Leah F. Pilconis, Esq. Consultant on Environmental Law & Policy Senior Environmental Advisor to The Associated General Contractors of Amer AGC of America THE ASSOCIATED GENERAL CONTRACTORS OF AMERICA Quality People. Quality Projects.

The Associated General Contractors of America Phone: (703) 837-5332 Fax: (703) 837-5401 Email: pilconisl@agc.org

# Memo

**TO:** Greg Schaner, Office of Water, U.S. Environmental Protection Agency (EPA)

**DATE:** September 15, 2011

**SUBJECT:** AGC Response to EPA Request for Clarification of Issues Raised in the July 11, 2011, AGC Comment Letter on EPA's Draft Construction General Permit (CGP) for Stormwater Discharges (76 *Federal Register* 22,882)

# 1. APPLICATION FOR PERMIT COVERAGE

The Draft CGP would require Notice of Intent (NOI) submission at least 30-days prior to commencing earth-disturbing activities. This is a significant change from the 2008 CGP, which includes just a 7-day waiting period. Specifically, EPA proposed to increase the "waiting period" to accommodate the endangered species and historic properties-related reviews that must take place prior to authorization. AGC's letter urges EPA to retain the 7-day waiting period, pointing out that the additional time would increase the cost of construction projects and be impractical on small projects that last only a few months. EPA's Response: EPA would like more information from contractors on how the 30-day waiting period would disrupt the construction process. The Agency pointed out at our August 17, 2011, meeting that the Draft CGP would – for the first time – create different types of operator categories. The first person to file for an NOI would be called the "primary operator" and he/she would have to wait 30 days before starting construction work. Any additional operator that subsequently files for an NOI would be deemed a "secondary operator" and his/her wait time would be seven (7) days. EPA believes that many permits (e.g., Section 404 and building permits) are obtained by the owner well before construction is scheduled to proceed. Similarly, EPA is assuming that the owner would secure the initial NOI and, therefore, a 30-day wait would not impact the scheduled construction start date. EPA believes the general contractor would generally be the secondary operator and, for that reason, the wait time for the GC would be commensurate with what's currently required.

#### AGC Response:

In today's competitive construction environment, there is a push to expedite projects. The 30-day waiting period would delay the start of many projects. This is problematic to AGC members for a variety of reasons, as explained below.

First, as a general practice, AGC members report that the application for coverage under a stormwater permit (e.g., NOI) is not submitted until **after** the project is awarded. Contractors are typically the first person who will submit the NOI because the application form requires the "operator" to sign/certify that the SWPPP documents are finished. Project owners typically push the SWPPP development

responsibility on to the general contractor – so AGC members are concerned that under EPA's Draft CGP, they would lose 30 days on the start of the project.

Second, many projects require <u>by contract</u> that work commence within 30 days of notice of award (timeframe could be anywhere from immediately to XX number days). It is common in the private construction arena that the general contractor must be on the jobsite the day after the contract is signed. AGC members report that when they get a contract for work, the project will start the day the financing gets approved by the owner. Industry is concerned that general contractors could face breach of contract (and the possibility of liquidated damages) for not adhering to the specified work schedule or for not meeting deadlines.

Third, in the northern states where the construction season is short due to harsh winters or a season of heavy precipitation, a 30-day wait at the beginning of every project would jeopardize the ability for contractors to complete many projects on time. The 30-day wait would take up an unreasonable percentage of the working days available. This puts pressure on projects with completion dates <u>and</u> those with working days assigned for completion. *See also* breach of contract concerns discussed above.

Fourth, AGC members point out that on many projects, the required protected species and historic properties issues already have been addressed prior to breaking ground. For example, there are many expansion-type projects in urban areas where the owner is just adding new facilities on existing sites. In addition, for projects involving some sort of federal action (e.g., all federally-funded highway work), a NEPA review is required and conducted early on in the planning/design stage, and there are public hearings, etc. The NEPA review should satisfy the ESA and Historic Property assessments required under the CGP. AGC members ask that EPA provide exemptions from the 30-day wait period for these types of situations.

Fifth, AGC members point out that the permit application requires the permittee to check for the presence of endangered species and historic properties and disclose information on the form. It does not seem to make sense for the agencies to spend 30-days double-checking the assessments that the government already has required to regulated community to perform. In this sense, the public ultimately would be paying for it twice. To this end, the cost of doing a second assessment is not commensurate with the environmental benefits.

