

HOSPITAL WASTE MANAGEMENT



a P.W. Grosser Consulting, Inc. Company

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Special points of interest:

- **Infrastructure Resiliency: Planning for Disaster**
- **Even the Newest High-Level Cold Sterilants Require Neutralization before Discharge**

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Hospital Waste

Hospital Waste Management Merges with P.W. Grosser Consulting, Inc.

Hospital Waste Management (HWM) is now wholly-owned by P. W. Grosser Consulting, Inc. (PWGC), a privately-held, 60-person engineering firm with headquarters in Bohemia, NY and offices across the U.S. Paul Grosser and I chose to engineer this merger to insure that even after I retire Hospital Waste Management services will continue to be offered to Pacific Northwest hospitals, clinics and laboratories.

PWGC has had a ten-year presence in Washington with a branch office in Fremont, north Seattle. PWGC offers engineering, environmental compliance and remediation, healthcare disaster resilience engineering, air quality and permitting and other consulting services in New York, Washington, and other states. Most importantly, PWGC has resources to hire and train new staff to provide Code Orange training, healthcare facility waste and hazardous material surveying, dangerous waste annual reporting, pollution prevention planning, pharmaceutical waste management, hazardous material and waste management planning, hazardous drug control planning and other services that have been offered by HWM for 18 years.

The merger with PWGC will allow HWM to grow with additional services and staff support to better serve healthcare facilities throughout the Pacific Northwest. For nearly 18 years HWM has been one per-

son: Alan Jones. I will continue to work with my Pacific NW clients for several more years as PWGC incorporates its staff into HWM services. Not much will outwardly change for some years to come.

Pacific NW healthcare deserves excellent consulting services that are consistent and continuing. The merger of Hospital Waste Management and P.W. Grosser Consulting will insure that the services that we presently offer will continue to be offered for the foreseeable future. All of us at P.W. Grosser Consulting look forward to serving you, our Pacific NW healthcare clients, with the care and skills that you've come to expect from Hospital Waste Management.

PWGC has headquarters in Bohemia (Long Island) NY and offices in New York City, Syracuse, NY, Shelton, CT and Seattle, WA. PWGC has a multidisciplined staff of more than 60 professionals with licensed professional engineers, geologists and hydrogeologists, LEED-accredited professionals and environmental compliance specialists.

We haven't changed our focus or quality of work, just expanded our types of services and support resources. We hope to continue serving healthcare in the Pacific Northwest for many years to come.



Healthcare Facility Resiliency: Planning for Disaster Recovery

All healthcare facility managers in Washington are aware of the potential for catastrophic natural disasters in our region. Whether it's earthquake, volcanic eruption, lahar, flooding, ice storm, wind storm or tsunami, we live and work in a fragile environment.

As numerous recent natural disasters and storm events have demonstrated, many traditional design cornerstones—notably utilities in basement/lower levels—proved to be susceptible to damage.

In New York, Hurricane Sandy especially typified the difficult consequences of not preparing for the calamity of severe flooding. The same was true of Hurricane Katrina in New Orleans. Floodwaters left many buildings uninhabitable, which presented issues for both tenants and owners. Healthcare patients frequently present even greater problems with mobility.

For 25 years PWGC has been a vanguard for identifying new opportunities in the engineering community, and its recognition of the need for an expert resiliency consultancy was no different. The professionals at PWGC

quickly adapted to the requirement associated with improved resiliency and formulated time-tested approach to facility assessment and recommending improvements to enable greater functionality and security in the face of severe natural weather events and disasters.

Natural disasters will affect not only our human operational systems, but our facility infrastructure as well. Planning for and mitigating utility and building failure will enable healthcare facilities to function reliably when they are most needed.

PWGC's resiliency assessment program starts with addressing the current state of a given structure, noting damage, if any, from previous weather or natural events, the location of critical building infrastructure, such as mechanical and electrical components, drains, telecommunications, and the overall design of the facility.

