UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION I

In the Matter of: U.S. EPA Region I
Training Ranges and Impact Area, EPA Docket No.: SDWA-01-2002-0009
Massachusetts Military Reservation
Textron Systems Corporation, Respondent

ADMINISTRATIVE ORDER
BY CONSENT FOR RESPONSE ACTION

Proceeding Under Section 1431(a) of the Safe Drinking Water Act,
42 U.S.C. § 300i(a)
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I. **JURISDICTION**

1. This Administrative Order by Consent (Order) is entered into voluntarily by and between the United States Environmental Protection Agency (EPA) and Textron Systems Corporation (hereinafter “TSC”). This Order is issued pursuant to the authority vested in the Administrator of the United States Environmental Protection Agency (EPA) by Section 1431(a) of the Safe Drinking Water Act (SDWA), 42 U.S.C. § 300i(a). The Administrator of EPA has delegated the authority to take these actions to the Regional Administrator of EPA Region I by EPA Delegation No. 9-17 (1200-TN-350) dated May 11, 1994. The Respondent neither admits nor denies the findings legal conclusions or determinations of the Order and agrees not to contest the authority or jurisdiction of the Regional Administrator of EPA to issue this Order in this or any subsequent proceeding to enforce the terms of this Order. This Order constitutes an enforceable agreement between the Respondent and EPA.

2. In the interests of environmental protection, public health and welfare, EPA hereby orders, and Respondent agrees to undertake, all actions required by this Order.

II. **STATE COORDINATION**

3. Pursuant to Section 1431 of the SDWA, 42 U.S.C. § 300i, EPA consulted with the Commonwealth of Massachusetts and local authorities on this matter.

III. **PARTIES BOUND**

4. In entering into this Order, the objectives of the Parties are to conduct Response Actions as identified in Appendices A and B. This Order shall apply to and be binding upon the Parties, and upon their affiliated organizations, agents, contractors, and consultants.

IV. **PURPOSE**

5. This Order requires the Respondent to undertake Response Actions to abate the potential threat to public health presented by the contamination from past and present sources at and emanating from the Massachusetts Military Reservation (MMR) Training Ranges and Impact Area. The required actions are described more fully in the Statements of Work (SOWs) attached to this Order as Appendices A and B, which are enforceable hereunder.
V. **DEFINITIONS**

6. All other terms, not otherwise defined herein, shall have their ordinary meanings unless defined in SDWA, in which case the SDWA definition shall control.

   "Contractor" shall mean any person, including the contractors, subcontractors, or agents, retained or hired by Respondent to undertake any Work under this Order.

   "Day" shall mean a calendar day, unless otherwise specified.

   "Order" shall mean this SDWA § 1431 Administrative Order; and any attachments or appendices to this Order.

   "Work" shall mean all tasks and activities required by this Order or related to the performance of tasks and activities required by this Order.

VI. **EPA’S FINDINGS OF FACT**

7. TSC is a Delaware corporation having its principle place of business in Wilmington, Massachusetts.

8. The Massachusetts Military Reservation (MMR) is a 21,000 acre facility located on Cape Cod, in the townships of Bourne, Falmouth, Mashpee and Sandwich in Barnstable County, Massachusetts. From approximately 1968 to 1999, TSC and its predecessor conducted operations at MMR under defense contracts with the United States, including the Department of Army, USAF, and others.

9. On July 13, 1982, EPA determined that the Cape Cod aquifer is the sole or principal source of drinking water for Cape Cod, Massachusetts, and that the Cape Cod aquifer, if contaminated, would create a significant hazard to public health. 47 Fed. Reg. 30282. Among the findings on which EPA based this determination are the following:

   a. The Cape Cod aquifer is a single continuous aquifer which then served as the "sole source" of drinking water for the approximately 147,725 permanent residents and 424,445 peak seasonal residents of Cape Cod;
   b. There is no existing alternative drinking water source, or combination of sources, which provides fifty percent or more of the drinking water to the designated areas, nor is there any reasonably available alternative future source capable of supplying Cape Cod's drinking water demands; and
   c. As a result of its highly permeable soil characteristics, the Cape Cod aquifer is susceptible to contamination through its recharge zone from a number of sources. Since groundwater contamination can be difficult or impossible to reverse, and since this aquifer is relied on for
drinking water purposes by the general population, contamination of the aquifer would pose a significant hazard to public health.

10. Currently, the Cape Cod Aquifer serves as the sole drinking water source for approximately 200,000 permanent and 520,000 seasonal residents of Cape Cod.
11. A study conducted by the Defense Department’s Joint Program Office at MMR in April of 1999 estimated that in the year 2020, there will be a water supply shortage of between 9.8 and 11 million gallons per day for the regional water supply, that is the combined supplies of Bourne, Falmouth, Mashpee, Sandwich, South Sagamore and for Otis Air National Guard Station, which serves all users on MMR.


