DRAFT ENVIRONMENTAL IMPACT STATEMENT FOR A PROPOSED WATER TREATMENT RESIDUALS MANAGEMENT PROCESS FOR THE WASHINGTON AQUEDUCT, WASHINGTON, D.C.

US Army Corps of Engineers
Baltimore District

VOLUME 2A
APPENDICES

Prepared by: **U.S. Army Corps of Engineers, Baltimore District**
Washington Aqueduct
5900 MacArthur Boulevard
Washington, D.C. 20016

April 2005

Table of Contents

List of Agencies, Organizations, and persons to whom copies of the statement are sent

AGENCY and ORGANIZATION RECIPIENTS

- U.S. Environmental Protection Agency, Office of Federal Activity
- U.S. Department of Interior
- D.C. Department of Public Works
- District of Columbia Fire and Emergency Medical Services
- Montgomery County Government
- D.C. Department of Transportation
- Metropolitan Police Department
- Montgomery County Department of Public Works and Transportation
- Solid Waste Management, D.C. Department of Public Works
- Metropolitan Washington Council of Governments
- Montgomery County District 1 Councilmember (Maryland)
- Fisheries and Wildlife Division, D.C. Department of Health
- Chesapeake Bay Field Office, U.S. Fish and Wildlife Service
- Water Management Administration, Maryland Department of the Environment
- D.C. Water and Sewer Authority
- National Capital Region, National Park Service
- District of Columbia Councilmember Carol Schwartz
- D.C. Parks and Recreation Department
- Protected Resource Division, National Marine Fisheries Service
- Office of the Deputy Mayor for Planning and Economic Development
- Guest Services Incorporated
- County Manager, Arlington County (Virginia)
- Bureau of Environmental Quality, D.C. Department of Health
- City Manager, City of Falls Church (Virginia)
- Attorney General for the District of Columbia
- Air Quality Division, D.C. Department of Health
- National Capital Planning Commission
- Mayor, City of Falls Church (Virginia)
- Soil Resources Management, D.C. Department of Health
- County Executive, Montgomery County (Maryland)
- Department of Environmental Services, Arlington County (Virginia)
- Honorable Paul S. Sarbanes
- American Sportfishing Association
- The Nature Conservancy of Maryland/D.C.
- Advisory Neighborhood Commission 2E (District of Columbia)
- Arlington County Board
- Historic Preservation Division, D.C. Office of Planning
- Cabin John Citizens Association
- Office of Federal Agency Programs, Advisory Council on Historic Preservation
- Western Avenue Citizens Association
- Chief Operating Officer, Sibley Memorial Hospital

- Advisory Neighborhood Commission 1B (District of Columbia)
- Advisory Neighborhood Commission 3B (District of Columbia)
- District of Columbia Councilmember Jim Graham
- Washington DC Regional Office, Natural Resources Defense Council
- Advisory Neighborhood Commission 3C (District of Columbia)
- National Wilderness Institute
- Advisory Neighborhood Commission 3E (District of Columbia)
- District of Columbia Councilmember Jack Evans
- Honorable Chris Van Hollen
- Honorable Eleanor Norton
- Palisades Citizens Association
- Office of Maryland Senator Brian Frosh
- Honorable Jim Moran
- Advisory Neighborhood Commission 3D (District of Columbia)
- District of Columbia Councilmember Kathy Patterson
- Watershed Protection Division, D.C. Department of Health
- U.S. Commission of Fine Arts
- General Manager for Environmental Services, City of Falls Church (Virginia)
- Virginia Department of Environmental Quality
- Audubon Naturalist Society
- Honorable George P. Radanovich
- U.S. EPA Region III
- Arlington County Environment and Energy Conservation Commission (Virginia)
- Water Quality Division, D.C. Department of Health
- Arlington County Fiscal Affairs Advisory Commission
- Office of Environmental Impact Review, Commonwealth of Virginia
- C&O Canal NHP Headquarters, National Park Service
- Maryland Historical Trust
- MD DNR - Wildlife and Heritage Service
- Westmoreland Citizens Association
- Citizens' Cooperating Committee on Friendship Heights
- Spring Valley-Wesley Heights Citizens Association
- Honorable Barbara A. Mikulski
- Department of Environmental Programs
- Chesapeake Bay Field Office
- District of Columbia Councilmember Marion Berry
- District of Columbia Councilmember-At-Large Kwame R. Brown
- District of Columbia Councilmember-At-Large Phil Mendelson
- District of Columbia Councilmember-At-Large David Catania
- Bethesda-Chevy Chase, Regional Service Center, Montgomery County (Maryland)
- Montgomery County Council (Maryland)
- State Highway Administration (Maryland)
- Maryland National Capital Park and Planning Commission, Montgomery County Park and Planning

CITIZEN RECIPIENTS
One hundred ninety private citizens in Maryland and the District of Columbia. Names are omitted for privacy.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION III
1650 Arch Street
Philadelphia, Pennsylvania 19103-2029

BY FACSIMILE & FIRST CLASS MAIL

MAR 0 1 2005

Thomas P. Jacobus, P.E. J Received 1 MAR 05
General Manager
Washington Aqueduct
U.S. Army Corps of Engineers
5900 MacArthur Boulevard, NW
Washington, DC 20016-2514

RE: Request for Modification of Federal Facility Compliance Agreement

Dear ~~Mr.~~ Tom Jacobus:

The U.S. Environmental Protection Agency Region III ("EPA") has received your letter dated February 7, 2005 requesting an extension of the deadline identified in Paragraph 22 of the June 12, 2003 Federal Facility Compliance Agreement ("FFCA"), Docket No. CWA-03-2003-0136DN. This letter serves as EPA's response, pursuant to Paragraph 52 of the FFCA, agreeing to the Washington Aqueduct's request for modification of the FFCA. Your February 7, 2005 letter and this letter should be considered as Exhibits C & D to the FFCA.

Pursuant to paragraph 50 of the FFCA, the Washington Aqueduct has submitted a request for modification of Paragraph 22 of the FFCA that would extend the interim milestone described in that paragraph from June 3, 2005 to October 17, 2005. With this modification, Paragraph 22 now should read as follows:

> "No later than ~~June 3, 2005~~ **October 17, 2005**, the Corps shall identify in a notice to EPA the engineering/ best management practices it will implement in order to achieve compliance with the numeric discharge limitations set forth in the NPDES Permit and a schedule for implementing the identified engineering/best management practices as expeditiously as practicable, consistent with best engineering judgment. The schedule shall include major milestones, including selection of a contractor, preliminary design, and final design, as well as the construction phase. The schedule shall achieve compliance with the numeric discharge limitations set forth in the NPDES Permit at one or more of the sedimentation basins no later than March 1, 2008, and to achieve full compliance with the numeric discharge limitations at all basins no later than December 30, 2009."

It is EPA's understanding that the Washington Aqueduct does not propose to extend the March 1, 2008 deadline for achieving compliance with the numeric discharge limitations set forth in National Pollutant Discharge Elimination System Permit No. DC 0000019 (the "NPDES Permit") at one or more of the sedimentation basins. It is also EPA's understanding that the Washington Aqueduct does not propose to extend the December 30, 2009 deadline for achieving full compliance with the NPDES Permit. Your letter states that the Washington Aqueduct intends to exercise its best efforts to comply with the March 1, 2008 and December 30, 2009 deadlines in Paragraph 22. These deadlines remain operative.

It is EPA's understanding that the Washington Aqueduct proposed this modification to the FFCA to accommodate requests from individuals, organizations, and elected officials for additional opportunities for public comment and involvement in the selection of treatment alternatives to be considered by the Washington Aqueduct for achieving compliance with the NPDES Permit. EPA has received numerous communications from the public and from elected officials expressing a desire that the Washington Aqueduct provide additional opportunities for public involvement with regards to the treatment alternatives. EPA acknowledges the Washington Aqueduct's efforts to involve and inform the public and agrees that providing an additional opportunity for public involvement at the alternatives stage is in the public interest.

Accordingly, EPA finds that the Washington Aqueduct has demonstrated good cause, as described in Paragraphs 50 and 51, for a modification of the FFCA. With this modification to the FFCA, the Washington Aqueduct now has until October 17, 2005 to develop and notify EPA of the engineering/ best management practices it will implement in order to achieve compliance with the numeric discharge limitations set forth in the NPDES Permit and a schedule for implementing the identified engineering/best management practices as expeditiously as practicable, consistent with best engineering judgment as set forth in Paragraph 22 of the FFCA.

Thank you for your continued efforts to comply with NPDES Permit No. DC0000019 and the FFCA. If you have any questions regarding the FFCA, please feel free to contact Stefania D. Shamet, Senior Assistant Regional Counsel, at (215) 814-2682.

Sincerely,

Jon M. Capacasa, Director
Water Protection Division

cc: Jim Bemis (USACE, Baltimore District)

BEFORE THE UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION III
1650 Arch Street
Philadelphia, Pennsylvania 19103-2029

IN THE MATTER OF

Docket No. CWA-03-2003-0136DN

DEPARTMENT OF THE ARMY and the ARMY CORPS OF ENGINEERS,

Respondent

WASHINGTON AQUEDUCT
5000 MacArthur Boulevard, N.W.
Washington, DC 20315-0220

Facility

FEDERAL FACILITY
COMPLIANCE AGREEMENT

I. SCOPE AND PURPOSE

The express purpose of the undersigned Parties in entering into this Federal Facility Compliance Agreement ("FFCA" or "Agreement") is to address the discharge of pollutants from sedimentation basins and other facilities at the Washington Aqueduct located in Washington, D.C. and to further the goals of the Clean Water Act ("CWA" or "the Act"), 33 U.S.C. §§ 1251-1387. It is the express objective of all provisions and obligations of this Agreement to cause the United States Department of the Army Corps of Engineers to come into full compliance with all applicable Federal, state and local laws, regulations and ordinances governing the discharge of pollutants from the Washington Aqueduct into the waters of the United States.

2. This Agreement addresses discharges to waters of the United States from the Washington Aqueduct. The term "Washington Aqueduct" refers to the Dalecarlia and McMillan water treatment facilities and all real and personal property and appurtenances associated therewith. The Dalecarlia and McMillan water treatment plants supply potable water to the District of Columbia, the County of Arlington, Virginia, and the City of Falls Church, Virginia. In addition, the Washington Aqueduct must maintain a continous uninterrupted supply of water of sufficient pressure in order to provide for the firefighting and other safety needs of its service area. Pursuant to an Act of Congress dated March 3, 1859 (11 Stat. 84), the Chief of Engineers, U.S. Army Corps of Engineers is responsible for the management and superintendence of the Washington Aqueduct. Ownership of the

Washington Aqueduct is under the administrative jurisdiction of the Department of the Army.