# 2. ELECTRONIC SUBMISSIONS

EPA would like to transition to a "paperless" NOI system for the CGP – and require all construction operators to use an e-NOI system. AGC urged EPA to continue to accept paper NOIs and pointed to situations that would require a paper submittal. <u>EPA's Response</u>: EPA is considering phasing in the electronic NOI requirement and allowing paper submission under limited circumstances.

## AGC Response:

Online filing has worked well for many AGC members. AGC agrees with EPA's plan to phase in the use of electronic NOIs, and AGC recommends that EPA continue to allow for paper filings as individual circumstances may warrant or require.

## 3. STEEP SLOPES

The Draft CGP defines "steep slopes" as slopes of 15% or greater. In areas with steep slopes, EPA would require avoidance unless infeasible, in which case EPA would require the use of specialized

controls. AGC commented (based on feedback from the membership) that linear transportation projects typically have a 3:1 slope (33%) over the majority of the project. AGC requested that EPA require specialized controls for very steep slopes only – i.e., outside what is typical on a highway projects. <u>EPA Response</u>: If EPA were to proceed with defining steep slopes as 33% or 3:1 – how would the Agency substantiate that this will work for most states?

#### AGC Response:

For the reasons listed below, even if EPA defines steep slopes in the CGP as 33%, many linear projects would still be subject to enhanced requirements, which would unnecessarily increase the cost of construction.

First, when the Interstate highway system was being designed and constructed, the Federal Highway Administration sent out guidance to all the states that in general, side slopes and back slopes on the interstate system should not be steeper than 3:1 or 33%. They did allow exceptions to this rule in mountainous terrain or in specific situations where steeper slopes had to be used.

Second, the standard slope of a swale is 3:1 (33%) – these are very common as they are often used to carry stormwater from roadways and into treatment systems. In addition, a stormwater retention/detention pond typically has a slope of 3:1 or 2:1.

Third, AGC members report that many municipalities already define steep slopes as greater than 3:1 (e.g., throughout Colorado). AGC cautions EPA against implementing a federal permit requirement that would conflict with municipal laws.

## 4. USE OF LEVEL SPREADERS

The Draft CGP would require the "use of level spreaders." AGC members reported – and AGC's letter explained – that level spreaders are rarely installed correctly or effectively. Contractors have found that "true level" is never achieved in rills/gullies and this BMP is ineffective and costly. <u>EPA Response</u>: If these don't work well, what are AGC members' suggestions on ways to level out the land above and below sediment controls?

## AGC Response:

AGC members have found that level spreaders work to trap sediment when the depth of the water is uniform – typically 3 inches or less – over the whole surface area and the flow is very slow. The water stagnates and the sediment drops. Level spreaders have to be designed and constructed to tolerance in order to work or be effective. It is hard on most construction sites to find locations to build a level spreader and also to have the right water flow regime over the spreader.

General practice is to try to make the stormwater entering above BMPs as spread out as much as possible to resemble sheet flow. Level spreaders do not accomplish this. AGC members report that they commonly use straw (or synthetic) wattles and mulching – and they stage projects. Another method is to create a diversion strip at top of slope and put energy dissipation at the bottom.

Level spreaders can be used in a treatment train or to supplement other BMPs – but they should not be mandated.

## 5. STABILIZATION DEADLINES

In several parts of the Draft CGP pertaining to stabilization requirements, EPA would require the construction site operator to "immediately initiate stabilization" whenever activities stop and will not resume within 14 days. In addition, EPA would require contractors to "complete stabilization activities" seven (7) days after initiating stabilization on exposed portions of the job site. AGC expressed concern with these timelines for several reasons – (1) potential conflicts with standard industry practice of scheduling in one-week increments; (2) insufficient time for subcontractors to mobilize and complete stabilization; (3) potential limits on the receipt of sod; and (4) language in the Draft CGP is far more prescriptive than language in final Construction and Development ELG – which requires stabilization initiation "as soon as practicable." <u>EPA Response</u>: The Agency has asked if any of the problems listed above are unique to linear projects. Specifically, EPA would like additional information and examples related to #1 (construction scheduling practices). EPA also would like AGC input on what would be a practical as far as a time to complete stabilization. [AGC's letter recommends that EPA consider an approach that would require contractors to start stabilization practices when construction is substantially complete and then make weekly progress until completion.]

#### AGC Response:

As a threshold matter, AGC members recommend that EPA use the term "stabilization" for the permanent and final product only. For example, industry understands the term to mean that the area is "stabilized" when there is no active erosion and the soil surface is covered with rooted vegetation or a permanent protection such as rock riprap.

