Public Comment
Draft Construction Permit
Deadline: 6/11/08 by 12 p.m.

Graniterock

MATERIAL SUPPLIER / ENGINEERING CONTRACTOR - **LICENSE #22**

June 11, 2008

Jeanine Townsend, Clerk to the Board
State Water Resources Control Board
1001 I Street, 24th Floor
Sacramento, CA 95814

VIA EMAIL: commentletters@waterboards.ca.gov

Re: Comments on the Draft of NPDES General Permit for Discharges of Storm Water Associated with Construction Activities

Dear Ms. Townsend and Board Members:

Graniterock again thanks the Board for listening to our recent hearing presentation and for their openness in working with all stakeholders in the development of this permit. We share the Board's goal of protecting water quality, and pride ourselves as a construction company that exhibits not only environmental compliance but environmental excellence. Our company's innovative and forward-thinking approach to environmental excellence includes backwards planning beyond compliance from new and proposed permits to anticipate compliance issues and to identify opportunities for improvement. As such we have much interest in the proposed draft General Construction Permit (DGCP), but we are concerned that compliance with the DGCP is not feasible. We support permits and general orders that forward the advancement of storm water management. This is why turbidity should be used as a tool for BMP assessment, not for something it cannot do such as measure sediment loading. This is also why we need to recognize that effluent limits in California for almost all construction sites, including state projects, are fantastical at best, and that source controls need to be better weighted. Below we more fully outline some of the issues that we feel will negatively impact our potential for future compliance. We also offer alternative recommendations to improving storm water quality through a tiered process and assessment.

Comments:

I. NELs are not appropriate for all construction projects in all storm events universally in all of California's climates and regions.

While Graniterock strongly supports the Board's efforts to protect water quality, we do not find numeric effluent limits (NELs) as proposed (i.e. not related to sediment load, not responsive to winter storms, and not averaged) to be appropriate or feasible at this time. We agree with the findings submitted by the Blue Ribbon Panel's report to the Board:

> "non-active erosion and sediment control BMPs, while effective when applied and adequately maintained, produce more highly variable [sic] in effluent quality, making setting Numeric Limits difficult, *if not impossible*" [emphasis added].

The Blue Ribbon Panel adds that:

> "it is important to consider natural background levels of turbidity or TSS in setting Numerical Limits or Action Levels for construction activities. The difficulty in determining natural background concentrations/levels for all areas of the state could make the setting of Numeric Limits or Action Levels impractical from an agency resource perspective."

Rather, the Blue Ribbon Panel recommends further investigation to determine "whether the use of Numeric Limits is prudent, practical or necessary to more effectively achieve nonpoint pollution control..." and Graniterock concurs with this recommendation. Below, we iterate specific concerns we have with the NELs for turbidity and pH as set forth in the DGCP

A. Turbidity NELs are not feasible or not scientifically supportable

We understand the Board's, primary goal is to reduce sediment loading in storm water runoff in water bodies, such as the 303D listed water bodies impaired for sediment. Graniterock shares the goal of having healthy natural levels sediment transport in waters of the state such that damaging excessive sediment loading is reduced. To be effective we must use the right tools. The use of turbidity to measure sediment in runoff is not scientifically sound and can lead to ineffective policy and infeasible compliance requirements, has scaling limitations, and will not exclusively measure the target constituent.

Traditional measurements of sediment, which are those used for the development of the last several decades of regulatory and policy making decisions, have not relied exclusively on turbidity; instead, reproducible and scientifically accepted measurements were used that are not as dependant on a plethora of natural factors such as weather and geology as turbidity might be. Measures of sediment in storm water include Total Suspended Solids (TSS) and Suspended Solid Concentration (SSC); both are measures of the concentration of sediment levels in runoff. In contrast, turbidity is an optically determined parameter that measures how much light can pass through a test sample of water. Turbidity measures the optical properties of particles, such as its

reflectiveness; its values can be independent of particle quantity and density, and is influenced by temporal considerations. It can include things like algae, chlorophyll, and anything that affects optical interactions disproportionate to the particle size. The EPA, in its 1972 Water Quality Criteria Handbook[1] (the "Blue Book" on which most of the water quality objectives in the basin plans are based) states that the "type of plankton, clay or earth particles, their size, and electrical charges, are more important determining factors than turbidity units." Also, turbidity as a field test is limited in magnitude: the water can only get so dark before we are left comparing dark against dark without generating useful data to assess compliance. In addition, like with any sampling event, turbidity is greatly influenced by location and temporal parameters.

