



Sustainable Solutions At Your Disposal

Emergency spill response deployed for acidic liquid spill – Government facility

Situation

The offices of Environmental Management Services, Inc. (EMSI) received a call from a government facility site reporting and initiating an emergency spill response. The caller reported multiple gallons of sulfuric acid that been spilled and spread to 3 levels below the point of origin. EMSI was able to pre-assess by asking additional questions with first contact regarding stoppage, containment, and if advisory of any regulatory agency was required while en route. Upon arrival and complete site survey, it was determined that the spill originated on the 2nd level and seeped down 2 levels to the basement along a very large diameter pipe and ducting. EMSI deployed backup to complete containment, cleanup and remediation which would last over the span of 3 days.

Action Plan

Phase I: Containment and cleanup

EMSI responders donned appropriate personal protective equipment (PPE) and began neutralizing the main floor (ground level) as it would be needed as a main access path for the rest of the spill levels. The plan was to neutralize and decontaminate from the highest level down. Soda ash was applied to all the walkways. Since water was going to be the main decontamination solution, all non-contaminated items and obstructions were removed from the lower levels to avoid additional contaminated surfaces. By the end of the first day the 2nd level remediation had been completed. All non-walking areas were neutralized and wet wiped with base solution (walls, pipes, ceiling and cabinets). All neutralizer was removed from the floor, residues sprayed with water and absorbed with mops until the pH of all surfaces was satisfactory.

Phase II: Continued cleanup and removal

In continued efforts EMSI methodically neutralized, sprayed and wiped down all surfaces down to lowest level in the basement. The pipes and ducts that served as vehicle for the spill chemical to spread was sprayed with base solution from the 2nd level to basement, wiped, and tested for satisfactory pH. Solution gathered on the main level and basement level travelled the same route as the initial spill. Neutralization of the main level and basement level was simultaneous and continued until all large and small pipes and surfaces were wiped, deconned and pH was satisfactory.

Result

In total 14x55 gallon and 2x30 gallon drums containing neutralized non-hazardous spill cleanup debris, non-hazardous rinse water collected with wet/dry vacuum during decontamination, non-hazardous used neutralizer soda ash were removed for disposal. The process was accomplished in a 3 day period with 4-5 responders. EMSI's close communication with the client paired with effective and organized response facilitated a fast and productive resolution resulting in resumed business operations at the facility within 3 days of this multi-level spill.