During construction there are two categories of **erosion control** that need to be addressed: temporary erosion control and erosion control during the establishment period.

There are many situations where contractors put down **temporary erosion control** in areas where they are not actively working, but will work in these areas again later. Examples of these areas include stockpiles, temporary bypass roads, temporary fills or embankment surcharge construction, haul roads, utility relocates, etc. There are also areas where final grades are reached, but vegetation cannot be established because of the season or time of the year. Seed may or may not be included in temporary erosion control.

The second category of erosion control is during the establishment period. Industry typically refers to this as **establishment erosion control**. Erosion control materials are used to protect the soil while the seed is germinating, or plantings are establishing. Growing times will vary by climate; but at minimum EPA should consider it takes up to 6 weeks before the seeds germinate and the vegetation has filled in properly to achieve stabilization. During this period erosion must be controlled. Even when sod is placed it takes 4- 6 weeks to root in during which time soil can erode from beneath the sod mat, unless proper precautions are taken.

Typically the same BMPs are used for both temporary and establishment erosion control. These BMPs are used to cover or protect the soil and include such things as mulch (with or without soil stabilizing polymers), blankets, mats and hydro mulch. The difference lies with how and when these BMPs are used. For example, at times it may contaminate the material to use an organic product (e.g., mulch) to temporarily cover a stockpile; other times it would not be as detrimental.

AGC recommends that EPA focus on scheduling and sequencing erosion control with the rest of the work. It is in the contractor's best interest not to leave areas exposed. AGC members maintain that on

most of their projects, erosion control is a continuous practice and is an integral part with all the other operations. There is no start and end time... it is continuous. The 14- day time period in the draft permit provides a window and gives contractors an objective. Erosion control is then weaved into the project as a continuous operation. A completion time is not needed... application of erosion control is continuous over the project as areas are graded until the project is completed.

## 6. STABILIZATION CRITERIA

EPA requested comment on whether the C-factor stabilization criteria should be used as the sole option for complying with the CGP's stabilization requirements (for both vegetative and non-vegetative cover methods)– as opposed to allowing permitees to choose either the C-factor method or the 70% area cover approach. AGC commented that the C-factor approach should not be the only criteria for stabilization, for a host of reasons. <u>EPA Response</u>: What are AGC's alternative suggestions for gauging the performance of non-vegetative measures like hydro-mulch or straw/fiber with netting, gravel, riprap, etc.?

## AGC Response:

AGC recommends that EPA leave it up to the states to define the criteria that would achieve final stabilization. For example, in Nevada, Arizona, SE Utah, SW Colorado, Wyoming, Eastern Montana, and New Mexico, AGC members report that it generally takes up to three growing seasons to establish the 70% background vegetal cover required for filing the Notice of Termination due to the extreme arid climate that exists in that region of the country no matter how elaborate the design seed mix. Using vegetative cover as the sole means for achieving "final stabilization" is not a viable option in this circumstance. Retaining permit coverage for three years or more after earth disturbing activities cease would prove to be very cumbersome economically and presents many other contractual issues. Reportedly, some of those permitting authorities consider the application of soil stabilizers/tackifiers (i.e. M-Binder, Soiltac®, Fisch-Stik, etc.) in combination with seeding as an equivalent permanent stabilization measure whereby filing the Notice of Termination is accepted without relying solely on the vegetal cover value. Soil types are of course considered in this example. Individual state permitting authorities know best what works in their regions and should be given the discretion to specify state-specific criteria for stabilization.

Turning to the C-factor equation: The C- factor, as used in the soil loss equation, is only one of the factors in the formula. [A=R K LS CP] "A" is the average annual soil loss. "R" is the rainfall factor. "K" is the soil erodibility factor. "LS" is the slope length and steepness and "P" is the practice factor. These factors are used in combination. **C-factor is used to predict soil loss** and sediment generation. It is used to describe the amount of erosion control. It does nothing to predict the murkiness of water discharge.

If the present term "stabilization" is changed to "erosion control" in much of the permit, the use of C-factor may make more sense. **Stabilization** is measured by permanent vegetation (that is rooted in) or by some form of permanent surface protection (e.g., rock riprap). The amount of **erosion control** obtained on a surface could be referred to in terms of cover C-factor.

AGC members report that construction site operators typically would use a BMP with a higher C- factor in instances where, for example, the site has highly erodible soil, or it is located in a high rainfall area or it includes slopes that are steep.