II. JURISDICTION

3. The United States Environmental Protection Agency, Region III ("EPA") and United States Department of the Army Corps of Engineers ("Corps") enter into this Agreement pursuant to the Clean Water Act, 33 U.S.C. §§ 1251-1387, and Executive Order No. 12088. This Agreement contains a "plan," as described in Section 1-601 of Executive Order No. 12088, to achieve and maintain compliance with the CWA.

III. PARTIES

4. The Parties to this FFCA are EPA and the Corps.

5 The Parties recognize that the cost to the Corps of operating and maintaining the Washington Aqueduct is not funded through the usual Federal budgetary mechanisms. Instead, the cost of operating and maintaining the Washington Aqueduct is funded through separate Water Sales Agreements between the Corps and the District of Columbia Water and Sewer Authority, Arlington County Government and Falls Church City Government (collectively the "Wholesale Customers"). These Water Sales Agreements obligate the purchasers (i.e., the Wholesale Customers) to pay their proportional shares of the Corps' costs of operating and maintaining the Washington Aqueduct. Thus, the Wholesale Customers bear the full cost of the operation and maintenance, including capital improvements, of the Washington Aqueduct.

6. The Parties recognize that the relationship between the Corps and the Wholesale Customers is governed by a Memorandum of Understanding Between the District of Columbia Water and Sewer Authority, Arlington County, Virginia and the City of Falls Church, Virginia and Between the District of Columbia Water and Sewer Authority, Arlington County, Virginia, the City of Falls Church, Virginia and the Department of the Army, Acting Through the Chief of Engineers (May 5, 1998) (Exh. A). Among various other provisions, the Memorandum of Understanding requires the Corps to submit a proposed agreement with a regulatory or enforcement agency to the Wholesale Customers if (A) such agreement would require the Corps to undertake a capital improvement to, or modify the operation of the Washington Aqueduct; (B) the cost of the capital improvement or operational modification exceeds a specified amount; and (C) the Corps determines that the capital improvement or operational modification does not represent the least costly means of satisfying the permit or statutory requirement which is the subject of the agreement. The Corps may proceed with such an agreement unless the Wholesale Customer Board votes to reject the agreement within thirty days of submission. *See* Exhibit A, Article IV, Section 2. The Corps agrees to exercise best

efforts, consistent with the Memorandum of Understanding, to obtain from the Wholesale Customers a written acceptance of the terms and conditions of this FFCA.

7. The undersigned representative of each Party to this Agreement certifies that s/he is fully authorized by the Party whom s/he represents to enter into the terms and conditions of the Agreement and to execute and legally bind that Party to it.

IV. FINDINGS OF FACT AND CONCLUSIONS OF LAW

8. Section 301(a) of the Clean Water Act, 33 U.S.C. § 1311(a), prohibits the discharge of any pollutant into the waters of the United States by any person except in accordance with other specified sections of the Act, including section 402, 33 U.S.C. § 1342.

9. Section 402(a) of the Act, 33 U.S.C. § 1342(a), provides that the Administrator of EPA may issue permits under the National Pollutant Discharge Elimination System ("NPDES") program for the discharge of any pollutant into the waters of the United States upon such specific terms and conditions as the Administrator may prescribe. Each violation of an NPDES permit, and each discharge of a pollutant that is not authorized by an NPDES permit, constitutes a violation of Section 301(a) of the Act, 33 U.S.C. § 1311(a).

10. Raw water is taken from the Potomac River, diverted through a screened intake at Great Falls, Maryland into two brick masonry pipes, and sent to the Dalecarlia Reservoir. Additionally, raw water is withdrawn at the Little Falls Dam via the Little Falls Pumping Station and sent to the Dalecarlia Reservoir. To make it drinkable, the water is treated with sedimentation, filtration and disinfection. Initially, there is some natural settling (i.e., no coagulant is added at that point) of sediment in the Dalecarlia Reservoir. Thereafter, the water is treated either at the Dalecarlia water treatment plant (the Dalecarlia sedimenation basins) or directed to the McMillan water treatment plant via the Georgetown sedimentation basins. Currently, aluminum sulfate (commonly called "alum") is used as a coagulant. This results in aluminum and fine sediments settling into the bottom of the basins. The water also is filtered and disinfected. The sediment and aluminum at the bottom of the sedimentation basins must be removed periodically to maintain the function of the sedimentation basins. Historically, the contents of the sedimentation basins periodically have been discharged through pipes to outfalls on the Potomac River.

1 On or about April 3, 1989, EPA issued to the Corps NPDES Permit No. DC 0000019, which authorizes certain discharges of pollutants from the Washington Aqueduct to waters of the United States, including the Potomac River. As issued on or about April 3, 1989, NPDES Permit No. DC 0000019 did not contain numeric discharge limitations for the following pollutants: total suspended solids, total aluminum, dissolved iron, and total residual chlorine.

12. On or about February 4, 1998, EPA issued to the Corps NPDES Permit No. DC 00000329, which authorizes certain discharges of pollutants from point sources within the Washington Aqueduct, other than those covered by Permit No. DC 0000019 issued in 1989, to waters of the United States. As issued on or about February 4, 1998, NPDES Permit No. DC 00000329 did not contain numeric discharge limitations for the following pollutants: total suspended solids, total aluminum, dissolved iron, and total residual chlorine.

13. On or about March 14, 2003, EPA re-issued NPDES Permit No. DC 0000019 ("the NPDES Permit"), which authorizes certain discharges of pollutants from the Washington Aqueduct to waters of the United States, including the Potomac River and supersedes NPDES Permit Nos. DC 0000019 (issued on or about April 3, 1989) and DC 00000329 (issued on or about February 4, 1998). The discharges authorized by NPDES Permit No. DC 0000019 are described in Exhibit B hereto. Unlike superseded NPDES Permit Nos. DC 0000019 (issued on or about April 3, 1989) and DC 00000329 (issued on or about February 4, 1998), the NPDES Permit contains numeric discharge limitations, with respect to various outfalls, for total suspended solids, total aluminum, and dissolved iron.

14. The Parties recognize that a variety of engineering and/or best management practices may be utilized by the Corps to achieve compliance with the numeric discharge limitations set forth in the NPDES Permit. These include, but are not limited to, conveyance (by pipeline or truck) of the discharge to a wastewater treatment facility for treatment, on-site dewatering and other methods.

15. The Parties further recognize that implementation of one or more of the treatment technologies necessary to achieve compliance with the numeric discharge limitations set forth in the NPDES Permit may require construction of pipelines and other appurtenances.

16. The Parties further recognize that implementation of one or more of the treatment technologies necessary to achieve compliance with the numeric discharge limitations set forth in the NPDES Permit may constitute a major Federal action significantly affecting the quality of the human environment.

7. The Parties further recognize that, prior to selecting one or a combination of treatment technologies to achieve compliance with the numeric discharge limitations set forth in the NPDES Permit, the Corps must satisfy its obligations pursuant to the National Environmental Policy Act ("NEPA"), 42 U.S.C. §§ 4321, et seq.

18. The Parties recognize that implementation (i.e., full design and construction) of one or more of the treatment technologies necessary to achieve compliance with the numeric discharge limitations set forth in the NPDES Permit may require the Corps to obtain

approvals, permits or some other form of authorization from local and/or federal agencies other than EPA, such as the State Historic Preservation Office or the National Park Service.

V. COMPLIANCE PROGRAM

19. The Corps agrees to take any and all necessary steps within its power to achieve compliance with the numeric discharge limitations set forth in the NPDES Permit as soon as practicable, consistent with its obligations pursuant to NEPA. Such steps will include, but not be limited to, the activities outlined in this section. To the extent the Corps is able to achieve compliance more expeditiously than the timeframes set forth in this FFCA, the Corps shall do so.

20. No later than May 28, 2004, the Corps shall complete an alternatives evaluation and a disposal study. The purpose of the alternatives evaluation and disposal study shall be to identify a range of engineering and/or best management practices that will cause the discharge from the Washington Aqueduct to achieve compliance with the numeric discharge limitations set forth in the NPDES Permit. The Corps shall notify and provide copies to EPA within 30 days of the completion of the alternatives evaluation and disposal study.

21. No later than December 20, 2004, the Corps shall complete and submit to EPA an analysis of the range of engineering and/or best management practices identified by the evaluation and study described in Paragraph 20 that will cause the discharge from the Washington Aqueduct to achieve compliance with the numeric discharge limitations set forth in the NPDES Permit. This analysis may be a free-standing document or may be a draft Environmental Assessment (EA) or draft Environmental Impact Statement (EIS). If the analysis is a free-standing document, the document should be in a format capable of being incorporated into a draft EA or EIS. In preparing this analysis, the Corps shall seek the views of EPA, the National Park Service, United States Fish and Wildlife Service, the National Marine Fisheries Service, the District of Columbia, representatives of the District of Columbia Advisory Neighborhood Commissions, the Wholesale Customers, other interested parties and members of the public. Engineering/best management practices that shall be considered as part of this analysis include, but shall not be limited to, the collection, concentration and transport of sediments from the Georgetown sedimentation basins to the Dalecarlia property, off-site disposal options and other changes of procedure to achieve compliance with the numeric discharge limits set forth in the NPDES Permit.

22. No later than June 3, 2005, the Corps shall identify in a notice to EPA the engineering/best management practices it will implement in order to achieve compliance with the numeric discharge limitations set forth in the NPDES Permit and a schedule for implementing the identified engineering/best management practices as expeditiously as

practicable, consistent with best engineering judgment. The schedule shall include major milestones, including selection of a contractor, preliminary design, and final design, as well as the construction phase. The schedule shall achieve compliance with the numeric discharge limitations set forth in the NPDES Permit at one or more of the sedimentation basins no later than March 1, 2008, and to achieve full compliance with the numeric discharge limitations at all basins no later than December 30, 2009.

23 EPA shall notify the Corps within thirty (30) days of receiving the schedule described in Paragraph 22 above whether EPA agrees that the schedule represents the most expeditious practicable schedule consistent with best engineering judgment. Upon agreement between EPA and the Corps regarding the schedule, the schedule will be incorporated automatically into this FFCA. To the extent the Corps and EPA disagree regarding the schedule described in Paragraph 22 above, the Parties shall utilize the Conflict Resolution procedures described in Paragraphs 37-46 herein. During the Conflict Resolution process, the Corps shall proceed with implementing the engineering/best management practices necessary to achieve compliance with the numeric discharge limitations set forth in the NPDES Permit as expeditiously as practicable but in no case shall the Corps proceed less expeditiously than the the schedule described in Paragraph 22 above.