The relationship between turbidity and sediment depends on site specific conditions (such as the surrounding geology) and on rain event specific parameters, and this relationship can vary with the exact time and location of the sample collection. The EPA, in the Blue Book referenced above, actually refrains from establishing a limit for turbidity because "it is not possible to establish a turbidity recommendation in terms of turbidity units; nor can a turbidity recommendation be expressed in terms of mg/l 'undissolved solids' or 'nonfilterable solids.'" The sediment to turbidity conversion used in the permit to establish numeric action limits (NALs) (which in turn was also used to establish the NEL) is not accurate, not real or reproducible, and is too broadly applied at all sites to allow for compliance in the varying hydro-geologic conditions present throughout California. Simple models do not work when describing complex storm water events.

Further, standard erosion control materials have generally been developed to control sediment, not turbidity. For example, Caltrans' extensive BMP Retrofit Pilot Program and its Erosion Control Pilot Program focus on BMP's ability to reduce sediment loading, not turbidity. Because of the complicated relationship between sediment load and turbidity, we cannot simply say that by controlling sediment we are controlling turbidity; it is not tested if the turbidity limit specified in the permit can be met with BMPs field tested for erosion and sediment reduction.

Because of the uncertainty between turbidity and sediment loading, automatic mandatory penalties based on turbidity values are not appropriate. Also, penalties based on turbidity may not even represent impact to the environment and are not weighted against climatic and other natural conditions, as we will discuss later in this letter.

We understand the good intent to provide a cost effective tool to access BMP performance and selection, and believe that BMP assessment is important in storm water management. Turbidity cannot be used to measure actual sediment loading and cannot be used to establish compliance. Instead, we are not opposed to using turbidity as an indicator of BMP effectiveness and believe a tiered approach (as will be discussed in a later section) can be beneficial to improving water quality. Again, the complicated/nonexistent relationship between turbidity and sediment makes the use of single turbidity-grab-sample in storm water management to evaluate NELs (with automatic penalties) not only the wrong tool, but sets the stage for a perfect storm of litigation.

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[1] EPA R3-73-033, March 1973: Water Quality Criteria 1972

B. pH NELs do not consider ambient conditions

The use of a pH numeric effluent limit is not appropriate because it does not consider natural conditions, nor will a single grab sample represent impacts to the environment. Potential natural inputs of pH that could affect the levels in the storm water discharge, such as springs with alkaline or acidic sources of water, vegetative matting and other natural sources pH altering materials could cause exceedances of the narrow proposed range. A stand-alone numeric limit also does not factor in pre-existing conditions that may be beyond the control of the contractor. For example, nutrient poor soils can have heavily acidic pH. Natural conditions such as mineralogy, climate and weathering can also influence the natural pH in a watershed beyond the control of the contractor, especially where there are indivertible run-on conditions. While a contractor can use BMPs (such as good source controls and good housekeeping) to manage construction sources of pH at a site, we cannot control for all natural inputs and upstream influences. Without careful consideration of pre-existing or uncontrollable conditions, a "one-size fits all" pH numeric limit sets up certain sites for non-compliance.

C. Effects of natural conditions, processes and the environment

The use of a blanket numeric effluent limit for pH and turbidity does not take into account the ambient levels of these parameters in receiving water quality. As stated in the fact sheet, the current permit assumes that:

> "this level of turbidity (1000 NTU) in construction site effluent being discharged to almost any jurisdictional water body in California poses a potential threat to cause or contribute to exceedance of receiving water quality objectives. As a result of all these factors, staff took this NAL limit and made it also an NEL that represents the current, best approach to using an NEL to control sediment (in the form of turbidity) discharges from construction activities."

