



Lessons Learned

The following is a video of the Encon Aquarion portable eyewash unit being tested. Notice that considerable force may be necessary in order to deploy the water appropriately. Continue to press down hard on the black handle until the flow is adequate.



The supplemental bottles will be deployed to each division consistent with their request. The bottles are a stop-gap measure in the event that the Encon does not deploy correctly, to provide an immediate capability until one can get to another suitable location.

We will update ORNL staff with additional information from the manufacturer as it becomes available.

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SAFETY FLASH

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Eyewash Unit Failed to Deploy

On June 21, 2016, an Encon Aquarion portable eyewash unit was activated at ORNL; upon activation the unit failed to provide flushing fluid to the eye nozzles. Fortunately, the worker was able to flush his eyes in a nearby sink and no injury occurred. The failed unit was retrieved and examined further for possible failure modes. This is the first known emergency activation of this brand and model since ORNL standardized to this manufacturer and model in 2012. Searches for reported issues with these units have not indicated known concerns elsewhere. There are approximately 190 of these units currently in use at ORNL.

Current Status

The Encon manufacturer's representative arrived this morning and a series of tests were conducted. While some units operated as intended, many units did not deploy properly – some deployed on one side and not the other, others would deploy only after forcefully pushing down the handle and some never deployed properly. OSHA 1910.151(c) requires the availability of eyewash units where the eyes or body of any person may be exposed to injurious corrosive materials. RSS question 7.8 asks "Does operation involve chemicals or wastes that are caustic or corrosive, e.g. acids or bases?" Based on the tests conducted, ORNL has determined these units to be unreliable and additional actions are necessary to provide redundancy until the issue is completely resolved.



Path Forward

Requesting each organization having these units in their facilities, perform the following actions:

- Communicate this Safety Flash to affected research and operations staff in the work areas where the Encon units are located. Emphasize that considerable force may need to be applied to the handle in order to deploy the water appropriately.
- Each division needs to delegate a point of contact to identify areas where these units are located and where caustics or corrosives, e.g. acids or bases, are used. For these areas, we are purchasing supplemental bottles for appropriate redundancy. Each point of contact must notify Bobby Buckner (865-253-6068) immediately of how many and where supplemental units are needed.