



Blue Grass Chemical Agent-Destruction Pilot Plant (BGCAPP)

Training Document

Personnel Training Plan

Contract W52P1J-09-C-0013
(CDRL F001)

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Record of Revision

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11	05 MAR 2025	Annual revision; added Training Closeout Plan to references
10	11 MAR 2024	Annual revision; corrected link in Section 4.3.
9	15 FEB 2023	Annual Revision
8	06 JAN 2022	Revision for annual review; Section 3.0 entry revised per Client comment
7	22 DEC 2020	Annual revision; changed AECOM to Amentum
6	22 NOV 2019	Revision; for annual review
5	15 OCT 2018	Annual Revision: Added training course waiver requirements. Changed required reading program review from a semi-annual to an annual basis.
4	18 JUL 2017	Revision. Rewrite based on Government Client comments upon a BPBG rewrite that bore the following changes: <ul style="list-style-type: none">• Streamline the plan to clearly describe the process for establishing curriculum and the process by which employees are trained• Provide a concise roadmap to implementing procedures Addresses condition report 24915-00-GCA-GAQ-21169
3	19 MAY 2016	Use
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List of Changes

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1.0 PURPOSE

The Personnel Training Plan (PTP) outlines the process for implementing training requirements to prepare the workforce to carry out the mission of the Blue Grass Chemical Agent-Destruction Pilot Plant (BGCAPP).

2.0 SCOPE

This PTP applies to Main Plant, Static Detonation Chamber (SDC) 1200, and SDC 2000 training. It describes the training methodology that is used to develop and implement training programs in support of all BGCAPP, vendor, visitor, and subcontractor personnel at the facility during systemization, operations, and closure. This plan does not address the development and implementation of Laboratory department-specific training, which is addressed in 24915-00-9PL-00-00003, *Laboratory Training Plan*; however, Laboratory department training records are created and maintained in accordance with this PTP.

For information about the closeout of training, see 24915-CL-G8L-GAT-00001, *Training Closeout Plan*.

3.0 DEFINITIONS

Annual	365 days, plus or minus a window of 30 days
Bechtel Parsons Blue Grass (BPBG) Joint Venture (JV) (BPBG-JV)	The Joint Venture between Bechtel National, Inc., and Parsons Government Services Inc., and their teaming partners on the BPBG Project (Amentum, Battelle Memorial Institute, and GP Strategies™)
Certification	The documented process, following qualification, by which personnel demonstrate the understanding and capability to perform the tasks required for the requisite functional position without direct supervision
Certified Individual	A person certified on the task/system (for tasks/systems requiring certification) for training/evaluating a trainee
Individual Training Path	The training path of a specific individual
Job Performance Measure (JPM)	A metric used to establish performance requirements necessary to evaluate trainee task performance, knowledge, and skills
Job Task Analysis (JTA)	A formal process for determining or verifying the work-related activities that employees perform
Learning Management System (LMS)	A computer application used to record employee training assignments and history and to deploy computer-based training

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On-the-Job Training (OJT)	Hands-on instruction while working On-the-job training encompasses the performance of routine, non-routine, and emergency procedures under the supervision of a certified individual.
Practical Factor	A selected task or evolution required to be successfully and safely performed by an individual as part of the certification process
Qualification	Successful completion of classroom training for a given system, area, or process A qualified individual has satisfactorily completed all course requirements for the position and may progress to the certification process; in addition, a qualified individual may work under the supervision of a certified individual.
Remediation	A method by which to upgrade a student's level of knowledge or skills in identified weak areas and for actions prescribed to reinstate revoked qualification or certification
Training Course Waiver	Release of an individual from portions of a training program because of prior education, experience, or training
Training Matrix	A document that lists the required training paths for all job titles Due to the large number of job titles and training paths for the entire workforce, each department has its own Training Matrix. The Training Matrix is created and maintained as described in Sections 4.1 and 4.6, respectively.
Training Path	The job-specific curriculum and evaluations one must satisfactorily complete to perform the tasks associated with the job
Training Plan	This document (24915-00-G8L-GGG-00052, <i>Personnel Training Plan</i>); also referred to as the Personnel Training Plan (PTP)
Training Program	The program used to train, qualify, and certify applicable personnel working at the Main Plant, the SDC 1200 facility, and the SDC 2000 facility during systemization, operations, and closure