In addition to the scientific problems of using turbidity to control sediment (which were previously discussed), Graniterock is concerned that this "potential threat" to "almost any" water body is used to justify the implementation of a numeric limit that will apply to *all* sites, with no exceptions given to those water bodies that *may not* be threatened by this level of turbidity. Some water bodies are naturally more turbid than others, especially during the rainy season; in fact, certain aquatic species have evolved to benefit from such turbid waters. The EPA Blue Book states that "individual waters vary in the natural amounts of suspended sediments they carry; therefore, no fixed recommendation can be made." This logic can extend to turbidity as well. It does not make sense to hold different water bodies to one fixed year round standard. Further, the receiving water quality objectives as outlined in regional Basin Plans are watershed (and often water body) specific, which allows for the influences of natural conditions. Having a numeric value ignores the effects of existing environmental conditions in favor of an arbitrary number that does not relate to actual water quality.

D. Methods of determining non-compliance that will create a system that erroneously portray discharges regulated by this permit as chronic violations.

In addition to the uncertainty surrounding the water quality benefits of using numeric limits, the methods to assess compliance with these levels are still under study. The Fact Sheet to the DGCP states that "we have not developed a set of tried and tested procedures for obtaining high-quality representative samples of storm water effluent from construction sites." Without methods for obtaining high-quality representative samples, we cannot be sure that the NELs are effective measures for assessing water quality. The degree of uncertainty in construction sampling makes automatic penalties for these samples unfair and inappropriate. Instead, Graniterock encourages the Board to use this opportunity to work with the construction industry to develop that set of "tried and tested" sampling procedures to ensure representative samples and useful data can be collected and applied to improve water quality.

Solutions to improving water quality using a general permit format

A. Use BMP-Trigger-Values, not NELs

The following recommendations assume use of Water-Shed management analysis combined with the use of source control benefits calculations.

Rather than relying on NELs based on faulty science with questionable success for compliance, Graniterock recommends using **BMP-Trigger-Values** to assess BMP effectiveness, in a tiered fashion. BMP Trigger Values is a site assessment tool based on an average of watershed weighted samples collected from the site; these calculations are discussed below. If the BMP-Trigger-Value is above a **Phase I BMP Assessment Value** for turbidity, the contractor should review up-stream BMPs to determine if there was a BMP malfunction, or if BMP improvement or improved selection is needed. The Phase I BMP-Assessment-Value can be either 1,625 NTU or +/- 10% of the upstream NTU level of the receiving water during discharge events. The 1,625 NTU value is the mean NTU value used to aid in compliance determination, based on the statistical calculations presented in the DCGP Fact Sheet. The Phase I BMP Assessment Value should be allowed to be refined for locality and available measurement technologies, and should not be expected to be an appropriate number applied across all sites throughout California.

The BMP-Assessment-Value would trigger assessment of BMPs and corrective actions as appropriate, and this iterative process allows the Board and the contractor to develop a better understanding between BMPs, sediment loading and turbidity to address the concerns previously described. If after three BMP-Trigger-Values the average results are still above the BMP-Assessment-Value despite corrective action implementation, then a BMP Action Plan, including additional BMPs review and selection, would be triggered. The site would also be required to assess the feasibility of using Active Treatment Systems (ATSs) and revise the Storm Water Pollution Prevention Plan (SWPPP) as necessary with any changes. We suggest the use of three or more samples to trigger the BMP Action Plan and ATS because this will allow the actual trend in water quality to be observed; it helps compensate for the potential effects of outliers, sampling errors and external influences that can influence real-life sampling situations. The use of more than one sample event for assessment is also supported by the Blue Ribbon Panel, who state:

> "The Panel recommends that a Numeric Limit or Action Level should be compared to the average discharge concentration. The minimum number of individual samples required to represent the average discharge concentration for a storm will need to be defined." [BRP pg 17]

This process also forces construction sites to review their BMPs on a regular basis and to respond to actual site conditions to protect water quality, without depending on the unknown relationship between turbidity and sediment loading. This tiered process will also allow the Board and construction industry to work together to collect the data necessary to understand whether the use of numeric effluent limits is "prudent, practical or necessary" to protect water quality while ensuring water quality objectives are met through the iterative BMP process. Finally, this collaborative effort will also provide the Board, the construction industry and the

general scientific community vital information to understand the success of BMPs in controlling turbidity and the feasibility of using turbidity to measure for sediment.