13. The Training Ranges and Impact Area lie directly over the Sagamore Lens, the most productive part of the Cape Cod Aquifer. The Training Ranges and Impact Area is a major groundwater recharge area, located near to the apex of the Sagamore Lens. Groundwater flows radially in all directions from the Training Ranges and Impact Area.

14. The Sagamore Lens has been identified by the Cape Cod Commission as the portion of the Cape Cod Aquifer most capable of supplying sufficient water to satisfy future demand for drinking water on Cape Cod. If MMR is excluded from the list of potential future water supply areas on Cape Cod, only approximately 5 percent of Cape Cod lies over groundwater which is suitable as a future water supply. If MMR is included in the analysis, approximately 19 percent of Cape Cod is suitable as a future water supply area.

15. The part of an aquifer that directly supplies a public water supply well is known as a "wellhead protection area". The Training Ranges and Impact Area lie directly above segments of several wellhead protection areas on Cape Cod.

16. For some part of the period from 1968 to 1999, TSC and its predecessor engaged in packing and testing of munitions as a contractor of the United States including the Department of Army, USAF and others at ranges under lease from the Department of Army. Excess explosives, off-specification propellants, unexploded ordinance, excess munitions and scrap metal were open detonated or burned in an unlined detonation pit and burn box on the J-3 Range.

17. On February 27, 1997, pursuant to Section 1431 of the SDWA, EPA issued Administrative Order SDWA I-97-1019, which required the National Guard Bureau to investigate contamination at and emanating from the Training Ranges and Impact Area.

18. On April 10, 1997, EPA issued Administrative Order SDWA I-97-1030, which required the National Guard Bureau and the Massachusetts National Guard to cease certain training activities at
the Training Ranges and Impact Area. Administrative Order SDWA I-97-1030 was later modified on July 25, 1997.

19. On January 7, 2000, EPA issued Administrative Order SDWA I-00-0014, which required the National Guard Bureau and the Massachusetts National Guard to undertake various response activities at the Training Ranges and Impact Area.

20. Munitions and other materials used at the Training Ranges and Impact Area, both currently and in the past, contain contaminants, including the compounds detected in groundwater and soil discussed in paragraph 22 below. A partial list of the munitions used at MMR and their components is contained in the Ordnance and Explosives Archive Search Report (Army Corps of Engineers, March, 1999), the Draft Range Use History Report (Ogden Environmental, June, 1997) and Draft Chemical Composition of Munitions Report (Ogden Environmental, June, 1997).

21. Munitions used by Respondent at MMR contained, without limitation: explosive compounds including trinitrotoluene (TNT) and Royal Demolition Explosive (RDX), hexahydro-1,3,5-trinitro-1,3,5-triazine, cyclotetramethylenetetranitramine, or octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine, commonly known as HMX or High Melting Explosive; propellant compounds; and metals.

22. Information gathered to date indicates that specific areas at or near the Training Ranges and Impact Area require response action, as described in Section X of this Order. The specific areas, and some of the contaminants detected, are as follows:

Southeast Corner of the Ranges: This area is close to the top of the groundwater mound of the Sagamore Lens. This area includes the J-1 Range and the J-3 Range where the Respondent and other contractors conducted activities as contractors to the Department of Army. Pollutants and contaminants including, without limitation, arsenic, lead, cadmium, 2,6-DNT, 2,4-DNT, RDX, HMX, TNT, and nitroglycerin have been detected in soils and/or groundwater at and surrounding the J-1 and J-3 Ranges where Respondent and other contractors conducted activities. Detections of these pollutants and contaminants have exceeded Maximum Contaminant Levels, Maximum Contaminant Level Goals, Health Advisories, or Drinking Water Equivalency Levels as described in Section VII or have exceeded Preliminary Remediation Goals established by EPA for the Impact Area and Training Ranges at MMR, which represent preliminary, site specific contaminant levels in soil and groundwater determined to be protective of human health.

Contaminants, including explosives, propellants, and metals found in soils are likely to enter the underlying groundwater. The soil and groundwater contamination related to the Southeast Corner of the Ranges lies within the zone of contribution for Long Range Water Supply wells 95-6, 95-15, Long Range Water Supply Wells 3 and 4 and future water supply wells WS-2 and WS-3. This contamination may also lie within the zone of contribution for the J Well, a current water supply well for MMR.
VII. ENDANGERMENT AND RESPONSE

23. EPA has determined that the detection of contaminants in soil and groundwater samples discussed above demonstrates the release or threat of release of contaminants from the Training Ranges and Impact Area to the Sagamore Lens, a part of the sole source aquifer underlying Cape Cod.

24. EPA has established Maximum Contaminant Level (MCLs) and Contaminant Level Goals (MCLGs) for certain contaminants in drinking water, pursuant to Section 1412 of SDWA. MCLGs are set at levels at which no known or anticipated adverse health effects will occur. MCLs are set as close to MCLGs as practical.