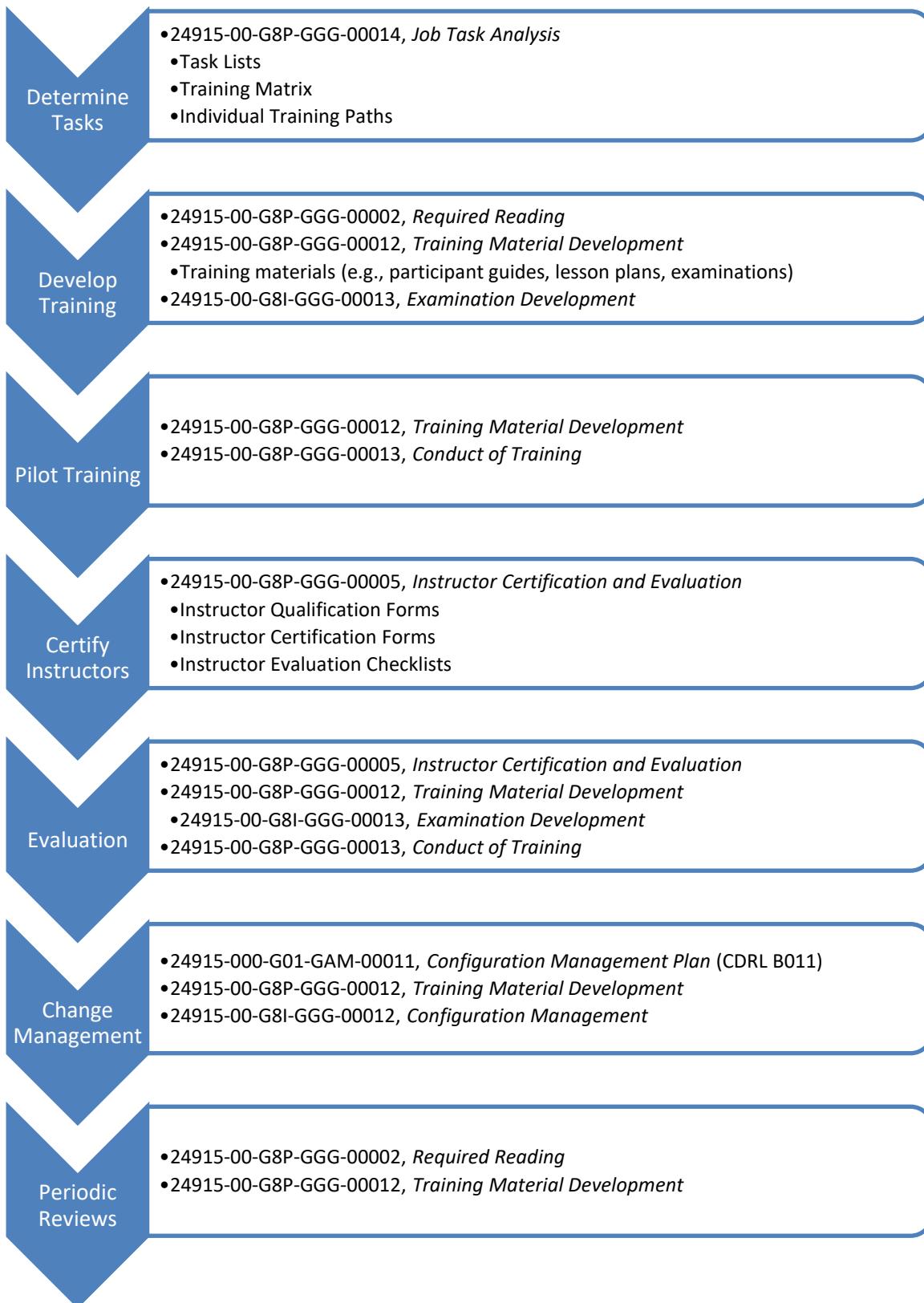
4.0 TRAINING DEVELOPMENT

The overall goal of the training program is to prepare the workforce to carry out the mission of BGCAPP. Toward that end, training must be developed to support the requisite tasks each member of the workforce will perform to carry out his or her mission.

The process used for training development is shown in Figure 1 and described in subsequent sections.

