

OPCW

Seventy-Third Session 16 – 19 July 2013 EC-73/2 8 July 2013 Original: ENGLISH

REPORT OF THE VISIT BY THE CHAIRPERSON OF THE EXECUTIVE COUNCIL AND REPRESENTATIVES OF THE EXECUTIVE COUNCIL TO THE PUEBLO CHEMICAL AGENT DESTRUCTION PILOT PLANT, COLORADO, AND TO THE BLUE GRASS CHEMICAL AGENT DESTRUCTION PILOT PLANT, KENTUCKY, THE UNITED STATES OF AMERICA 18 – 24 MAY 2013

Introduction

- 1. In its decision entitled the "Final Extended Deadline of 29 April 2012" (C-16/DEC.11, dated 1 December 2011), the Conference of the States Parties (hereinafter "the Conference") decided that the possessor States concerned are to invite the Chairperson of the Executive Council (hereinafter "the Council"), the Director-General and a delegation representing the Council to undertake visits to obtain an overview of the destruction programmes being undertaken. The Conference further decided that these visits are to inter alia include visits to destruction facilities as well as meetings with parliamentarians, if possible, and government officials in capitals as a formal part of the visits. Invitations are to also be extended to observers to participate in the Council delegation.
- 2. In pursuance of the above-mentioned decision of the Conference (C-16/DEC.11), the United States of America (hereinafter "the United States") invited the Council to visit the Pueblo Chemical Agent Destruction Pilot Plant (PCAPP), Colorado, and the Blue Grass Chemical Agent Destruction Pilot Plant (BGCAPP), Kentucky, between 18 and 24 May 2013. The United States provided a general outline of logistical and safety considerations (Annex 1 to this report) as well as a detailed itinerary (Annex 2), and initiated consultations with the Chairperson of the Council with a view to finalising all specific details of the visit.
- 3. Subsequent to consultations within the various regional groups and in line with the aforementioned decision of the Conference, the Council delegation that visited the Pueblo and Blue Grass facilities comprised the Chairperson of the Council, who also represented his regional group, a representative from each of the other four regional groups, the Director-General of the Technical Secretariat (hereinafter "the Secretariat"), one representative from the Russian Federation, and two Secretariat staff members. At the invitation of the Government of the United States, representatives from three Member States—Japan, Libya, and South Africa—joined the Council delegation as observers. The names of the representatives of the United States who hosted the visit are listed in Annex 4.

- 4. The Secretariat made the necessary funds available to the Chairperson of the Council, the Director-General, and Secretariat staff members. In addition, funding was provided for the representatives of the African Group, the Asian Group, the Group of Latin American and Caribbean States, as well as for the observer from Libya, using the voluntary contributions available under the terms of Project 3 of the decision adopted by the Council of the European Union on 23 March 2012 (2012/166/CFSP) in the framework of the implementation of the European Union Strategy against Proliferation of Weapons of Mass Destruction that was adopted on 12 December 2003. All other participants bore their own expenses incurred for the visit.
- 5. This report is presented by the Chairperson of the Council after consultations with the representatives of the Council in the delegation.
- 6. In preparation for the visit, the members of the Council delegation were briefed by the Permanent Representation of the United States to the OPCW on administrative and logistical arrangements, as well as on the programme of the visit.
- 7. On 18 May 2013, upon arrival in the United States, the members of the Council delegation met with senior representatives of the Government of the United States during a reception hosted by the Honorable Andrew C. Weber, Assistant Secretary of Defense for Nuclear, Chemical and Biological Defense Programs. The event offered an opportunity to interact and exchange views with respect to the chemical demilitarisation programme of the United States.

Visit to the Pueblo Chemical Agent Destruction Pilot Plant

- 8. The members of the Council delegation visited the Pueblo Chemical Depot (PCD) on 20 May 2013.
- 9. Upon arrival at Pueblo, the Council delegation was welcomed by the Government and site officials. A number of detailed presentations followed. The first, by Mr Don Barclay, Director of the United States Army Chemical Materials Activity (CMA), provided an overview of the CMA, responsible for the safe storage of the entire United States chemical weapons stockpile and the destruction of the chemical warfare materiel not classified as part of the United States unitary chemical stockpile.
- 10. Mr Barclay detailed the five areas of responsibility of the CMA, amongst which the safe storage of the United States chemical weapons stockpiles at the two remaining sites—PCD and Blue Grass Chemical Activity—represents a top priority. This includes the physical security of the chemical weapons stockpiles, safety maintenance, waste management, environmental compliance, emergency preparedness, and munitions transport for destruction.
- 11. The Chemical Stockpile Emergency Preparedness Program (CSEPP) is in place at the two remaining chemical weapons stockpile sites and works closely with the surrounding communities to deal with natural and man-made emergencies and disasters, including through continuing exercises and planning and continued integration of technology improvements.
- 12. Mr Barclay also provided information about the distribution by location and size of the chemical weapons stockpiles initially declared by the United States, and the

percentage of chemical agent remaining to be destroyed. It was highlighted that CMA was responsible for the destruction of the chemical weapons stockpiles at seven— Anniston, Aberdeen, Johnston Atoll, Newport, Pine Bluff, Tooele, and Umatilla—out of nine original storage locations. This represents 89.75% or 24,924 metric tonnes (MTs) of declared agent. The destruction of the remaining stockpiles at Blue Grass and Pueblo remains under the responsibility of the Assembled Chemical Weapons Alternatives (ACWA) programme.

- 13. The CMA is also responsible for the destruction of newly recovered munitions, which after having been assessed and confirmed as chemical weapons are included in supplemental declarations and destroyed in full compliance with the Chemical Weapons Convention (hereinafter "the Convention").
- 14. Mr Barclay stated that the United States works closely with the Secretariat to meet all Convention requirements and continues to provide updates on its activities to the Council and the Conference.
- 15. Mr Barclay further informed the Council delegation that while continuing to eliminate its own stockpile of chemical weapons, the United States is committed to the eradication of chemical threats worldwide. Thus, the United States has inter alia provided assessment operations in other countries including Australia and Japan; hosted on two separate occasions roundtable meetings for Iraqi and Libyan Government officials to discuss chemical weapons destruction options; provided programme management training to Iraqi representatives; and provided technical expertise to and participated in training exercises in other countries.
- 16. Finally, Mr Barclay stated that the CMA would continue to provide safe storage of the remaining chemical weapons until their destruction, while protecting the workforce, the public, and the environment to the maximum extent. At the same time, the CMA considers that retaining and relocating the workforce remain key activities and allow knowledge and experience be shared with the ACWA. The CMA will continue to meet its obligations and fulfil its mission while managing the impact of fiscal constraints that affect government spending.
- 17. In the presentation that followed, Mr Conrad Whyne, Program Executive Officer for the ACWA programme, provided an overview and a brief history of the programme, which was established in late 1996 at the direction of the United States Congress to identify alternatives to incineration for the destruction of assembled chemical weapons. Following a comprehensive process of research into various technologies that involved numerous government agencies, the chemical industry, and the public, alternative technologies were officially selected in late 2002 and early 2003 for Pueblo (i.e. neutralisation followed by bio-treatment) and Blue Grass (i.e. neutralisation followed by supercritical water oxidation (SCWO)). Contracts were awarded to Bechtel National, Inc. and to a Bechtel-Parsons joint venture for the design, construction, systemisation, operation, and closure of the facilities located at Pueblo and Blue Grass respectively.
- 18. As the safety of the workforce and local community is paramount for the ACWA programme, during the design and construction phases at these facilities the focus was on establishing a safety culture throughout all levels of the workforce that would

continue during the subsequent phases of operations and closure. In this regard, the ACWA is committed to continuing its outstanding safety record; the measures implemented at other chemical weapons destruction facilities (CWDFs) have resulted in accident-free operations and a lower-than-average recordable incident rate.

