

Developing and Delivering Training for the National Bio and Agro-Defense Facility (NBAF)

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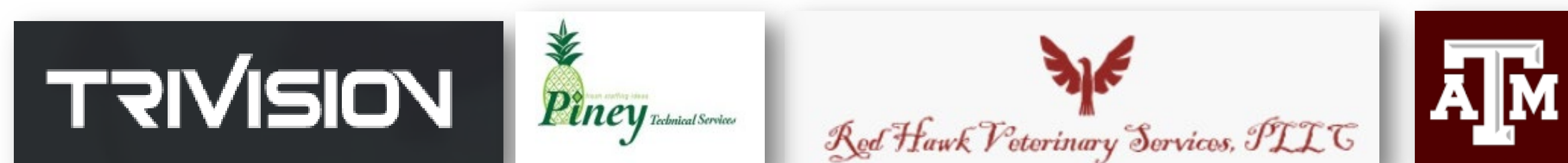
Introduction

In June of 2021, MRIGlobal was awarded a 7-million dollar Indefinite Delivery Indefinite (IDIQ) contract by the USDA for the Operational and Science Training Services contract for the National Bio and Agro-Defense Facility (NBAF) in Manhattan, KS. Once operational, NBAF will serve as the replacement for the USDA's Plum Island facility and will perform research and diagnostics intended to protect the United States against transboundary, emerging, and zoonotic animal diseases that threaten our food supply, agricultural economy, and public health. To date, two task orders have been awarded under this IDIQ, with the period of performance of the currently-funded activities running through September 2022. Here, we provide an update on the completed and ongoing efforts under this contract during the first eleven months of activity. These efforts include the delivery of training program assessments and gap analyses; the delivery of a customized Athena Mobile Laboratory for use in training; preparation of a curriculum assessment and recommendation report; and the ongoing development of didactic and virtual training materials addressing thirty-two key topics for NBAF's training program. This effort has involved extensive collaboration between specialists across four MRIGlobal offices and multiple remote locations, as well as several subcontractors, and represents a truly matrixed approach to addressing the needs of this unique and high-profile client.

MRIGlobal Team



ENGAGED MRIGLOBAL TEAMS



Athena Laboratory



Scan this link with a smartphone to see pictures of the Athena Mobile Laboratory
Manhattan, KS. 2022

At the start of the contract, the NBAF facility had yet to be turned over to government control, so an alternative laboratory space was required to start any in-person training. As part of the contract, MRIGlobal provided an Athena Mobile Laboratory to facilitate this training. The mobile laboratory, along with some custom training aids were delivered to Manhattan, KS in January 2022. These training aids included mock versions of equipment that would be found inside NBAF. The goal was to provide a similar experience for the students so they could learn laboratory procedures prior to gaining laboratory access. This custom hardware included an APR Door, fire and bio alarms, and decontamination shower.



Athena Mobile Laboratory Interior with custom built training equipment.
Manhattan, KS. 2022

NBAF Program Assessments

Initial Program Assessment

- Goal:** Assess the state of the biorisk management program at the start of the contract's period of performance, with a focus on the readiness to support high- and maximum-containment laboratory operations. Identify and prioritize opportunities to improve the program's readiness posture.
- Approach:** Interviews with Unit leads and other key personnel, as well as reviews of available facility documentation (e.g. plans, protocols, work instructions, and training materials).
- Outcomes:** Identified opportunities for improvement across eight focus areas, with recommendations for prioritizing development efforts.

Gap Assessment

- Goal:** Assess 883 available facility documents for appropriateness, completeness, and alignment with best practices, and identify opportunities for improvement and gaps that should be addressed prior to the laboratories going operational.
- Approach:** Subject matter experts reviewed and scored all 883 documents, and identified additional information that could be included to improve the quality and usability of the materials. The set of materials was cross checked against the needs identified in the Initial Program Assessment, as well as against key regulatory and guidance documents, to identify key topics that were not addressed in existing documents.
- Outcomes:** Scores and recommendations related to 883 facility documents, as well as a list of topics recommended for development that was cross-checked against the Initial Program Assessment to confirm utility, appropriateness, and need.

