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

BRASH INDUSTRIES

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June 2, 2008

Sent by e-mail

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

Subject: Comments to the Construction Permit 2008-XXXX

Dear Ms. Townsend:

The following comments have been prepared by Mr. Marvin H. Sachse P.E, CPESC,CPSWQ, CESSWI, Brash Industries. Mr. Sachse provides storm water consulting services to a number of national and local real estate developers, contractors, sub-contractors, and trade partners of the building industry. He has extensive field experience in Storm Water Permit compliance, and also provides training workshops on Permit Compliance, BMP installation and evaluation, and storm water sample collection and evaluation.

He is the Storm Water Group Program Manager for SoCal GMP, one of the State's largest group monitoring programs under the General Industrial Permit, and works with CIWQS on the SWARM Program.

Mr. Sachse has a Master's Degree in Environmental Engineering, Master's in Industrial Engineering, an MBA, is a State Licensed Professional Engineer, Certified Professional in Erosion and Sediment Control, Certified Professional in Storm Water Quality, and a Certified Sediment and Storm Water Inspector.

The following comments are submitted for review and consideration of the State Water Quality Control Board, in response to the request for comments from interested parties contained in the Notice of Staff Workshops and Public Hearing associated with the National Pollutant Discharge Elimination System Proposed Draft General Permit for Discharges of Storm Water Associated with Construction Activities dated March 19, 2008.

Page-Paragraph

4-17 How is access to the receiving water obtained? At what distance from the construction site?

4-20 Can the State Permit's REAP be excluded by a Municipal regulation?

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9-III.1	Is storm water below NALs/NELs considered a "waste discharge?" Can uncontaminated storm water be discharged to an ASBS?
9-IV.A.2	Please clarify what is meant by non-conventional and conventional pollutants.
10 Fnote5	If materials are raised off the ground on pallets does that lower the risk category?
11-IV.B.2.b	How are most sensitive species identified for chemicals used? Salt or fresh water species?
11-IV.B.3	Does the filing of the NEL exceedance preclude legal action of fines, penalties, or litigation? Would proposed and implemented mitigation eliminate the possibility of fines, penalties and litigation?
12-VI.2.a, c.	How long will it take for PRD approval? Is the PRD considered accepted the date the PRD is electronically submitted?
14-VII.B.1	How many samples are required per acre?
15-VIII.A.3	What are the Permitees options if the **runon** is causing an NAL or NEL exceedance?
16-VIII.B.3	A RUSLE "C Factor" of 0.003 is not a realistic number.
16-VIII.C.1	Can runon be redirected without a Permit?
16-VIII.C.2	What is the standard used to determine whether runon and runoff controls are necessary for Risk Level 1 if the quantity and quality evaluation deems them necessary sites?
16-VIII.D.1	What constitutes perimeter protection? The application of silt fencing parallel to the slope is an inappropriate application of the product. Why are BMPs to be installed if there is no runon or runoff on the sides of the site? Site delineation is different than a BMP.
16-VIII.D.3	Clarification is requested that runoff control is considered an erosion control BMP by the Permit.
18-F.1.a	The inventory of products used on the construction site is to be conducted at what frequency? Is a list of potential pollutants sufficient? The inventory changes daily. Is this data accuracy truly necessary?
18-F.1.b	Is the period of time associated with "Not actively...used" to be construed as within 14 days?
18-F.2.b	Are under liner trays to be considered equivalent to a berm for chemical toilets?

18-F.2.g	Is the spill response and implementation plan part of the SWPPP or a separate document?
18-F.4.b	Does erodible material include mulch, bark, compost, etc.?
19-F.5.a.i-v	Would an inventory suffice?
21-I.4	Unable to locate Project Implementation Requirement J.
25-Fnote12	What does "partially covered" mean? Does this include mulch and tree bark?
26-X.3.b	A RUSLE "C Factor" of 0.003 is an unrealistic number.

Receiving Water Risk Factor Worksheet

A.1

The term "indirectly" discharges into a 303(d) listed water body impaired by sediment is vague. Please clarify.