- 19. Mr Whyne underscored that the ACWA has established a culture of transparency and openness and has a robust public involvement programme with a view to educating the communities to increase their awareness and knowledge of chemical weapons destruction efforts. The public outreach teams at Pueblo and Blue Grass ensure that stakeholders have access to information through established outreach offices, community events, and speakers bureaus. In addition, the ACWA website offers programme information and the ability for stakeholders to provide feedback, while social media tools (Facebook, Twitter, YouTube, and Flickr) and monthly e-newsletters provide additional opportunities for engagement and updates. On their part, the local communities, through the Citizens' Advisory Commissions (CACs) in both Colorado and Kentucky, have played a key role in ensuring that their concerns are expressed and addressed by the ACWA programme.
- 20. With respect to the programme schedule, Mr Whyne stated that the design, construction, systemisation, and operations represent a long-term commitment. Under the current acquisition programme baseline, Pueblo would complete destruction operations in November 2019 and Blue Grass in September 2023. Construction work has been completed at Pueblo, while Blue Grass is at 67% and is expected to be completed in early 2017. At both sites, systemisation has been initiated during the construction phase and is ongoing. The destruction of chemical weapons is planned to commence in December 2015 at Pueblo and in April 2020 at Blue Grass.
- 21. It was underscored that, based in part on lessons learned from the baseline incineration facilities, and in view of the risks that may affect the successful and timely conclusion of the programme, the ACWA has been investigating the practicality of augmenting the primary destruction process at each site with explosive detonation technologies (EDTs) for problematic munitions that cannot otherwise be safely processed through the main facility. Thus, the decision has been already made to use the explosive destruction system (EDS) to destroy problematic munitions at PCAPP while the results of an environmental assessment will be released this summer with respect to the use of an EDT at BGCAPP.
- 22. Mr Whyne concluded by stating that the ACWA is fully committed to destroying the chemical weapons stockpiles at Pueblo and Blue Grass as soon as practicable, while maintaining the safety of the personnel and surrounding communities as the highest priority. The ACWA has incorporated the lessons learned from construction and destruction efforts at other chemical weapons destruction sites, including comprehensive early testing of first-of-a-kind equipment and employment of experienced members of the workforce; however, given the unique processes and equipment to be employed at these sites, challenges are nevertheless expected. The ACWA will also continue to assess the effects of budget decisions on the current programme schedule.
- 23. Lieutenant Colonel (LTC) Timothy M. Greenhaw, the Commander of the PCD, provided an overview of the depot, the mission of which is to safely secure and store

the chemical weapons stockpile while protecting the workforce, the public, and the environment, to set the conditions for stockpile destruction, and to prepare for the closure of the depot.

- 24. The PCD was established in 1942 and over the years, it was used for storage, and as a maintenance and supply facility for, inter alia, ammunition, tanks and wheeled vehicles, Army bridging material for combat engineers, and Army missile systems. The Chemical Limited Area (CLA) of the depot, which is used to store chemical weapons, consists of 102 storage igloos, 80 of those containing HD munitions, 14 containing HD and HT munitions, and four igloos used for the storage of hazardous waste such as personnel protective equipment, and contaminated wood pallets. The igloos are monitored continuously with near real-time monitors during open-door operations. Four additional igloos are empty or used for training personnel.
- 25. The PCD stores 780,078 artillery munitions, representing 8.5% of the original chemical weapons stockpile of the United States, in four storage configurations: 105mm cartridges, 105mm projectiles, 155mm projectiles, and 4.2-inch mortar rounds.
- 26. Since safety and readiness for emergency response are essential at chemical weapons storage sites, the PCD is mandated by federal and local regulations to protect the general public. Thus, the PCD, through its partnership with the Department of Homeland Security, the Federal Emergency Management Agency (FEMA), the State of Colorado, and the County of Pueblo, conducts annual CSEPP exercises with the goal of protecting the public. To ensure its readiness for emergency response, the PCD conducts chemical accident/incident response and assistance exercises on a routine basis.
- 27. Finally, LTC Greenhaw stressed that the PCD is subject to systematic inspections by the OPCW. Seventeen such inspections have taken place since 1997, the last of which was in March 2013.
- 28. The final presentation was given by Mr Mike Strong, PCAPP Deputy Site Project Manager. Mr Strong started with a brief background of the project, which will destroy 2,371 MTs of mustard agent, stored in three different types of munitions—105mm and 155mm projectiles and 4.2-inch mortars—using neutralisation followed by bio-treatment. In September 2002, the Bechtel Pueblo Team was awarded the systems contract to design, construct, systemise, pilot test, operate, and close the plant. Located within the current boundaries of the depot, the PCAPP includes a number of buildings for various purposes including agent processing, energetic processing, temporary munitions storage, bio-treatment, entry control, utilities, laboratory, personnel maintenance, and other support tasks.
- 29. Mr Strong indicated that one of the most important components of the project is safety and that PCAPP has been recognised as one of the safest construction sites in the United States and has been awarded in 2009 "Star Status"—one of the highest levels of recognition for safety practices in the United States Department of Labor Occupational Safety and Health Administration (OSHA) Voluntary Protection Program (VPP).
- 30. Mr Strong further explained the destruction technology that will be employed at PCAPP. Munitions processing starts with the removal by robotic equipment of energetic components, including the fuze and the burster, as removing these parts first makes the remaining processes safer. Once removed, the energetics will be disposed

of at an off-site permitted facility. Once the energetic components are removed, the weapon body containing chemical agent will be robotically accessed and the agent washed out with pressurised water. The mustard agent will be mixed with additional water and a caustic solution. The resulting product from this process called hydrolysate will go through the bio-treatment process, which consists of large tanks containing microbes that digest and further break down the solution. Water released from the process will be recycled, leaving various salts and bio-sludge. The bio-sludge, which is made up of microbe waste products and other bacterial matter, will be filtered to remove water and shipped off site to a permitted treatment, storage, and disposal facility. The final step of the process is treating the munitions metal parts to allow their recycling; this is achieved by heating them to 1,000 degrees Fahrenheit with electric inductive heaters for 15 minutes, ensuring that any residual agent contamination is destroyed.