II. **Use Standards to trigger action first; standards must be sensitive to concentrations.**

B. Watershed management approach: Area weighted sample results.

With the current NEL, all discharge points are legally considered the same, which is not the case in terms of impacts to the environment. The assessments of water quality impacts from a site should be calculated as a site area weighted average to increase representativeness of site impacts. For example, if a site has 95% of its drainage area discharging to Point A and 5% discharging to Point B, under the current permit the sample results of Point A and Point B are considered the same legally in terms of established penalty rules and case law. In reality, Point A has more of a pollution control burden (and a greater potential to pollute) because it represents more of the site. As such, the sample results from Point A should have more weight than from Point B. In this example, the BMP trigger-value used to compare against the BMP-Assessment-Value would be:

BMP trigger-value = [(0.95*Point A Sample Result) + (0.05*Point B Sample Result)]

By using this **watershed management approach**, we recognize the greater water quality concern posed by Point A and, at the same time, recognize the extra effort needed to control Point A. The use of the watershed management approach also allows the permit to recognize the water quality benefits of preventing discharges (essentially, there's zero pollution). Take for example a site that has 70% of its drainage area discharging to Point A, 5% discharging to Point B and 25% discharging to Point C. If the contractor were to "hold back" discharge from Point C, then the BMP trigger-value used to compare against the BMP-Assessment-Value would be:

BMP trigger-value = (0.70*Point A Sample Result) + (0.05*Point B Sample Result) + (0.25*0)

The use of the watershed management **approach** provides a better view of actual water quality concerns, allowing more targeted improvement efforts. It also provides a greater incentive for contractors to reduce discharges from the site and actually reduces sediment loading by prioritizing efforts.

C. Watershed Management Approach should include source control scoring

Source control is an integral component of any storm water management program and should be encouraged. As stated in the DCGP, "temporary soil stabilization can be the single-most important factor in reducing erosion at construction sites." With the current configuration of the permit, however, source control is discussed but there is no substantive incentive for their further

development as the single most important factor. Because discharge points are currently all treated the same with no benefit for source control, contractors may be inclined to use treatment controls (such as silt fence) and ATS because these are perceived as being "easier" to deal with; there is no drive towards the more effective and protective erosion control. In addition, while the DCGP encourages the use of new or innovative source control approaches in its narrative, there is a disincentive for contractors to think "outside of the box" because of fears of penalties.

The use "credits" for source control with the watershed management approach encourages contractors to turn to innovative, site-specific erosion control measures as the first line of defense.

The credit concept can be introduced by factoring in the amount of soil reduction provided by various source control measures. For example, the Caltrans District 7 Erosion Control Pilot Study2 conducted erosion rate tests on 15 source controls measures. The study was conducted in an indoor laboratory at the SDSU/SERL on a 1V:2H slope of clayey sand soil, using a rainfall simulator to simulate a 10-year (2) storm event for the Los Angeles area. Please note that this study has specific limitations if used to apply to all of California, and differences in soil, climatic patterns, geology, and slope lengths site may lead to different specific values. However, the results of this study can provide some general information to develop a useful tool to recognize the benefits of source control. The study calculated percent reduction of soil loss, relative to bare soil, of 15 source control measures. Graniterock averaged these results to calculate an average soil loss percent reduction afforded by these measures. However, we did not include the percentages from the mulch or compost source controls because these measures are used to spur vegetation and can provide long-term benefits, including enhanced source control measures, which were not accounted for this study. The average percent soil loss reduction was approximately 93%, and Graniterock recommends applying a factor of 7% to the percentage of the site that utilizes source control to provide a credit for the amount of sediment that would have been added to the site without source control. For example, assume a site has 95% of its drainage area discharging to Point A and 5% discharging to Point B. The contractor uses source control on 50% of the drainage area to Point A and on 100% of the drainage area to Point B. The BMP-trigger-value calculation would then look like:

(0.95*0.5*0.07*Point A result) + (0.95*0.5* Point A Result) + (0.05*Point B result*0.07*1)

As an example, assume a hypothetical site has 10 acres, with 9 acres draining to Point A and 1 acre draining to Point B. Of the 9 acres draining to Point A, 4.5 acres have source control; the entire 1 acre draining to Point B has source control. The BMP-Trigger Value would be:

((4.5 acres/10 acres)*0.07*Point A result) + ((4.5 acres/10 acres)*Point A result) + ((1 acre/10 acres)*0.07*Point B result)

Caltrans notes that "Caltrans does not hold any method or material to a numerical standard of performance, since there are other evaluation criteria that should be considered when selecting an appropriate erosion control measure," and Graniterock again reiterates its opposition to the use of

[2] Caltrans District 7 Erosion Control Pilot Study: http://www.fws.gov/fire/ifcc/Esr/Library/IECA%20ECPSpaper.pdf

a numeric effluent limit. However, if numeric limits or BMP-trigger-values are to be used, then Graniterock strongly recommends introducing methods of positively recognizing the benefits of source control used at a site.

D. Normalizing Watershed Management Approach Values

In addition to being more reflective of watershed management, actions based on sample results should be determined through a normalization of the results, not on a single sample event, i.e. not a single storm event. Graniterock recommends a sampling program based on qualifying rain events such as in the Industrial storm water program, not on a mandated schedule as currently outlined in the DCGP. Sampling twice a day for the length of a storm event is unnecessary and overly cost/labor intensive relative the quality of data generated. Instead, Graniterock proposes a sampling program that includes sampling in the first hour of a qualifying discharge (thus capturing the "first flush" of a rain event) and conducting visual observations of BMP performance at the start and end of the work day, when conditions allow for safe inspection. If BMPs are observed to be overwhelmed or in need of maintenance, then additional sampling should be triggered.

As discussed before, the use of average discharge values to assess compliance is recommended by the Blue Ribbon Panel. Using a single "snap-shot" sample to judge the site's entire storm water management program is not appropriate and, basically, is not fair. A variety of factors can skew that single sample, including weather conditions, sampling equipment errors, access issues and errors (such as fallen trees), flooding events and lab errors. Taking an average can reduce these external effects and provide a more representative understanding of the site's effects on water quality.

III. BMP-trigger-values, should include allowances for natural weather patterns and flooding events

Neither of the currently proposed numeric limits allow for natural variations in weather patterns, not even intensive winter events. Erosion causing rain events are a part of nature, and in some instances natural conditions beyond the control of the contractor can overwhelm the BMPs. There can be situations in which the numeric levels are exceeded because of intense and/or frequently spaced rain events, not because of contractor negligence or improper actions.

The Blue Ribbon Panel recommends that:

> "Numeric Limits and Action Levels not apply to storms of unusual event size and/or pattern (e.g. flood events). The determination of Water Quality Capture Volume should consider the differing climate regions to specify these events." [BRP pg 18]

Graniterock understands that the Board is wary of choosing a single storm event and using this as the level beyond which exemptions apply; after all, flood events are defined by site specific climatic and geological parameters. However, the important influence of rain events cannot be excluded when assessing compliance, especially when automatic penalties are involved and can be triggered in a single rain event regardless of the controls implemented on site. Flooding, if

ignored, would allow penalties to be awarded when off site floods run on the site, even if the offsite run-on was the cause of the elevated optical properties of the materials measured by the turbidity meter. If the Board insists on keeping the NELs, despite the problems with them as specified earlier, or if the Board chooses to use the BMP-Trigger-Values, then Graniterock recommends modifying the permit to ensure site and rain event specific information is considered in conjunction with any sampling data when determining compliance. This will allow unusual event sizes, as defined by location specific rain data, to be removed from usage against a one size fits all numeric concept.