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Figure 1 – Training Development Process



4.1 Determine Tasks

The training program approach is to evaluate each position, develop specific training paths based upon an analysis of existing historical information, and compare that information against defined requirements. Training requirements are determined by appropriate analysis.

The analysis includes a review of regulatory requirements, 24915-00-G8L-GGG-00053, *PM Chemical Demilitarization Training Program Plan*, previously conducted job task analyses (JTAs), specific job requirements, identified performance problems, audit findings, and requests for changes to an established training program. More detailed training requirements are identified, if necessary, by conducting additional in-depth JTAs. Training program goals are established, and the overall scope of training is defined during this analysis.

The training programs from other chemical demilitarization facilities have been reviewed to determine whether pertinent requirements for Bechtel Parsons Blue Grass Joint Venture (BPBG-JV) positions have been addressed in the BGCAPP training program. This review has occurred as Project-specific task lists were generated. Based on accepted industry standards and in accordance with 24915-00-G8P-GGG-00014, *Job Task Analysis*, the difficulty, importance, and frequency factors have been assigned for identified tasks and form the basis for selecting a task for training/certification.

At times, topics for training may be identified outside the JTA process. These trainings may be ancillary to the Project and are identified in accordance with 24915-00-G8P-GGG-00003, *Training Request Instructions*.

These evaluations result in the identification of training requirements, or *training paths*, for all job titles within the organization. These training requirements are aggregated into the Training Matrix. Due to the large number of job titles and training paths for the entire workforce, each department has its own Training Matrix.

The training paths are entered and maintained in the Learning Management System (LMS). When an individual is assigned a job title, the LMS automatically assigns required training to the individual and creates an Individual Training Path for that individual.

4.2 Develop Training

Skill and knowledge elements derived from the task lists, and subsequently modified as a result of input received from supervisors as part of performance assessments, are evaluated, and learning objectives are developed to support the analysis. Technical reviews are conducted by selected subject matter experts (SMEs), and instructional reviews are conducted by the training organization to ensure the program content is academically sound and meets the requirements of the PTP. As required, a Lesson Plan/Participant Guide/Test Package is developed for each course. Other training material may be developed, if necessary, to support plant exercises and plant schedules. Wherever practical, the BPBG-JV has adapted other demilitarization site programs or commercially available, off-the-shelf training materials to BGCAPP requirements.

The development phase is implemented in accordance with 24915-00-G8P-GGG-00012, *Training Material Development*, and 24915-00-G8I-GGG-00013, *Examination Development*. All developed training course materials are approved by the Training Manager and the appropriate department manager.

The required reading process is part of the training program. Required readings are identified and implemented in accordance with 24915-00-G8P-GGG-00002, *Required Reading*.

4.3 Pilot Training

After each course is developed and approved, a course pilot is conducted to ensure its technical accuracy and instructional soundness. Pilots are conducted in accordance with 24915-00-G8P-GGG-00012, *Training Material Development*, and 24915-00-G8P-GGG-00013, *Conduct of Training*. Credit for course completion may be given to personnel attending a pilot course, provided the pilot course meets the established training course objectives and the trainee meets the requirements of Section 5.4.

4.4 Certify Instructors

Prior to conducting training for BGCAPP employees, instructors must become certified to teach the topic. Instructor certification, conducted in accordance with 24915-00-G8P-GGG-00005, *Instructor Certification and Evaluation*, helps to ensure the following:

- The instructor is trained/experienced in the tools and techniques required to be an effective instructor (referred to as “qualified to teach”).
- The instructor is competent in the subject matter being taught (referred to as “certified to teach”).

4.5 Evaluation

Ongoing evaluation is required to ensure the training program remains effective. The training program is evaluated by the following means:

- Level I Evaluations – A Level I evaluation measures participants' opinions about the training. Level I evaluation data are collected from students attending formal courses, using a written survey collected at the end of each course in accordance with 24915-00-G8P-GGG-00013.
- Level II Evaluations – A Level II evaluation measures how well participants have mastered the training objectives. This is accomplished through testing conducted at the end of the course. A student's performance on the examination is indicative of how well he or she has learned the material presented in the course. The exams are developed and analyzed for validity in accordance with 24915-00-G8P-GGG-00012 and 24915-00-G8I-GGG-00013, *Examination Development*.
- Interactive Learning Tool – The interactive learning tool allows anonymous response to training-related questions and issues outside the normal training environment. Post-training knowledge retention and comprehension are measured and assessed on Management-defined topics.