- 31. Mr Strong informed the Council delegation that all major construction activities at Pueblo were completed in December 2012. Concurrent with ongoing systemisation activities, the PCAPP is undergoing operational readiness reviews that will confirm the readiness of the personnel, equipment, and procedures for the start of operations. This process will lead into plant optimisation by performing integrated testing, contingency exercises, and demonstrations. The end result will be the declaration of the readiness of the PCAPP, once external stakeholders have concurred with the declaration. Final approval for the start of chemical agent operations will be given by the Under Secretary of Defense for Acquisition, Technology, and Logistics.
- 32. The Council delegation was further informed on the expected challenges as well as the solutions envisaged to meet those challenges at PCAPP. Amongst those, Mr Strong referred in particular to problematic munitions (i.e. leakers and/or rejects), which have proven to be difficult to process by automated equipment and for which the use of an EDT will provide greater safety for the personnel involved. In addition, an environmental assessment concluded in August 2012 that the installation and operation of an EDT will have no significant environmental impact; further to that, in April 2013, the ACWA decided to use the EDS to destroy problematic chemical weapons at PCAPP. The decision followed a lengthy review of several EDTs designed for the safe destruction of chemical munitions unsuited for processing by the main plant's automated equipment.
- 33. One other challenge referred to is the staffing of nearly 1,100 employees needed to safely and compliantly destroy the chemical weapons at PCAPP. In this respect, it was underscored that PCAPP will benefit greatly from hiring experienced workers who are departing from the four baseline incineration facilities that have completed operations. These workers are familiar with and have been trained in the safe handling and destruction of chemical weapons, which will assist PCAPP in avoiding problems or delays during systemisation and destruction operations.
- 34. Finally, the closure of the Chemical Defense Training Facility (CDTF) at Aberdeen/ Edgewood, Maryland, presented PCAPP with the challenge of providing continuous training and certification for its personnel. As the plant draws closer to the start of destruction operations, the hiring and training of the operations workforce becomes a top priority. To this end, a new training facility has been established in February 2013 that will offer the perfect venue for PCAPP employees to receive the

best possible training to ensure their own safety and that of the community and the environment, as well as prepare them for the unique roles they play in the chemical weapons destruction process. Training areas for new employees will cover initial safety training, environmental compliance awareness, plant familiarisation, toxic entry training and the use of the demilitarisation protective ensemble (DPE), and training on first-of-a-kind demilitarisation equipment.

- 35. Following the presentations, the Council delegation visited two storage structures (bunkers) containing palletised 155mm and unboxed 105mm HD-filled projectiles, respectively.
- 36. The delegation also conducted a tour of the PCAPP, during which the delegation received additional comprehensive details regarding the process and destruction technology, and was able to observe the current status of activities.
- 37. The Council delegation was given the opportunity for questions, which covered a variety of general topics as well as very specific technical queries. Discussions were conducted in an open and transparent manner.
- 38. To answer a question related to the plans to restore the land once operations are complete, the representatives of the United States responded that the facility is closed once operations are complete; specifically, the destruction equipment is dismantled, decontaminated, and removed in accordance with agreements between the State of Colorado and the United States Army, while the land will be cleaned, decontaminated, and turned over to the public. The United States representatives further clarified that, based on the aforementioned agreement between the State of Colorado and the Army, equipment and structures/buildings that do not come directly in contact with the chemical agent during destruction operations could be used for commercial purposes.
- 39. In reply to a question regarding the cost of the chemical weapons demilitarisation programme, and in particular the specific costs related to the Pueblo and Blue Grass facilities, the United States representatives indicated that the total budget allocation for the entire United States chemical weapons stockpile destruction programme currently stands at USD 32 billion, of which USD 10 billion have been allocated for the facilities at Pueblo and Blue Grass. Of the total amount budgeted, USD 28 billion have been already spent. The full funding of the chemical weapons demilitarisation programme continues to represent a priority even during current budget cuts.
- 40. With respect to the duration of systematisation, the United States experts clarified that to maximise efficiency and provide systemisation experts with the opportunity to identify and solve any problems as soon as possible, systemisation at both Pueblo and Blue Grass has started earlier, during the construction phase.
- 41. Regarding the degree of confidence in meeting the current timelines for the operation of the two new facilities and the completion of chemical weapons destruction, the representatives of the United States responded that there is a robust risk-management programme in place which considers the 300 risks identified as having a potential to adversely affect the schedule; of these, around 75 risks, which were identified as high priority, have already been mitigated. It was further stated that the principal assumption for the current schedule is that the Congress continues to approve the

required amount of funding. Moreover, contract incentives similar to those that were successful in accelerating the destruction efforts at six other CWDFs will be applied to both the PCAPP and BGCAPP to accelerate the construction of the sites and destruction of the remainder of the United States chemical weapons stockpile.

- 42. With respect to the decision regarding the selection of the destruction technologies for Pueblo and Blue Grass and the cost-effectiveness of such decision, it was stated that decisions were based to a large extent on the public input, and safety was the primary consideration. PCAPP uses hot water to neutralise the chemical agent and effectively destroy the mustard agent molecules; the resulting hydrolysate is mostly water and thiodiglycol, a common industrial chemical that is readily biodegradable. In comparison, as each chemical agent is destroyed at BGCAPP in separate campaigns, a different type of hydrolysate will be produced—mustard hydrolysate, VX hydrolysate and GB hydrolysate. The destruction of energetics will also produce a unique type of hydrolysate.
- 43. Hydrolysates are classified as hazardous wastes and may contain heavy metals and have corrosive properties. While bio-treatment uses ordinary sewage treatment bacteria and equipment to consume the organics in the mustard hydrolysate in Pueblo, the SCWO process to be used in Blue Grass uses very high temperatures and pressures to break down the resulting hydrolysates into carbon dioxide, water, and salts, which could be later shipped off site to a permitted facility for disposal while some of the water is recycled back into the pilot plant and reused as part of the destruction process. The BGCAPP team will ensure that the treatment of the hydrolysate is done in a manner that balances cost, schedule, and performance, but that does not compromise the safety of workers, the community, and the environment.
- 44. With regard to maintaining the knowledge and expertise of the personnel, it was stated that experienced members of the workforce have been employed at the new sites in an effort to address the shortening of the construction and destruction schedule while maintaining an exemplary safety record. At the same time, efforts are being put into striking a correct balance between using experienced personnel and offering job opportunities to the local communities.
- 45. The United States representatives also clarified that commercially available equipment and technologies will be used to the extent possible for the destruction of the chemical weapons stockpiles in Pueblo and Blue Grass. At the same time, new, first-of-a-kind equipment and technologies have been developed to meet stringent safety and environmental requirements. Some of the technologies developed as well as the experience gained during the construction and operation of these facilities at very high safety standards could be later valuable to the commercial sector.
- 46. Finally, the United States representatives have underscored the transparent and collaborative relationship with the local communities at both Pueblo and Blue Grass, thus increasing their awareness and knowledge of chemical weapons destruction efforts and addressing any concerns very early into the process. It was also stressed that no lawsuit had been filed in the case of ACWA sites, due to the fact that the selected technologies meet local requirements.
- 47. In concluding its visit to Pueblo, the Council delegation expressed its appreciation for the hospitality shown to its members throughout the visit, as well as for the

transparency and openness that governed all discussions. The members of the delegation appreciated the efforts being undertaken to initiate and complete the destruction of the chemical weapons stockpile in Pueblo as early as possible, in compliance with the Conference decision on the final extended deadline of 29 April 2012 and with due regard to ensuring the safety of the people and environment.