25. EPA has established Lifetime Health Advisories for certain contaminants. Lifetime Health Advisories establish the concentration of a chemical in drinking water that is not expected to cause any adverse non-carcinogenic effect over a lifetime of exposure with a margin of safety.

26. EPA has also established Drinking Water Equivalency Levels (DWELs). A DWEL represents the concentration of a substance in drinking water that is not expected to cause any adverse non-carcinogenic health effects in humans over a lifetime of exposure. The DWEL is calculated assuming that all exposure to the chemical comes from drinking water.

27. The Lifetime Health Advisory for RDX is 2 ppb.

28. The Lifetime Health Advisory for TNT is 2 ppb.

29. EPA has established DWELs to assess the non-carcinogenic potential for 2,4-DNT and 2,6-DNT in adults. The DWEL for 2,4-DNT is 100 ppb and the DWEL for 2,6-DNT is 40 ppb.

30. The MCLG for lead is zero. For certain public drinking water supply systems, EPA has established 15 ppb as the level at which corrosion control systems must be established in order to reduce lead levels in drinking water.

31. EPA has established a Lifetime Health Advisory for HMX in drinking water of 400 ppb.

32. EPA has established a DWEL of 5 ppb for nitroglycerin (trinitroglycerol) in drinking water.

33. EPA has established an MCL of 5 ppb for arsenic in drinking water.

34. The presence of contaminants described above may present an imminent and substantial endangerment to the health of persons.

35. The Work required under this Order is necessary to prevent, minimize, and/or mitigate the threat of an imminent and substantial endangerment to the health of persons posed by the actual or potential releases of contaminants into the soils and groundwater at and emanating from the Training Ranges and Impact Area.
VIII. EPA’S CONCLUSIONS OF LAW

Based on the foregoing, EPA makes the following Conclusions of Law.

36. TSC is a "person" as that term is defined in Section 1401(12) of the SDWA, 42 U.S.C. § 300f(12).

37. The arsenic, lead, cadmium, 2,6-DNT, 2,4-DNT, RDX, HMX, TNT and nitroglycerin found in the soil in and groundwater beneath or near the Training Ranges and Impact Area, are "contaminants," as that term is defined in Section 1401(6) of SDWA, 42 U.S.C. § 300f(6).

38. The arsenic, lead, cadmium, 2,6-DNT, 2,4-DNT, RDX, HMX, TNT and nitroglycerin found in the soil and in the groundwater beneath or near the Training Ranges and Impact Area are present in or likely to enter the Sagamore Lens of the Cape Cod Aquifer.

39. The Sagamore Lens is part of the Cape Cod Aquifer, an "underground source of drinking water", as that term is defined in 40 C.F.R. Section 144.3.

IX. EPA’S DETERMINATIONS

Based on the foregoing and the EPA Administrative Record for this Site, EPA has determined the following:

40. The contaminants present in or likely to enter the underground source of drinking water may present an imminent and substantial endangerment to the health of persons, within the meaning of Section 1431(a) of SDWA, 42 U.S.C. § 300i(a).

41. Respondent’s activities as a defense contractor have caused or contributed to the endangerment described immediately above.

42. In accordance with the requirements of Section 1431 of the SDWA, EPA determines that the Commonwealth of Massachusetts and local authorities have not by themselves taken the actions necessary to protect the health of persons whose sole source of drinking water is the Sagamore Lens of the Cape Cod Aquifer (i.e., they have not required implementation of the response actions required by this Order).

43. The actions required by this Order are necessary to prevent further release or threat of release of contaminants and to protect the health of persons who are or may be users of the Sagamore Lens of the Cape Cod Aquifer. Based on the endangerment described above, the response actions in Appendices A and B of this Order are necessary. The response actions will consist of Respondent’s implementation of the Statements of Work appended to this Order.
X. ORDER

Based on EPA's jurisdiction, Findings of Fact, Conclusions of Law and Determinations set forth above, the Administrative Record supporting issuance of this Order, and in order to abate or prevent any imminent and substantial endangerment to health, the Respondent AGREES and EPA HEREBY ORDERS that Respondent shall perform all Work required under this Order. The Respondent shall comply with the following provisions and perform all actions required by the terms and conditions of this Order.

44. Respondent shall conduct the response actions described in Appendices A and B.

45. Respondent shall conduct additional response actions as required by the Statements of Work attached to this Order, and any modifications thereto made in accordance with this Order.

XI. DESIGNATION OF SUPERVISING CONTRACTOR AND PROJECT COORDINATOR

46. Respondent has retained Harding ESE, Inc. as its Supervising Contractor for the purpose of performing the work required by this Order in accordance with the terms and conditions of the Statements of Work. The Respondent shall notify EPA in writing of the name, address, and qualifications of any proposed changes to the supervising contractor and the name and telephone number of the supervising contractor's primary contact person. The Respondent shall also notify EPA of the identity and qualifications of any contractor(s) or subcontractor(s) to be used at the Site at least seven (7) days in advance of their performing any work under this Order.

