

**Virginia SWANA Chapter  
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**Is Your Solid Waste Program Prepared for VELAP?**

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**ABSTRACT**

*Beginning on January 1, 2012, laboratory data submitted to the Department of Environmental Quality (DEQ) must be generated by laboratories certified to perform analyses for Virginia under §2.2-1105 B (1 VAC30-45-20 and 1 VAC 30-46-20). This includes laboratory data submitted as part of solid waste permit activities (e.g., groundwater analyses, leachate analyses). DEQ has indicated that, beginning in January 2012, it will reject sample results from laboratories that are not certified or accredited under the Virginia Environmental Laboratory Accreditation Program (VELAP). Many SWANA members represent municipalities which contract with consultants and/or laboratories, often using multiple year renewal contracts. Competitive bidding is often a factor in cost determination for laboratory selection, and VELAP accreditation will need to become a factor as well. Landfill operators must plan now to ensure that they have arranged for a VELAP accredited laboratory to be contracted to provide service no later than the January 1, 2012, deadline, or else risk having data rejected by the DEQ. This may require ongoing communication with laboratories and consultants, modification to professional services solicitation content and schedules, and possibly a change in the laboratory used. Timing is critical, especially for jurisdictions that maintain a July/June fiscal year.*

**INTRODUCTION**

The Virginia Environmental Laboratory Accreditation Program (VELAP) is part of a nationwide effort to ensure that laboratory analyses performed for environmental monitoring purposes provide accurate and consistent data. The program was established in 1999 (Va. Code §2.2-1105) and approved nationally (National Environmental Laboratory Accreditation Conference or “NELAC”) on November 16, 2009 (Virginia’s is the 14<sup>th</sup> program to be approved). VELAP is administered by the Virginia Division of Consolidated Laboratory Services (DCLS).

A Memorandum of Understanding executed on September 9, 2009, between DCLS and the Virginia Department of Environmental Quality (DEQ) facilitates successful implementation of the program. In brief, beginning on January 1, 2012, laboratory

analyses performed under a state issued environmental permit such as a landfill permit must be generated by a VELAP certified or accredited laboratory. In e-mail correspondence to the SWANA Board dated February 26, 2010, the DEQ asks SWANA to help pass the word: “Beginning January 1, 2012, DEQ will *reject* (emphasis added) any sample results (such as groundwater monitoring) for such data submitted from a lab whose individual analytical methods fail to meet the subject certifications.”

## **CERTIFICATION vs. ACCREDITATION**

This is a regulatory distinction. Noncommercial laboratories (e.g., a laboratory at a POTW) are “certified.” Commercial laboratories are “accredited.” The standards for certification and accreditation are otherwise very similar.

## **WHAT IS INVOLVED?**

For laboratories, a lot. The deadline for submission of the commercial laboratory VELAP application package was July 1, 2009. Certification/accreditation involves rigorous analytical proficiency testing, inspections, QA/QC, and more. Laboratories that have successfully completed the process to date have been awarded Interim Certification. DCLS is on record that it did not initially receive the number of application packages it had anticipated.

SWANA members should be aware that VELAP certification/accreditation is not given to a laboratory *per se*, but rather is applied on a test method by test method basis. Although not a common occurrence, some commercial laboratories might advertise themselves as being “certified,” when in fact their certification/accreditation applies only for a distinct few specific methods<sup>1</sup>.

Members should also be aware that VELAP certification/accreditation is not a one time process. Laboratories are required to renew certification under 9 VAC 30-45 (noncommercial) every two years and to renew accreditation under 9 VAC 30-46 (commercial) annually.

## **THE OUT OF STATE LABORATORY QUESTION**

This is where it becomes more convoluted. Laboratories located outside of Virginia but doing business in Virginia are required to apply for VELAP accreditation. Some examples:

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<sup>1</sup> Under VELAP, every Certificate of Analysis (COA) is to be issued with an accompanying “Scope of Certification” or “Scope of Accreditation” which must list the specific matrix, method, and analyte combinations for which the certification/accreditation has been granted. DCLS recommends that laboratory users never accept a COA without the accompanying scope documenting certification/accreditation.