48. The Council delegation was impressed by the progress made in construction and systemisation and commended the efforts of those who made this possible.

Visit to the Blue Grass Chemical Agent Destruction Pilot Plant

- 49. On 22 May 2013, the Council delegation visited the BGCAPP, Kentucky. Activities here started with a presentation by LTC Christopher A. Grice, Commander of the Blue Grass Chemical Activity (BGCA).
- 50. The BGCA is responsible for the safe, secure, and environmentally responsible storage of the chemical weapons stockpile at Blue Grass as well as for setting the conditions for successful destruction of this stockpile. As informed by LTC Grice, the BGCA encompasses 250 acres adjacent to the CWDF under construction; the Chemical Limited Area (CLA) of the depot comprises 49 igloos, of which 45 hold chemical weapons.
- 51. The chemical weapons stockpile at Blue Grass comprises 475 MTs of nerve agents GB and VX, and mustard agent, stored in a variety of munitions, the majority of which are rockets and rocket warheads. Each rocket contains multiple explosive components, including rocket propellant, bursters, point detonating fuses, igniters, and nerve agent (GB or VX). In addition, the stockpile at Blue Grass includes 8-inch and 155mm projectiles filled with GB, VX, and mustard.
- 52. In addition to responsibilities directly related to maintaining the safe and secure storage of the chemical weapons stockpile, BGCA works closely with the local community and state emergency agencies to develop emergency plans and provide chemical accident response equipment and warning systems. Through its partnership with FEMA and the 10 surrounding counties, BGCA conducts quarterly and annual exercises as part of its emergency preparedness programme with the goal of protecting the public.
- 53. LTC Grice also stressed that BGCA is subject to systematic inspections by the OPCW. Seventeen such inspections have taken place since 1997, the last of which was in March 2013.
- 54. In his presentation, Mr Jeff Brubaker, Site Project Manager of the BGCAPP, provided background information on the project and the status of the pilot plant construction and systemisation efforts. The BGCAPP is being built to destroy 475 MTs of chemical agent in rockets and artillery projectiles currently in storage at the Blue Grass Army Depot. In 2003, neutralisation followed by SCWO was selected for the Blue Grass project, and Bechtel Parsons Blue Grass was selected as the contractor responsible for the design, construction, systemisation, operations, and closure of the destruction plant.

- 55. Mr Brubaker referred to the major site achievements over the past nine years, including obtaining the required environmental permits, groundbreaking, conducting in 2009 the first chemical demilitarisation mission in Kentucky for the destruction of three leaking ton containers with GB, maintaining safety performance during construction, and reaching over 67% completion in construction and 7% in systemisation. To explain the magnitude and complexity of the project, Mr Brubaker informed the Council delegation that, for example, 5,680 tons of structural steel, 205,000 feet of piping, and over 6 million feet of electrical cable and raceway have been used in building the facility. The BGCAPP spreads over 54 acres, has two major processing buildings, nine support buildings, and a vast support infrastructure. Currently, the site employs 1,000 workers and this number will remain almost the same during plant operations.
- 56. The BGCAPP maintains a "zero accidents" policy where, with proper planning, training, and communication, all accidents are preventable. It collaborates with the community and the CSEPP, which provides emergency preparedness assistance and resources to the community surrounding the BGCA by coordinating information as well as practicing drills designed to test the emergency response capabilities in the community.
- 57. Mr Brubaker stated that the United States Department of Labor awarded the Star Status to BGCAPP in 2011—this is the highest level of safety recognition in the Occupational Safety and Health Administration's Voluntary Protection Program.
- 58. A video presentation of the destruction technology that will be used at BGCAPP followed. During this presentation, the Council delegation was made aware that munitions will be disassembled by modified reverse assembly; the chemical agent and energetics will also be separated in the process. Chemical agent and energetics will be mixed with caustic solution or water, and the resulting hydrolysates will be tested to ensure agent destruction before proceeding to secondary treatment. The agent and energetic hydrolysates will then be fed to the SCWO units to destroy the organic materials. SCWO subjects the hydrolysate to very high temperatures and pressures, breaking them down into carbon dioxide, water, and salts. Metal parts will be decontaminated by high-pressure water washout and heating to 1,000 degrees Fahrenheit with electrical inductive heaters for a minimum of 15 minutes. The metal parts can then be safely recycled. Gas effluents will be filtered through a series of HEPA and carbon filters before being released to the atmosphere. Water will be recycled into the pilot plant facility and reused as part of the destruction process.
- 59. Regarding the status of the construction work, the Council delegation was informed that since its start in 2006, the construction of the pilot plant has progressed quite a lot. Neutralisation equipment has already been installed in the main demilitarisation building; the concrete and major structural steel work are complete as well as the civil infrastructure; and the first munitions conveyors are being installed. With respect to the support infrastructure, the laboratory, the nitrogen generation plant, and the hydrolysate storage area foundation are complete; and work is being conducted in relation to the exterior utility pipe rack and the installation of the tanks. Current construction activities at BGCAPP include assembling and placing hydrolysate storage tanks on the hydrolysate storage area foundation; installation of instrument cabinets, electrical wiring, piping, heating, and ventilation and air conditioning equipment in the control and support building; and continued installation building (MDB).

- 60. Systemisation of the facility is already under way. The Blue Grass chemical weapons stockpile is diverse, consisting of blister agent in projectiles and nerve agent in projectiles and rockets. Design efforts to accommodate destruction of multiple agents and munition types result in a very complex facility, which will incorporate highly technical and first-of-a-kind equipment. Due to the complexity of the facility, systemisation is a lengthy process, which is planned to be completed by 2020. This will allow for the various equipment and processes used for the different types of chemical agents and munitions to be fully prepared for destruction operations.
- 61. Mr Brubaker further explained that systemisation involves all activities required to ensure BGCAPP is ready to begin chemical weapons destruction operations. It will prepare the BGCAPP team for mission success in three areas: paper, plant, and people.
- 62. It was clarified that "paper" refers to the development of all standard operating procedures and maintenance instructions, as well as test plans for various elements of the plant. A tremendous amount of planning is required to ensure BGCAPP runs efficiently. Systemisation involves the commissioning, start-up, and testing of the physical plant—ensuring all the systems and facilities work properly and function together. It includes testing of the software programs that will run the plant and also affords personnel the opportunity to access the areas and equipment in the plant that will become restricted once operations begin. As construction teams complete various facilities and structures, they will turn them over to the start-up group for testing. This "waterfall" approach maximises efficiency and provides systemisation experts the opportunity to identify and solve any problems as soon as possible.
- 63. Finally, safety of the BGCAPP workforce is paramount. A key element of systemisation involves the hiring and training of the operations and maintenance staff needed to complete the BGCAPP mission. Activities include classroom learning, practical training on physical and simulated processes, on-the-job training with mentors, and a certification programme.
- 64. The final step of systemisation brings together all three aspects—paper, plant, and people—and is referred to as optimisation. Optimisation includes an operational readiness review (ORR) process and seeks to confirm the pilot plant is capable of conducting its mission, while being fully protective of personnel and the environment. An independent review team will assess these ORRs, which evaluate the readiness of the whole, multi-functional organisation to ensure the pilot plant is prepared for destruction operations.
- 65. First-of-a-kind equipment has been designed for use at the BGCAPP. This equipment is fully automated and its design is based on existing technologies but modified for the specific purpose of chemical weapons demilitarisation. Mr Brubaker stated that the BGCAPP team has made great progress with the off-site design, development, and testing of this equipment; thus, the metal parts treaters, agent and energetics neutralisation reactors, and energetics batch hydrolysers have been completed, tested, and installed in the MDB. The munitions washout system and the rocket-cutting and rocket-shear machines have been completed, tested, and delivered for installation while the testing of the SCWO processing equipment has been completed; the latter will be delivered to the site in 2013. All remaining munition-processing equipment is to be installed within the MDB in 2013.

