendors to certify they are complying with all licensing and permitting requirements.