The results of the evaluations are evaluated to determine the need to adjust the training program content to prepare personnel for the jobs they perform. The Training Department is responsible for incorporating needed changes to training materials identified in the feedback.

Instructors are evaluated in accordance with 24915-00-G8P-GGG-00005 to ensure they possess adequate presentation skills, subject matter knowledge, technical proficiency, and an appropriate attitude relative to classroom and field presentations.

4.6 Change Management

The Training department captures and analyzes potential configuration management items in accordance with 24915-000-G01-GAM-00011, *Configuration Management Plan* (CDRL B011), and 24915-00-G8I-GGG-00012, *Configuration Management*.

Engineering change proposals, permit modifications, revisions to technical documentation, facility baseline changes, regulatory changes, Government Field Office (GFO) reports, and course evaluations are reviewed to determine the necessity for changes to training materials. If a significant training impact associated with the reviews/changes and technical information (e.g., operating parameters) exists, or if the sequence of operations is affected, training materials are revised in accordance with 24915-00-G8P-GGG-00012, *Training Material Development*.

4.7 Periodic Reviews

The BPBG-JV Training Program is reviewed on an annual basis to determine the continued validity and accuracy of each course. These reviews are conducted through a cooperative effort between the Training department and the applicable BPBG-JV departments. The documented reviews address status and completeness of course documentation; determine the continued need and design of each course; determine the continued accuracy of the course material; and ensure all relevant changes are incorporated into the material, including any necessary changes to the testing instruments. These reviews are accomplished in accordance with 24915-00-G8P-GGG-00012.

The required reading program is reviewed annually by the applicable BPBG-JV departments in accordance with 24915-00-G8P-GGG-00002, *Required Reading*.

5.0 TRAINING IMPLEMENTATION

The overall goal of the training program is to prepare the workforce to carry out the mission of BGCAPP. Toward that end, each workforce member is trained in accordance with his or her Individual Training Path.

The process used for training implementation is summarized in Figure 2 and described in subsequent sections. Although shown as sequential steps, some steps are performed concurrently. For example, as described in 24915-00-GPP-GAZ-00001, *Chemical Personnel Reliability Program*, Chemical Personnel Reliability Program (CPRP) certification efforts begin after a person's assignment to a specific job title but are not complete until the person has been trained and demonstrates proficiency in the duties of that job.

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Figure 2 – Training Implementation Process



5.1 Onboard and Assign Individual Training Path

A newly hired employee, or one assigned to a new job title, is processed in accordance with 24915-00-GPP-GAG-00004, *Onboarding and Offboarding Software Program*. The Training department enters requisite information into the LMS in accordance with 24915-00-G8P-GGG-00004, *Training Records Management*. The LMS automatically creates the Individual Training Path based on the individual's job title.

Vendor, visitor, and subcontractor personnel at the facility are assigned Individual Training Paths in accordance with 24915-00-G8P-GGG-00011, *Non-Bechtel Parsons Blue Grass Employee Training Requirements*.

Printed copies of the Individual Training Paths are provided to employees at the conclusion of their first training event (Project orientation).

5.2 Schedule

The trainee is scheduled for trainings as far in advance as is practical, based on current operating considerations. This scheduling is a cooperative effort between the Training Department and the applicable BPBG-JV departments. Personnel are not permitted to perform tasks that require qualification or certification except under direct supervision of qualified or certified individuals, until qualification and/or certification efforts are complete.

Certain topics require prerequisite trainings to be completed before attending training. Examples include respiratory protection training as a prerequisite for toxic area training and metal part treater systems-level training as a prerequisite for metal part treater simulation-level training.

Prerequisites affect the scheduling efforts and are incorporated into the LMS. Individual course prerequisites, if any, are defined by the specific course and are summarized in 24915-00-G8G-GGG-00001, *Bechtel Parsons Blue Grass Training Center Course Catalog*.

Scheduling is accomplished in accordance with 24915-00-G8P-GGG-00013, *Conduct of Training*, and 24915-00-G8P-GGG-00011.

A BPBG-JV employee has read-only access to his or her Individual Training Path, including schedules and completion status, via the LMS. BPBG-JV department managers have read-only access to the Individual Training Paths of their department's employees via the LMS. The Surety department has read-only access to the Individual Training Paths of employees in the CPRP via the LMS.

