

**EXHIBIT 1**

## Section C - Descriptions and Specifications

**STATEMENT OF WORK  
CBRNIAC Task 729 / CB-08-0046****Chemical and Biological Warfare Defense Research for Office of the Special Assistant  
(Chemical Biological Defense & Chemical Demilitarization Program) (OSA(CBD&CDP))**

**1.0 Background.** The Office of the Special Assistant to the Secretary of Defense for Chemical/Biological Defense and Chemical Demilitarization Programs, OSA(CBD&CDP), is responsible for all chemical and biological defense programs within the Department of Defense (DoD) and oversees activities ranging from basic research to the procurement and supportability of development systems. The OSA(CBD&CDP) has identified the need for timely and accurate access to current and historical Chemical and Biological (CB) information and data, and access to subject matter experts with an awareness of threat and friendly capabilities as well as government and industrial research and development that might impact on CB matters. The OSA(CBD&CDP) frequently requires analyses related to current CB topics and must reply to questions and issues regarding the CB defensive program in a timely fashion to the highest levels of government.

Concerned that veterans and others might have health problems from exposure to chemical and/or biological materials, OSA(CBD&CDP) has identified an additional need to identify and assess information on prior testing of personnel potentially exposed to chemical and/or biological agents. An extensive Chemical, Biological, Radiological, and Nuclear (CBRN) knowledge base is required to identify and analyze chemical and biological defense archival information and make it available to the entire CBD community.

This task deals with the Technical Area Task (TAT) technical scope area 6.1.d (Medical Effects and Treatment), 6.1.n (International Technology, Proliferation, and Control), and 6.1.s (Domestic Preparedness) of the CBRN Information Analysis Center (CBRNIAC) contract. These efforts will continue to generate CBRN Defense (CBRND) information not previously available to the CBRNIAC and CBRN community and will, therefore, add to the CBRN knowledge base. The CBRNIAC will receive copies of all deliverables under this task and will incorporate the information from the deliverables into its databases for dissemination, as appropriate, to CBRNIAC users.

**2.0 Objectives.** The objectives of this task are four fold:

- 2.1** The first objective is to provide research, tests, and evaluations in response to inquiries related to the protection against, and destruction of chemical and biological warfare agents as well as broad-spectrum medical countermeasures against advanced bio-terror threats.
- 2.2** The second objective is to provide senior scientific technical examination of internal Chemical Biological Defense Program Science and Technology (S&T) research

efforts and how to effectively coordinate and integrate the research of external strategic intradepartmental and interagency work groups.

**2.3** The third objective is to provide analytic review of international CBRND program activities by identifying areas for international cooperative development, production, and sustainment thus eliminating redundancies focused on Chemical Biological Defense Program (CBDP) priorities.

**2.4** The fourth objective is to develop the consolidated reference repository of chemical and biological defense information required for the Chemical and Biological Archive Information Management System (CBAIMS) as well as agent fate and analysis that identifies personnel that were potentially exposed to chemical and biological agents during either weapons testing or defensive equipment testing.

**3.0 Specific Deliverables.** The CBRNIAC shall provide the necessary personnel, labor, facilities, materials, supplies, and equipment to perform the following tasks and shall perform these tasks without direct Government supervision, direction or control.

**3.1 Chemical Biological Defense Program (CBDP) Inquiry Analyses.**

**3.1.1 Studies and Experimental Tests/Research Inquiries.** The CBRNIAC shall perform the necessary research and analysis to respond to DoD inquiries related to chemical and biological defense programs and the issues surrounding the protection against, and destruction of chemical and biological warfare agents. The OSA (CBD&CDP) anticipates approximately 15-20 inquiries per year for the duration of this task. The CBRNIAC shall conduct initial searches of the CBRNIAC database and the DTIC Defense Research, Development, Test, and Evaluation Online System (DROLS) as well as other CBRN resources in responding to these inquiries. Based on the initial results, it is anticipated that 1-2 such inquiries per year will require in-depth laboratory analysis in order to support the initial findings and conclusions.—

**3.1.2 Medical Countermeasures Research.** The CBRNIAC shall analyze and report on current and developing medical research focused on the development of broad-spectrum medical countermeasures against advanced bio-terror threats, including genetically engineered intracellular bacterial pathogens and hemorrhagic fevers.

**3.2 Science and Technology Integration Evaluation.** The CBRNIAC shall identify and conduct an evaluation of new and/or alternative CBD technologies and assess their capability to be inserted into or implemented within CBRND S&T strategic directives, measures, and standards. Specific areas of interest include detection, warning and reporting, biological and chemical medical countermeasures, individual and collective protection, decontamination and modeling and simulation. In order to obtain the most current information on new and emerging technology initiatives, the CBRNIAC shall:

- Consult the National Research Council's Post-Doctoral Research Program, the CBD Lab Directors and Chief Scientists Council, and the Non-Traditional Chemical Agent Steering Group.
- Identify Chemical Biological Defense related S&T efforts at, or sponsored by other DoD organizations and other Federal agencies.
- Correlate Defense Science and Technology Advisory Group (DSTAG) and Defense Basic Research Advisory Group (DBRAG) initiatives.