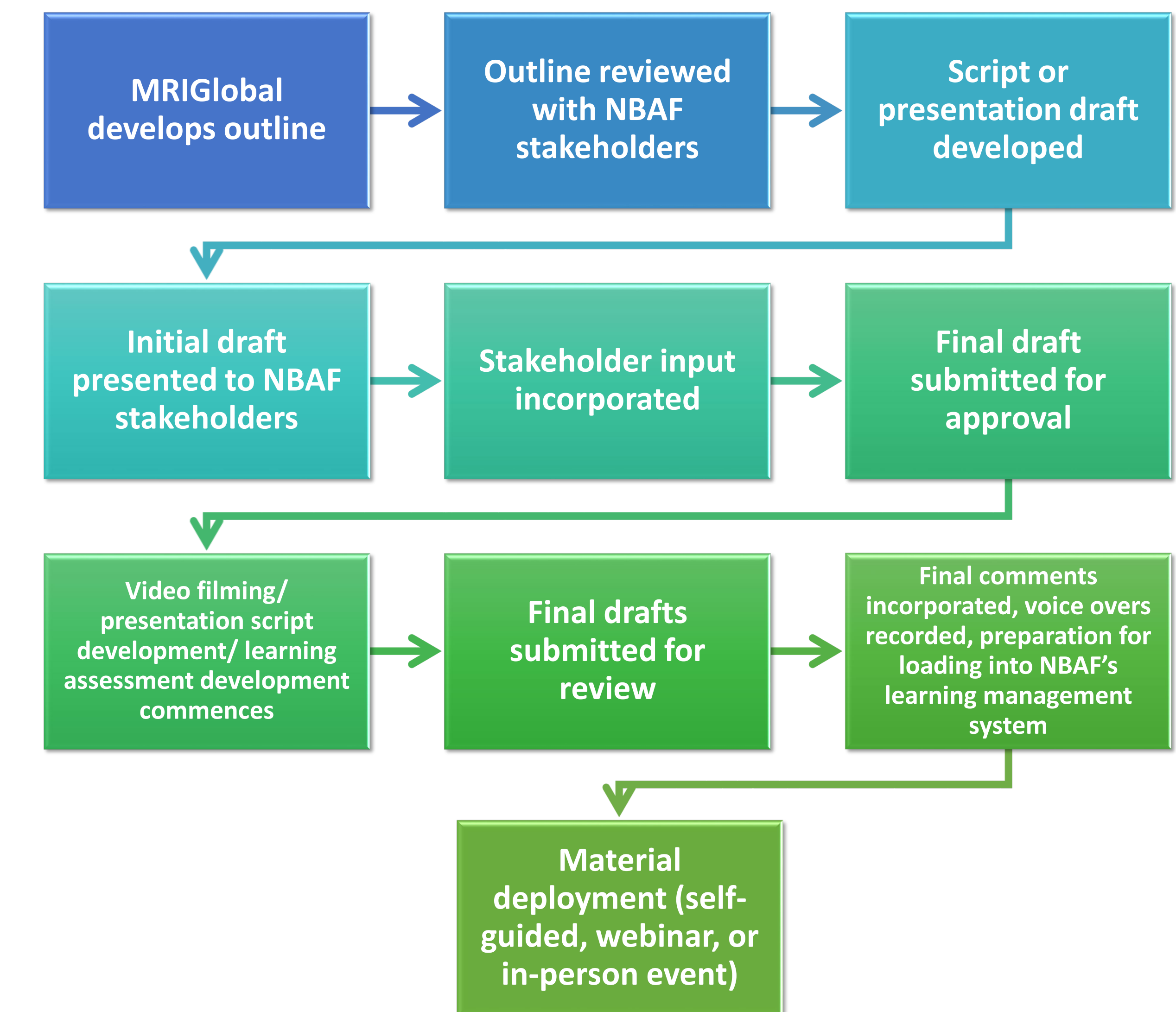
Curricula Assessment and Recommendations

- Goal:** Assess existing training materials related to laboratory start up and operations, identify opportunities for improvement and gaps to be addressed, and propose a training curricula for laboratory stand up that prioritizes establishing BSL-3 operations.
- Approach:** Leverage assessments of training materials conducted as part of the Gap Assessment, as well as MRIGlobal's development materials under the second task order, to determine status of existing training documentation. Develop lists and descriptions of proposed training curricula around various job responsibilities and environments, and socialize and refine with key Unit stakeholders.
- Outcomes:** Identification of remaining gaps in training material development, proposals for additional materials to develop in order to address those gaps, and a proposed training plan developed with stakeholder input to address the standup of laboratory and administrative support operations.

Collaborative Training Material Development

Current Training Material Development Stats

# of Training Development Tasks	# of Videos Development	# of collaborative development meetings
32	12	Hundreds ☺



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