AGC maintains, however, that there are some issues that EPA would need to work out before C-factor should be included in the permit. First, there needs to be a universal accepted table of C-factors for the various materials in the industry. Secondly the C-factor should relate to how a product or material is installed. (A light layer of mulch or streaked application will not have the same C-factor as a uniform layer of mulch properly anchored.)

Also if C-factor is stamped on the product or readily available, the contractor has better information to make informed decisions of which product to purchase and apply. For example, EPA could consider a C-factor of less than 0.05 on an area to equal stabilization.

## 7. CORRECTIVE ACTION RE: BMPS CURRENTLY IN USE

The Draft CGP states that if you discover that the stormwater controls you are using (per your SWPPP) are not designed, installed, and/or maintained as required by the permit, you must "[i]nitiate work to fix the problem immediately after discovering the problem, and complete such work by the close of the next full work day." EPA's intention was to address common "repairs" or "regular maintenance of stormwater controls" that typically ensure following a routine jobsite inspection. AGC commented that it often would not be feasible to complete this work in a single, full work day – pointing to relevant factors such as the size of the stormwater control and its accessibility on the jobsite. <u>EPA Response</u>: EPA would like AGC members to provide more information (case studies) on how long it takes to perform typical repairs/maintenance procedures on commonly used site controls.

#### AGC Response:

One day is not enough time to complete corrective actions. For example, on a large distribution center project that had an accelerated construction schedule and multiple shifts in operation – it might take several days to perform all the required corrective measures. Similarly, a freeway reconstruction project may have thousands of storm drain inlets. After a rainfall of more than an inch, the storm drain inlet protection on ALL the drains may need to be cleaned out.

Generally, the time it takes to clean out and/or repair BMPs on a project depends on the size of the storm event and the size of project. Another important factor to consider is whether the location of the compromised BMP(s) is accessible with equipment because the soils are saturated or the area is even under water. It may take several days after a large storm event for areas dry out enough to move in with machines and or repair tools.

Typical industry practice is to address the most "at risk" measures first. Construction companies commonly use subcontractors to install and maintain measures. They must be allowed some flexibility in scheduling their work for multiple clients. Usually it is the larger storm events that cover large geographical areas that cause the most damage. As a result, specialty/subcontractors cannot make it to all of the clients' sites in one day. On major storm events, it may take a week before specialty contractors can visit all the affected projects.

AGC members believe that industry's focus should be on getting the BMPs cleaned out maintained and serviceable before the next rain event. AGC recommends that EPA modify the corrective action provision to require site operators to show intent and progress toward fixing the problem (documentation in the SWPPP) after discovering the problem and then complete correction within seven working days unless infeasible, which would also be documented by appropriately trained professionals. AGC members continue to stress that the permit must provide an exclusion from the seven-day deadline because if it's raining the contractor would do more harm than good by tracking around the jobsite. He

could bury equipment or needlessly stir up a lot of dirt and create channels. EPA should allow the operator the opportunity to document in his SWPPP an explanation for not meeting the seven-day deadline.

# 8. CORRECTIVE ACTION RE: ADDITION OF NEW BMPS

Under the Draft CGP, if you determine that you need to install a new stormwater control or replace an existing control in order to meet the terms/conditions of your permit, you must "install the new or modified control, and make it operational, by no later than seven days from the time of discovery of this [noncompliant] condition at your site." EPA's intention was to address situations that require a significant redesign and reconstruction or replacement. AGC commented that a seven-day period is not reasonable because such corrective action measures (1) may require engineering design to meet EPA's proposed two-year storm criteria and turbidity standards and the proposed seven-day deadline is inadequate to design, procure materials and install anything more than rudimentary controls; (2) are typically contracted out to subcontractors who work for multiple customers and need flexibility in coordinating their clients' work; and (3) would not give the site operator enough time to seek assurance of compensation for the owner of the project for changed conditions. <u>EPA Response</u>: EPA would like AGC members to suggest an alternative to seven-day timeframe that would work for industry and provide support.

## AGC Response:

The situation of adding more or more rigorous BMPs on projects is very involved and involves **approvals that are beyond the contractor's control.** The draft CGP purports to require more rigorous BMPs or design modifications when the existing BMPs prove to be inadequate or fail. More rigorous BMPs cost more money and redesign means changed conditions.

