

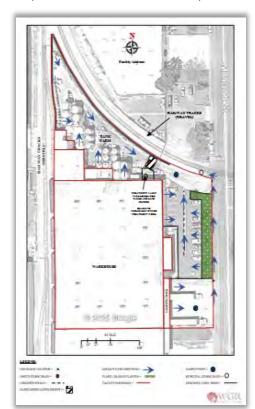
Mapping out industrial facilities of all shapes and sizes.

Ever get lost on your journey to creating a great SWPPP map? Well, you're not alone. From the looks of this North Pole Village SWPPP map, an elf forgot to include the "seven levels of the Candy Cane forest" and the "sea of twirly-swirly gum drops" on their site map. Which are two pretty important pieces of information since one of those locations is an on-facility surface water body, and the other appears to be some sort of Low Impact Development or vegetative swale (which might cause some issues with BOD since sugar is the pollutant of concern in that area). But, never fear! In this month's edition of **The Rain Events**, we're going to take a look at proper SWPPP map creation and what exactly you need to include in your facility SWPPP map to help you stay off the naughty list of SWPPP map makers.

Creating a site map for your facility's SWPPP may seem overwhelming and intimidating at first, but what if it really was just a chance to display your dazzling creativity! Before getting carried away in the design process, there are some requirements which need to be included in each map; however, overall, the design and layout is left to the imagination and creativity of the map-maker. According to the Industrial General Permit, "the dischargers shall prepare a site map that includes notes, legends, a north arrow, and other data as appropriate to ensure the map is clear, legible, and understandable." In other words, the first step of creating a site map is to make it readable. Ever encountered a road map you couldn't figure out? Well, site maps are meant to be easy to read and understand. Sometimes the best way to make the site map readable is to make more than one map. So often the map can become overcrowded with information and notes, and one of the simplest ways to change the readability of the map is to create several maps that call out different things as required by the Permit.

Note: the IGP allows multiple site maps!

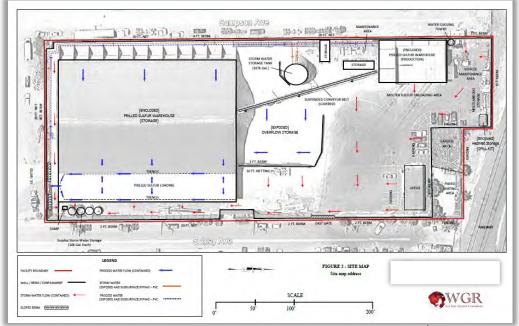
Before diving into the nitty-gritty information of what is required on the site map itself, let's review some helpful and



practical tips for creating a readable and clean looking site map:

- Use Google Earth as a tool to capture a satellite image of your facility. While drawings can be clean and tidy, a satellite-image gives the viewer a real sense of the site layout and helps them visualize what is actually happening. Using Google Earth is especially helpful when it comes to scaling the image. Just be sure to give Google Earth the credit for their image as the base map in the name or legend.
- Depending on your creative style, it sometimes works best to color the satellite image as black & white so that all the layers and areas of the map can be called out in color without the map getting too busy.
- Don't be afraid to use bright colors and outlines to call out the different requirements given by the Permit. The brightly colored lines and boxes make things easy to find. Hint: If you want to have the map be monochromatic, use textures in the outlined areas to distinguish the different selections.

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- Create a legend on the side of the map which details the shaded and outlined areas. Hint: It looks really professional to have a black line bordering the legend area!
- If the map is getting too cluttered with details, try calling out the drainage area portion of the map on a separate site map to keep everything neat and tidy.
- Have fun! Let your inner artist create a usable and beautiful map.

Since we've covered some of the tips for creating a map practically, let's cover the requirements given by the Industrial General Permit for what must be included on the map.

Think of the map as your facility in a nutshell – a clear and concise description of what and where your facility is, a definition of what you do and where on your facility you do it, a visible storm water chart showing where storm water enters and exits your facility, and a list of all potentially hazardous items. For the North Pole, this list is a little different due to snow, sugary vegetative areas, and cookie sampling points—not to mention the gingerbread erosion issues.