47. The supervising contractor shall be a qualified professional with substantial expertise and experience in the investigation and cleanup of hazardous waste sites, munitions and contaminated groundwater, as well as clearance and remediation of UXO. EPA reserves the right to disapprove, based on professional qualifications, conflicts of interest, and/or deficiencies in previous similar work, any contractor or subcontractor or other person engaged directly or indirectly by the Respondent to conduct work activities under this Order. If EPA disapproves the selection of any proposed contractor it shall notify Respondent in writing within ten days, and the Respondent shall notify EPA in writing of the name, address, and qualifications of another contractor within seven (7) days after receipt of the notice of disapproval.

48. Respondent shall provide a copy of this Order to all contractors, subcontractors, laboratories, and consultants retained in connection with this Order within seven (7) days after the Order's effective date or of such retention, whichever is later. Respondent shall be responsible for ensuring that their contractors and subcontractors perform the Work in accordance with this Order and applicable law.

49. Within seven (7) days after the effective date of this Order, the Respondent shall designate a Project Coordinator who shall be responsible for administration of all of the Respondent’s actions
called for by this Order, and shall submit the designated coordinator's name, address, and telephone number to EPA. EPA will deem the project coordinator's receipt of any notice or communication from EPA relating to this Order as receipt by the Respondent.

XII. NECESSITY OF FORMAL APPROVAL

50. No informal advice, guidance, suggestions or comments by EPA regarding reports, plans, specifications, schedules, or any other writing submitted by the Respondent shall be construed as relieving the Respondent of its obligations to obtain such formal reviews as may be required by this Order.

XIII. EPA TECHNICAL PROJECT COORDINATOR

51. The EPA Technical Project Coordinator (TPC) will administer EPA's responsibilities and receive all written notices, reports, plans and other documents required by this Order. EPA's TPC under this Order will be Todd Borci. All submissions required by this Order shall be sent to EPA's TPC at the following address:

   Attention: MMR Impact Area Technical Project Coordinator
   Mr. Todd J. Borci
   U.S. Environmental Protection Agency
   1 Congress Street
   Boston, MA  02114-2023

52. Absence of the TPC from the Site shall not be cause for stoppage of work by the Respondent unless specifically directed by the TPC.

XIV. WORK TO BE PERFORMED; COMPLETION OF WORK

53. Pursuant to the schedules contained therein, the Respondent shall conduct the Work detailed in the Statements of Work. All Work performed by the Respondent shall be conducted in accordance with SDWA, applicable guidance documents provided by EPA reasonably in advance of commencement of the Work, and the provisions of this Order including any standards, specifications, and time schedules contained in the Statements of Work.

54. Within forty-five (45) days after completing all Work required under this Order, the Respondent shall submit for EPA approval a Completion of Work Report summarizing the activities conducted pursuant to the Statements of Work. The Completion of Work Report shall be certified by the supervising contractor to the effect that all response activities have been completed in full satisfaction of the requirements of this Order attached as Appendices A and B and any modifications thereto.
55. When EPA determines that all Work has been fully performed in accordance with this Order and that the Statements of Work have been satisfied, EPA will provide written notice to the Respondent. If EPA determines that all response activities have not been completed in accordance with the provisions of this Order, it will so notify the Respondent and provide a list of the tasks remaining. The Respondent shall perform all remaining tasks required under this Order on a schedule acceptable to EPA’s TPC and shall submit an amended Completion of Work Report in accordance with the EPA notice. Performance of the remaining tasks in accordance with the schedule shall be a requirement of the Order.

XV. SUBMISSIONS REQUIRING AGENCY APPROVAL; RESPONDENT’S OBLIGATION TO PROCEED

56. After review of any deliverable, plan, report or other item (submission) which the Respondent is required to submit for review and approval pursuant to this Order and Statements of Work, EPA may: (i) approve the submission; (ii) conditionally approve the submission with required modifications; or (iii) disapprove the submission and notify the Respondent of deficiencies. In the event EPA approves or conditionally approves the submission, the Respondent shall perform all actions required by the submission, as approved, or conditionally approved.

57. Upon receipt of a notice of disapproval with deficiencies ((iii) above), the Respondent shall correct the deficiencies and resubmit the submission within ten (10) days or such longer time period specified in the notice of disapproval. Notwithstanding a notice of disapproval, the Respondent shall proceed to take any action required by any non-deficient portion of the submission. Respondent’s transmittal of this second submission in a form acceptable to EPA shall be a requirement of the Order.