The following is an example on a commercial site where a school was under construction and existing controls needed to be upgraded:

Engineering analysis and design of two comparative alternates took 3 days; it took 2 additional days to develop quantities, estimate work hours and develop costs for the two alternates, and about a week to get approvals from the district school administration. Once approvals were obtained it took two days to order materials and get equipment on the job site and another three- four days to complete the work.

When changes are done on state-administered Federal Highway projects, it frequently takes at least 2-3 weeks to get approvals. Another issue is if additional monies have to be encumbered on state or federally funded projects. Then it takes at least a month.

Many times there are joint projects such as state/city projects where a highway is reconstructed through a city and the city work of doing new water mains and sewer which the city pays for is bundled with the total project. Approvals and estimating the cost splits of extra erosion control work on these projects takes a lot of time.

The bottom line is that it takes longer to do an engineering and cost analysis and get approvals than it does to do the actual work.

If, in the permit, EPA insists on specifying an exact deadline for contractors to add new/enhanced BMPs, AGC recommends that it be 7-10 days <u>after approval from the owner</u>. However, AGC maintains that an exact "one-size-fits-all" deadline could never be met in all instances.

# 9. STORMWATER POLLUTION PREVENTION PLAN DOCUMENT

EPA requested public comment on whether the owner of the site should bear the initial requirement to develop the Stormwater Pollution Prevention Plan (SWPPP) for the jobsite. AGC commented that the owner should develop the SWPPP and have responsibility for modifying the SWPPP throughout project construction to completion. AGC reasoned that this approach is essential to ensure that the owner (and architect/engineer) address stormwater compliance during the project planning stage and the contractor(s) is informed up front (i.e., as part of the bid package) of his/her stormwater responsibilities. <u>EPA Response</u>: EPA would like to know if it would address AGC's main concerns if it were to draft the new CGP to make the owner responsible for the design components of the SWPPP, but leave the procedural elements to be the "operators" responsibility.

## AGC Response:

The SWPPP must be designed early on in the project and include all costly/permanent controls, such as permanent ponds and/or permanent water treatment BMPs like bio-swales, grit chambers, etc. The SWPPP also needs to address how to fit the project into the terrain, how to minimize disturbance and how to protect species and avoid historic properties. In order for bids to be fair (level playing field), the erosion control BMPs to be used during construction need to be included in the initial bid package. The contractors can then bid fairly on the work proposed. Thus, AGC finds that the owner needs to be responsible for the design components of the SWPPP because it is the owner who controls the project design.

On large transportation and commercial construction projects, where the contract is awarded to the lowest bid and the site design may have been developed without sufficient regard for stormwater management and CGP compliance, it is very difficult to then later develop a SWPPP that complies with the permit, due to potential conflicts with the site plans. The result of these conflicts can be that the owner and the general contractor are forced to negotiate changes to the site plan, which arguably should have been part of the original design. This has been the experience of many AGC members.

During construction the contractor needs to implement the SWPPP. Part of implementing is scheduling, doing things in a timely manner, and incorporating the BMPs that are in the SWPPP into the work. In Wisconsin, for example, the contractor provides an implementation plan. In Minnesota, the contractor provides a short schedule of erosion control activities each week during construction as part of their progress report on the project. Having the contractor do the procedural part of SWPPP implementation is a very workable method in just about all situations. The only issue is when owner approval is necessary to change the BMPs in the SWPPP or if owner approval is necessary before the BMPs in the SWPPP can be installed by the contractor or if there is an increase in cost that needs to be negotiated due to necessary changes.

# **10. CLOSING REMARKS**

To tie together several of the recommendations outlined above, AGC urges EPA to make clear in the new permit that the contractor does not become an "operator" on the site until he commences earthmoving activities. In view of that, prior to the project breaking ground, the owner would be the only party that meets the definition of operator. This change should be coupled with a new requirement that the owner take responsibility for the design part of the SWPPP. What follows is a pattern where the owner would typically be the first party to file for permit coverage. [This scenario has NOT played out successfully in the past, because – as explained above – the owner has pushed the SWPPP design responsibility on to the general contractor and so he has not been able to satisfy the NOI requirements. It has ended up that the contractor is the first person to file the NOI. Moving forward, if EPA makes the owner responsible for SWPPP design, then the owner has no barrier to filing the first NOI.] Having the owner act as the "primary operator" would get the owner and contractor talking about environmental compliance much earlier in the process and would yield improvements for every party to the construction process. The GC would typically come to the project site as the "secondary operator" and he would adhere to the seven-day wait period that industry has become accustomed to and then implement/modify the SWPPP moving forward.