

Utility Arborist Newsline

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Pushing Digital Technology to the Ground!

By Dave Krause, Vegetation Specialist, Arborchem Products Division

FOCUS ON
 TECHNOLOGY

Technological innovation has been a powerful mechanism for vegetation management throughout the years with advancements in mechanization and development of new chemistry and application methods. In recent years, the utilization of computers for data collection, records, mapping, and workload management has helped vegetation managers improve efficiency and reliability. Today, the advancements in handheld devices and mobile telecommunications have brought that technology directly to the crews on the ground performing vegetation management activities.

Digital Record Keeping for Herbicide Applications

Detailed daily chemical records are required by state regulation and have been typically written on paper. Now, data collection for herbicide treatments in the field can easily be done electronically and uploaded in real time to improve accuracy and productivity, not only for the crews, but also for supervision. The ability to pre-populate information into drop-down menus not only helps improve accuracy (no penmanship worries), but also reduces the time needed to fill out reports during and after field work. It also allows for collection of much more information, such as photos and tracking data on returnable/reusable containers. (Continued on page 3)

Spray crews receive training in the field on digital record keeping app. Photo by Tim Mencer



Pushing Digital Technology *(From page 1)*

Starting in 2014, FirstEnergy engaged all of the vegetation management contractors on their transmission system in an initiative to improve the overall effectiveness and efficiency of their herbicide program. In response, Arborchem implemented one of the utility's "Closed Chain of Custody" pilot programs with Asplundh Tree Expert Co. crews who used an application (app) on tablets to document their activities. For the pilot program, a barcode was scanned on each returnable/reusable container of custom-blended herbicide formulation, creating a digital record to track the container.

The digital record was evidence of where and when the returnable/reusable container was shipped from, where it was shipped to for use by Asplundh, and when it was received back at the warehouse for refilling. This assisted with inventory management and helped to ensure crews had the custom-blended products that they needed on time. Collectively, the process proved to reduce labor and costs associated with storing, handling, and disposing of containers traditionally used when products were mixed on site.

Pushing Forward with Digital Technology

The digital record keeping app initially created for the pilot program continues to be revised to meet both the applicators' and utilities' needs by tracking the product to the location it is applied. At the same time, it is also being designed to integrate into Asplundh's 4G LTE Wi-Fi "Truck-As-A-Hub" initiative, which makes it possible to upload information through a secure Wi-Fi "hot spot." In the field, a 4G LTE connection is much more reliable and efficient than through cell service, which can be spotty on remote rights-of-way.

This year, mobile device apps are being implemented by Asplundh to allow applicators in the field to use a tablet or Android phone to scan barcodes on drums and add photos



Before shipping custom-blended products to the field, a barcode scanner records identifying information on each returnable/reusable container so its movement and use can be electronically tracked. Photo by Joe Lentz

where desired. In addition, opportunities now exist for integrating a utility system's maps and adding GPS locations to document exactly where herbicides are applied. Other documents such as labels, safety data sheets (SDS), job briefings, etc. can also be stored on mobile devices, providing ready access when needed.

The original pilot program continues to evolve and the new technology will be implemented on all Asplundh crews working on FirstEnergy's transmission system in 2016.

Although it requires an investment in IT, mobile devices, and training, the benefits of reducing paperwork, improving accuracy, and gathering data in real time are undeniable to both the crews in the field, as well as the utility for whom they work. Digital record keeping is also a way for utilities and contractors to use technology to help measure the efficacy of herbicide applications, all the while generating documentation for reliability and environmental compliance. Technology is not just for the high rise office anymore. It's on the ground and operational right now.

Hate Surprises? Well here is a little information on what is to come...

UAA Launches Recognition Programs in 2016!

Partners in Excellence Program

The UAA is the leading North American organization for the enhancement of quality utility arboriculture and right-of-way (ROW) management. Our success relies on the support of we receive from all of our members, sponsors, and volunteers. It is with great gratitude and excitement to announce the new Partners in Excellence (PinE) Program for 2016.

Companies that go above and beyond to support our mission will be recognized annually. To qualify for this

prestigious recognition, a company can participate in one or many ways. Membership, sponsorship, advertising, (active) committee volunteerism, and many other means have been quantified and assigned a value—all adding up to equal your PinE Score.

The Safety Allstars

Our industry is driven by safety and it is our goal to recognize those individuals that perpetuate and inspire safety wherever they go. These individuals (or individual) may have an official or unofficial role within your organization;

however, they influence and promote a safety culture at every turn.

This elite group (or person) of Safety Allstars will hold this title for life. You know them (or him/her) because they (he/she) coaches and mentors new recruits and seasoned-tenured employees alike. They (or he/she) understand the importance of safety and is always improving the system.

Join us at the UAA luncheon on Tuesday, March 22 to hear the official launch of these programs. See you in Knoxville, TN!