EC-73/2 page 12

- 66. Similar to PCAPP, the BGCAPP is considering the use of an EDT to process problematic mustard rounds. A key factor is that the mustard projectiles in the Blue Grass chemical weapons stockpile contain the oldest mustard remaining in the inventory. The final results of an X-ray assessment conducted in 2011 indicate that the destruction of this portion of the Blue Grass stockpile could be difficult using the currently planned neutralisation followed by SCWO technology. The assessment analysed a sample of mustard projectiles to gain better understanding of the amount of heel that may exist in these munitions. However, no final decisions regarding the use of EDTs will be made until the National Environmental Policy Act (NEPA) process, currently ongoing, is complete.
- 67. Following the presentation, the Council delegation toured the BGCAPP to observe the status of activities, which corroborated the information already provided. Many opportunities for discussions were provided during the visit and the Council delegation used these occasions to clarify further questions it had.
- 68. Thus, the representatives of the United States explained that back-up power at the facility will be ensured through the use of three diesel generators, while the ventilation system alone has a second set of back-up generators.
- 69. In response to a query regarding the quality of each item of specialised equipment, it was stated that this is warranted from the design and fabrication phase, where the equipment has to pass the acceptance tests. Additional quality checks take place at the BGCAPP and any corrective measures are taken before system integration.
- 70. Concerning the average processing rate, the United States representatives informed that the designed processing rate for the equipment is 20 rockets per hour in the case of GB-filled rockets or 24 rockets per hour in the case of VX-filled rockets. However, in practice, the routine average rates will be lower (150 to 200 rockets per day) except during ramp-up operations when the processing rate will be lower to allow for a proper test of the equipment.
- 71. In reply to a question related to the control room operators, the representatives of the United States stated that 40 trained and certified operators will staff the two control rooms of the facility (i.e. MDB and SCWO control rooms). They will be specialised on specific operations/systems (i.e. utilities, agent reactors, MDB) and some of them will have a second or even third specialisation. Training has been structured to include class modules as well as an on-the-job part; on average, it takes three to four months to train an operator on one system.
- 72. One question addressed the main risks that the BGCAPP may face in the future and that can lead to delays. The United States representatives stated that the approach which has been taken is to prioritise possible risks based on their impact, and address those as early in the process as possible. Risk identification and management have been built into the current schedule and at present, no delays are envisaged.
- 73. To address another query, the United States representatives stated that if the use of an EDT were not approved at BGCAPP, the facility has planned for the destruction of problematic munitions in the main plant, in a manner similar to what has been done at some of the incineration sites. This will involve more human handling and processing and would likely result in repeated and avoidable risks to the operators.

- 74. It was also stated that the costs associated with the destruction of one MT of chemical agent is approximately USD 5.7 million.
- 75. In concluding its visit to Blue Grass, the Council delegation expressed its appreciation for the hospitality shown to its members throughout the visit, and for the transparency and openness that governed all discussions. The members of the Council delegation concluded that the visits to both Pueblo and Blue Grass allowed for better understanding of the challenges involved in the process of destruction of chemical weapons, of the path forward, and of the emphasis placed by the United States on safety and environmental protection.

Meetings with the Citizens' Advisory Commissions

- 76. As part of the visits to both Pueblo and Blue Grass, the Council delegation met with members of the local CACs.
- 77. The Colorado CAC serves as a bridge between the community and the government, by providing a forum for exchanging information on chemical weapons, offering opportunities for public involvement, and representing community and state interests to the Army and Department of Defense. Similarly, the Kentucky CAC and its subcommittee, the Chemical Destruction Community Advisory Board, hold joint public meetings on a quarterly basis. These meetings provide a forum for the BGCAPP staff, government officials, ACWA leadership, members of the Commission, and the public to exchange information regarding chemical weapons destruction in Kentucky.
- 78. During the meetings, the Council delegation exchanged views with respect to the role of the CACs and the involvement of local communities in decisions related to the chemical demilitarisation programmes, which both in Pueblo and Blue Grass have had a significant impact on project activities.
- 79. The meetings with the members of the CACs from Colorado and Kentucky were carried out in an open and transparent manner. Discussions emphasised that public input and involvement have represented a cornerstone of the ACWA programme and allowed the Council delegation to better recognise why safety and environmental protection represent important features of the United States chemical demilitarisation programme.

Meetings in Washington, D.C.

- 80. The Council delegation held discussions in Washington, D.C., with Senator Mitch McConnell, Senate Republican Leader; Mr Rob Brownell, Legislative Director and Counsel, Senator Mitch McConnell's Office; Mr Frank A. Rose, Deputy Assistant Secretary of State for Space and Defense Policy, Bureau of Arms Control, Verification and Compliance; and Ms Lynn Rusten, Senior Director for Arms Control and Non-proliferation, National Security Staff to the White House.
- 81. All the officials called attention to the fact that the United States values the Convention as an important instrument of peace and security and is committed to achieving the complete destruction of the remaining chemical weapons stockpile in line with the obligations undertaken. They underscored that the destruction of the

remaining chemical weapons represents a priority for the Obama Administration and, to this end, appropriate resources will continue to be allocated to meet the timelines.

- 82. They explained that the destruction of chemical weapons in a safe and secure manner has proven a more difficult task than initially envisaged. However, the United States continues to be on track to meet the timelines for the completion of the destruction of the remaining chemical weapons and has planned for managing the risks or circumventing them. At the same time, the United States will explore options to expedite the schedule of destruction, while continuing to meet safety and environmental regulations.
- 83. The role of the local communities and their continuous involvement in the decisions taken with respect to the destruction of chemical weapons at Pueblo and Blue Grass was also reiterated throughout the discussions.
- 84. Finally, it was underscored that the United States will maintain the practice of providing accurate and timely details with respect to the overall progress of its chemical weapons destruction programme.

