

Kennedy/Jenks Consultants

Engineers & Scientists

32001 32nd Avenue South, Suite 100
Federal Way, Washington 98001
T: 253-874-0555
F: 253-952-3435

9 January 2008

Mr. Lionel Klikoff
Washington Department of Ecology
PO Box 47600
Olympia, Washington 98504-7600

Subject: Comments on Draft Industrial Stormwater General Permit

Dear Mr. Klikoff:

This letter provides our comments on the proposed revisions to Washington's Industrial Stormwater General Permit (ISGP), as published on 21 November 2007. Thank you for the opportunity to provide you our comments.

General Comments

Establishing Benchmarks – The permit uses the median values of stormwater data submitted to Ecology during 2003, 2004, and 2005 to establish benchmarks. Unfortunately, some industries have a much more difficult time achieving benchmark values because of the nature of their operations. The ability to achieve benchmarks for some industries will be impossible by implementing the source control, operational, or even treatment best management practices (BMPs) contained in the State of Washington Department of Ecology (Ecology) Stormwater Management Manual for Western Washington dated February 2005 (SWMM). Data provided in the permit fact sheet suggests that over 70 percent of samples from some industries cannot meet benchmarks. If Ecology wishes to establish benchmarks based on all known, available, and reasonable methods of prevention, control, and treatment (AKART), or a reasonable ability to achieve the benchmarks, industry specific benchmarks should be developed.

Corrective Actions – The draft permit presents a two-step corrective action process. Step B requires Permittees to prepare an Engineering Report which “shall include an evaluation of effectiveness and costs of all possible source control and treatment BMPs to reduce pollutants to below benchmark concentrations.” We believe that only a few expensive treatment technologies will be able to reduce stormwater concentrations to below benchmarks for some industries, even with diligent implementation of BMPs in the SWMMs. Other treatment technologies should be evaluated, particularly if no other technologies are determined to be

Mr. Lionel Klikoff
Washington Department of Ecology
9 January 2008
Page 2

“reasonable” in accordance with AKART. These technologies may NOT be able to achieve benchmarks, but may be reasonable to implement.

When preparing an Engineering Report for evaluating wastewater treatment alternatives at industrial sites (which is what WAC 173-240 specifically addresses), the engineer typically evaluates Best Available Control Technology (BACT) based on information published by federal and state regulatory agencies. For example, the U.S. Environmental Protection Agency (EPA) has conducted studies of waste streams and treatment for wastewater generated by various industries. Since the agencies have not designated BACT for stormwater, under the draft permit, the engineer will need to conduct an independent evaluation of potential treatment technologies. There could be hundreds of these evaluations performed, which theoretically should draw the same conclusions for the same constituents. This seems to be an extreme waste of money. We would recommend that Ecology initiate a study to establish a menu of specific technologies they would like evaluated for sites in the Engineering Report. If Ecology does not provide this information, the engineer will need to evaluate treatment technologies that may not achieve benchmarks, but are reasonable to implement.

Some of the challenges that the engineer will need to address in the Engineering Report are variable stormwater concentrations (perhaps several orders of magnitude) and variable flow rates. In many cases, necessary data to perform the evaluation will not be available to the engineer based on monitoring previously performed at the site. Extensive stormwater chemical analysis will be necessary to evaluate constituents that may interfere with the effectiveness of various treatment technologies. Pilot studies may also be prudent prior to the Permittee spending large sums of money to treat stormwater at the site. In addition, Ecology should clarify what are the Permittee’s responsibilities if the Engineering Report concludes that “reasonable” treatment may not achieve benchmarks. For example, what type of “outfall analysis” (required under the Engineering Report) will be required, including potential receiving water studies and/or diffuser design? All the issues presented in this paragraph will require considerable time, effort, and money to define. Permittees should be provided the time necessary to comply, or the permit should provide for longer term implementation if additional studies are required.

Ecology needs to clarify what portions of the site require treatment as a result of monitoring activities. Many Permittees sample stormwater within their facility and/or at one of several drainage basins within the facility. Time should be provided for Permittees to conduct sampling within other drainage basins onsite to assess the total area of the site where treatment may need to be implemented. In addition, Permittees should be provided the opportunity to monitor or model concentrations at the site boundary (particularly if they currently monitor within the site) prior to being required to implement treatment. Again, these evaluations will take time.

Specific Comments

Summary of Permit Reports – The fifth entry on the table indicates that the stormwater pollution prevention plan (SWPPP) must be submitted to Ecology at least once during the permit cycle. Please clarify, as stated in the Fact Sheet, that the SWPPP does not need to be submitted to Ecology at least once per permit cycle.

Mr. Lionel Klikoff
Washington Department of Ecology
9 January 2008
Page 3

S1, Table 1 – Table 1 list *Vehicle* maintenance shops (including vehicle rehabilitation, mechanical repairs, painting, fueling, and lubrication) ... as Industrial Activities for SIC codes 40XX, 41XX, 42XX, 43XX, 44XX, 45XX, and 5171. The table also refers to footnote 3 which states that “Only the specified activities (vehicle maintenance shops, equipment cleaning operations, or airport anti-icing/deicing operations) occurring at a facility require coverage under this permit.

Please clarify the definition of industrial activity. The provided definition can be interpreted to indicate that the vehicle maintenance shop itself is defined as an industrial activity. It is our understanding that vehicle maintenance performed indoors may be eligible for conditional no-exposure certification. The vehicle maintenance shop itself should not be defined as an industrial activity as no other buildings (commercial, administration, industrial, etc) are defined to require permit coverage.