58. For each submission provided to EPA, the Respondent shall submit such copies as specified by the TPC. Any deliverable, plan, or report submitted to EPA pursuant to this Order shall be dated and shall include, in a prominent location in the document, the following disclaimer: "Disclaimer: This document has been prepared pursuant to a government administrative order (U.S. EPA Region I SDWA Docket No. 01-2002-0009 and is subject to approval by the U.S. Environmental Protection Agency. The opinions, findings, and conclusions expressed are those of the authors and not those of the U.S. Environmental Protection Agency.” In addition, any such deliverable, plan, or report which has not received final approval from EPA shall be marked "Draft" on each page. The Respondent shall provide copies of all deliverables to the Massachusetts Department of Environmental Protection (DEP). EPA will consult with the DEP in its review of each major deliverable; however, EPA retains the authority to approve or disapprove any of the deliverables.
XVI. INCORPORATION AND ENFORCEABILITY OF DOCUMENTS

59. The Statements of Work and all other appendices or attachments to this Order shall be deemed incorporated into, and made an enforceable part of, this Order. Upon approval by EPA, all contracts, deliverables, plans, reports, specifications, schedules, or other items required by this Order shall be deemed incorporated into, and made an enforceable part of, this Order. In the event of conflict between this Order and any document attached to, incorporated into, or enforceable hereunder, the provisions of this Order shall control.

60. Respondent shall timely take all steps necessary to obtain access to all properties necessary to satisfy the requirements of this Order.

XVII. QUALITY ASSURANCE/SAMPLING

61. The Respondent shall submit immediately to EPA and the State, upon receipt, the results of all sampling or tests and all other data generated by the Respondent, its contractor(s), or on the Respondent's behalf in the course of implementing this Order. The Respondent shall also provide the quality assurance/quality control procedures followed by all sampling teams and laboratories performing data collection and/or analysis.

62. Upon request, the Respondent shall allow EPA, the State, or their authorized representatives to take split and/or duplicate samples of any samples collected by the Respondent while performing work under this Order. The Respondent shall notify EPA and the State not less than four (4) days in advance of any sample collection activity. In addition, EPA shall have the right to take any additional samples that it deems necessary.

63. The Respondent shall assure that EPA and its authorized representatives are allowed access to any laboratory utilized by the Respondent in implementing this Order. Upon request, the Respondent shall have a designated laboratory analyze samples submitted by EPA for quality assurance monitoring.

XVIII. ACCESS TO INFORMATION; RECORD PRESERVATION; CONFIDENTIALITY CLAIMS

64. Upon request, the Respondent shall provide EPA with copies of all non-privileged records, documents, and other information generated by the Respondent and its contractor(s) which relates to the implementation of this Order, including but not limited to, sampling and analysis records, field sheets and field notes, engineering logs, chain of custody records, contracts, bills of lading, trucking logs, manifests, receipts, reports, and correspondence. In addition, the Respondent’s employees, agents, or representatives with knowledge of facts concerning performance of work under this Order shall be made available to EPA to provide such information.
65. For a period of at least five (5) years following completion of all work conducted by the Respondent pursuant to this Order, the Respondent shall preserve all documents, records, and information of whatever kind, nature or description in its possession and/or control or that of its officers, employees, agents, licensees, accountants, contractors, attorneys, successors and assigns, that relate in any way to the performance of work under this Order. After this five (5) year period has expired, the Respondent shall provide EPA with thirty (30) days advance written notice prior to the destruction of any such records, documents, or information. The Respondent shall send such notice, accompanied by a copy of this Order, to:

Attention: MMR Impact Area Counsel
Office of Environmental Stewardship
U.S. Environmental Protection Agency
One Congress Street, Suite 1100
Boston, Massachusetts 02114

Re: Response Action at Massachusetts Military Reservation
SDWA Docket No.01-2002-0009

Upon request, the Respondent shall provide to EPA copies of all such records, documents, or information.

66. Respondent may assert a confidentiality claim, if appropriate, covering part or all of the information required by or requested under this Order, pursuant to Section 1445(d)(1) of SDWA, 42 U.S.C. § 300j-4(d)(1) and 40 C.F.R. § 2.203(b) (1989). Upon request, Respondent shall adequately substantiate all such assertions. Information determined to be confidential by EPA will be afforded the protection required by 40 C.F.R. Part 2, Subpart B. If no confidentiality claim accompanies the information when submitted to EPA, EPA may make it available to the public without further notice to the Respondent. However, pursuant to Section 1445(d)(2) of SDWA, 42 U.S.C. § 300j-4(d)(2), any information shall be disclosed to the public to the extent that it deals with the level of contaminants in drinking water.