24. The Corps will exercise its best efforts to satisfy all requirements of NEPA consistent with the timeframes provided herein.

25. The Corps agrees that it shall immediately comply with all effective provisions of the NPDES Permit (including the prohibitions on discharges during the Spring Spawning Season) other than the numeric discharge limitations described in Exhibit B. In addition, until such time as the Corps has fully implemented all engineering/best management practices necessary to achieve compliance with the numeric discharge limitations set forth in the NPDES Permit, the Corps agrees that it shall not discharge through Outfall 002 (discharge from Dalecarlia Sedimentation Basin Nos. 1,2,3 and 4), unless the flow in the Potomac River is equal to or greater than 800 million gallons per day (mgd) as measured at the gauge station at Little Falls (2.64 feet in river elevation). Until such time as the Corps has fully implemented all engineering/best management practices necessary to achieve compliance with the numeric discharge limitations set forth in the NPDES Permit, the Corps agrees that it shall not discharge through Outfall 003 (discharge from Georgetown Sedimentation Basins Nos. 1 and 2) and Outfall 004 (discharge from Georgetown Sedimentation Basin No. 1), unless the flow in the Potomac River is equal to or greater than 1500 million gallons per day (mgd) as measured at the gauge station at Little Falls (2.90 feet in river elevation).

26. Until such time as the Corps has fully implemented all engineering/best management practices necessary to achieve compliance with the numeric discharge limitations set forth in the NPDES Permit, the Corps agrees that it shall increase the duration of the discharge

(which includes a step of an initial draining of flocculent/sediment-laden water and a step that is a final flushing of remaining flocculent/sediment) from Outfalls 003 and 004 to a minimum of thirty-six (36) hours per basin, with each discharge step at a constant rate on an hourly basis. The 36-hour period represents double the 18-hour period that is the current practice of the Corps. The Corps agrees to exercise best efforts, taking into consideration the projected flow rate of the river, its obligations under the Safe Drinking Water Act, and customer demand, to increase the duration of the discharge (which includes both above-described steps) from Outfalls 003 and 004 to 48 hours per basin, with each discharge step at a constant rate on an hourly basis. In addition, the Corps agrees to increase the amount of untreated process water that is used to flush and clean each of the Georgetown sedimentation basins to twice the amount used for each cleaning in calendar year 2001 (which, for Georgetown Basin No. 1, will be a new minimum of 3 million gallons, and for Georgetown Basin No. 2 will be a new minimum of 5 million gallons). Any upset or bypass that occurs at the Washington Aqueduct shall be governed by the upset and bypass provisions of Part II, Section B of the NPDES Permit. Provided that all other provisions of Part II, Section B of the NPDES Permit applicable to a bypass are satisfied, the diversion of waste streams from any portion of the treatment facilities includes an inability to control the timing of a discharge. Any bypass subject to Part II, Section B.3.b. of the NPDES Permit ("Bypass not exceeding limitations") shall comply with the numeric effluent limitations set forth in Exhibit B. Provided that all other provisions of Part II, Section B of the NPDES Permit applicable to an upset are satisfied, an upset may include a discharge that results from the inability to control the timing of a discharge. During any upset or bypass that occurs during the spring spawning season, the Corps shall use best efforts to slow the rate of flocculent/sediment discharge from Outfalls 003 and 004 to seventy-two (72) hours per basin.

27. The Corps agrees that it shall notify EPA, the District of Columbia Department of Health, and the Office of the Superintendent of the Chesapeake and Ohio Canal National Historical Park both orally (which may include by voice message) and in writing (which may include facsimile or electronic mail) at least twelve (12) hours in advance of any discharge from Outfalls 002, 003 and 004. The Corps agrees that it shall notify the District of Columbia Department of Health and the Superintendent of the Chesapeake and Ohio Canal National Historical Park both orally (which may include by voice message) and in writing (which may include facsimile or electronic mail) at least forty-eight (48) hours in advance of any discharge from Outfalls 006 and 007.

28. The Corps' officers, agents, contractors, servants, employees, successors, assigns, and all persons, departments, agencies, firms and corporations in active concert or participation with them shall take all necessary steps to ensure compliance with provisions of the Agreement. As long as this FFCA is in effect, the Corps shall give written notice of this Agreement to any prospective successor in interest and EPA at least ninety (90) calendar days prior to transfer of ownership or operation of the Facility.

29. In any action to enforce this Agreement, the Corps agrees that it shall not raise as a defense the avoidable failure of any of its officers, agents, servants, employees, successors, or assigns, within the scope of their employment, to take all actions necessary to comply with this Agreement. To the extent within its control or the control of its officers, agents, servants, employees, successors, or assigns, as recognized by federal law, the Corps agrees that it shall not raise as a defense the avoidable failure of its contractors, or of any other persons, departments, agencies, firms or corporations in active concert or participation with them, to take all actions necessary to comply with this Agreement.

IV. REPORTING

30. The Corps shall submit a written status report to EPA no later than sixty (60) calendar days after the end of each fiscal year quarter. The status report shall be submitted in addition to any other reporting or certification required under this Agreement or pursuant to law, regulation, or the Permit. The status report shall state and describe the cause of any failure to comply with this Agreement and at a minimum shall include: (1) the deadlines and other milestones which the Corps was required to meet during the reporting period; (2) the progress it made toward meeting them; (3) the reasons for any noncompliance; and (4) a description of any matters relevant to the status of its compliance with this Agreement.

31 Notification to EPA of any noncompliance with any provision of the Agreement or anticipated delay in performing any obligation under the Agreement shall not excuse the Corps' noncompliance or anticipated delay.

32. Unless specified otherwise, when written notification to or communication with EPA is required by the terms of the Agreement, it shall be addressed as follows:

Chief
NPDES Branch (3WP31)
Office of Compliance and Enforcement
Water Protection Division
U.S. EPA Region III
1650 Arch Street
Philadelphia, PA 19103

33. Each notification or communication to EPA shall be deemed submitted on the date it is postmarked, and shall be sent by certified mail, return receipt requested. The Corps shall maintain records of each notification or communication for the duration of the Agreement.

34. All submissions provided pursuant to this Order shall be signed by a duly authorized representative of the Corps who has personal knowledge of the submission's contents.

Each submission shall be admissible as evidence in any proceeding to enforce this Agreement. Each submission shall include the following certification:

> "I certify that the information contained in or accompanying this submission is true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

VII. COMPLIANCE WITH OTHER LAWS AND REGULATIONS

35. Compliance with the terms of this Agreement in no way affects or relieves the Corps of its obligation to comply with all applicable requirements of the Act, and regulations promulgated thereunder, or other applicable requirements of Federal, state, or local law.

VIII. RIGHT OF ENTRY

36. EPA, its contractors, and other authorized representatives shall have the right to enter the Washington Aqueduct to conduct any inspection, including but not limited to record inspection, sampling testing, or monitoring they believe is necessary to determine the Corps' compliance with the Agreement.

X. CONFLICT RESOLUTION

37. In the event of any conflict involving violations of this Agreement, US EPA and the Corps shall meet promptly and work in good faith in an effort to reach a mutually agreeable resolution of the dispute.

38. Except as specifically set forth elsewhere in this Agreement, if a dispute arises under this Agreement, the procedures of this Section shall apply. In addition, during the pendency of any dispute, the Corps agrees that it shall continue to implement those portions of this Agreement which are not in dispute.

39. The pendency of any dispute under this Section shall not affect the Corps' responsibility to perform the work required by this Agreement in a timely manner, except that the time period for completion of work affected by such dispute may, at EPA's sole discretion, 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 specified herein. All elements of the work required by this Agreement which are not affected by the dispute shall continue and be completed in accordance with applicable schedule.

40. The Parties to this Agreement shall make reasonable efforts to informally resolve disputes at the Project Manager or immediate supervisor level. With respect to EPA, ""Project

Manager" means the Chief, NPDES Branch, Water Protection Division, EPA Region III, or any duly identified successor. With respect to the Corps, "Project Manager" means the Chief, Planning and Engineering Branch, Washington Aqueduct or any duly- identified successor. If resolution cannot be achieved informally, the procedures of this Section shall be implemented to resolve a dispute.

41 Within fourteen (14) days after any action which leads to or generates a dispute, the Corps shall submit to EPA a written statement of dispute setting forth the nature of the dispute, the Corps' position with respect to the dispute, and the information the Corps is relying upon to support its position. If the Corps does not provide such written statement to EPA within this fourteen (14) day period, the Corps shall be deemed to have agreed with EPA's position with respect to the dispute.

42. Upon EPA receipt of the written statement of dispute from the Corps, the Parties shall engage in dispute resolution among the Project Managers and/or (their immediate supervisors). The Parties shall have fourteen (14) days from the receipt by EPA of the written statement of dispute to resolve the dispute. During this period, the Project Managers shall meet or confer as many times as necessary to discuss and attempt resolution of the dispute. To the extent appropriate, the Project Managers may meet with and consider the views of the Wholesale Customers. If agreement cannot be reached on any issue within this fourteen (14) day period, the Corps may, within ten (10) days after the conclusion of the fourteen (14) days dispute resolution period, submit a written notice to EPA elevating the dispute to the Dispute Resolution Committee ("DRC") for resolution. If the Corps does not elevate the dispute to the DRC within this ten (10) day period, the Corps shall be deemed to have agreed with EPA's position with respect to the dispute.

43. The DRC will serve as a forum for resolution of disputes for which agreement has not been reached pursuant to the foregoing paragraphs in this Section. Following elevation of a dispute to the DRC, the DRC shall have thirty (30) days to unanimously resolve the dispute. The US EPA representative on the DRC is the Director, Water Protection Division, EPA Region III. The Corps' designated member is the Chief, Washington Aqueduct. Delegation of the authority from a Party's representative on the DRC to an alternate shall be provided to the other Party in wiriting within seven (7) days of delegation.

44. If unanimous resolution by the DRC is not achieved within this thirty (30) day period, the Corps may, within twenty-one (21) days after the conclusion of the thirty (30) day dispute resolution period, submit a written Notice of Dispute to the Regional Administrator of U.S. EPA Region III for final resolution of the dispute. In the event that the dispute is not elevated to the Regional Administrator of U.S. EPA Region III within the designated twenty-one (21) day period, the Corps shall be deemed to have agreed with the original EPA position with respect to the dispute.

45. Within twenty-one (21) days of resolution of a dispute pursuant to the procedures specified in this Section, the Corps shall incorporate the resolution and final determination into the appropriate statement of work, plan, schedule, or procedures and proceed to implement this Agreement according to the amended statement of work, plan, schedule, or procedures.