IV. Timing is important!

By timing the release of a discharge, water quality goals can be maximized. The permit should provide weighting where storm releases can be staged prior to or after the peak of the hydrograph.

V. Training/certification discussion

A. The Caltrans' 24-Hour Construction Site Storm Water Management class

Graniterock requests that the Board include the Caltrans' 24-hour storm water management course in the list of accepted certifications; to make the Caltrans certification comparable to the other listed certifications (such as the Certified Professional in Erosion and Sediment Control certification), a work experience requirement of three in soil and sediment control should be included as a requirement of the training. The Caltrans' storm water class reviews the concepts pollutant sources, effects of rain and erosion, and includes a comprehensive review of the BMPs field tested and approved by Caltrans.

Many of the people in our construction crew have solid expertise in BMP management and in storm water quality management based on years of experience, but they may not be the types who are able to go through complicated application processes and examinations; the Caltrans training class makes it accessible to these field guys. It is our firm belief that the person in the field and working the site is in the best position to make reactive and pro-active improvements to the site's storm water management program the quickest. As the permit is currently framed, these hands-on, experienced people will be distanced from the storm water management program on a site.

A specific area of concern is the definition of a qualified SWPPP Practitioner includes the responsibilities of visual observations and sampling and analysis, and it is not clear if properly trained people other than the Qualified SWPPP Practitioner are allowed to do these things. Graniterock requests that this issue be clarified and that properly trained people be allowed to conduct samples and make visual observations without the unnecessary certification processes.

B. Allow industry to conduct training

Graniterock prides itself on its education based environmental management system, and makes efforts above and beyond the norm to provide comprehensive, high quality training to our crews

from the bottom up. As such, we request that construction companies such as ours be allowed to provide the State Water Board approved Qualified SWPPP Developer training course internally, without the need for an external consultant. Based on our experience, internal training is more effective than external training because it allows our company to use company-specific and regional specific examples, which will be more relevant (and thus informative) to the attendees. Based on our years of teaching experiences, having that connection with the audience is critical in ensuring solid understanding of the training material. Graniterock has experience with providing training and we request the opportunity to also provide the State Water Board Qualified SWPPP Developer training to our team members.

VI. ATS

A. Numeric limit for ATS should be based on background levels

As with the previously discussed NELs for turbidity and pH , Graniterock is opposed to the use of a broadly applied numeric limit for turbidity for discharges from an ATS unit. ATS units have the capability of reducing turbidity levels well below natural levels, which can be a detriment to the aquatic ecosystem that has evolved to survive in such conditions. Rather, Graniterock recommends that the Board based limits on existing background conditions, and require performance standards to be sensitive to the receiving water.

B. ATS sampling if the condition is to remain in place

Graniterock has conducted research into continuous data loggers, and have found that continuous data loggers are not very field sturdy; we have found the need for frequent calibration and repairs, issues with maintaining cleanliness (i.e. algal growth on the lens can interfere with turbidity readings), and frequent fouling of the meter. While the permit requires calibration and cleaning of the equipment, it does not allow for the time to do these things. Graniterock requests that the permit allow exemptions from the 15-minute sampling requirement for equipment calibration or cleaning, and to allow an exemption for equipment break-down to give the user enough time to repair or replace broken equipment. Exemptions should also be allowed for unavailability of supply parts, of power (for example, if the site cannot obtain a diesel generator set to supply power due to air quality restrictions) and of chemicals, and if the cost of system will contribute to a 1,000 fold increase to cost.

VII. Sampling considerations

C. Clarification of sampling procedures

As discussed before, Graniterock recommends a sampling program based on qualifying rain events, not on a mandated twice-daily schedule. Sampling twice a day for the length of a storm event is unnecessary and will not generate useful data generated. Instead, Graniterock proposes a sampling program that includes sampling in the first hour of a qualifying discharge (similar to the Industrial storm water program) and conducting visual observations of BMP performance at the start and end of the work day, when conditions allow for safe inspection. If BMPs are

observed to be overwhelmed or in need of maintenance, then additional sampling should be triggered.