XIX. CREATION OF DANGER; EMERGENCY RESPONSE

67. Upon the occurrence of any incident or change of conditions related to the activities conducted pursuant to this Order that causes or threatens a release of contaminants from the facility or an endangerment to the public health or welfare or the environment, the Respondent shall immediately take all appropriate action to prevent, abate or minimize such release or endangerment. The Respondent shall also immediately notify the TPC or, in the event of his/her unavailability, shall notify the Regional Duty Officer of the Emergency Planning and Response Branch, EPA Region I, telephone (617) 223-7265. In taking any actions under this paragraph, the Respondent shall act in accordance with all applicable provisions of the Health and Safety Plan prepared pursuant to the Statements of Work.
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68. The Respondent shall submit a written report to EPA within ten (10) days after each incident specified above, setting forth the events that occurred and the measures taken and to be taken to mitigate any release or endangerment caused or threatened by the incident and to prevent the reoccurrence of such an incident.

69. Nothing herein shall limit the power and authority of EPA or the United States to take, direct, or order all actions necessary to protect public health, welfare, or the environment or to prevent, abate, or minimize an actual or threatened release of hazardous substances, pollutants or contaminants, or hazardous or solid waste on, at, or from the facility.

XX. AMENDMENTS

70. This Order, other than the Statements of Work, may only be amended in writing by the Parties. Amendments or modifications to the Statements of Work may only be made in writing by the mutual agreement of the TPC and Project Coordinator.

XXI. PUBLIC INVOLVEMENT AND COORDINATION

71. Respondent shall upon request by EPA provide periodic oral and written updates to the public on the progress of the Work.

72. Respondent shall coordinate the Work under this Order and SOWs with the ongoing groundwater investigations and response actions being undertaken by the National Guard Bureau and the Massachusetts Army National Guard and with response actions being undertaken at MMR by the Installation Restoration Program.

XXII. DISPUTE RESOLUTION

73. The dispute resolution procedures herein will apply to disputes regarding implementation of the requirements of this Order.

   a. EPA and TSC shall make reasonable efforts to resolve disputes informally at the Project Management levels. If resolution cannot be reached informally, then the procedures below shall be implemented to resolve a dispute.

   b. During this informal dispute resolution period, the Parties shall confer as many times as may be necessary to discuss and attempt resolution of the dispute, and shall involve the public as appropriate.

   c. Within 7 days after either Party concludes that the Parties cannot reach agreement through informal dispute resolution, the Respondent shall submit to the TPC a written statement of dispute setting forth the nature of the dispute, the work affected by the dispute, the Respondent’s position
with respect to the dispute, and the technical or factual information the Respondent is relying upon to support its position. TSC and EPA shall then have an additional three days to reach agreement or the matter shall be referred to the Regional Administrator.

d. EPA’s Regional Administrator shall use best efforts to issue a written decision within 21 days from the date on which the dispute was forwarded but may issue a written decision in a longer time frame if considered necessary by the EPA Regional Administrator based on the particular circumstances of the dispute. No further review of the dispute is available.

e. The review of any dispute under these procedures shall not affect Respondent’s responsibility for timely performance of the Work required by this Order, except that the time period for completion of Work affected by such dispute shall be extended for a period of time not to exceed the actual time taken to resolve any good faith dispute in accordance with the procedures as specified herein. Whether a dispute has been made in good faith shall be determined by EPA. All elements of the work required by the Order, as determined by EPA, which are not affected by the dispute, shall continue to be completed in accordance with the applicable schedule.

f. The Parties anticipate that Work affected by the dispute will continue during the dispute resolution process, with the time period for completion of the Work extended as set out in the previous paragraph. However, while dispute resolution is in progress, performance of specific elements of the Work affected by the dispute will be suspended if either party requests, in writing, that such work element be suspended because (1) performing such work element will make the dispute moot, or (2) because such work element is inadequate or defective and such inadequacy or defect may result in an adverse effect on human health, welfare or the environment. Notwithstanding any other provision of this agreement, however, any element of Work that has been stopped pursuant to the previous sentence shall be immediately recommenced, if EPA determines that the stoppage, either by itself or in conjunction with other events, may present an imminent and substantial endangerment to human health and the environment.

g. After stoppage of Work as set out in the prior sub-paragraph, the Parties shall meet to discuss the stoppage. Following this meeting, and further consideration of the issues, EPA will issue a written opinion with respect to the Work stoppage if the Parties continue to disagree. In any event, any element of the Work which has been stopped under this paragraph shall be immediately resumed upon issuance and in accordance with the Regional Administrator's written decision on the underlying dispute, as provided in sub-paragraph d.

h. Within the time frame established in the resolution of a dispute pursuant to this provision, Respondent shall incorporate the resolution and final determination into the appropriate plan, timetable or procedures, and complete the Work according to such amended plan, timetable or procedure.

i. The resolution of a dispute pursuant to this section constitutes a final resolution to any dispute arising under this Order. The Parties shall abide by the terms and conditions of any final resolution of the dispute obtained pursuant to this section.
XXIII. OTHER APPLICABLE LAWS

74. All actions required pursuant to this Order shall be undertaken in accordance with the requirements of all applicable local, state, and federal laws and regulations, including but not limited to, the laws relating to occupational health and safety and worker’s compensation.

