John General

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memorandum

Environmental Stewardship Division (ENV-DO)
Water Quality & Hydrology Group (ENV-WQH)

To/MS: SWAT TEAM MEMBERS
From/MS: Steve Veenis, ENV-WQH, MS K497 SV
Phone/Fax: 7-0013/5-9344
Symbol: ENV-WQH: 05-038
Date: February 22, 2005

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MAR 2005
Waste Bureau

SUBJECT: FINAL SURFACE WATER ASSESSMENT TEAM MEETING MINUTES FOR JANUARY 14, 2005

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 and the draft Federal Facility Compliance Agreement (FFCA). The SWAT role is to provide a review of storm water issues and to build consensus on recommendations associated with Solid Waste Management Units (SWMUs) and Areas of Concern (AOCs). Items of discussion will include but are not limited to; monitoring locations, potential pollutants, action levels, corrective actions, BMP effectiveness studies and permitting concerns.

2.0 DISCUSSION

Prior to the meeting, Steve Veenis e-mailed the SWAT Team members a copy of the Tentative Agenda for the January 14, 2004 meeting (Handout 1).

2.1 Review of September 13, 2004 Draft Meeting Minutes

The meeting minutes from the September 14, 2004 meeting were distributed, reviewed, briefly discussed and accepted without changes (Handout 2). Steve Veenis will finalize the September 14, 2004 meeting minutes and formally distribute to SWAT Team members.

2.2 Rad Data Evaluations at SWMUs and AOCs

Ralph Ford-Schmid (DOE-OB) wanted to know how LANL and DOE/NNSA plan to evaluate radionuclide data and address exceedances of DCGs.

Gene Turner (DOE) replied that DOE has put together a radionuclide review committee and is drafting a procedure on how to evaluate radionuclide data. Gene is working with the DOE Service Center, and anticipates that the process will have a formal DOE review. Gene indicated that he is open to suggestions and looking for support for the procedure.

Steve Veenis (LANL) asked if the SWAT could review the procedure. Gene Turner indicated that he would get the draft procedure to Steve for distribution to the SWAT.

2.3 DOE/OB 2003 PCB Storm Water Data

(a) Ralph Ford-Schmidt handed out a one page table that detailed 2003 PCB data from DOE-OB's single-stage sampling activities conducted below selected SWMUs (Handout 3). PCBs were analyzed using the PCB congener method at these sites. The handout was reviewed by the SWAT. Ralph used suspended sediment concentration (SSC) values to calculate the amount of PCB in sediment to arrive at an estimated SSC screening level to meet the current and proposed PCB standard. SSC values measured ranged between 130 mg/l and 17907 mg/l. Estimated SSC values in storm water ranged from 2 to 582 ng/g to meet the 1.5 ng/l standard, and 1 mg/l to 219 mg/l to meet the 0.64 ng/l standard. All agreed that these low levels of SSC would be difficult, if not impossible to meet. Ralph indicated that LANL needs to drastically reduce SSC by implementing BMPs such as run-on controls at certain SWMUs.

In 2003, DOE/OB conducted a storm water runoff study designed to collect water samples below PRS locations using single-stage samplers. DOE/OB chose 21-024(m) as a control site because it was a No Further Action (NFA) site, it had a low SOP 2.01 erosion matrix score, and PCBs were not detected in soil samples. During the study, PCBs were detected in samples taken at the 21-024(m). Steve Veenis indicated that LANL had reviewed the site with ER and they confirmed that PCB were not detected during soil sampling at 21-024(m). Ralph and Steve agreed that the SWAT needed to make a site visit to this location verify the erosion score, look at potential run-on sources and determine what potential problems may exist. The site visit is planned for Thursday the 20th of January 2005 at 1 p.m.

Ken Mullen (LANL) asked Ralph his opinion on how to control PCBs on a watershed basis. Ralph replied that he has made many suggestions over the years (i.e., SWMU run-on control, wetlands enhancement, etc.). Steve Veenis discussed a number of corrective action measures currently underway by LANL and Los Alamos County: LANL is currently installing BMPs in Pueblo watershed; LA County, at LANL and DOE-OB suggestion, is reviewing the possibility of moving the wastewater treatment plant outfall ½ mile upstream from the current locations to create additional wetlands in Pueblo Canyon; and, Ralph Ford Schmid (DOE/OB), Danny Katzman (LANL), Steve Reneau (LANL), and Greg Kuyumjian (U.S.D.A. FS)/ DOE) were working together to come up with other watershed solutions such as willow wattles and grade control structures.