So, what does the Permit require to be listed on a site map? According to the Permit, the map needs to include:

- The facility boundary;
- Storm water drainage areas within the facility boundary, and portions of any drainage areas impacted by discharges from surrounding areas. *Include the flow direction of each drainage area, on-facility surface water bodies, areas of soil erosion, and location(s) of*

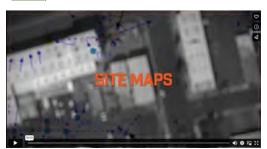
- nearby water bodies (such as rivers, lakes, wetlands, etc.) or municipal storm drain inlets that may receive the facility's industrial storm water discharges and authorized NSWDs;
- Locations of storm water collection and conveyance systems, associated discharge locations, and direction of flow. Include any sample locations if different than the identified discharge locations;
- Locations and descriptions of structural control measures that affect industrial storm water discharges, authorized NSWDs, and/or run-on;
- Identification of all impervious areas of the facility, including paved areas, buildings, covered storage areas, or other roofed structures;
- Locations where materials are directly exposed to precipitation and the locations where identified significant spills or leaks have occurred; and
- Areas of industrial activity subject to the General Permit. Identify all industrial storage areas and storage tanks, shipping and receiving areas, fueling areas, vehicle and equipment storage/maintenance areas, material handling and processing areas, waste treatment and disposal areas, dust or particulate generating areas, cleaning and material reuse areas, and other areas of industrial activity that may have potential pollutant sources.

For additional requirements for creating a site map, see Section X and Attachment D of the Industrial General Permit. Also look at the SWPPP checklist the Permit has in Appendix 1 — however, not everything on that checklist will apply to your facility.

Pro Tip: use an 11x17 inch layout for creating your facility's map. It makes the design process and readability of your map better. Rather than trying to fit everything on an 8.5x11 inch map and condensing the font to practically indistinguishable sizes, go for a larger map size to start with.

As the Permit mentions, you're also going to want to add a scale and a north arrow on your map so the reader can see the exact direction and sizing of the areas shown on the map. Try to scale items on the map to their correlating scale size. Feel free to make notes on your map of historical pollutants from soil contamination or spills, spill kits, drains, etc. These notes will personalize the map to your facility and give a clearer picture of what is happening on the site. Don't let these lists of requirements intimidate you, rather, view them as your guide and checklist for creating a map (you're going to want to check the list twice). If you follow these two lists of requirements, you are well on your way to creating a readable and compliant site map. If you get lost in all the details, be sure and take a step back and get the big picture before diving back into your newfound map making skills. We hope you enjoy the cartographic process!

PS—if you want more assistance with creating SWPPP maps, check out this video from our FORGE Industrial SWPPP Series (you can purchase the whole course HERE):



The Rain Events

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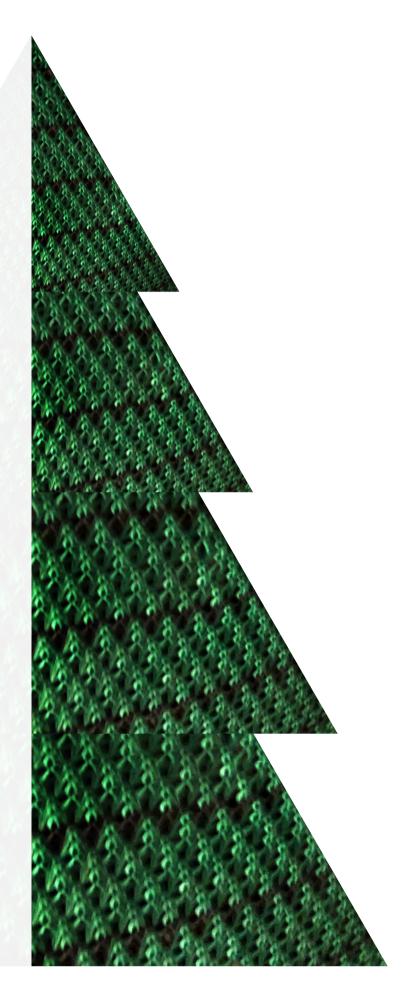
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LET IT RAIN

LET IT RAIN, LET IT RAIN.

Deck your site with festive and effective BMPs for the holiday season!



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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 are the Industrial Activity BMP Demonstrations listed in the IGP for dischargers?

Congratulations to Zak who replied "The Industrial Activity BMP Demonstrations are part of a Level 2 ERA Technical Report. In the Level 2 ERA Technical Report, an Industrial Activity BMP Demonstration, Non-Industrial Pollutant Source Demonstration or a Natural Background Pollutant Source Demonstration is required." Zak, happy shopping on Amazon!

... This Month's Contest

What is your best SWPPP map making tip?

We need industrial storm water sleuths to help us with this month's question. Submit your answers by Friday, January 13th. Email your answer to jteravskis@wgr-sw.com. One winner will be selected by a random drawing to receive a \$25 gift card to Jamba Juice.

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