XXIV. ENFORCEMENT; PENALTIES FOR NONCOMPLIANCE

75. For each day that the Respondent fails to comply with the requirements of this Order, Respondent shall be liable for stipulated penalties as set forth below. “Compliance” by Respondent shall include the completion of the activities, including deliverables, under this Order or any work plan or other plan approved under this Order to EPA’s satisfaction, in accordance with all applicable requirements of law, this Order, the SOWs, and any plans or documents approved by EPA pursuant to this Order and within the specified time schedules established and approved under this Order. Penalties begin to accrue on the day that performance is due or a violation occurs, and extend through the period of correction. EPA will provide written notice for violations that are not based on timeliness; nevertheless, penalties shall accrue from the day a violation commences. Payment shall be due within 30 days of receipt of a demand letter from EPA.

76. Respondent shall pay interest on the unpaid balance, which shall begin to accrue at the end of the 30-day period, at the rate established by the Department of Treasury pursuant to 30 U.S.C. Section 3717. Respondent shall further pay a handling charge of 1 percent, to be assessed at the end of each 31 day period, and a 6 percent per annum penalty charge, to be assessed if the penalty is not paid in full within 90 days after it is due. Respondent shall make all payments as directed by EPA Region I by certified check. A copy of the certified check shall be sent to the Technical Project Coordinator within five (5) days of payment.

77. The following stipulated penalties shall be payable per violation per day to EPA for any non-compliance with this Order or the SOWs.

<table>
<thead>
<tr>
<th>Period of Failure to Comply</th>
<th>Penalty Per Day</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st - 7th day</td>
<td>$ 750</td>
</tr>
<tr>
<td>8th - 14th day</td>
<td>$ 1,000</td>
</tr>
<tr>
<td>each day thereafter</td>
<td>$ 1,500</td>
</tr>
</tbody>
</table>

78. Respondent may dispute EPA’s right to the stated amount of penalties by invoking the dispute resolution procedures of this Order. Penalties shall accrue but need not be paid during the dispute resolution period. If Respondent does not prevail upon resolution, all penalties shall be due to EPA within 30 days of resolution of the dispute. If Respondent prevails upon resolution, no penalties shall be paid.
79. In the event that EPA provides for corrections to be reflected in the next deliverable, stipulated penalties for that interim deliverable shall cease to accrue on the date of such decision by EPA.

80. The stipulated penalties provisions do not preclude EPA from pursuing any other remedies or sanctions which are available to EPA because of the Respondent’s failure to comply with this Order. Provided, however, that EPA will not seek civil penalties under the SDWA for any violation for which a stipulated penalty is provided, except in the case of a willful violation of the Order. Payment of stipulated penalties does not alter Respondent’s obligation to complete performance under this Order.

XXV. CIVIL PENALTIES

81. Violation of this Order, or failure or refusal to comply with this Order, may subject the Respondent to civil penalties of up to fifteen thousand dollars ($15,000) for each day in which such violation or failure to comply occurs, as provided in Section 1431(b) of SDWA, 42 U.S.C. §300i(b).

XXVI. DISCLAIMER OF LIABILITY BY EPA

82. By issuance of this Order, EPA assumes no liability for injuries or damages to persons or property resulting from acts or omissions by the Respondent, its officers, employees, agents, representatives, successors, assigns, contractors, or consultants in carrying out activities pursuant to this Order. EPA shall not be held as a party to any contract entered into by the Respondent or its employees, agents, representatives, successors, assigns, contractors, or consultants in carrying out activities pursuant to this Order.

XXVII. NO RELEASE FROM LIABILITY

83. Nothing in this Order shall constitute or be construed as a satisfaction or release from any claim, cause of action, or demand in law or equity against the Respondent or any other person, whether or not a party to this Order, for any liability such person may have for any conditions or claims arising out of or relating in any way to the generation, storage, treatment, handling, transportation, release, or disposal of any hazardous substances, hazardous wastes, pollutants, or contaminants found at, taken to, or taken from the facility, including but not limited to any and all claims of the United States for money damages and interest under Section 107(a) of CERCLA, 42 U.S.C. § 9607(a) or claims under the Resource Conservation and Recovery Act 42 U.S.C. § 6901 et.seq. or under any other applicable statute or the common law.

XXVIII. RESERVATION OF RIGHTS BY EPA

84. The United States reserves all rights against the Respondent and all other persons to take any further civil, criminal, or administrative enforcement action pursuant to any available legal authority,
including the right to seek injunctive relief; the recovery of money expended or to be expended (plus interest); monetary penalties; criminal sanctions; and/or punitive damages regarding: (i) any violation of this Order; or (ii) any actual or potential threat to human health or welfare or the environment, or any release or threat of release of hazardous substances on, at, in, or near the facility. Nothing in this Order shall preclude EPA from taking any additional enforcement actions, or issuance of additional Orders, and/or additional actions as EPA may deem necessary, or from requiring Respondent in the future to perform additional activities pursuant to RCRA, SDWA, or any other applicable law.