46. Resolution of a dispute pursuant to this Section of the Agreement constitutes a final resolution of any dispute arising under this Agreement. The Parties shall abide by all term and conditions of any final resolution of dispute obtained pursuant to this Section of the Agreement.

XI. FORCE MAJEURE

47. The Corps' obligations under the Compliance Program section of this Agreement shall be performed as set forth in this Agreement unless performance is prevented or delayed by a force majeure event. For purposes of this Agreement, "force majeure" is defined as any event arising from causes beyond the control of the Corps or of entities controlled by the Corps, including but not limited to contractors and subcontractors, which could not be overcome by the due diligence of the Corps or the entities controlled by the Corps, which delays or prevents the performance of any obligation under this Agreement, including acts of God or war, labor unrest, civil disturbance and any judicial orders which prevent compliance with the provisions of this Agreement. Force majeure shall not include increased costs of performance of any activity required by this Agreement, the failure of the Wholesale Customers to fund any activity necessary to achieve compliance with this Agreement or the failure to apply for any required permits or approvals or to provide all information required therefore in a timely manner, nor shall it include the failure of contractors or employees to perform or the avoidable malfunction of equipment.

48. If the Corps ~~is~~ having difficulty meeting its obligations as set forth in this Agreement due to a force majeure event, it shall notify EPA promptly by telephone of any change in circumstances giving rise to the suspension of performance or the nonperformance of any obligation under this Agreement. In addition, within fourteen (14) days of the occurrence of circumstances causing such difficulty, it shall provide a written statement to EPA of the reason(s), the anticipated duration of the event and delay, the measures taken and to be taken to prevent or minimize the time and effects of failing to perform or delaying any obligation, and the timetable for the implementation of such measures. Failure to comply with the notice provisions shall constitute a waiver of any claims of force majeure. The Corps shall take all reasonable steps to avoid and/or minimize any such delay.

49. The burden of proving that any delay is caused by circumstances beyond the control of the Corps shall rest with the Corps.

XII. MODIFICATIONS

50. The requirements, timetable and deadline under this Agreement may be modified upon receipt of a timely request for modification and when good cause exists for the requested modification. Any request for modification by the Corps shall be submitted in writing and shall specify: the requirement, timetable or deadline for which a modification is sought; the good cause for the extension; and any related requirement, timetable, deadline or schedule that would be affected if the modification were granted.

51 Good cause exists for a modification when sought in regard to: a force majeure event; a delay caused, or which is likely to be caused, by the grant of an extension in regard to another timetable and deadline or schedule; a delay caused by failure of a regulatory agency to perform its duties in a timely manner where regulatory action is necessary to proceed with construction and where the Corps has made a timely and complete request for action from the regulatory agency; acceptable scientific data exists which demonstrates that another requirement, deadline or timetable would be adequate to achieve the numeric discharge limitations set forth in the NPDES Permit, protect water quality and achieve the goals of the Clean Water Act; and other event or series of events mutually agreed to by the Parties and constituting good cause.

52. Within twenty-one (21) calendar days of receipt of a request for a modification, EPA shall advise the Corps of its position on the request. If EPA does not concur in the modification, it shall include in its statement of nonconcurrence an explanation of the basis for its position.

53 In the event that the NPDES Permit is modified, through appeal, completion of ongoing consultation between EPA and the National Marine Fisheries Service, or otherwise, EPA and the Corps agree to negotiate modificiations to this FFCA to the extent necessary for the Corps to achieve compliance with the discharge limitations in the final NPDES Permit pursuant to a schedule as consistent as practicable with the one set forth in this FFCA.

XIII. FUNDING

54. It is the expectation of the Parties to this Agreement that all obligations of the Corps will be fully funded. The Corps agrees to use every legally available mechanism to seek sufficient funding to fulfill its obligations under the Agreement.

55. Provision herein shall not be interpreted to require obligations or payment of funds in violations of the Anti-Deficiency Act, 31 U.S.C. § 1341. In cases where payment or obligation of funds would constitute a violation of the Anti-Deficiency Act, the dates established requiring the payment or obligation of such funds shall be appropriately adjusted within the terms delineated in this Agreement.

If funds are not available to fulfill the Corps' obligations under this Agreement, EPA reserves the right to initiate an action against any other person, or to take any action which would be appropriate absent this agreement.

XIV. GENERAL PROVISIONS

57. The Parties agree that the terms and conditions of this Agreement are enforceable as appropriate by any person pursuant to Section 505 of the Act, 33 U.S.C. § 1365. Terms and conditions of this Agreement changed by an agreed upon modification shall be enforceable as changed. Nothing in this Agreement shall be deemed to waive the sovereign immunity of the United States beyond what is already accomplished in the Clean Water Act.

58. This Agreement was negotiated and executed by the Parties in good faith to ensure compliance with the law. No part of this Agreement constitutes or should be interpreted or construed as an admission of fact or of liability under federal, state or local laws, regulations, ordinances, or common law or as an admission of any violations of any law, regulations, ordinances, or common law. By entering into this Agreement, the Corps does not waive, other than as to the enforcement of this Agreement pursuant to the terms contained herein, any claim, right, or defense that it might raise in any other proceeding or action.

59. If any provision or authority of this Agreement or the application of this Agreement to any party or circumstance is held by any judicial or administrative authority to be invalid, the application of such provisions to other parties or circumstances and the remainder of the Agreement shall remain in force and shall not be affected thereby.

The effective date of this Agreement shall be the date on which it is signed by the last signatory.

61 This Agreement shall be effective if signed in counterparts.

62. In computing any period of time described as "days" herein, all references to "days" refer to "calendar days." The last day of a time period shall be included, unless it is a Saturday, a Sunday or a legal holiday, in which event the period runs until the end of the next day that is not a Saturday, a Sunday or a legal holiday.

63. This Agreement shall terminate once the Corps has met all of its obligations herein, as determined by the mutual consent of the Parties and evidenced in writing.

Date

Jon M. Capacasa, Director
Water Protection Division
US EPA Region III

June 11, 2003
Date

Thomas P. Jacobus, P.E.
General Manager
Washington Aqueduct
U.S. Army Corps of Engineers

63. This Agreement shall terminate once the Corps has met all of its obligations herein, as determined by the mutual consent of the Parties and evidenced in writing.

June 12, 2003
Date

Jon M. Capacasa, Director
Water Protection Division
US EPA Region III

Date

Thomas P. Jacobus, P.E.
General Manager
Washington Aqueduct
U.S. Army Corps of Engineers

ACTION: Notice of Advisory Committee Meeting Cancellations.

SUMMARY: On Thursday, September 11, 2003 (68 FR 53597) the Department of Defense announced closed meetings of the Defense Science Board Task Force on Patriot Systems Performance. The meetings scheduled for January 7–8, 2004, were cancelled.

Dated: January 5, 2004.

Patricia L. Toppings,

Alternate OSD Federal Register Liaison Officer, Department of Defense.

[FR Doc. 04–506 Filed 1–9–04; 8:45 am]

BILLING CODE 5001–06–M

DEPARTMENT OF DEFENSE

Office of the Secretary

Strategic Environmental Research and Development Program, Scientific Advisory Board

AGENCY: Department of Defense.

ACTION: Notice.

SUMMARY: In accordance with section 10(a)(2) of the Federal Advisory Committee Act (Pub. L. 92–463), announcement is made of the following Committee meeting:

DATES: March 30, 2004 from 0800 a.m. to 12:10 p.m.; March 31, 2004 from 0800 a.m. to 15:30 p.m. and April 1, 2004 from 0800 a.m. to 12:45 p.m.

ADDRESSES: The Shelter Pointe Hotel and Marina, 1551 Shelter Island Drive, San Diego, CA 92106.

FOR FURTHER INFORMATION CONTACT: Ms. Veronica Rice, SERDP Program Office, 901 North Stuart Street, Suite 303, Arlington, VA or by telephone at (703) 696–2119.

SUPPLEMENTARY INFORMATION:

Matters To Be Considered

Research and Development proposals and continuing projects requesting Strategic Environmental Research and Development Program funds in excess of $1M will be reviewed.

The meeting is open to the public. Any interested person may attend, appear before, or file statements with the Scientific Advisory Board at the time and in the manner permitted by the Board.

Dated: January 5, 2004.

Patricia L. Toppings,

Alternate OSD Federal Register Liaison Officer, Department of Defense.

[FR Doc. 04–507 Filed 1–9–04; 8:45 am]

BILLING CODE 5001–06–M

DEPARTMENT OF DEFENSE

Department of the Army; Corps of Engineers

Intent To Prepare a Draft Environmental Impact Statement for a Proposed Water Treatment Residuals Management Process for the Washington Aqueduct, Washington, DC

AGENCY: Department of the Army, U.S. Army Corps of Engineers, DOD.

ACTION: Notice of intent.

SUMMARY: The Washington Aqueduct seeks to plan and create a water treatment residuals management process that will comply with the standards established in National Pollutant Discharge Elimination System (NPDES) Permit DC0000019 and will allow for continued safe, reliable, and cost effective production of drinking water. Washington Aqueduct generates residual solids, a byproduct of producing drinking water, and currently periodically discharges this material to the Potomac River. The residuals consist of river sediment and solid materials generated by adding coagulant as part of the drinking water treatment process. NPDES Permit DC0000019 includes effluent standards for the discharge of the water treatment residuals that cannot be achieved by the current Washington Aqueduct residual management process.

This notice advises the public that pursuant to Section 102(2)(c) of the National Environmental Policy Act (NEPA) of 1969, as amended, Washington Aqueduct, which operates the Dalecarlia and McMillan Water Treatment Plants, will prepare a combined Feasibility Study/Draft Environmental Impact Statement. The combined studies will identify, analyze, and evaluate alternatives for reducing or eliminating the discharge of water treatment residuals from the Dalecarlia Water Treatment Plant and Georgetown Reservoir to the Potomac River in order to comply with NPDES Permit DC0000019, effective April 15, 2003, and a Federal Facility Compliance Agreement, signed June 12, 2003. In addition, Washington Aqueduct will consider alternate methods of managing the Potomac River sediment that accumulates in the Dalecarlia Reservoir.

DATES: A public scoping meeting will be held on Wednesday, January 28, 2004 between 7 and 9 p.m. at St. Patrick's Episcopal Church and Day School, 4700 Whitehaven Parkway, NW., Washington, DC 20007–1586. Directions are available at *http://washingtonaqueduct.nab.usace.army.mil.*

FOR FURTHER INFORMATION CONTACT: Questions about the proposed action and the Draft Environmental Impact Statement (DEIS) can be addressed to: Michael C. Peterson, (202) 764–0025, *michael.c.peterson@usace.army.mil*, Environmental Engineer, Washington Aqueduct Division, Baltimore District, U.S. Army Corps of Engineers, 5900 MacArthur Boulevard, Washington, DC 20016.

