General James

Los Alamos
NATIONAL LABORATORY
memorandum

Risk Reduction & Environmental Stewardship Division
Water Quality & Hydrology Group
(RRES-WQH)

To/MS: SWAT TEAM MEMBERS
From/MS: Steve Veenis, RRES-WQH, MS K497
Phone/Fax: 7-0013/5-9344
Symbol: RRES-WQH: 02-454
Date: December 10, 2002

SUBJECT: FINAL SURFACE WATER ASSESSMENT TEAM MEETING MINUTES FOR NOVEMBER 21, 2002

1.0 PURPOSE

The Surface Water Site Assessment Team (SWAT) continues an effort to review the Laboratory's Storm Water Monitoring Program for the Multi-Sector General Permit. A Data Quality Objective (DQO) process will be used to determine the adequacy of the data collected by the Laboratory's monitoring network. The SWAT role is to provide a review of Multi-Sector General Permit (MSGP) Sector K – which includes Solid Waste Management Units (SWMUs), station locations, analytical methods, Benchmark Parameters and approved monitoring waivers and to make recommendations on how to improve the overall approach.

2.0 DISCUSSION

2.1 EPA Briefing in Dallas

Steve Veenis reported on the previous week's meeting with EPA Region 6 in Dallas. On Thursday November 14, the topic was the coverage for conventional industrial areas; EPA expressed satisfaction with that plan, as long as the recommended actions are actually implemented. EPA endorsed the fact that LANL and NMED are working together on this effort. On Friday November 15, the discussion focused on SWMU runoff monitoring. EPA was generally receptive, and recognized the innovative proposal to track suspended sediment trends as a tool for evaluating BMPs, rather than relying only on monitoring of Sector K benchmarks. In order to learn more about the details of this proposal, EPA will schedule a trip to Los Alamos in early 2003. EPA was positive about the "storm water management unit" concept, and is comfortable with the focus on high erosion potential SWMUs with BMPs. All in all, this was a successful meeting, which encourages the SWAT to continue with the DQO process.

2.2 Decision Logic

The group reviewed the latest version of the draft decision logic for management and evaluation of SWMU runoff. It was confirmed that this effort focuses on sites that are listed on the Laboratory's HSWA permit. With respect to the "storm water management unit" concept, we should not use the term "consolidate" because it has a specific meaning in the RCRA program. There is also concern about the potential use of the acronym "SMU" because it is so close to "SWMU".

Much of the discussion focused on what to do once the data demonstrate that a site is stable (i.e., the BMPs are adequately protective). The next step should be for the SWAT to re-evaluate the site and consider whether to take a range of steps (e.g., making temporary BMPs permanent, changing the monitoring schedule, recalculating the erosion potential score, etc.). The draft decision logic will be revised to reflect this discussion.

2.3 Monitoring Strategy

The discussion then turned to a consideration of several issues related to the monitoring design. Highlights include the following:

- It would be useful to install rain gauges to help interpret SWMU runoff data.
- Many SWMUs with BMPs do not have pre-BMP-installation baseline data, making the evaluation of trends more complex. We need to be able to distinguish between BMP performance on the one hand, and complicating factors such as rainfall intensity on the other. Comparisons to similar sites without BMPs might be one approach, and comparison of above-BMP and below-BMP measurements might be another, but both of those alternatives could pose their own challenges.
- An advantage of ISCO stations is that they signal LANL's automated system when flow has occurred. But a disadvantage is that they may not be triggered by the low levels of flow typical of hillslope drainages. Single-stage samplers might be preferable for that purpose.
- Maps of culverts exist, and could be a tool for determining optimal placement of samplers.
- We will use the TA-46 data collected by Barbara Hoditschek as a test case of our proposed approach to trend evaluation. If we find that it works at TA-46, we can extend our approach to other locations.
- We will sample for Sector K parameters once per quarter, but will attempt to collect suspended sediment data from each flow event. One possible configuration is to use ISCO stations for the Sector K benchmarks, but single-stage samplers for the suspended sediment measurements.

With respect to the Sector K benchmarks, cyanide, COD, and ammonia are the most problematic analytes for collection using single-stage samplers due to special sampling collection requirements. It was suggested that a waiver might apply to those analytes if it could be certified that they are not expected to be present or are not exposed to storm water runoff.

2.4 Monitoring Locations

It was proposed that one of LANL's contractors make field visits in order to identify and photograph candidate sampling locations. This would enable the SWAT to make more rapid progress on designing the overall program.

The next meeting is scheduled for Wednesday, December 4, 2002, in White Rock at the DOE/OB Offices. Any exceptions taken to these minutes should be brought to the attention of Steve Veenis at 667-0013, within five (5) working days of receipt.

Participants:
Gabriela Escobedo
Ralph Ford-Schmid
Barbara Hoditschek
Kevin Hull
Ken Mullen
Mike Saladen
Steve Veenis

SV/yg

Cy: Ralph Ford-Schmid, DOE/OB, Santa Fe, NM,
Barbara Hoditschek, DOE/OB, Santa Fe, NM
Brett Lucas, NMED/SWQB, Santa Fe, NM
James Davis, NMED/SWQB, Santa Fe, NM
James Bearzi, NMED/HWB, Santa Fe, NM
Everett Spencer, EPA Region VI, Dallas, TX
Gene Turner, DOE/OLASO, MS A316
Doug Stavert, RRES-EP, MS J591
Dave McInroy, RRES-R, MS M992
Alison Dorries, RRES-R, MS M992
Gabriela Lopez-Escobedo, RRES-R, MS M992
Tony Grieggs, RRES-SWRC, MS K490
Steven Rae, RRES-WQH, MS K497
Mike Alexander, RRES-WQH, MS K497
Mike Saladen, RRES-WQH, MS K497
Ken Mullen, RRES-WQH, MS K497
Deb Woitte, LC-ESH, MS A187
Kevin Hull, NEPTUNE, MS M969
RRES-WQH File, MS K497