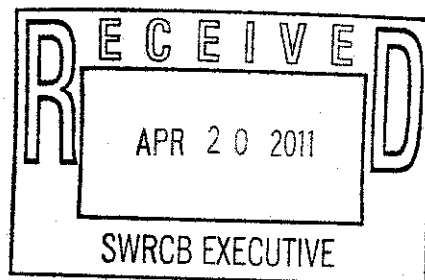


# Lawrence Livermore National Laboratory



April 13, 2011



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

*Subject: Joint Comments from United States Department of Energy/National Nuclear Security Administration Laboratories, Lawrence Berkeley National Laboratory, Lawrence Livermore National Laboratory, Sandia National Laboratories, California, and the Stanford Linear Accelerator on the Draft Industrial General Permit for Storm Water Discharges*

Dear State Water Resources Control Board:

Thank you for the opportunity to provide comments on the Draft NPDES General Permit for Storm Water Discharges Associated with Industrial Activities (Order No. NPDES No. CAS000001). Although our letters will be submitted individually, the following comments have been coordinated between the Lawrence Berkeley National Laboratory (Berkeley, CA), Lawrence Livermore National Laboratory (Livermore, CA), Sandia National Laboratories, California (Livermore, CA), and the Stanford Linear Accelerator (Palo Alto, CA). As such these comments are combined perspectives in reference to industrial discharges from U.S. Department of Energy/National Nuclear Security Administration (DOE/NNSA) Laboratories, which have relatively similar operational aspects.

Lawrence Livermore National Laboratory (LLNL) is situated on property owned by the U.S. Department of Energy and is operated under contract to the National Nuclear Security Agency (NNSA). Our laboratory was established more than 50 years ago and has significant scientific infrastructure which supports national priorities and our laboratory mission. At LLNL's two sites, we are also actively managing and cleaning up legacy contamination including coverage under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). In addition, our facilities have other NPDES permits and Waste Discharge Requirements addressing various water discharges. Given LLNL's mission and history, our facilities have tended to be situated in less developed areas that include natural vegetated landscapes with some steep slopes discharging to valleys and arroyos below. As a result, our facilities are not typical industrial dischargers.

We appreciate the effort required to draft a permit designed to apply to such a broad spectrum of activities and facilities. We also support the effort to protect and improve storm water quality in California. At the same time, we are concerned that various aspects of this permit will add significant burden to our staff and budget in difficult financial times, while not providing the desired improvements to storm water quality. The comments prepared below elaborate on some of these concerns and suggest alternatives, which we recommend for incorporation into the permit.

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### **Comment 1: Accounting for Natural Background and Upstream Sources in Numeric Action Levels (NAL) Exceedances and Corrective Action Triggers**

In general, we are concerned about the application of the EPA Benchmark Parameters as numeric action levels (NAL) and numeric effluent limits (NEL). As stated in the EPA Multi-Sector General Permit (MSGP), the Benchmarks are not considered effluent limits and we request that staff reconsider the transformation of NALs into NELs during the third corrective action level (IGP I.E.47 and V.D). In addition, there is a larger concern regarding pathways to provide explanations in response to the action triggers and corrective actions. The permit currently does not provide a pathway for facilities to reasonably explain observed exceedances of an NAL, which may be unrelated to industrial activities. It is reasonable, and consistent with the MSGP (MSGP 6.2.1.2), to consider upstream sources of water quality constituents to determine if a facility has an additive contribution of that constituent. This issue is particularly relevant to National Laboratory facilities, which are often located in rural or less developed areas where natural soil erosion, agricultural practices, and natural springs all would provide opportunities to exceed NALs, but are beyond the control of the industrial facility. Moreover, many of our facilities are also covered by CERCLA and as such have substantially equivalent permitted discharges of treated ground water into surface storm drains, increasing the background electrical conductivity in runoff. It is neither reasonable nor appropriate to hold the industrial discharger responsible for any water quality constituents exceeding NALs if sources are unrelated to industrial activities.

Therefore, we recommend:

- The inclusion of text into the Draft IGP Section V.D. similar to that in the MSGP Section 6.2.1.2 to consider natural background and to provide the ability to determine that: *"no further pollutant reductions are technologically available and economically practicable and achievable in light of best industry practice to meet the technology-based effluent limits or are necessary to meet the water-quality-based effluent limitations"* (MSGP, pg 36).
- The addition of text stating that industrial facilities are not responsible for concentrations of constituents from upstream runoff or atmospheric deposition that is unrelated to their industrial activities.
- Finally, that text is added to allow industrial facilities to explain NAL exceedances prior to increasing to the next corrective action level and that "off-ramps" are provided to allow facilities to move back down the corrective action levels when a reasonable explanation is provided and accepted by the appropriate Regional Water Quality Control Board.

### **Comment 2: Compliance Storm 10-Year 24-Hour is Quite Large**

The justification for using such a large design storm of 10-year 24-hour (Section V.E), is not understood, while numerous other permits (CGP, Phase II MS4) and guidance from EPA (Energy Independent and Security Act Section 438 Guidance) use values like the 85<sup>th</sup> or 95<sup>th</sup> percentile storms for hydromodification BMPs. The CGP also defines a 5-year 24-hour

compliance storm and we propose that this is appropriate and protective of storm water quality and recommend this revision to Section V.E.