SUPPLEMENTARY INFORMATION:

1. Background

Washington Aqueduct operates the Dalecarlia and McMillan Water Treatment Plants in Washington, DC, which provide potable water to over one million persons in the District of Columbia and Northern Virginia. Raw water diverted from the Potomac River is collected in the Dalecarlia Reservoir, where river sediment settles naturally. The sediment periodically dredged from the Dalecarlia Reservoir is not returned to the Potomac River.

Raw water flows from the Dalecarlia Reservoir to the Dalecarlia Water Treatment Plant and also via the Georgetown Reservoir to the McMillan Water Treatment Plant. Aluminum sulfate, the chemical used for coagulation, is added from the Dalecarlia Plant to the raw water for both the Dalecarlia and McMillan Water Treatment Plants. Chemically included sedimentation takes place in four basins at the Dalecarlia Water Treatment Plant and two basins at the Georgetown Reservoir. The Dalecarlia facility employs 36 rapid dual media filters and the McMillan facility is equipped with 12 rapid dual media filters. Except for the filter backwash water at the McMillan Water Treatment Plant, which is recycled to the McMillan Reservoir, and the filter backwash water at the Dalecarlia Water Treatment Plant, which is recycled to the Dalecarlia Reservoir, all sedimentation residuals are currently returned to the Potomac River.

2. Regulatory Mandate

In the recently issued NPDES permit, the Environmental Protection Agency has significantly reduced the allowable concentration of residuals that Washington Aqueduct can discharge to the Potomac. This change in the permit requires Washington Aqueduct to evaluate alternate methods of residuals collection, processing, conveyance, and disposal. Washington Aqueduct and Environmental Protection Agency Region III entered into a Federal Facility

Compliance Agreement to allow Washington Aqueduct to continue to produce drinking water while developing and implementing a new residuals management process. The Federal Facilities Compliance Agreement contains deadlines for various compliance milestones including the following NEPA documents (deadline in parentheses):

• Description of Proposed Actions and Alternatives submitted to Environmental Protection Agency Region III (May 28, 2004)

• Draft Environmental Impact Statement submitted to Environmental Protection Agency Region III (December 20, 2004)

• Final Record of Decision submitted to Environmental Protection Agency Region III (June 3, 2005)

3. Objectives of Proposed Action

The objectives of the proposed residuals management process are as follows, not necessarily in order of precedence (measurement indicators in parentheses):

• To allow Washington Aqueduct to achieve complete compliance with NPDES Permit DC00000019 and all other federal and local regulations.

• To design a process that will not impact current or future production of safe drinking water reliably for the Washington Aqueduct customers. (Peak design flow of drinking water)

• To reduce, if possible, the quantity of solids generated by the water treatment process through optimized coagulation or other means. (Mass or volume of solids generated)

• To minimize, if possible, impacts on various local or regional stakeholders and minimize impacts on the environment. (Traffic, noise, pollutants, etc.)

• To design a process that is cost-effective in design, implementation, and operation. (Capital, operations, and maintenance expenses)

4. Alternatives

Various alternatives will be considered that include, but are not limited to, different methods of collection, processing, conveyance, and disposal of the residuals as well as the no action alternative. Processing will be evaluated at both onsite and offsite facilities. Conveyance and disposal options are anticipated to include discharging to the sewer, barging to a remote processing or disposal site, trucking to a remote disposal site, pumping to a remote processing facility, and dewatering onsite and disposing in a dedicated monofill.

The alternatives evaluated in the DEIS will be analyzed in depth in areas to include, but not limited to, predicted changes to air quality, aquatic resources, terrestrial and wetland resources, cultural resources, traffic, solid and toxic waste, and infrastructure as well as any environmental justice concerns. Cumulative, secondary, indirect and other associated impacts will be evaluated.

5. Scoping Process

The participation of all affected and interested federal, state, and local agencies, environmental and neighborhood groups, Indian tribes, and individuals is welcome and encouraged. Anyone wishing to contribute ideas or information may submit a comment to the contact above during the 30 day scoping period that immediately follows the publication of this notice. Alternatively, comments will be collected online at *http://washingtonaqueduct.nab.ussace.army.mil.* Comments and other information can also be presented at the public scoping meeting (see DATES).

6. Availability of the DEIS

The Washington Aqueduct anticipates the DEIS will be made available to the public in October 2004.

Dated: January 5, 2004.

Thomas P. Jacobus,

Chief, Washington Aqueduct.

[FR Doc. 04–441 Filed 1–9–04; 8:45 am]

BILLING CODE 3710–41–M

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

Sunshine Act Meeting

Pursuant to the provisions of the "Government in the Sunshine Act" (5 U.S.C. 552b), notice is hereby given of the Defense Nuclear Facilities Safety Board's (Board) meeting described below. The Board will also conduct a series of public hearings pursuant to 42 U.S.C. 2286b and invites any interested persons or groups to present any comments, technical information, or data concerning safety issues related to the matters to be considered.

TIME AND DATE OF MEETING: 9 a.m., February 3, 2004.

PLACE: Defense Nuclear Facilities Safety Board, Public Hearing Room, 625 Indiana Avenue NW., Suite 300, Washington, DC 20004–2001. Additionally, as a part of the Board's E-Government initiative, the meeting will be presented live through Internet video streaming. A link to the presentation will be available on the Board's Web site (*http://www.dnfsb.gov*).

STATUS: Open. While the Government in the Sunshine Act does not require that the scheduled discussion be conducted in a meeting, the Board has determined that an open meeting in this specific case furthers the public interests underlying both the Sunshine Act and the Board's enabling legislation.

MATTERS TO BE CONSIDERED: The Board has been reviewing the Department of Energy's (DOE) current oversight and management of the contracts and contractors it relies upon to accomplish the mission assigned to DOE under the Atomic Energy Act of 1954, as amended. We will focus on what impact, if any, DOE's new initiatives may have or might have had upon assuring adequate protection of the health and safety of the public and workers at DOE's defense nuclear facilities. The seventh public meeting will collect information needed to understand and address any health or safety concerns that may require Board action. This will include, but is not limited to, presentations by the Department of Energy and the National Nuclear Security Administration (NNSA) to explain their contract management and oversight initiatives.

The Board has identified several key areas that will be examined in public meetings. In the February 3rd meeting, the Board will hear from DOE's Office of Environment, Safety, and Health concerning its roles and responsibilities in the oversight process, and from NNSA regarding its review of applicable lessons learned from the Columbia Accident Investigation Board Report. The Board will continue to explore in more depth Federal management and oversight policies being developed by DOE and NNSA for defense nuclear facilities. The information gathered will explore Federal contract management and oversight experience and will provide relevant reference experience. The public hearing portion is independently authorized by 42 U.S.C. 2286b.

FOR FURTHER INFORMATION CONTACT: Kenneth M. Pusateri, General Manager, Defense Nuclear Facilities Safety Board, 625 Indiana Avenue NW., Suite 700, Washington, DC 20004–2901, (800) 788–4016. This is a toll-free number.

SUPPLEMENTARY INFORMATION: Requests to speak at the hearing may be submitted in writing or by telephone. The Board asks that commentators describe the nature and scope of their oral presentation. Those who contact the Board prior to close of business on February 2, 2004, will be scheduled for

CENAB-WA-EN 13 APRIL 2005

MEMORANDUM FOR RECORD

SUBJECT: Washington Aqueduct Coordination with Agencies for Development of a Draft Environmental Impact Statement for a Proposed Water Treatment Residuals Management Process

1. In January 2004, Washington Aqueduct initiated the development of a Draft Environmental Impact Statement (DEIS) for a proposed water treatment residuals management process. In order to formally seek coordination and information for this DEIS from other agencies and organizations, Washington Aqueduct sent a series of letters to various representatives of these entities. Copies of the letters can be found in the Administrative Record for the DEIS.

2. The initial set of letters (Letter #1), sent in January 2004, included the Notice of Intent to prepare the DEIS, an invitation to the scoping meeting, or in a few instances, the announcement that the scoping meeting had already occurred. The mailing list for Letter #1 can be found at Tab A.

3. The next set of letters (Letter #2), sent in May 2004, included a brief description of the alternatives that were determined to be feasible related to the Project Purpose and Need, and an invitation to a public meeting. The mailing list for Letter #2 can be found at Tab B.

4. A letter was sent to the District of Columbia Water and Sewer Authority Engineering Department in July 2004 requesting documentation and an opportunity to meet and discuss specific engineering issues related to the alternative that involved construction of facilities at the Blue Plains Advanced Wastewater Treatment Plant. Previous meetings had been with a member of the operations staff at Blue Plains.

5. The next set of letters (Letter #3), sent in August 2004, included discussion about the alternatives and the public interest related to the development of the DEIS, and an announcement of the availability of various documents on the project website (Description of Proposed Action and Alternatives, Engineering Feasibility Study, and Scope of Statement). In addition, the letters included an invitation to a public meeting. The mailing list for Letter #3 can be found at Tab C.

6. Also in August, Washington Aqueduct sent several agencies tasked with protection of resources such as natural and historical resources specific letter seeking formal consultation regarding the feasible alternatives and the Scope of Statement. The resources agencies that were sent this letter were as follows: the Chesapeake Field Office of the United States Fish and Wildlife Service; the Protected Resource Division of the National Marine Fisheries Service; the Maryland Department of Natural Resources; the Fisheries and Wildlife Division of the District of Columbia Department of Health; the Maryland State Historic Preservation Officer; the District of Columbia State Historic Preservation Officer. Responses were received from the National Marine Fisheries Service and the Maryland Department of Natural Resources. Subsequent letters to the resource protection agencies were sent in February 2005 that described the

alternative that had been added to the original set of alternatives identified as satisfying the Project Purpose and Need. In addition, a third letter was sent on April 4, 2005 to the Chesapeake Field Office of the United States Fish and Wildlife Service in order to reiterate the request for consultation and information relevant to Section 7 of the Endangered Species Act as well as to seek consultation relevant to the U.S. Fish and Wildlife Coordination Act.

7. Other agencies were sent letters in August seeking coordination meetings or information including: the National Capital Planning Commission; the National Capital Region of the National Park Service; the C&O Canal National Historic Park of the National Park Service; the Bureau of Environmental Quality of the District of Columbia Department of Health; the Attorney General for the District of Columbia; the Solid Waste Management office of the District of Columbia Department of Public Works, the Facility Manager of the Anacostia Naval Station; the Commander of the 11th Civil Engineering Squadron at Bolling Air Force Base.