If the storm water from a construction site is commingled with storm water from another site prior to discharge into a 303(d) water, is the discharge considered an indirect discharge? If so designated, would the indirect discharge result in the 15 point allocation?

What is the purpose of the 10 point base score? Why is the A.1 assigned 15 points? Why not 5 or 10 points?

LS Factor

If a grade break occurs or slope length exceeds 1000 feet is it correct to assume that each slope is to be calculated from the top to the break and then summarized?

The RUSLE A factor is tons per acre per year. Should Sediment Risk Factors be adjusted for changes in the soil's erodibility with the use of Erosion Control BMPs, cover and practices applications.

Combined Risk Level Matrix

In order to achieve a Level 4 ranking the Sediment Risk must be Extreme. But no consideration for: BMPs applied, Sediment size, Cover, Practices, and ATS are reflected in the Sediment Risk Factor Worksheet.

Attachment B:

Clarification of the term drainage area would be helpful. Does it apply to each catch basin inlet? A watershed? Discharge point? This term is not identified in the Glossary.

If the construction site is closed during a rain event are samples required as normal operations have ceased?

Clarification of the term "SSC" would be appreciated. Is it a test for Suspended Sediment Concentration (per the acronym list or Settleable Solid Concentration per an ELAP Lab? Or are they the same test. No reference was found in the EPA Index to Test Methods.

Table 1 - ibid questions regarding access to receiving waters.

C.2
Visual observations are to be conducted during daylight hours, and the Fact Sheet states sampling is to occur during working hours. Should consistency apply and both visual observations and sampling occur during business hours?

E.
Forty-eight hours of non discharge is not uncommon and should be increased to 72 hours. With two days between sampling events the materials in the storm water discharges would not change significantly between the last sample of the previous storm and the first sample of the new storm.

What training is the individual collecting the storm water samples to have received? What are the qualifications of the trainer?

E.4.b.
Refers to Section VII.F.5 in the General Permit. This section does not seem to exist.

E. 8.
How does a Risk Level 3 discharger conduct or participate in benthic macro invertebrate bioassessment of RWs if the discharge water never reaches the ocean?

E. 13.
The Fact Sheet requires hourly sampling. Page 35, III B.1.a.iii, and every one-inch thereafter. The Order states, within the first hour of discharge, that samples should be taken the first and last hour of every day of normal operations. Please clarify. What is the purpose if sampling for SSC, if turbidity measurements are conducted in the field.

E.16.b
How can effluent discharges be monitored for residual coagulant analysis and recorded when the residual field test are typically pass or fail?

E.16.c.
Toxicity testing, chronic and acute can take many days to receive the results, is the batch treated water to be retained on site until the results are received or can the treated batch of water be released prior to receipt of the analytical results?

E.e.i-iii
Does an NEL exceedance represent a Permit violation when it is reported to the RWB? Is the discharger exposed to fines, penalties, and litigation, for an NEL exceedance, particularly if a corrective action plan is implemented? Does an NEL exceedance fall under Migden's mandatory fines?

F.1.
Is it required to sample "muddy water" if the water at that point of BMP failure is not discharged offsite, and the discharge water will subsequently be treated through an onsite BMP?

F.2.
What remedies result from the presence of NEL exceedances in runon water?

F.3
If ATS treated water is commingled with untreated discharge water, what are the NALs and NELs for that water, those of ATS treated water or discharge water?

Table 5
Minimum detection units of 0.2 pH would not be achievable for a pH reading. Stated accuracy would also not be applicable to pH units with a filed test using test strips. Suggest deleting MDL note from Table 5 pH measurements.

G.1.b.
Fact sheet indicates sample collection during day light hours. Permit states operating hours? Update Fact Sheet to concur with the Permit.

H.9.
Only one Chain of Custody is required for all of the sample sets.

K.1.
Watershed Monitoring Option
See note 4.

