STATE OF WASHINGTON

October 5, 2022

Honorable Pat McCarthy
Washington State Auditor
P.O. Box 40021
Olympia, WA 98504-0021

Dear Auditor McCarthy:

Thank you for the opportunity to review and respond to the State Auditor's Office (SAO) performance audit on Sexual Assault Kits: Assessing Washington State Patrol's testing backlog and tracking system. The Washington State Patrol (WSP) and the Office of Financial Management worked together to provide this response.

We appreciate Washington public policymakers' emphasis on the importance of processing and tracking sexual assault kits (SAKs). WSP agrees with the State Auditor's Office that the testing backlog for sexual assault kits must not fade from the public consciousness. Each SAK represents a person and WSP is committed to ensuring they are not forgotten. That is why one of the missions of the WSP Crime Laboratory Division (CLD) is to ensure all kits are tested and the forensic data is provided timely to the criminal justice system.

We are grateful the report recognizes how the COVID-19 pandemic contributed to delays in eliminating the backlog. Despite the challenges presented to all organizations during the pandemic, WSP found ways to prioritize this work among its other CLD forensic responsibilities and customer needs, including testing in homicides, assaults and other types of public safety risks. WSP appreciates the work performed by the SAO and its commitment to working collaboratively with our personnel to fully grasp all the information related to testing and eliminating the backlog. We agree that the overall presentation of the report accurately and fairly portrays the facts of this audit.

WSP also appreciates SAO's scrutiny of the SAK tracking system and the acknowledgment that it meets statutory requirements, including the mechanisms for survivors of sexual assault to track the processing of their SAK. WSP offers the following update to the public and SAO on the status of the backlog, as well as greater context regarding WSP's implementation of "Direct-to-DNA" technology.

SAK Backlog Update

As of August 31, 2022, the WSP had received over 25,000 kits since 2015. About 9,400 were historical kits and almost 16,000 were newer kits. The WSP has tested 82% of all kits received and 4,649 are waiting to be tested. In the eight months since January 1, 2022, the WSP has further reduced the backlog by 28% and decreased the number of kits waiting for testing by over 1,800 kits while receiving 1,715 more kits in this same timeframe. It estimates that the remaining kits will be fully tested by December 2023.

In addition to backlog reduction efforts, the WSP crime laboratories strive to provide timely DNA results for newer kit submissions. RCW 5.70.040 specifies that for sexual assault kit submissions received starting May 1, 2022, WSP shall conduct the laboratory examination of a sexual assault kit within 45 days of receipt of the request. As of August 2022, 99.7% of the kits received starting May 1, 2022,

have been tested within 45 days, resulting in a testing turnaround time of less than 30 days on average for these cases.

Also, with additional legislative funding provided in 2019, WSP crime laboratories increased staffing in the DNA casework program by almost 30%, adding 16 forensic scientist and three laboratory technician positions statewide, in addition to backfilling new vacancies on an ongoing basis due to promotions, retirements, or resignations. This has resulted in hiring and training 32 forensic DNA scientists since 2019. Since 2019, 23 new DNA scientists successfully completed the internal training program (lasting 6-18 months on average, depending on prior experience) and remained working for WSP. Currently, WSP has 13 DNA forensic scientists in various stages of training and one vacancy.

The full DNA training program is time-intensive for both the trainee and trainer (who is also a case-working DNA scientist). It takes up to 18 months before a scientist can independently perform full casework. WSP leveraged efficiencies by phasing the training program, allowing qualified trainees to conduct Phase 1 type casework to independently screen SAKs after about 6-8 months of training, and utilizing other training efficiencies (virtual training, group/cohorts, and external training resources). WSP evaluated new robotic equipment that was purchased for the Vancouver DNA Section to automate the processing of DNA samples and a total of three instruments were purchased in 2019–2020. Two of the three instruments were programmed and are currently operational for "Direct-to-DNA" (Y-screening) SAK samples, allowing for up to 86 samples to be screened at a time.

In August 2022, additional robotic methods were validated, which will allow for the automation of about 75% of the laboratory processing of SAK samples once scientist training is complete. The third instrument is currently reserved for the ongoing validation activities necessary to automate the remaining method, with the ultimate goal of automating the full DNA testing process. It is important to note that WSP must follow the Federal Bureau of Investigation's quality assurance standards to validate and train staff, in addition to following state procurement requirements when acquiring new technology and instrumentation. As a result, this extends the timeline for any project undertaken by the WSP CLD.

Implementation of Direct-to-DNA Technology and Laboratory Best Practices

WSP first became aware of the "Direct-to-DNA" (also known as Y-screening) technology in 2015. The agency obtained a sample of the technology to perform the extensive evaluation procedures that ensure the technology meets accreditation standards for WSP's crime laboratories. Once the technology had been evaluated and validated, WSP procured the technology and trained its forensic scientists on how to use it for DNA testing. The "Direct-to-DNA" technology was fully implemented in all the crime laboratories operated in the spring of 2021 and the implementation timeline is included in the attachment.

