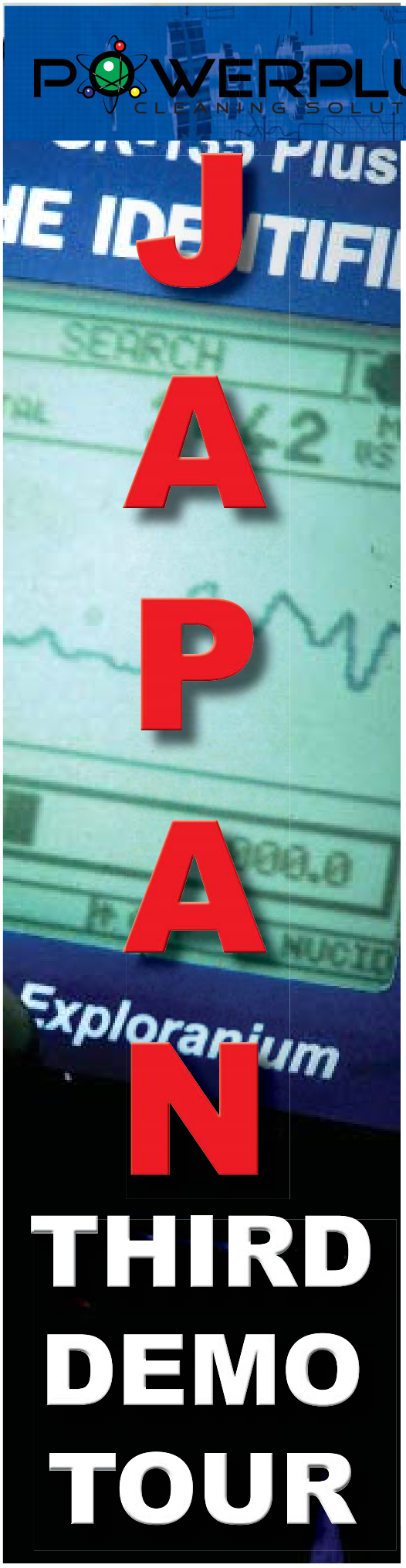

As the Japan nuclear disaster continues to grow worse, contaminants are being absorbed into the biological environment which contaminates plants, people, animals, and livestock. Improper decontamination efforts are dangerous and have proven only to make matters worse.

Attempts to burn the radioactive materials has re-released it back into the air contaminating new areas, while normal pressure washing, which has a low removal rate, also has pushed even more contaminants into the water supplies. Attempting to burry the contaminated material spreads the contaminants to plant roots where they are “bio absorbed” as well as moving closer to the ground water table. This results in contamination being ingested through grown foods and contaminated water supplies. All this may make the situation seem hopeless, still a source of hope remains. PowerPlus DCU has proven, yet again, that all these issues can be addressed safely and without causing further endangerment or harm to the environment or the people who inhabit these areas.

Having just come back from two weeks of demonstrations in Fukushima, and the Mountain Passes in Japan, where PowerPlus DCU performed four important demonstrations. Their methods and equipment proved able to handle very harsh conditions and still more than capable to get the job done.

The team’s first stop was at JA Soma rice center. The team quickly set out to decontaminate the grass in place and the results showed reductions from 200 to 155uRem/Hr. This number adjusted for background, sky shine, and shielding inefficiency represents about a 43% decrease in radiation levels. Later, the team decontaminated a “down spout” proving to be a hot-spot and reduced the levels from 70 to 46uRem/Hr with the same corrections is about a 97% removal. Last, a large asphalt parking lot was addressed as heavy snow began to fall. Even with the added complications the clean up efforts ended with results of 87 to 48 uRem/Hr which, when adjusted, is about 81% removal from the surface.

After a positive start to their campaign the team continued on to their next JA location at the JA Shin Fukushima Onami center. The site proved to be particularly meaningful as it contained the hottest contaminated spot recorded ever during any demonstration, though the team was instructed to NOT decontaminate it. They did, however, decontaminate a nearby asphalt area. The asphalt contamination levels where brought from 70 to 33 uRem/hr adjusting to an estimated 80% removal. An adjacent grassy area proved difficult to address due to what was thought to be deep snow cover as the culprit. Never-the-less, with an adjusted re-

sult of 56.5% with a 220 to 110 uRem/per hours, a significant reduction yet not the expected amount. After looking into the matter it was discovered that a chemical injector failure had reduced the expected reductions. However the result still proved the technologies ability to continue to work well even under the harshest conditions.