(b) Steve Yanicak, DOE-OB, had submitted NMED's preliminary 2003 PCB storm water data to Gene Turner on October 18, 2004. John Young was concerned with NPDES outfalls discharging onto SWMUs and dispersing contaminants at the sites. Based on this information, Mr. Young (NMED-HWB) informed the SWAT that HWB will be sending a letter to Ed Wilmot (DOE) and Pete Nanos asking LANL to review all SWMUs with outfalls discharging onto them. LANL will have 30 days to conduct the evaluation from the date the letter is received.

(c) Cathy Smith (LANL) presented a table on Aroclor detections at LANL Single-Stage Sampling locations collected in 2004 (Handout 4). BMPs were implemented at these sites in October 2004 after ENV-WQH received the data from the analytical lab (see attached photos).

Based on the review of the table (Site-Specific Storm Water Monitoring, 2004 Detected PCB Results) six PCB hits were detected in Los Alamos Canyon, one PCB hit in Pratt Canyon and one PCB hit in Sandia.

John Young informed the group that most of the septic systems at TA-21 have PCBs in them. He also informed the group that ER would be cleaning up and sampling soil at TA-21. This work may impact site BMPs and storm water sampling. John asked if ENV-WQH had worked with Katzman and Reneau on the results of their sampling in LA canyon. Veenis indicated ENV-WQH have been working with Mr. Katzman, and he is aware of our data.

Ralph suggested that LANL may want to sample run-on sources above these Sites to see if the PCBs are coming from other sources. Ralph asked if ENV-WQH had detected any PCB at E030. Cathy informed the group that there was one sample with a PCB detection at E030.

(d) Ken Mullen asked if the State of New Mexico Environment Department had a plan to investigate PCBs statewide. Ralph and Rich Powell (NMED) said that the State does not have any information about PCBs other than what was collected during the Regional PCB study done by DOE-OB and LANL. At this time the State does not have any plans to further investigate the occurrence of PCBs in the State other than around LANL.

Mike Saladen (LANL) asked if the State looked for PCBs while collecting data during their annual comprehensive surveys and Total Maximum Daily Load (TMDL) surveys conducted around the State. Lynette Guevara (NMED) said that unless NMED knows that PCBs are an issue they do not typically look for them. Ralph added that sampling for a TMDL consists of sampling base flow of perennial streams, so most likely PCBs would not be detected above a standard during these conditions.

(e) Lynette Guevara (NMED) informed the group that in 2007, NMED would be sampling and developing TMDLs on the Pajarito Plateau. NMED will be sampling storm water from ephemeral streams as well as perennial water. Mike Saladen asked that LANL be involved with the TMDL development process since most of the data will be from LANL sampling locations. Additionally, LANL would like to support NMED in establishing a process for TMDLs on storm water in ephemeral streams.

2.4 Status of LANL FY04 Storm Water Monitoring, and Discussion of Proposed FFCA Report Format

Cathy Smith provided a copy of "Sample Report Formats for Watershed Analytical Monitoring Data" (Handout 5). This handout was included in Appendix F of the Laboratory's draft Storm Water Monitoring Plan dated November 2004.

Sample Reports (Tables F-1 thru F-7) included examples of how the summary tables of watershed storm water runoff monitoring may look for FFCA reporting purposes. The handout had proposed tables (i.e. fictitious data) that summarized the following: Samples collected; Analytical results greater than wSALs – Summary, Analytical results greater than wSALs – Detail; Analytical results for Inorganics; Analytical results for detected organics; Results for radionuclides; and, Analytical results for radionuclides greater than DOE-DGCs – Summary.

Cathy provided the following handouts summarizing the status of FY04 storm water monitoring: FFCA Gage Station Sample Status Monitoring Year 2004 (Handout 6); FFCA Gage Station Samples Taken Monitoring Year 2004 (Handout 7); FFCA Gage Station Sample Event Dates by Station Monitoring Year 2004 (Handout 8); SMA Samples Taken by SMA ID Monitoring Year 2004 (Handout 9); SMA Samples Taken Monitoring Year 2004 (Handout 10); and, 2004 Site Monitoring Area List (Handout 11). The report information and format were discussed.