General observations by the delegation and conclusions

- 85. From the briefings, explanations and evidence provided to them, the Council delegation were satisfied that the United States remained fully committed to completing the destruction of the remaining chemical weapons as soon as possible, while continuing to conduct destruction operations in a safe and environmentally sound manner. The members of the delegation felt confident that the United States is on track to meet the timelines it set in this regard.
- 86. The delegation noted the progress which has been made by the United States in completing the destruction of 89.75% of the chemical weapons stockpile it declared upon entry into force of the Convention. The delegation also noted the completion of the construction work in Pueblo as well as the 67% completion of the construction work in Blue Grass.
- 87. The Council delegation acknowledged the efforts that have been made to move forward through systemisation activities in parallel with ongoing construction work and that systemisation is a very thorough process meant to ensure that once destruction operations start, they run safely and smoothly. In particular, the delegation noted that a staged approach with respect to systemisation has maximised efficiency and allowed experts to identify and solve problems at an early stage.
- 88. The delegation recognised that measures have been put in place to shorten the construction and systemisation schedule at both Pueblo and Blue Grass, inter alia by using a combination of new technologies and equipment, contract incentives, transfer of experienced personnel, as well as by augmenting the main plants' capacities with EDTs designed for the safe destruction of problematic chemical munitions.
- 89. The visit to Pueblo and Blue Grass as well as the meetings with the members of the CACs of Colorado and Kentucky enabled the Council delegation to appreciate the emphasis placed by the United States on safe and environmentally friendly operations. It was noted that the United States is promoting full transparency and openness in its

relations with the local communities and that the stakeholder input and involvement remains a cornerstone of the ACWA programme and have been crucial in selecting technologies and setting schedules.

- 90. The meetings with United States high officials held in Washington, D.C., also highlighted the United States' firm commitment to continue to explore options to accelerate the current schedule for the destruction of the remaining chemical weapons stockpiles. The Council delegation was reassured that to this end the United States has allocated the necessary financial resources, even during current budget cuts required by the Balanced Budget and Emergency Deficit Control Act.
- 91. The members of the delegation were impressed by the professionalism and dedication of the people, at all levels, involved in the chemical weapons destruction programme in the United States.
- 92. The delegation was very appreciative of the spirit of cooperation, openness, and transparency that marked the visit at the two CWDFs, as well as the detailed discussions with the United States representatives, including during the high-level meetings in Washington, D.C.

Annexes (English only):

- Annex 1: The United States of America Program for the Conduct of the 2013 OPCW Executive Council Visit to United States Chemical Weapons Destruction Facilities
- Annex 2: The United States of America Itinerary of the OPCW Executive Council Visit to the Pueblo Chemical Agent Destruction Pilot Plant and Blue Grass Chemical Agent Destruction Pilot Plant, 18 24 May 2013
- Annex 3: List of Members of the OPCW Executive Council Delegation Who Took Part in the Visit to the Pueblo Chemical Agent Destruction Pilot Plant and Blue Grass Chemical Agent Destruction Pilot Plant
- Annex 4: List of Representatives of the United States of America Hosting the Visit of the OPCW Executive Council Delegation to the Pueblo Chemical Agent Destruction Pilot Plant and Blue Grass Chemical Agent Destruction Pilot Plant
- Annex 5: The United States of America Briefing Materials (background information provided during the visit is available upon request at the Documentation Counter and through the OPCW external server)
- Annex 6: Comments from the United States of America on the Report of the Visit by the Chairperson of the Executive Council and Representatives of the Executive Council to the Pueblo Chemical Agent Destruction Pilot Plant and Blue Grass Chemical Agent Destruction Pilot Plant, 18 24 May 2013

THE UNITED STATES OF AMERICA PROGRAM FOR THE CONDUCT OF THE 2013 OPCW EXECUTIVE COUNCIL VISIT TO UNITED STATES CHEMICAL WEAPONS DESTRUCTION FACILITIES

The Sixteenth Conference of the States Parties agreed that visits to chemical weapons destruction facilities should take place to facilitate a greater understanding of States Parties destruction programs. The United States of America invites the Executive Council (EC) to conduct its 2013 visit to the Pueblo Chemical Agent-Destruction Pilot Plant, Colorado, and to the Blue Grass Chemical Agent-Destruction Pilot Plant, Kentucky. The United States (U.S.) has begun consultations with the Chairman of the Executive Council to develop the details of the visit. In order to provide transparency to the consultations, the U.S. presents this paper to explain the program and actions that must take place prior to and during the visit.

1. Pre-Arrival to the United States

- (a) The maximum number of participants in the Executive Council delegation, to include invited observers, is limited to 19 persons.
- (b) Individual replacements must be kept to a minimum and visitors cancelling their participation within 14 days of the visit cannot be replaced.
- (c) Individuals requiring visas to enter the U.S. must obtain them through their customary diplomatic channels.
- (d) The EC Chair will request a Technical Secretariat (TS) point of contact (POC) for coordination of visitor arrangements. Visitors will coordinate individual travel arrangements and other required information directly with the TS POC.
- (e) The TS POC will consolidate the visitor's information and provide all required information to the U.S. National Authority no later than April 12, 2013.
- (f) To facilitate security and logistical arrangements, request visitors provide the required information on the attached spreadsheet to the TS POC no later than April 1, 2013.
- (g) All briefings will be in English, with no interpretation provided by the U.S.
- (h) All costs incurred with respect to hotel accommodations, air transport expenses, and meals will be paid by each individual.

2. Arrival and Departure

(a) International travel to and from the Washington-Dulles International Airport is the responsibility of each visitor. Arrival must be within the time period between 12:00 – 5:00 PM, May 18, 2013. Deviations outside of this timeframe must be coordinated 30 days in advance of the visit.

- (b) Members of the delegation will be greeted at the Dulles International Airport and transported to the Hyatt Dulles Hotel. See section III. Lodging Requirements for further lodging information.
- (c) Domestic U.S. air travel will be arranged through the Technical Secretariat travel office based on flight information provided by the U.S. No deviations from the pre-arranged flights to or from the visit sites will be allowed. The U.S. will not be responsible for individuals who miss the pre-arranged flights.

Date	Flight	Departing	Arriving	
May 19	United	Washington-Dulles (IAD)	Denver International (DEN)	
	#403	9:10AM	11:07AM	
May 21	Delta	Denver International	Cincinnati International	
	#1956	(DEN)	(CVG)	
		10:52AM	3:30PM	
May 23	Delta	Cincinnati International	Washington National (DCA)	
_	#3287	(CVG) 11:35AM	12:59PM	

(d) Departure from the United States at the completion of the visit is the responsibility of each visitor.

3. Lodging Requirements

The U.S. has set aside a number of hotel rooms in the vicinity of the selected sites as well as in Washington, D.C. Each participant must provide their credit card information to the TS POC no later than April 5, 2013. The TS POC will inform the hotel manager that you are with the "Executive Council Visit" no later than April 12, 2013. Each visitor will be responsible for paying his or her hotel bill. Costs listed below include all taxes.