**3.3 CB Defense International Program Assessment.** The CBRNIAC shall identify, review and assess current and proposed international CB defense research projects being performed at DoD laboratories or by allied laboratories such as Porton Down in the United Kingdom. The CBRNIAC's assessment shall consider all aspects of the project(s) to include technical scope, approach and objectives of the CB defense research projects. Assessment results shall be compiled in a report and delivered to the Government.

**3.4 CBAIMS Archives:** The OSA (CBD&CDP) had identified the need to develop an Archival Information Management System that incorporates several known CB defense data repositories into one central location. The Chemical and Biological Archive Information Management System (CBAIMS) was developed with the intent to provide an integrated database system that is accessible, at appropriate levels, by the CBD community of users. All existing and participating data repositories have access to the CBAIMS central database. Key unique information from the US Army Chemical School closedown from Fort McClellan, AL and the National Archives at College Park, Maryland were preserved in earlier phases of this program. The OSA (CBD&CDP) has identified the need to leverage work conducted under CBRNIAC Tasks 423 and 360, in order to continue to identify and incorporate additional chemical and biological defense archival information from other known holdings.

The CBRNIAC shall search and data mine existing Government databases, commercial databases and restricted-access data repositories for CBRN related documents as recommended by DoD. The CBRNIAC shall identify and collect CBD archival information and make it available to the entire CBD community through the CBAIMS collection; and define and execute the most effective and efficient processes to respond to the requirements established by the CBAIMS Advisory Committee.

**3.4.1 Initial Database Search:** Upon gaining access to a CB defense data resource to include databases and hard-copy repositories, the CBRNIAC shall conduct preliminary searches of the CBRNIAC database and the DTIC Defense Research, Development, Test, and Evaluation Online System (DROLS) on the subject matter within the identified holdings. This effort will mitigate the processing of duplicate data already existing in CBRNIAC or the Defense Technical Information Center (DTIC) bibliographic databases.



**3.4.2 Site Characterization.** The CBRNIAC shall research and conduct an assessment of the technical holdings within each data repository. The CBRNIAC shall perform site characterizations to obtain detailed information on the types of CB defense materials contained within the repository and their relevance to CBRND. Additionally, the site characterization will provide parameters on how to execute the consolidation of information. Factors to be considered include: the number of documents in each collection; how documents are catalogued (i.e., electronically, manually, or not at all); number of classified versus unclassified documents within each collection; whether documents have a valid distribution statement; number of documents available in electronic form (i.e., imaged, word processed, PDF, etc.); and any unique site requirements for holdings (e.g., must all holdings remain on site or certain holdings are destined for destruction).

**3.4.3 Site Preparation and Preliminary Processing.** The CBRNIAC shall determine whether or not a document is appropriate for the CBAIMS collection. The CBRNIAC shall conduct a document-by-document review in order to identify scientific and technical documents that are related to CBRND per CBAIMS Advisory Committee recommendations. Documents that will not be processed will be those that are purely historical, programmatic, and technical documents that are not CBRN related (e.g., those pertaining to convention weapons, armor testing, etc.).

**3.4.4 Document Selection and Conversion.** The CBRNIAC shall conduct a down selection of the documents within each site's repository for relevance to CBRND. The CBRNIAC shall identify the documents that have little to no relevant content value or those where the same information already exists within CBAIMS. The CBRNIAC shall utilize all relevant documents, convert them to searchable electronic format, and save them onto electronic media.

**3.5 CB Exposure Document Review.** Concerned that veterans and others might have health problems from exposure, the OSA (CBD&CDP) has identified a need to expand the search for personnel potentially exposed to chemical and/or biological agents while involved in tests and other ancillary events. The CBRNIAC shall analyze all documents at the following sites for information on personnel potentially exposed to chemical and/or biological agents while involved in tests and other ancillary events. The information to be collected will include the test names, test objectives, chemical or biological agents involved, and number of service members and other personnel potentially affected by each test from 1942 to the present timeframe. The results of this work will be separate and distinct from those identified from Project 112 which was a classified chemical and biological test program from 1963-69. The timeframe is to be expanded to cover the period from 1942 to the present. These sites include:

- RDECOM Historical Office
- Medical Research Institute of Infectious Diseases
- Edgewood Chemical Biological Center Technical Library Laboratory Notebooks
- West Desert Technical Information Center Classified
- Naval Research Laboratory
- Naval Medical Research Center
- Walter Reed Army Institute of Research
- Naval Medical Research and Development Command
- Eglin Air Force Base
- Military History Institute
- Kirtland Air Force Base
- Air Force Institute of Operational Health
- U.S. Army Chemical School

**3.5.1 Processing and Quality Assurance/Quality Control (QC).** The CBRNIAC shall scan relevant documents, QC the scanned documents, conduct technical data extraction to identify potential exposures, and QC the technical data extracted from the documents

**3.5.2 Consolidated Reference Repository.** As a result of the activities outlined in section 3.5.1 the CBRNIAC shall develop collection, generation, processing, analysis, dissemination or access strategies for DoD approval and will develop a consolidated reference repository within the CBRNIAC outlining the metadata information that characterizes identified documents and their content. This subtask shall include pertinent file sources and data from previous CBRNIAC efforts and other CBW related activities as approved by the sponsoring organizations. Data created or obtained in support of this task will be provided to and accessed through the CBRNIAC according to customer's distribution instructions and archived as appropriate. The CBRNIAC shall also develop and implement capabilities for organizing, storing, and disseminating appropriate data to include a full-text collection of this information searchable on a classified server.