As schedule changes occur, BPBG-JV employees are notified by automatic email via the LMS; vendors, visitors, and subcontractor personnel are informed through their appropriate BPBG-JV contact.

Refresher training is scheduled in accordance with regulatory or procedural requirements. Other refresher training may be conducted to review or update system operations, support campaign changeover, or meet personnel performance issues. This training will be conducted with the concurrence of the responsible BPBG-JV Department Manager and the BPBG-JV Training Manager.

If an employee has been absent from the Project for a year or more, orientation training must be repeated. The need for retraining in other courses will be determined by the employee's Manager or Supervisor. Retraining requirements will be coordinated with the Training Manager.

5.3 Train

5.3.1 General

Employees may not work unsupervised unless they have completed their applicable job training and required readings.

Each trainee attends requisite training in accordance with his or her Individual Training Path.

Classroom trainings are conducted by certified instructors in accordance with 24915-00-G8P-GGG-00013, *Conduct of Training*. Classroom training records are also generated in accordance with 24915-00-G8P-GGG-00013.

On-the-job training (OJT) is conducted by a certified individual in accordance with the requirements of 24915-OPS-5PR-00-00033, *BGCAPP Operations, Maintenance, and Operations Support Personnel Certification Procedure*. Certification records are also generated in accordance with 24915-OPS-5PR-00-00033.

During their first week of employment on the Project, BPBG-JV employees are assigned required readings in accordance with 24915-00-G8P-GGG-00002, *Required Reading*.

5.3.2 Training Course Waiver

Personnel may receive a training course waiver from portions of a training path based upon prior education, experience, or training that is deemed equivalent but received elsewhere.

Personnel who are involved in developing or instructing courses may be excused from the training due to their involvement.

Training course waivers are evaluated on a case-by-case basis and are granted by a joint decision of the employee's Department Manager and the Training Manager. The decision is provided in writing and should include justification for the training course waiver. Training course waivers are included in the individual's training folder.

The LMS will be updated to reflect completion when training course waivers are granted.

Training requirements that have a basis in regulation are not eligible for training course waivers.

Training course waivers are submitted, evaluated, approved or disapproved, and documented in accordance with 24915-00-G8P-GGG-00004, *Training Records Management*.

5.4 Qualify

NOTE: A qualified individual has satisfactorily completed all course requirements for a given position and may progress to the certification process; in addition, a qualified individual may work under the supervision of a certified individual.

Qualification is the successful completion of classroom training for a given system, area, or process. Qualification training is accomplished in accordance with 24915-00-G8P-GGG-00013.

To satisfactorily complete prescribed training, the trainee must:

- Attend required training
- Complete all modules in a self-paced program of instruction
- Complete all training requirements within the time allowed for the prescribed training path

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- Receive a grade of at least 70 percent (unless otherwise dictated by regulation or procedure) on all classroom-phase written examinations
- Satisfactorily pass all elements on performance tests

Remediation activities for failures shall be conducted in accordance with 24915-00-G8P-GGG-00013, *Conduct of Training*.

Refresher training is required to maintain qualification. If required training is not completed as specified, a recommendation will be provided by the Training Manager via email to the Project Manager, Surety Manager, and Environmental Compliance Manager to remove the delinquent individual's facility access authorization.

After any failure of a requalification or recertification evaluation, the trainee shall be considered disqualified and removed from any duties requiring *that* qualification or certification.

5.5 Position Certify

NOTE: Some job titles do not require separate verification of proficiency for certification (e.g., an SDC 1200 Shift Clerk); these positions go directly to CPRP certification. Other positions do require verification of proficiency for certification (e.g., a Control Room Operator); these positions require that trainees complete OJT to gain the skill set necessary to perform their assigned duties.

After qualification efforts are complete, the trainee may work under direct supervision of a certified individual. The trainee begins or continues OJT conducted by a certified individual. Certification efforts include OJT, demonstration of practical factors, and interviews in accordance with the requirements of 24915-OPS-5PR-00-00033, *BGCAPP Operations, Maintenance, and Operations Support Personnel Certification Procedure*.

