

Helping the pollutants at your facility take shelter from precipitation.

This year, our State has been blessed with so much needed rain. Reservoirs and lakes are filling up again, and the snowpack is unbelievable. But with all this amazing rain comes possible storm water issues for facilities who have to maintain No-Exposure Certificates and keep precipitation off of potential pollutants. Sounds like its time to take shelter—preferably a storm-resistant one... Speaking of, when you hear the phrase "storm-resistant shelter," what comes to mind? A warehouse? A gigantic, enclosed building? Well, if you are wondering what options are acceptable as Advanced BMPs for No-Exposure Certificates, this month's Rain Events newsletter is for you! We're going to be taking a look at how a storm-resistant shelter is a very valuable BMP, get a quick refresher course on what the Industrial General Permit defines as a "storm-resistant shelter," and review the NEC checklist!

To start with, what exactly is a storm-resistant shelter? While the term can apply to a wide range of structures, the Permit's requirements for No-Exposure Certification includes a brief description in Section XVII.B.5 – a storm-resistant shelter "includes completely roofed and walled buildings or structures. Also includes structures with only a top cover supported by permanent supports but with no side coverings, provided material within the

structure is not subject to wind dispersion (sawdust, powders, etc.), or track-out, and there is no storm water discharged from within the structure that comes into contact with any materials." For NEC-compliant storm-resistant shelters, there are basically two options – structures that are completely enclosed, and structures that are only partially enclosed. The "completely enclosed" category includes buildings such as warehouses and

that are completely roofed and walled - such as portable sheds and shipping containers, provided they are in good condition and don't leak. The "partially enclosed" category includes structures that have a top cover but no walls, such as awnings and the like. Notice the additional requirement here - these types of nonwalled structures are only considered storm -resistant if the materials stored within the structure are not subject to wind dispersion or track-out. Because of the potential for storm water and wind to whip through the sides of the structure, materials stored in partially enclosed structures need to be weather-proof: nothing is going to blow away, nothing is going to dissolve, nothing is going to leak, nothing is going to leach pollutants into the runoff, and nothing is going to be tracked out. Also, notice that these types of partly enclosed structures must be supported by permanent supports. So putting a carport that you might find at a local hardware store over materials that need to be kept out of the elements will not work for facilities seeking NECcompliant shelter (but, keep reading to hear how structures similar to these might still be used for minimizing exposure...)

sheds, but it can also include other structures

It should be noted that storm-resistant shelters



The Rain Events | January 2022



can also be used as an Advanced BMP and as such are not subject to as many requirements as NEC-compliant structures. The Permit states that Exposure Minimization BMPs "include storm resistant shelters (either permanent or temporary) that prevent the contact of storm water with the identified industrial materials or area(s) of industrial activity." (X.H.2.b.i) As an advanced BMP, storm-resistant shelters can be permanent or temporary and can even include simply covering industrial materials with a properly secured waterproof tarp. But stormresistant shelters have to actually be storm resistant - if your tarp setup can't withstand high winds or is installed in a way that causes the tarp to fail due to rain or snow loads, it doesn't classify as "storm resistant." And since the main purpose of storm-resistant shelters is preventing storm water from contacting industrial materials or activities, opt for a secure waterproof shelter which will actually and adequately protect your materials and activities from precipitation. Also think about longevity and durability – a tarp that is being put under a lot of strain by high winds and constant battering by rain will wear out pretty quickly and need to be replaced, which will cost a lot of money in the long run if you are constantly having to buy a new tarp. And while a tarp-and-string shelter might qualify as a temporary exposure minimization BMP, it won't be sufficient if you're applying for NEC status. So do some research and look at all your stormresistant shelter options and prices before settling on your course of action to increase your facility's storm-resistance—whether that be Advanced BMPs or NEC-compliant shelters.

When is a storm-resistant shelter needed? The most common application of these shelters is at facilities applying for No Exposure Certification coverage. As outlined in Section XVII of the IGP, this special type of Permit certification is for industrial facilities that have no exposure of

materials and activities precipitation, have eliminated non-storm water discharges, and have submitted the required certification documents on SMARTS. The NEC-specific definition of storm-resistant shelters makes it clear that these shelters must be permanent and must effectively prevent storm water from contacting industrial materials or activities - such as a warehouse, shed, building, or etc. Does that mean everything on your facility which may be a potential pollutant has to be covered? No! According to Section XVII.D of the Industrial General Permit, there are some situations where a storm-resistant shelter is not required in order to qualify for NEC coverage - "To qualify for NEC coverage, a Storm-Resistant Shelter is not required for the following:

- 1. Drums, barrels, tanks, and similar containers that are tightly sealed, provided those containers are not deteriorated, do not contain residual industrial materials on the outside surfaces, and do not leak;
- 2. Adequately maintained vehicles used in material handling;
- Final products, other than products that would be mobilized in storm water discharge (e.g., rock salt);
- 4. Any Industrial Materials and Activities that are protected by a temporary shelter for a period of no more than ninety (90) days due to facility construction or remodeling; and.
- 5. Any Industrial Materials and Activities that are protected within a secondary containment structure that will not discharge storm water to waters of the United States."

In other words, if the material is already contained and can't be mobilized by contact with storm water and won't leak or be tracked out, it doesn't have to be contained again or put under a storm-resistant shelter since

there's no exposure to begin with.

A storm-resistant shelter is a great BMP, and while invaluable for dischargers looking for NEC coverage, it's also something to consider for facilities that are already moving towards Level 2 ERA status. And remember that storm-resistant shelters are not necessarily limited to warehouses or other buildings, especially when used as an exposure minimization BMP. A properly secured tarp could do the job, as could a properly installed carport canopy from a discount hardware store. By exercising a little creativity, there's a good chance you will be able to come up with a storm-resistant shelter that fulfills the Permit requirements but doesn't break the bank.

Speaking of no exposure, need a quick refresher on what items are included in the NEC checklist? Here is a simplified version of the checklist found in Appendix 2, Section D of the Permit. The discharger must prepare a checklist showing the facility has been evaluated, and that all of these pollutant sources have been eliminated and will not be exposed to precipitation:

- 1.Runoff from cleaning/storage of industrial machinery, or areas that have remaining residual from these activities
- 2.Residual materials from spills or leaks
- 3. Materials from past industrial activities
- 4. Material handling equipment (except properly maintained vehicles)
- 5.Products being loaded/unloaded or transported
- 6.Products stored outdoors (except final products intended for outdoor use)
- 7.Materials in deteriorated or leaking storage containers
- 8.Materials that are handled/stored on the discharger's roads or railways
- 9. Waste material (except properly covered containers)
- 10.On-site application or disposal of processed wastewater (unless covered under NPDES permit)
- 11.Particulate matter or visible deposits from roof stacks or vents

#### The Rain Events

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## Storm Water Contest...

Each month, we invite our readers to participate in a contest to test their knowledge of the Industrial General Permit and show their storm water compliance program. We enter all submittals to our monthly newsletter question into a drawing and one person is selected at random to receive a \$25 gift card. Last month's contest question was:

What pH values trigger an NAL exceedance?

Congratulations to Brian who answered our contest question - "Below 6 and above 9." Brian, we hope you enjoy a delicious meal at Chipotle on us!

## ... This Month's Contest

Name some of the things a storm-resistant shelter is not needed for in order to comply with NEC coverage!

We need industrial storm water sleuths to help us with this month's question. Submit your answers by Friday, February 4th. Email your answer to jteravskis@wgr-sw.com. One winner will be selected by a random drawing to receive a \$25 gift card to *Starbucks*.

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