8. In September, two sets of letters were sent to the agencies and organizations listed at Tab C (Letter #4) and Tab D (Letter #5). These letters discussed the public meeting that was held on Setepmber 7 and announced an additional public meeting on September 28.

9. Another set of letters (Letter #6) were sent in November 2004 announcing a fifth meeting. The list of agency and organization recipients are at Tab E.

10. In December 2004, two letters were sent to officials in the Department of the Navy regarding a request to consider allowing Washington Aqueduct to use space at the Navy's Carderock facility.

11. Also in December 2004, a letter was sent to the National Capital Region of the National Park Service regarding a request to consider transfer or use of land for Washington Aqueduct near the Dalecarlia Water Treatment Plant in order to construct an access road to Canal Road and the Clara Barton Parkway. Consideration of and comments on an request for an exemption for Washington Aqueduct contracted trucks hauling water treatment residuals on National Park Service roads was also requested. In addition, the consideration of and comments on the potential construction of a facility at the Navy's Carderock facility was requested.

12. In February 2005, in addition to the letters sent to the resource protection agencies as indicated in paragraph 6, letters were sent to the National Capital Planning Commission and Montgomery County Park & Planning of the Maryland-National Capital Park & Planning Commission discussing the alternative that had been added to the original set of alternatives identified as satisfying the Project Purpose and Need

13. Although managers at both the Washington Suburban Sanitary Commission and Fairfax Water had previously indicated via e-mail messages that they would not accept Washington Aqueduct water treatment residuals at their respective facilities, in March 2005, Washington Aqueduct submitted letters to these water utilities, as well as the Central Intelligence Agency, the Federal Highway Administration, and the Public Works Office of the City of Rockville requesting use of their respective facilities.

Letter #1

Ms. Leslie A. Hotaling, Director
D.C. Department of Public Works
2000 14th Street, NW
Washington, DC 20001

Mr. Dan Tangherlini, Director
D.C. Department of Transportation
2000 14th Street, NW, 6th Floor
Washington, DC 20001

Mr. Tom Henderson, Administrator
Solid Waste Management
D.C. Department of Public Works
2000 14th Street, NW
Washington, DC 20001

Mr. Ira Palmer, Branch Chief
Fisheries and Wildlife Division
D.C. Department of Health
51 N Street, NE, 5th floor
Washington, DC 20002

Mr. Jerry N. Johnson
General Manager
D.C. Water and Sewer Authority
5000 Overlook Avenue, SW
Washington, DC 20032

Mr. Neil O. Albert, Director
D.C. Parks and Recreation Department
3149 16th Street, NW
Washington, DC 20010

Mr. Eric W. Price
Office of the Deputy Mayor for Planning
and Economic Development
John A. Wilson Building
1350 Pennsylvania Avenue, NW, Suite 317
Washington, DC 20004

Mr. James R, Collier, P.E.
Chief, Bureau of Environmental Quality
D.C. Department of Health
51 N Street, NE, 5th Floor
Washington, DC 20002

Mr. Donald Wambsgans, Program Manager
Air Quality Division
D.C. Department of Health
51 N Street, NE, 5th Floor
Washington, DC 20002

Ms. Cheryl Amisial
Program Manager
Soil Resources Management
D.C. Department of Health
51 N Street, NE, 6th Floor
Washington, DC 20002

Adrian H. Thompson, Chief
Fire and Emergency Medical Services
District of Columbia
1923 Vermont Avenue, NW
Washington, DC 20001

Charles H. Ramsey, Chief of Police
Metropolitan Police Department
Government of the District of Columbia
300 Indiana Avenue, NW
Washington, DC 20001

Mr. David J. Robertson
Executive Director
Metropolitan Washington Council
of Governments
777 North Capitol Street, NE, Suite 300
Washington, DC 20002-4201

Mr. John Wolflin, Field Supervisor
Chesapeake Bay Field Office
U.S. Fish and Wildlife Service
177 Admiral Cochrane Drive
Annapolis, MD 21401

Mr. Terry R. Carlstrom, Director
National Capital Region
National Park Service
1100 Ohio Drive, SW
Washington, DC 20242

Ms. Mary Colligan
Assistant Regional Administrator
Protected Resource Division
National Marine Fisheries Services
One Blackburn Drive
Gloucester, MA 01930-2298

Mr. Joe Fletcher
Fletcher's Boat House, Inc.
4940 Canal Road, N.W.
Washington, DC 20007

Mr. Neal Fitzpatrick, Executive Director
Audubon Naturalist Society
8940 Jones Mill Road
Chevy Chase, Maryland 20815

Ms. Patricia E. Gallagher
Executive Director
National Capital Planning Commission
401 9th Street, NW, Suite 500
Washington, DC 20576

Mr. Douglas M. Duncan
County Executive
Executive Office Building
101 Monroe Street
Rockville, MD 20850

Mr. James A. Caldwell, Director
Montgomery County Government
Department of Environmental Protection
255 Rockville Pike
Rockville, MD 20850

Mr. Albert J. Genetti, Jr., Director
Montgomery County Department of
Public Works and Transportation
101 Monroe Street; 10th Floor
Rockville, MD 20850-2450

Mr. Howard A. Denis
District 1 Councilmember
Montgomery County Council
100 Maryland Avenue
Rockville, MD 20850

Robert S. Summers, Ph.D., Director
Water Management Administration
Maryland Department of the Environment
1800 Washington Boulevard
Baltimore, MD 21230

Ms. Carol Schwartz
DC Council Chair of Public Works Committee
The John A. Wilson Building
1350 Pennsylvania Avenue, NW, Suite 105
Washington, DC 20004

Honorable George P. Radanovich
Chairman Subcommittee on National Parks,
Recreation, and Public Lands
United States House of Representatives
187 Ford House Office Building
Washington, DC 20515

Ms. Joyce A. Wilson
Deputy County Manager
Arlington County
2100 Clarendon Boulevard
Arlington, VA 22201

Mr. Daniel McKeever
City Manager
City of Falls Church
300 Park Avenue
Falls Church, VA 22046

Honorable Daniel E. Gardner
Mayor, City of Falls Church
300 Park Avenue
Falls Church, VA 22046

Mr. Sam Kem, Director
Department of Public Works
Arlington County
2100 Clarendon Boulevard
Arlington, VA 22201

Honorable Paul S. Sarbanes
309 Hart Senate Office Building
U.S. Senate
Washington, DC 20510

Mr. W. Tayloe Murphy, Jr.
Secretary of Natural Resources
Ninth Street Office Building, 7th Floor
202 N. Ninth Street
Richmond, VA 23219

Ms. Lisa Burcham, State Historic
Preservation Officer
Historic Preservation Division
D.C. Office of Planning
801 North Capitol Street, NE, Suite 4000
Washington, DC 20002

Mr. Don L. Klima, Director
Office of Federal Agency Programs
Advisory Council on Historic Preservation
1100 Pennsylvania Avenue, NW, Suite 803
Washington, DC 20004

Mr. Jerry L. Price
Chief Operating Officer
Sibley Memorial Hospital
5255 Loughboro Road, NW
Washington, DC 20016-2695

Ms. Melissa J. Lane, Chair
ANC 3B
PO Box 32312
Calvert Station
Washington, DC 20007

Ms. Nancy MacWood, Chair
ANC 3C
2737 Devonshire Place, NW
Washington, DC 20008

Ms. Amy Bauer McVey, Chair
ANC 3E
PO Box 9953
Friendship Station
Washington, DC 20016

Mr. Stu Ross, President
Palisades Citizens Association
PO Box 40603
Palisades Station
Washington, DC 20016

Mr. John Finney, Chair
ANC 3D Commissioner
5275 Watson Street, NW
Washington, DC 20016

Mr. Michael Nussman, President and CEO
American Sportfishing Association
225 Reinekers Lane, Suite 420
Alexandria, VA 22314

Mr. Tom Birch, Chair
ANC 2E
3265 S Street, NW
Washington, DC 20007

Mr. James D. Berry, Jr., Chair
ANC 5C
680 Rhode Island Avenue, NE, #H-4
Washington, DC 20002

Mr. Robert G. Burnley, Director
Virginia Department of Environmental
Quality
629 East Main Street
Richmond, Virginia 23219

Ms. Deborah R. Thomas, Chair
ANC 1B
P.O. Box 73710
Washington, DC 20009

Mr. Jim Graham
Councilmember Ward 1
1350 Pennsylvania Avenue, NW, Suite 406
Washington, DC 20004

Mr. Rob Gordon, Executive Director
National Wilderness Institute
P.O. Box 25766
Georgetown Station
Washington, D.C. 20007

Mr. Jack Evans
Ward 2 Councilmember
John A. Wilson Building
1350 Pennsylvania Avenue, NW, Room 106
Washington, DC 20004

Mr. David Brewster
Office of Maryland Senator Brian Frosh
446 Miller Senate Office Building
Annapolis, MD 21401-1991

Ms. Kathy Patterson
Councilwoman Ward 3
1350 Pennsylvania Avenue, NW, Suite 107
Washington, DC 20004

Mr. Nat Williams, Director
The Nature Conservancy of Maryland/D.C.
5410 Grosvenor Lane, Suite 100
Bethesda, MD 20814

Ms. Barbara Favola, Chairman
Arlington County Board
2100 Clarendon Boulevard, Suite 300
Arlington, VA 22201

Mr. Burton Gray, President
Cabin John Citizens Association
PO Box 31
Cabin John, MD 20818

Ms. Lucia Leith
Western Avenue Citizens Association
4626 Western Avenue
Bethesda, MD 20816

[redacted]

Mr. Raymond Roach
Washington DC Regional Office
Natural Resources Defense Council
1200 New York Ave., NW, Suite 400
Washington, DC 20005

Honorable Eleanor Holmes Norton
United States House of Representatives
2136 Rayburn House Office Building
Washington, DC 20515

Honorable Chris Van Hollen
United States House of Representatives
1419 Longworth House Office Building
Washington, DC 20515

Honorable Jim Moran
United States House of Representatives
2239 Rayburn Building
Washington, DC 20515-4608

Dr. Hamid Karimi, Program Manager
Watershed Protection Division
D.C. Department of Health
51 N Street, NE, 5th floor
Washington, DC 20002

Mr. George S. Rizzo
Drinking Water Program Manager
Mail Code: 3WP22
U.S. EPA Region III
1650 Arch Street
Philadelphia, PA 19103-2029

Mr. Charles H. Atherton, Secretary
U.S. Commission of Fine Arts
National Building Museum
401 F Street, NW, Suite 312
Washington, DC 20001-2728

Ms. Brenda Creel
Acting General Manager
for Environmental Services
City of Falls Church
300 Park Avenue
Falls Church, VA 22046