NMED indicated that they preferred that the reports be formatted similar to the LANL environmental surveillance reports and data summary tables. They also recommended that the single-stage and the closest gage station data be reported together so that they can evaluate results on a site-specific and watershed basis.

Steve Veenis asked that the SWAT make comments in writing to him on the report format. Timing was essential since the first data report would be due shortly after the FFCA is signed. SWAT members agreed to review and provide comments at their earliest convenience

2.5 Review of proposed FY05 Site Specific Locations

Kevin Buckley (LANL) handed out a series of Power Point Slides detailing single-stage sampling at LANL (Handout 12). The photos (LAUR-04-8169) document single stage sampler installations activities, single stage equipment (sample bottles, tubing, etc.), example of single stage sample location, 1 gallon sample bottles, and an ISCO sampler set up.

Kevin handed out a list of 52 sampling locations, sampling 81 Sites, proposed to be sampled with single-stage samplers during monitoring year FY05 (Handout 13). These proposed stations will be sampled in addition to the 43 sampling locations sampled during FY04. In total, LANL will have 95 single-stage samplers sampling 143 Sites during FY05.

Kevin invited all of the members of the SWAT to participate in visiting the sites to identify single-stage sampler locations at the beginning of February 2005. Kevin will e-mail the SWAT with the time and date.

Ralph Ford-Schmid asked what contaminants LANL looked for at the FY04 sampling locations. Kevin and Cathy Smith informed the group that ENV-WQH used the contaminant list from the draft FFCA for the closest downstream gage station, and ER soil sampling data to develop the sampling plans.

Ralph asked if LANL or DOE sampled the Ash Pile at the Airport. Steve Veenis indicated that the site had not been sampled however, this site is scheduled to be sampled in FY05.

Gene Turner asked if some of the FY04 samplers could be disabled. Kevin reported that most locations would carry over to the next monitoring period because of wSALs exceedances and/or because the samples could not be collected due to lack of flow.

Ralph Ford-Schmid commented that if every sample had exceedences of wSALs, the wSALs may be incorrect and the SWAT may have to revisit them to determine if they are appropriate.

2.6 Discussion of wSAL development for constituents no currently addressed (i.e., molybdenum)

The FFCA does not currently have a wSAL for molybdenum and barium (Handout 14). Mike Saladen asked the SWAT if they would like to develop wSALs for these analytes. Mike informed the group that there are currently groundwater and drinking water standards for these analytes that could be considered for developing wSALs for these constituents.

Ralph Ford-Schmid told the group that he did not see a problem with using the standards for a short term solution. John Young indicated that we may want to monitor and report only until we start seeing results. Gene Turner commented that we may not need a wSAL for these parameters and should wait to see results and make a determination later. Rich Powell, NMED-SWQB, stated that he didn't know why LANL would want to develop additional wSALs outside of the FFCA. Mike Saladen indicated that Barbara Hoditschek, DOE-OB, had raised this concern previously. Mike Saladen asked for recommendations and the SWAT could make a determination at the next SWAT meeting.

2.7 Discussion of FFCA Final Issuance and Public Comments

Rich Powell informed the group that only three sets of public comments on the FFCA had been received by EPA. The comments were from the US Fish &Wildlife Service, Northern New Mexico Citizens Advisory Board, and the Concerned Citizens for Nuclear Safety. Rich thinks that the FFCA will be signed within the next month. Steve Veenis distributed copies of the comments LANL received on the draft FFCA (Handout 15). Neither LANL or NMED provided comments to EPA since we were involved in the development of the draft FFCA. LANL requested a copy of comments from Concerned Citizens for Nuclear Safety. Ralph indicated he would provide LANL with a copy. Please note, EPA received two additional set of comments from the Nuclear Watch New Mexico and Donivan Poerterfield.

2.8 Other Discussions

John Young wondered when and if LANL could post maps on the Water Quality web site so it would be easier for users to locate sampling stations. Ken Mullen informed the group that at this time maps could not be posted on LANL web sites due to security concerns. Gene Turner said that he would look into this issue and try to help.

Handouts referenced in the above notes are not provided with the minutes, but are available upon request. Any exceptions taken to these minutes should be brought to the attention of Steve Veenis (667-0013), within five (5) working days of receipt.

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Lynette Guevara
John Young
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