On-the-job training is accomplished by assuming a functional position, such as a Plant Operator, under the guidance of a certified individual. The trainee participates in the normal activities of the shift (e.g., taking rounds and readings, starting and stopping equipment as required, responding to off-normal conditions).

The certification program has multiple levels: Entry, Initial, Primary, and Supplemental. The Entry and Initial levels may be combined because they are generally concurrent activities for the individual; this combination of levels is referred to as Basic level. A trainee will complete each lower level of certification before completing a higher level of certification, but a trainee may begin certification efforts for the higher-level certification in conjunction with completing the lower-level certification. For example, a Plant Operator trainee may not certify as a Plant Operator (a Primary level certification) until he or she has completed the Basic-level certification. At each level, the trainee shall have a thorough understanding of the knowledge requirements applicable to the specific certification as well as the ability to perform, simulate, or discuss the specific practical factors required.

5.6 CPRP Certify

The person may become CPRP certified in accordance with the requirements of 24915-00-GPP-GAZ-00001, *Chemical Personnel Reliability Program*.

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6.0 REFERENCES

- 24915-000-2KP-A03-00012, *Records Retention and Turnover*
- 24915-000-G01-GAM-00011, *Configuration Management Plan* (CDRL B011)
- 24915-00-9PL-00-00003, *Laboratory Training Plan*
- 24915-00-G01-GAZ-00003, *Chemical Surety Management Plan* (CDRL D022)
- 24915-00-G01-GGPT-00003, *Attachment H – Personnel Training Plan* (CDRL A019) [Environmental Document]
- 24915-00-G8G-GGG-00001, *Bechtel Parsons Blue Grass Training Center Course Catalog*
- 24915-00-G8I-GGG-00012, *Configuration Management*
- 24915-00-G8I-GGG-00013, *Examination Development*
- 24915-00-G8L-GGG-00053, *PM Chemical Demilitarization Training Program Plan*
- 24915-00-G8P-GGG-00002, *Required Reading*
- 24915-00-G8P-GGG-00003, *Training Request Instructions*
- 24915-00-G8P-GGG-00004, *Training Records Management*
- 24915-00-G8P-GGG-00005, *Instructor Certification and Evaluation*
- 24915-00-G8P-GGG-00011, *Non-Bechtel Parsons Blue Grass Employee Training Requirements*
- 24915-00-G8P-GGG-00012, *Training Material Development*
- 24915-00-G8P-GGG-00013, *Conduct of Training*
- 24915-00-G8P-GGG-00014, *Job Task Analysis*
- 24915-00-GPP-GAG-00004, *Onboarding and Offboarding Software Program*
- 24915-00-GPP-GAZ-00001, *Chemical Personnel Reliability Program*
- 24915-CL-G8L-GAT-00001, *Training Closeout Plan*
- 24915-OPS-5PR-00-00033, *BGCAPP Operations, Maintenance, and Operations Support Personnel Certification Procedure*
- 29 CFR 1910.120, (p) and (q) regarding Hazardous Waste Operations and Emergency Response
- 49 CFR 172.700, *Subpart H Training*
- AR 190-59, *Chemical Agent Security Program*
- AR 385-61, *The Army Toxic Chemical/Agent Safety Program*
- AR 385-64, *Ammunition and Explosive Safety Standards*
- AR 50-6, *Chemical Surety*
- Code of Federal Regulations, Title 29, *Occupational Safety and Health Standards*
- Code of Federal Regulations, Title 40, *Protection of Environment*
- Code of Federal Regulations, Title 49, *Transportation*
- DA Pamphlet (PAM) 385-61, *Toxic Chemical Agent Safety Standards*
- DA Pamphlet (PAM) 40-173, *Occupational Health Guidelines for Evaluation and Control of Occupational Exposures to Mustard Agents H, HD and HT*
- DA Pamphlet (PAM) 40-8, *Occupational Health Guidelines for the Evaluation and Control of Occupational Exposures to Nerve Agents GA, GB, GD, and VX*

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- Kentucky Administrative Regulation, Title 401, *Energy and Environment Cabinet Department for Environmental Protection*
- Military Standard (MIL-STD) -00139, *Military Training Programs*
- System Contract for the BPBG, Contract No. W52P1J-09-C-0013
- U.S. Environmental Protection Agency (USEPA), *Test Methods for Evaluating Solid Waste: Physical/Chemical Methods*, SW-846, current edition