The next site proved to be a very difficult case and test subject. JA Shin Fukushima Watari-chiku rice patties which were covered by 8 inches of snow and slush. Along with that, two to four inches of water covering the field would be challenging, as well as there being no clean water supply available. After officials requested that the section of patties be cleaned, it was recommended that the team wait until the snow had cleared and the water drained rendering the soil much more susceptible to decontamination. However, the suggestion was disregarded and the command was repeated with the note that if the team did not complete the activity it would be counted as a failure on the behalf of PowerPlus DCU. It was agreed that an attempt at the impossible was better than a recorded failure. The team set about setting up a clean water supply by addressing a nearby contaminated irrigation ditch, by processing the Radioactive water and then using the then clean water to decontaminate the site. Next, the team trenched around a section of land for decontamination. With equipment not functioning properly and conditions which violate their normal procedures, the levels still dropped from 96 to 90 uRem/Hr. Adjusted this equated to approximately 28% removal. Although this has never before been accomplished by anyone in the history of the world except the PowerPlus DCU team, the results were disappointing. During the course of the decontamination effort it was noticed that water had gotten into the “FYCC” system through laying the cables in snow and water which shorted it out. Since then, that issue has been corrected to eliminate the possibility of it reoccurring again. Kevin Wang (the President of PowerPlus DCU) noted that: “All accomplishments were done without the use of their FYCC technology which would have yielded a better result of about 75%.”

“The expecation was that we would get a low yield from the ground since “bio-absorbed” material is supposed to be impossible to remove. But, we were shocked at the results, and so were the nearby officials watching! An 80% drop in contamination levels in ONE PASS!“ - Kevin Wang

Overall the previous engagement did not leave the team feeling wonderful but the next days events would quickly change that. At the JA Shin Fukushima Watari-chiku Cherry or-

THIRD DEMO SITE

“Some of the worst possible conditions to decontaimate in” - Kevin Wang

BREAKING RECORDS WITH 80% REMOVAL IN A CHERRY TREE ORCHARD

chard., under the watchful eyes of the Japanese governing officials, the PowerPlus DCU team performed an amazing and comprehensive and biologically important. Paying close attention to not short out their FYCC system, the team began decontaminating nearby ground soil in place with a huge drop of 230 to 128 uRem/Hr an adjusted estimate of 80% in one attempt. This result was still achieved after a full year of soil movement. Next, though in hibernation at this time in the snow and bitter cold, a Cherry tree was thoughtfully looked after and thoroughly decontaminated. A staggering drop from .59 to .41 uSv/hr. with side shine, adjusted to almost 83% removal. Notes were made to adjust the machine to yield better results in the future with no impact to the trees for future decontamination efforts.

While on site, several tests were conducted to simulate a new machine developed by PowerPlus DCU. The machine is called Earth Decontamination Machine or EDM, and was developed to decontaminate dirt, trash, bio mass, mud, ashes from burning, etc. Material was gathered at a hot spot and the simulation took the levels from 153 to 62 uRem/Hr. After allowing for adjustments it reaches nearly 130% removal of decontamination. Next, grass that had "bio-absorbed" radioactive contaminates, allowed to grow and populate for a time after the disaster, was also put through similar tests. Scientists in the past have agreed that a plant that has "bio-absorbed" radioactive material is impossible to decontaminate. Yet, the results speak for themselves as the levels went from 100 to 55 uRem/Hr. If you are wondering how that is possible, the conditions show that not only were the contaminants of the site removed, it also means that other contaminates from WWII and Naturally Occurring Radiation (or NOR) had also been removed as well. This gives and adjusted number 150%, which other wise could not be possible.

The team learned enough to modify further their tools, chemicals, and techniques to achieve greater results immediately and came home with pages of improvements which will be implemented within 3 weeks.

THE POWERPLUS DCU DEMONSTRATION TEAM

"We eagerly await the acceptance of this well proven solution to the disaster by the Japanese Government.
Japan, without knowing, has over the years assisted in the development of this process and we are eager to work closely in using it on a wide spread basis with Japanese workers and train them as we go so as to create a large base in Japan ready and able to solve any global future Radiological problems .This is how Japan can turn a disaster into a benefit for the entire Nuclear industry and help protect the world. The capacity to decontaminate all of the affected areas within a couple years is only a decision by them away. We hope and pray for the honor of teaming with them to achieve this."
- Kevin Wang (President PowerPlus DCU)