Date	Location	Hotel	Cost	Contact #
May 18	Herndon, VA	Hyatt Dulles	\$248.64	Nasima Alam
(1 night)				703-793-6883
May 19-20	Pueblo, CO	Springhill Suites	\$97.26	Kristin Martinez
(2 nights)				719-546-7952
May 21	Lexington, KY	Griffin Gate	\$122.45	Anthea Halpryn
(1 night)		Marriott		877-901-6632
				859-288-6107
May 22	Cincinnati, OH	Doubletree	\$96.83	Lisa Keller
(1 night)		Hilton Hotel		859-817-2610
May 23/24	Washington,	Park Hyatt	\$256.48	Jill Fox
(2 nights)*	DC			202-419-6681

*Consultations in Washington will end on Friday mid-afternoon. Return flight arrangements must be communicated to the TS POC.

4. Ground transportation requirements

- (a) Ground transportation will be provided by the U.S. for travel between airports, local accommodations, eating establishments, destruction sites and other meeting locations.
- (b) Ground transportation will be provided from the Park Hyatt Hotel to Dulles International Airport for travelers wishing to depart the country on May 24 or May 25. Only one shuttle service will be provided per day.

5. Dining requirements

- (a) Visitors with special dietary needs must make individual requirements known to the TS POC. Menu selections must be completed and returned to the TS POC.
- (b) Upon arrival at the hotel on May 18, 2013, the National Escorts will collect a lump sum CASH payment (U.S. Dollars) for the cost of lunch and dinner meals. The total cost of the lump sum payment for each visitor will be communicated to the TS POC no later than May 10, 2013.

6. Safety Requirements

- (a) All visitors must complete a respirator medical questionnaire to determine ability to wear a respiratory protective device.
- (b) All visitors must provide their shoe size for the issuance of safety shoes.
- (c) The TS POC must provide consolidated visitor documents/information, meal selections, respirator medical questionnaires, and shoe sizes to the U.S. National Authority no later than April 12, 2013.
- (d) All visitors entering the Chemical Limited Area must successfully pass a mask fit test and will be issued a protective mask at Pueblo Army Depot.
- (e) Visitors may be subject to a blood pressure check prior to entry into the Chemical Agent bunker.

7. Clothing and Grooming Requirements

- (a) The following items are not allowed to be worn during the site tours: dresses, skirts, shorts, sleeveless shirts, or running/tennis shoes.
- (b) In order to use respirators, all visitors must be clean shaven and hairstyles or jewelry must not interfere with the mask facepiece seal.
- (c) Visitors are asked to refrain from using perfume, aftershave, or cologne on the plant tour days to avoid interference with monitoring equipment.
- (d) Safety shoes will be provided for the tours.

8. Public Affairs

- (a) The U.S. will not include members of the visiting group in public affairs activities or put members of the visiting group in a position where they are expected to conduct media interviews during the course of the visit.
- (b) A group photograph will be taken at each site to commemorate the visit. No cameras or cell phones with cameras will be allowed on the sites.
- (c) The U.S. requests that members of the visiting group reserve comment on the planning, conduct, or results of the visits until after the group's report is considered by the Executive Council.

THE UNITED STATES OF AMERICA ITINERARY OF THE OPCW EXECUTIVE COUNCIL VISIT TO THE PUEBLO CHEMICAL AGENT DESTRUCTION PILOT PLANT AND BLUE GRASS CHEMICAL AGENT DESTRUCTION PILOT PLANT, 18-24 MAY 2013

Saturday, May 18

12:00-17:00 Arrive Washington Dulles International Airport (IAD), Virginia

Transport to Hyatt Dulles Hotel

Welcome and Check-In Hyatt Dulles Hotel

19:00-21:00 Welcome Reception – Dress Code: Business Attire

Sunday, May 19

- 06:30 Breakfast
- 07:00 Depart Hotel (transportation provided)
- 09:10 Depart Dulles International Airport (IAD)—United Flight #403
- 11:07 Arrive Denver International Airport (DEN)
- 13:00 Depart Denver Airport and travel to Pueblo Boxed Lunch/Safety Briefings/Mask Fit video Enroute
- 16:00 Arrive Springhill Suites Hotel/Check-In

Mask Fit/Badge Issue (Location to be determined)

- 19:00 Depart Springhill Suites for Dinner
- 19:10 Meeting with Colorado Chemical Demilitarization Citizen's Advisory Commission at the Center for American Values
- 19:50 Dinner at Rosario's on the Riverwalk Dress Code: Business Casual

Monday, May 20

07:30 Depart Hotel

- 08:00 Arrive Pueblo Chemical Depot
- 08:30 Group Photograph

09:00 Welcome — Ambassador Robert P. Mikulak, United States Permanent Representative to the OPCW

Welcome — Lieutenant Colonel Timothy Greenhaw, Commander, Pueblo Chemical Depot

09: 15 Chemical Weapons Demilitarization Program Overview and Chemical Weapons Program Overview — Mr. Don Barclay, Director, U.S. Army Chemical Materials Activity

09:35 Assembled Chemical Weapons Alternatives (ACWA) Program Overview — Mr. Conrad Whyne, Program Executive Officer, Assembled Chemical Weapons Alternatives

10:00 Break

10:15 Pueblo Site Briefing — Lieutenant Colonel Timothy Greenhaw, Commander, Pueblo Chemical Depot

10:35 Tour of Chemical Weapons Storage Bunker

12:00 Lunch

1245 Pueblo Chemical Agent-Destruction Pilot Plant (PCAPP) Orientation — Mr. Mike Strong, PCAPP Deputy Site Project Manager

13:05 Break/ Issuance of Personal Protective Equipment (glasses, hard hats, boots)

- 13:30 Tour of PCAPP Break
- 15:00 Discussion/Q&A
- 16:00 Depart site and travel to hotel
- 19:00 Dinner at La Renaissance Closing Remarks and Presentations

Tuesday, May 21

06:00 Check-Out of Springhill Suites, Depart for Denver Airport (breakfast and lunch will be on your own, recommend meal items be purchased at the airport)

- 10:52 Depart Denver Airport (DEN) Delta Flight #1956
- 15:30 Arrive Cincinnati International Airport (CVG)
- 16:00 Depart Cincinnati Airport and travel to Lexington, Kentucky
- 17:30 Check-In Griffin Gate Hotel

EC-73/2 Annex 2 page 22

18:30 Depart Hotel for Dinner

18:45 Dinner at Kentucky Horse Park

Wednesday, May 22

07:45 Check-Out and Depart Griffin Gate Hotel (breakfast included at hotel)

08:30 Meet with Kentucky Chemical Demilitarization Citizens' Advisory Commission and Chemical Destruction Community Advisory Board Members (light refreshment available)

09:15 Depart meeting and travel to Blue Grass. Blue Grass Chemical Agent-Destruction Pilot Plant Orientation and Safety Briefing Enroute

09:45 Arrive Blue Grass Army Depot

- 10:00 Group Photograph
- 10:15 Welcome Colonel Brian Rogers, Commander, Blue Grass Army Depot

Welcome — The Honorable Andrew C. Weber, Assistant Secretary of Defense for Nuclear, Chemical, and Biological Defense Programs

10:20 Blue Grass Site Briefing — Lieutenant Colonel Christopher Grice, Commander, Blue Grass Chemical Activity

10:30 Blue Grass Chemical Agent-Destruction Pilot Plant (BGCAPP) Orientation Briefing — Mr. Jeffrey Brubaker, BGCAPP Site Project Manager