**Comment 3: Additional Inspections Require Significant Staff Time**

A significant increase in the number and frequency of documented inspections are required in this Draft IGP including: pre-storm inspections, weekly BMP inspections, monthly wet season inspections, monthly containment inspections, quarterly non-storm water discharge inspections, quarterly pollutant source inspections, and the Annual Comprehensive Facility Compliance evaluation (which may be combined with a quarterly inspection). Pre-storm inspections of all facilities in combination with weekly BMP inspections will add the single largest financial burden next to triggering a Corrective Action Level 3. National Laboratories have strict document and record management requirements (75 year to permanent records retaining requirements) that adds effort beyond the simple action of performing an inspection. Our facility is large (with more than 200 individual buildings) and this effort would be the equivalent of more than a full time staff equivalent each year, which would be a major increase for our storm water programs in these difficult economic times. We agree that visual inspections are key to compliance, but propose the removal of the required weekly BMP inspections (IGP VIII.H.1) and pre-storm inspections (IGP IX.C.6). The monthly wet season inspections are adequate to protect water quality and industrial dischargers have every incentive under this permit to ensure that BMPs are in place and functioning without a permit required inspection. If the BMPs are insufficient, that should be revealed in the water quality monitoring (otherwise, there is no justification to require monitoring). Such inspections only serve to increase the likelihood of administrative error and third party litigation.

**Comment 4: QSD/QSP Training Requirements**

The current training/certification requirements for SWPPP preparers and implementers to be Qualified SWPPP Developers (QSDs) and Qualified SWPPP Practitioners (QSPs) are too restrictive (IGP VII.A and B). Our facilities are already being required to have QSDs and QSPs for the Construction General Permit (CGP). This process includes required training by a CASQA Trainer of Record, an exam, and for staff not already PEs or PGs an additional certification. This adds significant staff time and cost to our existing CGP programs. Moreover, the Draft Phase II General Permit for Small MS4s may also require inspectors to have the QSD/QSP certifications. All of this adds significant staffing cost to our compliance programs, when our staff is knowledgeable and fully qualified. The draft permit proposes an additional independent process for industrial dischargers that will double the cost for our facilities. We propose that the certification requirements in Section VII.A and B be similar to the CGP, including the Certified Professional in Storm Water Quality (CPSWQ). In addition, the training requirements should be reduced for those already certified as QSD/QSPs under the CGP, such as a half day short course and no additional fee for the training course. Given the significant overlap expected between CGP and IGP programs, these certifications should not be administered separately.

### **Comment 5: Clarification of Facilities with Significant Land Disturbance**

The Draft IGP states that facilities in the Mining and Quarrying category, Metal Mining category, landfills, land application sites, and open dumps shall collect samples on all days of an eligible storm event, as opposed to once per quarter (IGP XIII). The cited section includes the SIC code 4953 (IGP XIII.A.3), which also applies to Refuse and Waste Handling and Hazardous Waste Facilities. While open landfills and mining may have significant land disturbance, hazardous waste facilities do not have disturbed land and are strictly regulated through Resource Conservation and Recovery Act (RCRA) permits. Moreover, closed landfills also do not have significantly disturbed surfaces and are managed and regulated according to post-closure plans and permits that prevent such disturbance. As such, we are requesting a clarification of the language Section XIII to specifically exclude refuse and waste handling activities, hazardous waste facilities, and closed landfills or simply the removal of the SIC 4953 from this section. It is an unreasonable administrative burden to include these discharges in this requirement and then add additional requirements to apply for an exemption (IGP XIII.C) to demonstrate that current activities do not cause significant land disturbance.

### **Comment 6: Runon Diversion is Impractical at Developed Facilities**

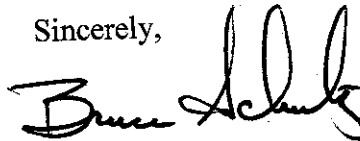
As mentioned previously, many of our facilities are more than 50 years old. It is simply infeasible to divert runon from non-industrial activities to prevent comingling of storm water runoff (IGP VIII.H.1.vii). We cannot redesign and retrofit our facilities without major Federal funding. Our storm drain systems also transport CERCLA discharges and serve as wildlife habitat, so any diversion would require review and approval of multiple agencies. This may not be the intent of this required BMP, so we recommend that the permit include clarification language stating that the diversion of runon should be considered when practical and feasible or to remove the statement entirely.

### **Comment 7: Qualifying Storm Event Timing**

The qualifying storm event (QSE) defined in Section VIII.E.1 does not have any time factors as currently stated in the draft permit. Was a time period considered in the analysis performed to select the 0.25 inch rainfall minimum? It would be possible to get a continuous storm totaling 0.25 inches over a three day (or even five day) period for example, without the 48-hour time in between rainfall. If this occurs, an industrial facility may find that it missed a pre-storm inspection for a drawn out storm event that did not produce runoff but reached the 0.25 inch total precipitation on the last day. This specific problem has already been identified in the Construction General Permit and the language should be clarified in the IGP to avoid repeating the same problem. Please provide clarification as to whether the 0.25 inches for the QSE applies over a 24-hour period or longer and when it is appropriate to restart the rainfall total estimates (other than just the 48-hour gap).

Once again, LLNL would like to reiterate our commitment to storm water quality in California and thank the State Water Resources Control Board and Staff for all their efforts in preparing this draft permit. We look forward to working with you to address our concerns and generate an Industrial General Permit that protects the environment and may be effectively implemented.

Sincerely,



Bruce Schultz, Manager  
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