L. NEL Violation Report
By reporting the NEL Violation is the discharger granted immunity from prosecution or litigation if appropriate remediation measures are demonstrated to have been immediately implemented?

N. Annual Report
BI, as a Group Monitoring Program Manager, assists in the completion of over 250 Annual Reports under the Industrial Permit. The SWARM program presently requires 40 to 50 minutes to complete an electronic Annual Report, and that is with complete familiarity with the CIWQS/SWARM system. With the number of annual reports increasing from 10,000 under the Industrial Permit to 40,000 combined, it is hoped that CIWQS will improve the usability of the SWARM module.

Attachment C:
The use of C factor 0.5 and Practices factor of 0.1 may not be representative of actual site conditions.

Attachment E:
3.f
Does a Permit violation occur if the storm event that is being treated exceeds the design storm event, and an NEL results?

5.c
Several labs indicated that there is no procedure to determine residual flocculant aid chemicals.

7.a
The word "storage" in storage capability could be taken to mean "flow"?

NOTES:

1) There is a fundamental flaw in using the RUSLE equation. "A", the unknown in the RUSLE equation, is the amount of soil eroded, stated in tons/acre/year. "A" does not consider the amount of soil redeposited after it has been suspended in the water column. Sediment yield is a more representative measure for predicting Suspended Sediment Concentration as it accounts for the soil that is reapplied to the ground. Provisions should be made for the amount of soil that is stabilized with erosion control measures, collected in sediment traps, desilting basins, and in and behind BMPs, as this material is not discharged off site and does not contribute to silt and sediment discharged to the receiving waters.

2) It appears that this Permit is utilizing three studies that postulate a 1:3 correlation between Suspended Sediment Concentration and turbidity. Data does indicate a relationship between the two variables but subsequent literature search also shows that the correlation is not without challenge. Moreover, it appears that level 2 and Level 3 permitees are required to spend sampling dollars on these redundant tests to validate the hypothesis of the correlation between SSC and Turbidity.

Although the correlation between Turbidity and SSC is scientifically interesting it is extremely challenging to include all of the variables that occur related to particle size, and particle charge, suspended in water, as a measure for Turbidity which is an optical measurement. Prior to this correlation being utilized as a performance standard it would appear prudent to obtain additional data from established research institutions as opposed to mandating the cost and performance of these studies to be borne by the construction industry. It is anticipated that if the desired relationships are not established, challenges to the data collection accuracy will arise and the entire study is redone. This study should be done before the mandate is written.

3) Page 4.C. ii on page 49 of the fact sheet indicates that turbidity shall be calculated by the discharger using the MUSLE equation. The MUSLE equation provides an estimate of Sediment Yield in tons of soil accumulating at a particular location on a site as a function of a particular storm event. The correlation between tons accumulated at one location and Turbidity does not appear to exist in published storm water studies. The scientific basis does not appear to be obvious. It is suggested that a rigorous scientific explanation of the correlation between tons and turbidity be provided prior to inclusion into the Permit's Fact Sheet.

4) It should be noted that there is a significant disconnect between NELs and NALs established for water discharged from a construction site and the impacts of these materials when they arrive at the receiving water. Receiving water standards are inappropriately applied at the construction site which could be many miles from the receiving water.

5) The RUSLE and MUSLE equations do not take into account the usage of BMPs, sediment traps, settling basins, the application of tackifiers, hydro seeding, matting, benching, etc.

6) Page 58 of the Fact Sheet refers to two general types of ATS Systems that are considered reliable. Identifications of these two system types would be appreciated. If one of these systems is electro coagulation, as previously suggested in a prior Permit draft, then the board should be aware that as of six months ago these systems were not available for lease and cost, on outright purchase, up to $1 million to treat 300 gallons per minute. External electrical generators are required due to the high electrical current required for the systems.

7) During the SWQCB Permit hearings it was stated that "no sampling data for non visible pollutants is available." This statement is incorrect. Southern California builders have been sampling for a number of years under the San Jacinto Permit.

Thank you for your time and consideration.

Sincerely,

M. H. Sachse

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