Letter #2

Ms. Leslie A. Hotaling, Director
D.C. Department of Public Works
2000 14th Street, NW
Washington, DC 20001

Mr. Dan Tangherlini, Director
D.C. Department of Transportation
2000 14th Street, NW, 6th Floor
Washington, DC 20001

Mr. Tom Henderson, Administrator
Solid Waste Management
D.C. Department of Public Works
2000 14th Street, NW
Washington, DC 20001

Mr. Ira Palmer, Branch Chief
Fisheries and Wildlife Division
D.C. Department of Health
51 N Street, NE, 5th floor
Washington, DC 20002

Mr. Jerry N. Johnson
General Manager
D.C. Water and Sewer Authority
5000 Overlook Avenue, SW
Washington, DC 20032

Mr. Neil O. Albert, Director
D.C. Parks and Recreation Department
3149 16th Street, NW
Washington, DC 20010

Mr. Eric W. Price
Office of the Deputy Mayor for Planning
and Economic Development
John A. Wilson Building
1350 Pennsylvania Avenue, NW, Suite 317
Washington, DC 20004

Mr. James R, Collier, P.E.
Chief, Bureau of Environmental Quality
D.C. Department of Health
51 N Street, NE, 5th Floor
Washington, DC 20002

Mr. Donald Wambsgans, Program Manager
Air Quality Division
D.C. Department of Health
51 N Street, NE, 5th Floor
Washington, DC 20002

Ms. Cheryl Amisial
Program Manager
Soil Resources Management
D.C. Department of Health
51 N Street, NE, 6th Floor
Washington, DC 20002

Adrian H. Thompson, Chief
Fire and Emergency Medical Services
District of Columbia
1923 Vermont Avenue, NW
Washington, DC 20001

Charles H. Ramsey, Chief of Police
Metropolitan Police Department
Government of the District of Columbia
300 Indiana Avenue, NW
Washington, DC 20001

Mr. David J. Robertson
Executive Director
Metropolitan Washington Council
of Governments
777 North Capitol Street, NE, Suite 300
Washington, DC 20002-4201

Mr. John Wolflin, Field Supervisor
Chesapeake Bay Field Office
U.S. Fish and Wildlife Service
177 Admiral Cochrane Drive
Annapolis, MD 21401

Mr. Terry R. Carlstrom, Director
National Capital Region
National Park Service
1100 Ohio Drive, SW
Washington, DC 20242

Ms. Mary Colligan
Assistant Regional Administrator
Protected Resource Division
National Marine Fisheries Services
One Blackburn Drive
Gloucester, MA 01930-2298

Mr. Joe Fletcher
Fletcher's Boat House, Inc.
4940 Canal Road, N.W.
Washington, DC 20007

Mr. Neal Fitzpatrick, Executive Director
Audubon Naturalist Society
8940 Jones Mill Road
Chevy Chase, Maryland 20815

Ms. Patricia E. Gallagher
Executive Director
National Capital Planning Commission
401 9th Street, NW, Suite 500
Washington, DC 20576

Mr. Douglas M. Duncan
County Executive
Executive Office Building
101 Monroe Street
Rockville, MD 20850

Mr. James A. Caldwell, Director
Montgomery County Government
Department of Environmental Protection
255 Rockville Pike
Rockville, MD 20850

Mr. Albert J. Genetti, Jr., Director
Montgomery County Department of
Public Works and Transportation
101 Monroe Street; 10th Floor
Rockville, MD 20850-2450

Mr. Howard A. Denis
District 1 Councilmember
Montgomery County Council
100 Maryland Avenue
Rockville, MD 20850

Robert M. Summers, Director
Water Management Administration
Maryland Department of the Environment
1800 Washington Boulevard
Baltimore, MD 21230

Ms. Carol Schwartz
DC Council Chair of Public Works Committee
The John A. Wilson Building
1350 Pennsylvania Avenue, NW, Suite 105
Washington, DC 20004

Honorable George P. Radanovich
Chairman Subcommittee on National Parks,
Recreation, and Public Lands
United States House of Representatives
187 Ford House Office Building
Washington, DC 20515

Ms. Joyce A. Wilson
Deputy County Manager
Arlington County
2100 Clarendon Boulevard
Arlington, VA 22201

Mr. Daniel McKeever
City Manager
City of Falls Church
300 Park Avenue
Falls Church, VA 22046

Honorable Daniel E. Gardner
Mayor, City of Falls Church
300 Park Avenue
Falls Church, VA 22046

Mr. Sam Kem, Director
Department of Public Works
Arlington County
2100 Clarendon Boulevard
Arlington, VA 22201

Honorable Paul S. Sarbanes
309 Hart Senate Office Building
U.S. Senate
Washington, DC 20510

Mr. W. Tayloe Murphy, Jr.
Secretary of Natural Resources
Ninth Street Office Building, 7th Floor
202 N. Ninth Street
Richmond, VA 23219

Ms. Lisa Burcham, State Historic
Preservation Officer
Historic Preservation Division
D.C. Office of Planning
801 North Capitol Street, NE, Suite 4000
Washington, DC 20002

Mr. Don L. Klima, Director
Office of Federal Agency Programs
Advisory Council on Historic Preservation
1100 Pennsylvania Avenue, NW, Suite 803
Washington, DC 20004

Mr. Jerry L. Price
Chief Operating Officer
Sibley Memorial Hospital
5255 Loughboro Road, NW
Washington, DC 20016-2695

Ms. Melissa J. Lane, Chair
ANC 3B
PO Box 32312
Calvert Station
Washington, DC 20007

Ms. Nancy MacWood, Chair
ANC 3C
2737 Devonshire Place, NW
Washington, DC 20008

Ms. Amy Bauer McVey, Chair
ANC 3E
PO Box 9953
Friendship Station
Washington, DC 20016

Mr. Stu Ross, President
Palisades Citizens Association
PO Box 40603
Palisades Station
Washington, DC 20016

Mr. John Finney, Chair
ANC 3D Commissioner
5275 Watson Street, NW
Washington, DC 20016

Mr. Michael Nussman, President and CEO
American Sportfishing Association
225 Reinekers Lane, Suite 420
Alexandria, VA 22314

Mr. Tom Birch, Chair
ANC 2E
3265 S Street, NW
Washington, DC 20007

Mr. James D. Berry, Jr., Chair
ANC 5C
680 Rhode Island Avenue, NE, #H-4
Washington, DC 20002

Mr. Robert G. Burnley, Director
Virginia Department of Environmental
Quality
629 East Main Street
Richmond, Virginia 23219

Ms. Deborah R. Thomas, Chair
ANC 1B
P.O. Box 73710
Washington, DC 20009

Mr. Jim Graham
Councilmember Ward 1
1350 Pennsylvania Avenue, NW, Suite 406
Washington, DC 20004

Mr. Rob Gordon, Executive Director
National Wilderness Institute
P.O. Box 25766
Georgetown Station
Washington, D.C. 20007

Mr. Jack Evans
Ward 2 Councilmember
John A. Wilson Building
1350 Pennsylvania Avenue, NW, Room 106
Washington, DC 20004

Mr. David Brewster
Office of Maryland Senator Brian Frosh
446 Miller Senate Office Building
Annapolis, MD 21401-1991

Ms. Kathy Patterson
Councilwoman Ward 3
1350 Pennsylvania Avenue, NW, Suite 107
Washington, DC 20004

Mr. Nat Williams, Director
The Nature Conservancy of Maryland/D.C.
5410 Grosvenor Lane, Suite 100
Bethesda, MD 20814

Ms. Barbara Favola, Chairman
Arlington County Board
2100 Clarendon Boulevard, Suite 300
Arlington, VA 22201

Mr. Burton Gray, President
Cabin John Citizens Association
PO Box 31
Cabin John, MD 20818

Ms. Lucia Leith
Western Avenue Citizens Association
4626 Western Avenue
Bethesda, MD 20816

Mr. Raymond Roach
Washington DC Regional Office
Natural Resources Defense Council
1200 New York Ave., NW, Suite 400
Washington, DC 20005

Honorable Eleanor Holmes Norton
United States House of Representatives
2136 Rayburn House Office Building
Washington, DC 20515

Honorable Chris Van Hollen
United States House of Representatives
1419 Longworth House Office Building
Washington, DC 20515

Honorable Jim Moran
United States House of Representatives
2239 Rayburn Building
Washington, DC 20515-4608

Dr. Hamid Karimi, Program Manager
Watershed Protection Division
D.C. Department of Health
51 N Street, NE, 5th floor
Washington, DC 20002

Mr. George S. Rizzo
Drinking Water Program Manager
Mail Code: 3WP22
U.S. EPA Region III
1650 Arch Street
Philadelphia, PA 19103-2029

Mr. William S. Arguto
U.S. EPA Region III
Mail Code: 3EA30
1650 Arch Street
Philadelphia, PA 19103-2029

Mr. Peter Rousselot, Chair
Arlington County Fiscal Affairs Advisory Commission
3182 Key Boulevard
Arlington, Virginia 22201

Mr. Charles H. Atherton, Secretary
U.S. Commission of Fine Arts
National Building Museum
401 F Street, NW, Suite 312
Washington, DC 20001-2728

Mr. Dean F. Amel, Chair
Arlington County Environment and Energy Conservation Commission
3013 N. 4th St.
Arlington, VA 22201

Ms. Mary Letzkus
U.S. EPA Region III
Mail Code: 3WP13
1650 Arch Street
Philadelphia, PA 19103-2029

Ms. Brenda Creel
Acting General Manager
for Environmental Services
City of Falls Church
300 Park Avenue
Falls Church, VA 22046

Mr. Gregory Hope
Water Quality Division
DC Department of Health
51 N. Street, NE, 5th Floor
Washington, DC 20002

Letter #3

Mr. Dan Tangherlini, Director
D.C. Department of Transportation
2000 14th Street, NW, 6th Floor
Washington, DC 20001

Mr. Tom Henderson, Administrator
Solid Waste Management
D.C. Department of Public Works
2000 14th Street, NW
Washington, DC 20001

Mr. Ira Palmer, Branch Chief
Fisheries and Wildlife Division
D.C. Department of Health
51 N Street, NE, 5th floor
Washington, DC 20002

Mr. Jerry N. Johnson
General Manager
D.C. Water and Sewer Authority
5000 Overlook Avenue, SW
Washington, DC 20032

Mr. Neil O. Albert, Director
D.C. Parks and Recreation Department
3149 16th Street, NW
Washington, DC 20010

Mr. Eric W. Price
Office of the Deputy Mayor for Planning
and Economic Development
John A. Wilson Building
1350 Pennsylvania Avenue, NW, Suite 317
Washington, DC 20004