**3.5.3 Data Transfer Progress Reports.** The CBRNIAC shall provide a synopsis of extracted technical data to OSA (CBD&CDP) and the Assistant Secretary of Defense for Health Affairs for Force Health Protection & Readiness (OASD(HA)FHP&R) on a monthly basis.

**3.6 Program Plan and Quarterly Program Reviews.** The CBRNIAC shall deliver a program plan 15 days after task award which addresses but not limited to Concept of Operations (CONOPs) specific to the work presented in this SOW, metrics to measure progress, government decision points, quality assurance metrics, Work Breakdown Structures, and Research/Study Plan procedures. The CBRNIAC shall

conduct quarterly program reviews with OSA(CBD&CDP) and OASD(HA)FHP&R to review program performance, site priorities, data quality, and lessons learned.

**3.7 Quarterly Field Site Visits.** The CBRNIAC shall host quarterly field site visits by the OSA(CBD&CDP) tests repository program manager.

**3.8 Place of Performance.** This effort will be accomplished at Government locations and at CBRNIAC facilities as appropriate.

**3.9 Period of Performance.** All work is to be completed 1095 days after task award.

**3.10 Travel Requirements.** Local, foreign, and domestic travel is anticipated for this task.

#### **4.0 Reporting Requirements.**

**4.1 Monthly report.** The monthly progress report includes task expenditures versus planned expenditures, technical progress made, schedule status, travel conducted, meetings attended, Principal Contracting Officer (PCO) approved equipment/materials procured and excessed, issues and recommendations. The monthly progress report will be in PDF format and e-mailed to the client and CBRNIAC.

**4.2 Interim Technical Report.** The CBRNIAC shall submit a technical report (TR) for each year during this task. Each TR will be delivered to the client, COTR, and CBRNIAC. The format, content, and submission requirements for any TR (interim, final comprehensive, or other) are the same as listed below for the Final Comprehensive Technical Report.

**4.3 Final Comprehensive Technical Report.** A final detailed written TR will include task background, objectives, assumptions, specific data collected, analyses conducted, conclusions and recommendations. Each TR will be delivered to the client, COTR, and CBRNIAC. Under authority of the client (when an unclassified document or a classified document) and with approval by the COTR, each TR will have a Distribution Statement that provides guidance on the distribution authority and access level required to access information contained within each TR. If the TR is CLASSIFIED, the COTR and client will review the document for appropriate security markings IAW DoD Security Guidelines and will also have a distribution statement assigned. An UNCLASSIFIED abstract/citation (Report Documentation Forms, Standard Form 298) of every TR (i.e., all TAT report deliverables) will be created and entered into the IAC bibliographic database in the Total Electronic Migration System (TEMS). TEMS allows authorized DTIC STI users to perform simple and complex queries of the entire IAC knowledge base using any Web browser. An electronic full text copy in PDF format of every TR will be placed in the IAC full text database (TEMS) for DoD reference.

The CBRNIAC shall submit two copies of the draft Final Comprehensive Technical Report with a completed SF298 no later than 45 days prior to the completion of this task. The Government will require 30 days for review and comment on the draft version. The CBRNIAC shall will incorporate the Government's comments and deliver hard copies and electronic copies of the Final Comprehensive Technical Report within 1 days of receipt of the Government comments.

#### 4.4 Deliverable Schedule Table.

Deliverable Requirement Tasks	Ref.	Due Date
Laboratory Studies and Experimental Tests/Research Inquiries	3.1.1	30 days after completion of inquiry
Medical Countermeasures Research Analysis Report	3.1.2	180 days after task award
Science and Technology Integration Evaluation Report	3.2	180 days after task award
CB Defense International RDA Program Assessments Report	3.3	365 days after task award
Data Transfer Reports	3.5.3	15 <sup>th</sup> of each month
Detailed Program Plan	3.6	15 days after task award
Quarterly Program Reviews	3.6	115 <sup>th</sup> day and 90 days thereafter
Monthly Report	4.1	15 <sup>th</sup> of each month
Interim Technical Report	4.2	365 & 730 days after task award
Draft Final Comprehensive Technical Report	4.3	August 16, 2011
Final Comprehensive Technical Report	4.3	September 28, 2011

**5.0 Government-Furnished Equipment/Information.** The Government will provide access to collections, archives, classified data systems, and network connectivity as required for research, collection, and dissemination of relevant source material.

**6.0 Security.** Access to and generation of material up to Top Secret, NATO Secret, or Top Secret Special Compartmented Information will be required. Contactor personnel working on this task will have appropriate clearances.

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