At the time WSP was evaluating, procuring and transitioning to "Direct-to-DNA" technology for screening SAKs, WSP was also relying on the same staff to implement two other major technology advances related to forensic DNA testing for all case types, not just sexual assault cases. First, the FBI required crime laboratories to implement a new, expanded DNA typing kit by January 1, 2017, to continue accessing CODIS (Combined DNA Index System). Without access to CODIS, WSP would have been unable to submit DNA profiles for comparison against the national database. Second, the National Institute of Justice's 2017 publication, *Best Practices for Testing Sexual Assault Kits,* included the recommendation to adopt specialized software to assist in interpreting DNA mixtures, which are commonly encountered in sexual assault evidence DNA profiles. The crime laboratory adopted this specialized software in 2018, which required additional staff time to validate and implement. These simultaneous major technology advancements impacted the WSP's timeline to fully implement the "Direct-to-DNA" technology as a method to screen SAKs.

We appreciate the opportunity to respond to the audit and provide additional information that may help the public understand the ongoing work related to SAKs and the progress made toward eliminating the testing backlog. Each month WSP updates the progress made towards addressing the SAK backlog and its testing efforts at https://www.wsp.wa.gov/sak-testing/.

Again, we appreciate the work of the SAO and look forward to sharing our progress in future audits.

Sincerely,

Chief John R. Batiste
Washington State Patrol

David Schumacher, Director
Office of Financial Management

Attachment

cc: Jamila Thomas, Chief of Staff, Office of the Governor
Kelly Wicker, Deputy Chief of Staff, Office of the Governor
Nick Streuli, Executive Director of Policy and Outreach, Office of the Governor
Emily Beck, Deputy Director, Office of Financial Management
Mandeep Kaundal, Director, Results Washington, Office of the Governor
Scott Frank, Director of Performance Audit, Office of the Washington State Auditor

Direct-to-DNA Implementation Timeline

- **January 2015 – June 2015**: The Crime Laboratory Division became aware of the "Direct-to-DNA" (Y-screening) technology as an approach for screening SAKs.
    - CLD began researching the Y-screening technology and determined it required a more sensitive DNA quantification chemistry kit to conduct the testing.
        - The technology consists of the two primary processes. The first process is cell lysis, which is performed by one chemistry kit. CLD currently uses Promega's Casework Direct kit for the first process.
        - The second process is quantification, which is used to determine how much DNA is in a sample. This is a separate chemistry kit from the one previously described and CLD currently uses Promega's PowerQuant kit.
    - CLD determined a more sensitive DNA quantification was needed to meet its quality standards and moved forward with validating the Promega PowerQuant kit.
    - The Promega PowerQuant Kit had to be procured and validated and the forensic scientists needed to be trained prior to implementing the technology.
- **April 2015**: The CLD Standards and Accountability Section (tasked with ensuring the crime laboratories meet quality standards requirements) submitted a proposal for the evaluation of the Quantifiler Trio and PowerQuant kits.
- **June 2015**: CLD approved the plan for the Standards and Accountability Section to evaluate both kits.
- **February 2016**: The Standards and Accountability Section completed its evaluation of the Quantifiler Trio and PowerQuant kits. It recommended procuring the PowerQuant kit from Promega due to its flexibility of reaction set-up for future Y-screening protocols, the standard curve set-up and reproducibility, mixture studies, and the ease of use of analysis tools.
- **March 2016 – October 2018**: Once the evaluation was completed and the decision was made to proceed with the PowerQuant kits, CLD contracted with Bode Technology to perform the validation of the kits.
    - The PowerQuant kits are used in other steps of the DNA process in addition to Y-screening, so additional validation was required for each of these steps.
    - All of the WSP crime laboratories also conducted additional experiments on the PowerQuant kits.
    - Once the validation and experiments were complete, an RFQQ (Request for Qualifications and Quotations) process was initiated to procure the kits.
    - At the end of 2018 the DNA Technical Leader (TL) for CLD retired.
        - An initial recruitment failed to find a suitable candidate and an interim TL was appointed.
        - Turnover in the TL position impacted the project timeline because the interim TL was working to get up to speed on the project while continuing to run the entire DNA program for WSP.
        - At the same time the interim TL was performing their duties specific to being the technical leader, they were also performing the duties of the DNA Operations Manager before the duties were eventually separated into two positions.
        - The TL was also responsible for evaluating and approving all of the validations, developing and implementing the training plans for new hires, and approving all of the contracts with external laboratories.

- **November 2018**: WSP executed a contract with Promega Corporation to validate Promega's Casework Direct kit as customized for the WSP Vancouver High-Throughput DNA Section. The contract was from November 2018 to November 2019.

- **November 2018 – November 2019**: The CLD performed the necessary validation procedures to ensure that the customized chemistry kits procured from Promega met the high-quality standards required to forensically test the SAKs.

- **December 2019 – November 2020**: All of the WSP crime laboratories finished completing their independent validation of the Promega chemistry kits:
    - January 30, 2020 – Vancouver Crime Laboratory
    - August 31, 2020 – Spokane Crime Laboratory
    - October 14, 2020 – Marysville Crime Laboratory
    - November 6, 2020 – Seattle Crime Laboratory
    - November 13, 2020 – Tacoma Crime Laboratory

  The laboratories must perform an independent validation since each laboratory is accredited under a separate accreditation certificate and scope document, requiring each laboratory to have its own set of validation data. It is an FBI quality assurance standard that validation data can be shared in a multi-laboratory system, but each individual site must conduct studies for contamination, sensitivity, and precision.

- **December 2020 – March 2021**: Y-screening was implemented statewide based on the dates of when the scientists were individually authorized to use the method in their casework.
    - Dates for implementation vary since the scientists also had to be trained in the Y-screening method before it could be used.