Please clarify the definition of maintenance. The definition of maintenance provided in Table 1 includes mechanical repairs. Mechanical repairs may be performed at numerous locations at most facilities varying from vehicle rehabilitation in designated maintenance shops to replacing headlights in administrative parking lots (defined to not require ISGP coverage under S.1.C). Ecology inspectors have indicated that the area where any vehicle maintenance is performed at a facility requires the area where maintenance is performed to require coverage under the ISGP. The perceived intent of the ISGP is to cover vehicle maintenance performed outdoors at a vehicle maintenance shop that may contribute a significant amount of pollutants. General maintenance performed outside of the vehicle maintenance shop area while implementing appropriate source and operational control BMPs should not be covered under this definition.

Please clarify whether mobile fueling is an operation requiring coverage under the ISGP at sites where vehicle maintenance operations occur. At many sites, only those portions of the site where vehicle maintenance occur are covered and included in the SWPPP. Coverage for areas where mobile fueling occurs would expand coverage considerably.

Many mobile fueling activities are covered under Federal Spill Prevention Containment and Countermeasures and many other rules. BMPs for proper storage and transfer of fuel are clearly defined in these regulations. Ecology should provide clarification that areas beyond vehicle maintenance shops where mobile fueling is performed do not require coverage under the ISGP.

S.1.E.1 – This section states “For sites that discharge to both surface water and ground water, the terms and conditions of this permit shall apply to all stormwater discharges”. Please clarify Ecology’s intent for this requirement. This requirement could be construed to mean that benchmark levels would need to be met before stormwater is discharged to the ground.

S3.A.5 – The draft permit requires the Permittee to update the SWPPP and BMPs in accordance with the most recent SWMM. There are many additions to SWPPP requirements in the new permit that will require Permittees to update their SWPPP. For example, the draft permit requires Permittees to attend an Ecology-approved training course. This requirement

Mr. Lionel Klikoff
Washington Department of Ecology
9 January 2008
Page 4

was not in the previous permit. Please clarify whether Permittees must update all BMPs to address the most recent SWMM when revising their SWPPP or whether the most recent SWMM must be used solely to select new BMPs (as opposed to modifications to existing BMPs) that may need to be implemented.

S.4.B.1.a – Please clarify that it is acceptable for Permittees to collect more than five samples during the wet season and establish a median value of all samples collected for ISGP compliance.

S4.B.1.b – The permit states that the Permittee shall take a sample of the first discharge after September 1. Please clarify that the Permittee should obtain this sample to the extent reasonable, and that it is acceptable to not collect the first discharge if it is outside of normal working hours or if safety may be compromised.

S4.B.1.c – “as soon as possible” needs to be defined (Fact Sheet seems to indicate 12 hours).

S4.B.2.a – The reason to change the monitoring location to a four-digit alphanumeric designation is unclear. Generally, SWPPPs will need to be updated to meet this requirement and we question why this is necessary.

S5.A.6 – “Immediate” needs to be defined.

S7.D.3 (inadvertently repeated in S7.D.7) – If inspections are conducted by a contractor to the Permittee, which is the case in many situations, the person conducting the inspection will not be able to state whether the site is or is not in compliance with the SWPPP and the permit. In many cases, the inspector may not know all the provisions of the SWPPP or the permit. Only the responsible person at the facility itself can make such certification.

S8.A.3.b and c – The permit should clarify that discharge monitoring reports (DMRs) only need to be submitted under this section if samples are collected in April or May 2008.

S.8.A.2.d – This section states that after the Permittee has implemented the corrective actions in S.8.C, Step A Corrective Actions for all parameters, if the seasonal median exceeds a benchmark one time for any parameter, the Permittee shall implement Step B Corrective Actions in Condition S8.D. Please clarify whether seasonal monitoring is required during the period that Step A corrective actions are being planned and implemented. Monitoring during this period seems unnecessary.

S.8.C.3 – This section states that a Permittee conducting a Step A corrective action must implement treatment BMPs within 18 months to reduce all pollutant concentrations below the benchmarks. Please clarify which “treatment BMPs” should be implemented during Step A versus those treatment technologies that will be evaluated as part of the Engineering Report. Step A anticipates that at least some type of treatment of stormwater will be required.

Mr. Lionel Klikoff
Washington Department of Ecology
9 January 2008
Page 5

S8.D.1 – The permit states that the Engineering Report shall include an evaluation of effectiveness and costs of all possible source control and treatment BMPs to reduce pollutants *to below benchmark concentrations*. We suspect that, in many cases, only a very few expensive treatment technologies will be able to reduce stormwater concentrations to below benchmark concentrations. Other treatment technologies, which may meet the “reasonable” standard of AKART, yet will NOT be able to achieve benchmark concentrations, should also be evaluated. Please clarify that treatment technologies, other than those that will result in stormwater concentrations below benchmark values, may also be evaluated as part of the Engineering Report.

S.9.A.3.a – This section requires submittal of the first DMR and required reports on 1 October 2008 for facilities west of the crest of the Cascades. Table 11 indicates that the first DMR is due 1 May 2008. This subsection should clarify that DMRs are required on 1 October only for those facilities collecting samples in April and May 2008 (under the existing permit).

Please contact us if you have questions or comments at (253) 874-0555.

Very truly yours,

KENNEDY/JENKS CONSULTANTS



Ross Dunning, P.E.
Civil Engineer



Nathan Graves
Vice President