In Attachment B, the Monitoring Program and Reporting Requirement, Section F states that:

> "Similarly, if muddy water is flowing through some parts of a silt fence, samples shall be taken of the muddy water even if most water flowing through the fence is clear."

This guidance appears to be directing the contractor to take samples that are not representative of actual discharge conditions. For example, if one 5-foot section of silt fence has relatively muddy water flowing through it while the remaining 1,000 feet has relatively clear water flowing through it, Section F seems to require that the sample be collected from the 5-foot section even if this is not representative of the discharge from the drainage area. Graniterock requests that this statement be removed to avoid confusion over the concept of representativeness in sample collection.

Also, Table 3 of Attachment B, which describes the sampling frequency for the different risk levels, states that "one sample per storm event" but does not clearly specify that the storm event should be a qualifying rain event as defined in the permit, nor does it clearly specify that an off-site discharge must occur for sample collection. Graniterock asks that the Board revise the language to read "one sample of off-site discharge from a qualifying rain event".

In addition, Graniterock requests that an exemption from sampling be specified in the DCGP if sampling conditions are unsafe. While we know it is not the Board's intent to require sampling under potentially unsafe situations, we ask that this allowance be clearly specified in the permit.

VIII. Risk assessment worksheet complications

Graniterock agrees with the Board on the need for a risk based approach in determining compliance and BMP requirements, however we concur with the California Stormwater Quality Association (CSQA) comments presented at the public hearing regarding the complexity and difficulty of the risk assessment worksheet. We request that the Board continue to work with all stakeholders to simplify the process so that it can be a useful, beneficial tool.

IX. Hydromodification not appropriate for this permit

While Graniterock recognizes that hydro-modification is an issue that should be addressed, we do not believe the construction general permit is the appropriate arena for these discussions. As a general contractor that frequently works with public agencies such as cities and counties, our role is to construct already designed roads and highways; we have minimal, if any, input during the designs. Because of our inability to modify most pre and post construction designs, it is not feasible for us to comply with hydro-modification requirements; these requirements should be directed at project designers, not contractors. MS4 permits are the most appropriate place for hydromodification permits because they allow local expertise to determine site specific hydromodification requirements. Graniterock recommends that the hydro-modification requirement be removed from the construction general permit and that the Board instead work

with regional planning departments to ensure that hydro-modification issues are properly considered.

In addition, under Section H of the DCGP (*New Development and Re-development Storm Water Performance Standards*), there is a requirement to "obtain Regional Water Board staff approval for the use of any structural control measures used to comply with [pre-project water balance] requirement." However, it is unclear the process by which the approval will occur or what standards will be used to determine approval; it is Graniterock's understanding that there is currently no approval process for structural controls in place. Given that receiving this approval will be a requirement for this permit, Graniterock requests that the Board develop a transparent, objective system of reviewing and approving such structural controls, including approval criteria, or remove this requirement from the permit.

X. Summary of suggested action items

Because of the problems outlined above with the use of numeric effluent limits, Graniterock recommends that the permit not include these NELs nor the automatic penalties associated with them. Until there is better understanding of the science behind the numeric values, the feasible methods of compliance and the targeted water quality objectives, NELs and automatic penalties are not appropriate.

Graniterock sees the need to improve water quality, and offers an alternative system that allows the contractor to supplement visual observations with real-time turbidity values that allow for trend assessment and rapid response. Additionally, Graniterock offers a prioritization system that encourages and targets BMP selection and performance on a site with the goal of reducing sediment loading. We thank the Board for this opportunity to provide written comments and we look forward to describing these approaches in more detail.

As we understand there have been substantial and substantive comments provided to the Board, and that is currently a large disconnect among varying stake holders in this permit, Graniterock requests that a revised DCGP be made available for further public comment prior to adoption.

Thank you.

Sincerely,

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