85. EPA further expressly reserves the right both to disapprove work performed by the Respondent and to request the Respondent to perform tasks in addition to those detailed in the Order. In addition, EPA reserves all rights it may have to undertake response actions at any time and to perform any and all portions of the work activities which the Respondent has failed or refused to perform properly or promptly, and to seek reimbursement from Respondent for its costs, or seek any other appropriate relief.

86. Notwithstanding any other provision of this Order, EPA shall retain all of its information gathering, entry, inspection, and enforcement authorities and rights under any applicable law, regulation, or permit.

XXIX. EXCUSED DELAY - FORCE MAJEURE

87. Respondent’s activities under this Order shall be performed within the time limits set forth herein, or otherwise established or approved by EPA, unless performance is delayed or prevented by events which constitute "force majeure". For purposes of this Order, "force majeure" is defined as any event arising from causes beyond Respondent’s control. "Force majeure" shall not include any inability of any Respondent to pay the costs or expenses associated with complying with this Order, or increases in such costs or expenses. When an event constituting "force majeure" occurs, Respondent shall perform the affected activities within a time period not to exceed the time provided in this Order and the period of delay attributable to "force majeure". Respondent shall use best efforts to avoid or minimize any delay or prevention of performance of its obligations under this Order, and to discover and keep apprized of any and all circumstances which may result in a delay or prevention of the work required under this Order. A delay caused by EPA, and otherwise conforming with the terms of this Section, shall be treated as beyond the Respondent’s control.

88. Respondent shall verbally notify the EPA Project Coordinator as soon as possible, and not later than forty-eight (48) hours, after the discovering that circumstances have occurred or are likely to occur which may delay or prevent the performance of any activity required by this Order, regardless of whether or not those circumstances constitute a "force majeure." If the Project Coordinator cannot be reached, Respondent shall leave a telephone message at the Project Coordinator's office. Respondent shall also notify EPA in writing within seven (7) days after the date Respondent first became aware of the circumstances which may delay or prevent any performance of any activity required by this Order. Such written notice shall be accompanied by all available pertinent documentation including, but not limited to, third-party correspondence, and shall contain: 1) a
description of the circumstances and the Respondent’s rationale for interpreting such circumstances as being beyond its control; 2) the actions (including pertinent dates) Respondent has taken and/or intend to take to minimize any delay; and, 3) the date or time period Respondent proposes to complete the delayed activities. Such notification shall not in and of itself relieve Respondent of any of its obligations under this Order. Respondent’s failure to timely and properly notify EPA as required by this paragraph shall nullify any claim of "force majeure" for a period equal to Respondent’s delay in providing proper notification. Respondent shall have the burden of proving to EPA's satisfaction that an event constituting "force majeure" has occurred.

XXX. EFFECTIVE DATE; COMPUTATION OF TIME

89. The obligations required by this Order shall become effective upon execution by the Parties. All times for Performance of Work under this Order shall be calculated from the effective date. When computing any period of time under this Order, if the last day would fall on a Saturday, Sunday or federal holiday, the period shall run until the next working day.

XXXI. SEVERABILITY

90. If a court issues an order that invalidates any provision of this Order, or finds the Respondent has sufficient cause not to comply with one or more provisions of this Order, Respondent shall remain bound to comply with all provisions of this Order not invalidated by such court’s order.

XXXII. TERMINATION

91. The provisions of this Order shall remain in full force and effect until all actions required by this Order have been completed and EPA has notified the Respondent, in writing, that the actions required by this Order have been completed. Respondent shall notify EPA in writing at such time as they believe that all such actions have been completed. EPA shall have sole discretion in determining whether all such actions have in fact been completed. Performance of all actions required hereunder shall be a requirement of the Order. EPA’s provision of written notice to Respondent pursuant to this paragraph shall not be construed as a waiver of any of EPA’s rights to take further enforcement action under any environmental laws.

XXXIII. EXISTING CONSENT DECREE

92. The provisions of this Order are not intended to require any action inconsistent with applicable law or with the consent decree in Conservation Law Foundation of New England, Inc. v. Lt. Gen. Herbert R. Temple, Jr. as he is Chief of the National Guard Bureau, et al., No. 86-1044-S (D. Mass). To the extent that Respondent believes in good faith that any action required by this Order would be inconsistent with that Consent Decree, Respondent is to notify EPA immediately.
IT IS SO ORDERED AND AGREED

Robert W. Varney
Regional Administrator, Region I
U.S. Environmental Protection Agency

Date: March 15, 2002
IT IS SO ORDERED AND AGREED

Carl Buzawa
Vice President
Textron Systems Corporation

March 15, 2002