- Accredited laboratories in other NELAC states (e.g., New York) must become VELAP accredited by January 1, 2012, to do business in Virginia after that time. They can achieve VELAP accreditation via reciprocity.
- Accredited laboratories in non NELAC states (e.g., North Carolina) are to have applied for VELAP accreditation just like a laboratory located in Virginia. Alternatively, in the case of a laboratory in a non NELAC state that has already achieved NELAC accreditation from a NELAC state such as New York, it can apply via reciprocity.
- *BE AWARE, however, that VELAP will not be processing applications from reciprocal applicants until after January 1, 2011<sup>2</sup>.*

## THE GEOTECHNICAL/GEOSYNTHETIC QUESTION

The VELAP regulations define "Environmental analysis" or "environmental analyses" as "any test, analysis, measurement, or monitoring used for the purposes of the Virginia Air Pollution Control Law, the Virginia Waste Management Act or the State Water Control Law... For the purposes of these regulations, any test, analysis, measurement, or monitoring required pursuant to the regulations promulgated under these three laws, or by any permit or order issued under the authority of any of these laws or regulations is 'used for the purposes' of these laws."

This definition specifically excludes sample collection, analyses conducted in the field, and taxonomic identification. There are no other exclusions listed.

However, the Virginia Solid Waste Management Regulations (VSWMR) stipulate geotechnical and geosynthetic materials analyses applicable to events such as Part A geologic investigation and QA/QC of cell construction and closure. This raises the question as to whether geotechnical analyses performed in a laboratory (e.g., plasticity, shear, moisture, etc.) and/or the destructive and conformance testing required of geosynthetic materials fall under the VELAP umbrella. Generally, geotechnical and geosynthetic materials testing are considered to be distinct disciplines from "environmental" (chemical/ biological) testing. On the other hand, given the broadness of the definition of "environmental analyses," it is unclear from the VELAP regulatory language alone if geotechnical/geosynthetic materials laboratory procedures are to be (or can be) excluded. It certainly seems unlikely that geotechnical/geosynthetic materials analyses were *intended* to be administered under VELAP. Unfortunately, the wording does not make this clear and prior to now no clarifications have been offered by the DCLS.

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<sup>2</sup> Laboratories pursuing "secondary applications" via reciprocity are encouraged to submit applications to DCLS in late November to early December 2010. Processing will begin in January 2011 in the order received. A laboratory can apply anytime, but those who do not apply by the January 1, 2011, deadline are **not** guaranteed certification before January 1, 2012.

Issues that require additional review and interpretation are of course inevitable in any new program, as is the case here. In preparing for this presentation, the author requested clarification from both the DCLS and the DEQ regarding the applicability of VELAP to non-environmental testing. Both agencies were prompt in developing a response. In a July 13, 2010, email to the author from the DCLS it is stated that DEQ and DCLS are in agreement that geotechnical analyses (and by extension geosynthetic materials analyses) do not require certification/accreditation under VELAP.

It is hoped that clarification of this question will be added to the current publicly available DCLS guidance. Ultimately, it would be helpful if these disciplines could be identified in the regulation as specific exclusions under the definition of “environmental analyses.”

### **WHAT DOES VELAP MEAN FOR YOUR LANDFILL?**

Most obviously, landfill operators should be aware that they must be using VELAP laboratories by January 1, 2012. Many municipalities have a July-June fiscal year. Most also award professional services contracts – including environmental consultants and in some cases laboratories directly – under public procurement policies which typically award contracts of one year, with options for a defined number of renewals. So the time to begin thinking about the January 1, 2012, deadline is right now. Landfill operators, especially municipalities and service authorities, should consider the following actions:

- Determine whether your existing laboratory (whether contracted directly or as a subcontractor to your consultant) has achieved interim accreditation. This is the best and most direct method at hand to monitor the laboratory’s status in the VELAP process.
- If your laboratory has not achieved interim accreditation, determine whether it has submitted an application and, if so, where it is in the process. Remember that NELAC laboratories from other states should submit applications for reciprocity prior to January 1, 2011, in order for the application to be processed prior to January 1, 2012. If a laboratory has not initiated the application process and/or planned for a reciprocity application, it is time to reconsider the continued use of that laboratory’s services.
- Make sure that the laboratory you are using has interim accreditation (or is at least in process of obtaining it) for *all parameters you test for*. This will include Table 5.1 of the VSWMR. However, be wary, it will *also* include additional parameters associated with your leachate monitoring, storm water monitoring, and so forth. While field measurements such as pH and methane are not included under the VELAP umbrella – some landfills collect periodic decomposition gas samples for laboratory analyses for methane or other parameters. The laboratory conducting such analyses must have VELAP accreditation for these tests.

- If you do not have confidence that your contracted laboratory is on track for VELAP accreditation, you may need to evaluate and potentially alter your procurement cycle so that you are protected before January 1, 2012. This paper is not intended to provide legal advice regarding existing contract language. However, if you have a rock solid contract extending beyond January 1, 2012, with a lab that is not on track for VELAP accreditation, consultation with an attorney may be warranted.
- In soliciting proposals prior to January 1, 2012, for environmental monitoring and/or direct laboratory services, the following is encouraged:
  - Include a requirement that laboratories
    - have interim VELAP accreditation now, or
    - have NELAC accreditation in another state and are on track to pursue VELAP accreditation via reciprocity, or
    - otherwise provide documentation that they are on track for VELAP accreditation by January 1, 2012.
  - Specify that full VELAP accreditation for all parameters in the landfill program will be a requirement for continued service beyond January 1, 2012. RFPs should specify the analytical parameters addressed under the landfill's solid waste, storm water, and other applicable permits (air, VPDES, etc.).
  - Include a requirement that laboratories will be required to submit documentation of continuing VELAP accreditation in order for additional years to be awarded under the terms of the contract.
  - Specify that failure to maintain VELAP accreditation may be considered grounds for termination of services.
  - Landfill operators may want to consider a requirement that they (or their consultants) pre-qualify multiple laboratories as means of ensuring backup in the event that a laboratory fails to maintain VELAP accreditation.
- RFPs issued after the VELAP deadline should specify that maintenance of VELAP accreditation for all matrices, methods, and analytes is a requirement to provide laboratory services.
- Beyond professional services procurement considerations, landfill operators may wish to initiate institutional changes as means to monitor laboratory programs. Specifically:
  - Familiarize yourself with the laboratory's accreditation history (e.g., dates accreditation occurred for applicable parameters), and schedule of renewal.
  - Require laboratories to submit accreditation documentation, including renewal, for inclusion in the landfill's operating record.<sup>3</sup>

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<sup>3</sup> The Scope of Accreditation that is to accompany Certificates of Analysis may suffice for this purpose; however, this should be subject to a third party data validation protocol.

- Require laboratories to submit prompt notification if it fails to maintain accreditation.

## CONCLUSION

Everybody – landfill operators, regulators, the public – benefits from accurate and consistent laboratory data. VELAP is a means to providing confidence in the data, which in turn assists in decision making and determinations as they pertain to every level of environmental monitoring from data reporting through corrective action.

The penalty for not using a VELAP laboratory after January 1, 2012, is clear – DEQ will reject the data. Initially this will require prompt resampling and analysis (a financial burden). In the longer term it could carry additional penalty as well.

Laboratories have already had to be on top of this. The time for landfill operators to begin to assess their own programs is right now. It is imperative that landfill operators be familiar with VELAP and undertake appropriate action (procurement, contract renegotiation etc.) to ensure that they are protected as of January 1, 2012. This includes continued attention to the DCLS and DEQ with respect to pending guidance on the applicability of VELAP to geotechnical and geosynthetic materials testing.

Moreover, recognition that VELAP is an ongoing certification/accreditation process is imperative. Make sure that you have confidence that the laboratories you rely upon achieve the appropriate accreditations *and* are proactive in continually maintaining them.

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*For additional information, refer to <http://www.dgs.state.va.us/DivisionofConsolidatedLaboratoryServices/Services/EnvironmentalLaboratoryCertification/tabid/1059/Default.aspx>*