- 11:00 Tour of BGCAPP
- 13:00 Lunch
- 13:30 Discussion/Q&A
- 14:30 Closing Remarks and Presentations
- 15:00 Depart site and travel to Doubletree Hotel in Cincinnati
- 17:00 Check-In Doubletree Hotel
- 18:00 Depart Doubletree Hotel for dinner
- 18:30 Dinner at Jeff Ruby's Precinct

Thursday, May 23

09:00 Check-out of Hotel, Depart for Cincinnati Airport

- 11:30 Depart Cincinnati Airport (CVG)—Delta Flight #3287
- 12:52 Arrive Ronald Reagan Washington National Airport (DCA)
- 15:30 Meeting with Senator McConnell on the Hill (Location TBD)
- 16:30 Check-In Park Hyatt Washington Hotel
- 1900 Dinner at the Turkish Ambassador's Residence

Friday, May 24

09:30 Depart Hotel

10:30 Meeting with Mr. Frank A. Rose, Deputy Assistant Secretary for Space and Defense Policy, Bureau of Arms Control, Verification and Compliance (at DOS)

Meeting with Ms. Lynn Rusten, Senior Director for Arms Control and Nonproliferation, National Security Staff (at DOS)

12:00 Lunch (location TBD)

13:00 Completion of Executive Council Visit, Return to Hotel

Saturday, May 25

13:00 Shuttle departs for Washington Dulles International Airport

LIST OF MEMBERS OF THE OPCW EXECUTIVE COUNCIL DELEGATION WHO TOOK PART IN THE VISIT TO THE PUEBLO CHEMICAL AGENT DESTRUCTION PILOT PLANT AND BLUE GRASS CHEMICAL AGENT DESTRUCTION PILOT PLANT

Name	Representing
Ambassador Olexander Horin	Executive Council Chair
Chairperson of the Executive Council and Permanent	and Eastern European
Representative of Ukraine	Group
Ambassador Ahmet Üzümcü	OPCW
Director-General of the OPCW	
Ambassador Nimota Nihinlola Akanbi	African Group
Permanent Representative of the Federal Republic of Nigeria	
Mr Chunsen Gong	Asian Group
Deputy Permanent Representative of China	
Ambassador Eberhard Shcanze	Western European and
Permanent Representative of Germany	Other States Group
Ambassador Miguel Calahorrano Camino	Latin America and the
Permanent Representative of Ecuador	Caribbean States Group
Mr. Vasily Titushkin	Russian Federation
Deputy Permanent Representative of the Russian Federation	
Dr Ali Gebril Werfeli	Observer
Permanent Representative of Libya	
Mr Yutaka Kikuta	Observer
Minister, Japan	
Mr Teddy Bongezile Ceke	Observer
Deputy Permanent Representative of the Republic of South	
Africa	
Mr Robert Fairweather	Technical Secretariat
Chief of Cabinet	
Ms Gabriela Coman-Enescu	Technical Secretariat
Technical Secretariat	

LIST OF REPRESENTATIVES OF THE UNITED STATES OF AMERICA HOSTING THE VISIT OF THE OPCW EXECUTIVE COUNCIL DELEGATION TO THE PUEBLO CHEMICAL AGENT DESTRUCTION PILOT PLANT AND BLUE GRASS CHEMICAL AGENT DESTRUCTION PILOT PLANT

Name	Representing
Ambassador Robert P. Mikulak	Permanent Representation
United States Permanent Representative to the OPCW	of the United States to the
	OPCW
The Honorable Andrew C. Weber	Department of Defense
Assistant Secretary of Defense for Nuclear, Chemical, and Biological	_
Defense Programs	
Dr Arthur T. Hopkins (Tom)	Department of Defense
Deputy Assistant Secretary of Defense for Nuclear, Chemical and	
Biological Defense Programs (Threat Reduction and Arms Control)	
Mr Carmen J. Spencer	United States Army
Joint Program Executive Officer for Chemical and Biological Defense	
Mr Conrad F. Whyne	United States Army
Program Executive Officer, Assembled Chemical Weapons	
Alternatives	
Mr Don E. Barclay	United States Army
Director, U.S. Army Chemical Materials Activity	-
Mr H. E. Wolfe (Hew)	United States Army
Deputy Assistant Secretary of the Army (Environment, Safety and	
Occupational Health)	
Mr Kenneth D. Ward	Department of State
Executive Director, U.S. National Authority for the CWC	_
Lieutenant Colonel Timothy M. Greenhaw	United States Army
Commander, Pueblo Chemical Depot	
Mr Mike Strong	Assembled Chemical
Deputy Site Project Manager, Pueblo Chemical Agent Pilot Plant	Weapons Alternatives
Lieutenant Colonel Christopher Grice	United States Army
Commander, Blue Grass Chemical Activity	
Mr Jeffery Brubaker	Assembled Chemical
Site Project Manager, Blue Grass Chemical Agent Pilot Plant	Weapons Alternatives
Ms Lynn M. Hoggins	Department of Defense
Director, Chemical and Biological Weapons Treaty Management,	
Office of the Deputy Assistant to the Secretary of Defense for	
Nuclear, Chemical and Biological Defense Programs (Threat	
Reduction and Arms Control)	
Ms Crystal A. Legaluppi	United States Army
Chief, Center for Treaty Implementation and Compliance, U.S. Army	_
Chemical Materials Activity	
Mr Greggory Allen	Assembled Chemical
Treaty Manager, Assembled Chemical Weapons Alternatives	Weapons Alternatives
Headquarters	
Mr Isaac Manigault	Department of Defense
National Escort Team Leader, Defense Threat Reduction Agency	

THE UNITED STATES OF AMERICA BRIEFING MATERIALS

Background information provided during the visit is available upon request at the Documentation Counter and through the OPCW external server.

COMMENTS FROM THE UNITED STATES OF AMERICA ON THE REPORT OF THE VISIT BY THE CHAIRPERSON OF THE EXECUTIVE COUNCIL AND REPRESENTATIVES OF THE EXECUTIVE COUNCIL TO THE PUEBLO CHEMICAL AGENT DESTRUCTION PILOT PLANT AND BLUE GRASS CHEMICAL AGENT DESTRUCTION PILOT PLANT, 18 – 24 MAY 2013

1. Reference paragraph 38; the following table provides updated information regarding the lifecycle costs associated with the United States destruction program:

Reflected in Report:			Updated Estimates:	
	Pueblo and			Pueblo and
Total Lifecycle:	Blue Grass:		Total Lifecycle:	Blue Grass:
\$32 billion	\$10 billion		\$35.1 billion	\$10.6 billion
			Total budget	
Total budget			expended	
expended:	\$28 billion		(through FY13):	\$27 billion

2. Paragraph 74 reports the cost associated with the destruction of one metric tonne (MT) of chemical agent is approximately \$5.7 million.

An updated figure for destruction of one MT of agent at the Assembled Chemical Weapons Alternative (ACWA) sites is \$3.5 million. This includes the Pueblo Chemical Agent Destruction Pilot Plant and the Blue Grass Chemical Agent Destruction Pilot Plant.

---0---