Outside of the building, PWGC examines connections to public utilities, topography, site layout and building access. These variables are taken into account to determine what improvements would best increase a facility's resiliency for a given storm event or natural disaster.

With current infrastructure and damage inventoried, PWGC then maps out a plan to improve resiliency based on structural analysis and observation. We can then recommend improvements based on assessment and/or budget constraints to best position a given structure.

PWGC developed its expertise in resiliency planning through a variety of projects including North Shore Long Island Jewish System hospitals following the destructive flooding of Hurricane Sandy in 2012.

If you're concerned about the capacity of your facility to survive a natural disaster or storm event, contact us at P. W. Grosser Consulting to learn more about what your options are. We owe it to our communities.

Wastewater Discharges: What is the “Point of Compliance”?

The discharge of wastewater into the sanitary sewer is regulated by federal, state and local law in Washington. Most localities treat wastewater and discharge it into navigable surface waters under a permit system overseen by the Washington State Department of Ecology. The U.S. Environmental Protection Agency administers National Pollution Discharge Elimination System (NPDES) permits and delegates that authority to Ecology in Washington. The federal Clean Water Act of 1972 provides direction for federal, state and local agencies.

As a general rule, some substances may not be discharged to the sewer system,

including:

- Dangerous waste,
- Highly corrosive waste,
- Oils, fats and grease,
- Flammable liquids,
- Very hot liquids,
- Dissolved heavy metals,
- Toxins, and
- Highly radioactive materials.

Local wastewater treatment districts may further restrict the discharge of specific materials because they might adversely impact treatment plant operations. An example might be heavy organic loads in the summer when surface water flows are substantially lower.

For all of these examples,

however, there is a single point of compliance in Washington where the discharge threshold must be met. That point of compliance is the “first hard pipe,” which may mean a floor drain or a sink drain. It is not after a large volume of tap water or domestic sewage dilutes the discharge far down the collector system.

In other words, dilution is *not* the solution. Washing a prohibited material down the drain with a large quantity of tap water is neither legal nor ethical.

Talk with officials at your local wastewater treatment plant if you have questions about business discharges.



High-Level Cold Disinfectants Require Neutralization to Discharge to Sewer

Hospitals are increasingly turning to alternative high-level, cold disinfectants to disinfect scopes after cleaning. Two popular choices contain hydrogen peroxide as their primary ingredient. Rapacide® PA and Resert™ XL HLD are commonly marketed as capable of being discharged to the sewer without pretreatment when spent.

Rapacide® PA contains peroxyacetic acid (peracetic acid) and the working solution has a pH of 4.2. Resert™ XL HLD contains 2-furoic acid and the working solution has a pH of 2.2 to 2.6.

The Washington Department of Ecology requires that wastewater treatment plant (POTW) discharges have a pH between 6 and 9.

Commonly, POTWs require that business discharges be greater than 5.5 and less than 12.0 for the POTW to meet its own permitted requirements.

Check with your local publicly-owned treatment works to determine if you should neutralize cold sterilants before discharging them to the sewer.

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Know Your Dangerous Waste Streams

The single most common problem waste and facility managers face when complying with Washington Department of Ecology regulations is in designating their dangerous waste. I.e., you must know what dangerous waste your facility operations are generating.

Some dangerous waste is fairly obvious and is easily identified, collected, and hauled off-site for disposal. Some dangerous waste is not so obvious and commonly gets shunted down a drain in a neglected department. Rest assured that if your facility is inspected by Ecology they will know what to ask for when investigating your waste management practices.

You can learn what waste is dangerous (ignitable, corrosive, reactive, listed, toxic or persistent) by consulting Washington's Dangerous Waste Regulations (WAC 173-303). You can also invite an Ecology Toxics Reduction Specialist to your facility to work with you to identify and designate your dangerous waste. Finally, you can contract with a waste consultant to survey your facility and provide you with a confidential assessment.

The key is to know your facility's waste streams. During an Ecology inspection is the worst way to find out what you've never known or suspected.