

Andrea Gyger

From: Dwight Shellman [REDACTED]
Sent: Thursday, December 08, 2011 10:34 AM
To: Andrea Gyger
Cc: Janice Vos
Subject: Comments regarding proposed changes to Election Rule 43

Andrea: Please accept the following as my comments to the proposed changes to Rule 43.

43.1: I suggest adding definitions for or contextually clarifying the intended meanings of “central count system” as used in proposed Rule 43.2.7(2)(D) (“tabulation software” might be a more appropriate term), and “paper record” as used in 43.2.11 (“V-VPAT record” is probably intended).

43.2.2(D): The practice in Pitkin County has been to place seals over every seam on the OS machine cases, and over the memory card slots. The proposed rule requires seals to be affixed only to the memory card slot (whether or not a card is inserted). I may be missing something, but I think this limitation may cast doubt on the efficacy of trusted build in these machines. As you know, during trusted build, virtually every electrical component inside of an optical scan machine is examined to confirm that each component is the type that was originally certified. If seals are required on the memory card slot only, there is no way to verify that the motherboard components have not been tampered with, or replaced with non-certified components. Uninterrupted chain-of-custody as documented on the log for each machine will provide some assurance that a member of the public has not opened the case of the machine, but chain-of-custody alone will not demonstrate that an election official or judge has not done so.

43.2.7(B)(2)(C) and (D): Pitkin County has adopted the practice of not removing memory cards from precinct count machines before uploading results to the tabulation computer. Rather, all memory cards remain sealed in their respective machines, which are secured in the equipment vault after uploading (unless their use is required for the post-election audit), until expiration of the contest period. After the contest period expires, the memory cards are removed from the machines and stored in sealed containers in a safe for the full statutory retention period. This process enables us to access a specific machine with a specific memory card installed containing specific polling place results in the event of a recount or contest, all of which is preserved in “election day status.” I realize this procedure would impose a substantial burden on larger counties, simply because they deploy so many more machines for any given election. This is an area where individual counties should be permitted to adopt specific procedures that meet their individual needs and desires, subject to certain minimum requirements. As currently drafted, however, 43.2.7(B)(2)(C) requires the removal of the memory card before uploading results. I suggest this subsection be revised to state: “Upon confirmation that the seals are intact and bear the correct numbers, the tabulation results may be uploaded into the central count [tabulation?] system.” Then revise the following subsection (D) to state: “In the event that the memory card or cartridge is removed from a device to upload results to the central count [tabulation] system, then election judges shall secure the equipment by placing tamper-evident seals over the memory card slots, and by updating the chain-of-custody logs to reflect the new seal numbers.” Also, I don’t think use of the term “central count system” is really intended here, and for this reason I propose use of the term “tabulation system,” or something similar.

43.2.7(C)(1) and (2): “Ballot box” is not a defined term. In Pitkin County, the precinct election judges return voted ballots with their completed and reconciled Statement of Ballots in heavy duty nylon bags with sealed and locked zippers, accompanied by completed chain-of-custody logs. I suggest a more generic term in subsection (1), such as “voted ballot container.” Also, I respectfully question the wisdom of subsection (2), which permits only one election judge to return voted ballots. I believe a better practice is to require voted ballots to be returned by at least two judges, of different political affiliations if at all possible. I raise this not because I question the honesty or integrity of election judges, but to protect them from “he said – she said” allegations that are difficult to disprove by their nature. Finally, this section does not seem to permit voted ballots to be returned by law enforcement officers. When Pitkin County

requires the assistance of law enforcement officers for ballot returns, we deputize them as deputy clerks before they act in that role. In addition, if the head of the law enforcement agency is a candidate on the ballot for that election, we invite representatives of the other candidates for the same office to accompany the law enforcement officer with the voted ballots. It is unclear to me if Rule 43.2.7(C)(2) would permit us to continue this practice.

43.2.11(A): Internal incident reports should be filed immediately with the Secretary of State, regardless of their resolution. There should be a central repository for this information, if only to gauge the frequency of security incidents in Colorado.

43.2.11(B)(3) and (4):

- Both subsections state that, if V-VPAT records are determined to match the summary tape, the results may be uploaded. If they don't match, the "only the paper record will be accepted as official results for that device....." The term "paper record" is ambiguous here – I think V-VPAT record is intended.
- Also, I question the wisdom of uploading results from a memory card when the evidence indicates tampering, whether or not the summary report matches the V-VPAT record. If the tampering consisted of introducing a malicious virus that did not alter the results in that particular election, uploading the results conceivably might spread that code to the entire voting system utilized in the county. Isn't the better practice in the case of possible tampering to segregate and preserve the memory card, possibly for forensic examination, followed by manual entry into the tabulation software of the results from that device as confirmed by the V-VPAT records? This would minimize the risk of spreading malicious code from a tampered memory card to an entire voting system.

Thank you for the opportunity to give my input on these matters.

Very truly yours,

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