Mr. James R, Collier, P.E.
Chief, Bureau of Environmental Quality
D.C. Department of Health
51 N Street, NE, 5th Floor
Washington, DC 20002

Mr. Donald Wambsgans, Program Manager
Air Quality Division
D.C. Department of Health
51 N Street, NE, 5th Floor
Washington, DC 20002

Ms. Cheryl Amisial
Program Manager
Soil Resources Management
D.C. Department of Health
51 N Street, NE, 6th Floor
Washington, DC 20002

Adrian H. Thompson, Chief
Fire and Emergency Medical Services
District of Columbia
1923 Vermont Avenue, NW
Washington, DC 20001

Charles H. Ramsey, Chief of Police
Metropolitan Police Department
Government of the District of Columbia
300 Indiana Avenue, NW
Washington, DC 20001

Mr. David J. Robertson
Executive Director
Metropolitan Washington Council
of Governments
777 North Capitol Street, NE, Suite 300
Washington, DC 20002-4201

Mr. John Wolflin, Field Supervisor
Chesapeake Bay Field Office
U.S. Fish and Wildlife Service
177 Admiral Cochrane Drive
Annapolis, MD 21401

Mr. Terry R. Carlstrom, Director
National Capital Region
National Park Service
1100 Ohio Drive, SW
Washington, DC 20242

Ms. Mary Colligan
Assistant Regional Administrator
Protected Resource Division
National Marine Fisheries Services
One Blackburn Drive
Gloucester, MA 01930-2298

Mr. Joe Fletcher
Fletcher's Boat House, Inc.
4940 Canal Road, N.W.
Washington, DC 20007

Mr. Neal Fitzpatrick, Executive Director
Audubon Naturalist Society
8940 Jones Mill Road
Chevy Chase, Maryland 20815

Ms. Patricia E. Gallagher
Executive Director
National Capital Planning Commission
401 9th Street, NW, Suite 500
Washington, DC 20576

Mr. Douglas M. Duncan
County Executive
Executive Office Building
101 Monroe Street
Rockville, MD 20850

Mr. James A. Caldwell, Director
Montgomery County Government
Department of Environmental Protection
255 Rockville Pike
Rockville, MD 20850

Mr. Albert J. Genetti, Jr., Director
Montgomery County Department of
Public Works and Transportation
101 Monroe Street; 10th Floor
Rockville, MD 20850-2450

Mr. Howard A. Denis
District 1 Councilmember
Montgomery County Council
100 Maryland Avenue
Rockville, MD 20850

Robert M. Summers, Director
Water Management Administration
Maryland Department of the Environment
1800 Washington Boulevard
Baltimore, MD 21230

Ms. Carol Schwartz
DC Council Chair of Public Works Committee
The John A. Wilson Building
1350 Pennsylvania Avenue, NW, Suite 105
Washington, DC 20004

Honorable George P. Radanovich
Chairman Subcommittee on National Parks,
Recreation, and Public Lands
United States House of Representatives
187 Ford House Office Building
Washington, DC 20515

Ms. Joyce A. Wilson
Deputy County Manager
Arlington County
2100 Clarendon Boulevard
Arlington, VA 22201

Mr. Daniel McKeever
City Manager
City of Falls Church
300 Park Avenue
Falls Church, VA 22046

Honorable Daniel E. Gardner
Mayor, City of Falls Church
300 Park Avenue
Falls Church, VA 22046

Mr. Randy Bartlett, Director
Department of Environmental Services
One Courthouse Plaza
2100 Clarendon Boulevard, Suite 807
Arlington, VA 22201

Honorable Paul S. Sarbanes
309 Hart Senate Office Building
U.S. Senate
Washington, DC 20510

Mr. W. Tayloe Murphy, Jr.
Secretary of Natural Resources
Ninth Street Office Building, 7th Floor
202 N. Ninth Street
Richmond, VA 23219

Ms. Lisa Burcham, State Historic
Preservation Officer
Historic Preservation Division
D.C. Office of Planning
801 North Capitol Street, NE, Suite 4000
Washington, DC 20002

Mr. Don L. Klima, Director
Office of Federal Agency Programs
Advisory Council on Historic Preservation
1100 Pennsylvania Avenue, NW, Suite 803
Washington, DC 20004

Mr. Jerry L. Price
Chief Operating Officer
Sibley Memorial Hospital
5255 Loughboro Road, NW
Washington, DC 20016-2695

Ms. Melissa J. Lane, Chair
ANC 3B
PO Box 32312
Calvert Station
Washington, DC 20007

Ms. Nancy MacWood, Chair
ANC 3C
2737 Devonshire Place, NW
Washington, DC 20008

Ms. Amy Bauer McVey, Chair
ANC 3E
PO Box 9953
Friendship Station
Washington, DC 20016

Mr. Stu Ross, President
Palisades Citizens Association
PO Box 40603
Palisades Station
Washington, DC 20016

Mr. John Finney, Chair
ANC 3D Commissioner
5275 Watson Street, NW
Washington, DC 20016

Mr. Michael Nussman, President and CEO
American Sportfishing Association
225 Reinekers Lane, Suite 420
Alexandria, VA 22314

Mr. Tom Birch, Chair
ANC 2E
3265 S Street, NW
Washington, DC 20007

Mr. James D. Berry, Jr., Chair
ANC 5C
680 Rhode Island Avenue, NE, #H-4
Washington, DC 20002

Mr. Robert G. Burnley, Director
Virginia Department of Environmental
Quality
629 East Main Street
Richmond, Virginia 23219

Ms. Deborah R. Thomas, Chair
ANC 1B
P.O. Box 73710
Washington, DC 20009

Mr. Jim Graham
Councilmember Ward 1
1350 Pennsylvania Avenue, NW, Suite 406
Washington, DC 20004

Mr. Rob Gordon, Executive Director
National Wilderness Institute
P.O. Box 25766
Georgetown Station
Washington, D.C. 20007

Mr. Jack Evans
Ward 2 Councilmember
John A. Wilson Building
1350 Pennsylvania Avenue, NW, Room 106
Washington, DC 20004

Mr. David Brewster
Office of Maryland Senator Brian Frosh
446 Miller Senate Office Building
Annapolis, MD 21401-1991

Ms. Kathy Patterson
Councilwoman Ward 3
1350 Pennsylvania Avenue, NW, Suite 107
Washington, DC 20004

Mr. Nat Williams, Director
The Nature Conservancy of Maryland/D.C.
5410 Grosvenor Lane, Suite 100
Bethesda, MD 20814

Ms. Barbara Favola, Chairman
Arlington County Board
2100 Clarendon Boulevard, Suite 300
Arlington, VA 22201

Mr. Burton Gray, President
Cabin John Citizens Association
PO Box 31
Cabin John, MD 20818

Ms. Lucia Leith
Western Avenue Citizens Association
4626 Western Avenue
Bethesda, MD 20816

Mr. Raymond Roach
Washington DC Regional Office
Natural Resources Defense Council
1200 New York Ave., NW, Suite 400
Washington, DC 20005

Honorable Eleanor Holmes Norton
United States House of Representatives
2136 Rayburn House Office Building
Washington, DC 20515

Honorable Chris Van Hollen
United States House of Representatives
1419 Longworth House Office Building
Washington, DC 20515

Honorable Jim Moran
United States House of Representatives
2239 Rayburn Building
Washington, DC 20515-4608

Dr. Hamid Karimi, Program Manager
Watershed Protection Division
D.C. Department of Health
51 N Street, NE, 5th floor
Washington, DC 20002

Mr. George S. Rizzo
Drinking Water Program Manager
Mail Code: 3WP22
U.S. EPA Region III
1650 Arch Street
Philadelphia, PA 19103-2029

Mr. William S. Arguto
U.S. EPA Region III
Mail Code: 3EA30
1650 Arch Street
Philadelphia, PA 19103-2029

Mr. Peter Rousselot, Chair
Arlington County Fiscal Affairs Advisory Commission
3182 Key Boulevard
Arlington, Virginia 22201

Lt Col Dennis Jasinski, Commander
11th CES
370 Brookley Ave.
Bolling AFB, DC 20032-5403

Ms. Tania Tully
State Historic Preservation Officer
Maryland Historic Trust
Division of Historical and Cultural Programs
100 Community Place
Crownsville, MD 21032-2023

Ms. Elizabeth Adams
Westmoreland Citizens Association
5111 Dalecarlia Drive
Bethesda, MD 20816

Mr. Robert Spagnoletti
Attorney General for the District of Columbia
1350 Pennsylvania Avenue, NW
Suite 409
Washington, DC 20004

Mr. Charles H. Atherton, Secretary
U.S. Commission of Fine Arts
National Building Museum
401 F Street, NW, Suite 312
Washington, DC 20001-2728

Mr. Dean F. Amel, Chair
Arlington County Environment and Energy Conservation Commission
3013 N. 4th St.
Arlington, VA 22201

Ms. Mary Letzkus
U.S. EPA Region III
Mail Code: 3WP13
1650 Arch Street
Philadelphia, PA 19103-2029

Ms. Lori Byrne, Environmental Review Specialist
MD DNR - Wildlife and Heritage Service
Tawes State Office Building, E-1
580 Taylor Avenue
Annapolis, MD 21401

Ms. Alma H. Gates
Chair, ANC 3D
PO Box 40846
Palisades Station
Washington, DC 20016

Mr. Ron Tripp
Citizens' Cooperating Committee on Friendship Heights
5330 Sherrill Ave
Chevy Chase, MD 20815

Ms. Brenda Creel
Acting General Manager
for Environmental Services
City of Falls Church
300 Park Avenue
Falls Church, VA 22046

Mr. Gregory Hope
Water Quality Division
DC Department of Health
51 N. Street, NE, 5th Floor
Washington, DC 20002

Lieutenant Mike Wischnewski, Facility Manager
Anacostia Naval Station
121 DIA Access Road, SW
Washington, DC 20374

Mr. Kevin Brandt, Superintendent
C&O Canal NHP Headquarters
1850 Dual Highway, Suite 100
Hagerstown, MD 21740

Ms. Debra Graham
Westmoreland Citizens Association
5407 Duvall Drive
Bethesda, MD 20816

Mr. William Haprop, President
Spring Valley-Wesley Heights Citizens Association
3615 49th Street, NW
Washington, DC 20016

Letter #4

Mr. William O. Howland, Interim Director
D.C. Department of Public Works
2000 14th Street, NW
Washington, DC 20001

Mr. Dan Tangherlini, Director
D.C. Department of Transportation
2000 14th Street, NW, 6th Floor
Washington, DC 20001

Mr. Tom Henderson, Administrator
Solid Waste Management
D.C. Department of Public Works
2000 14th Street, NW
Washington, DC 20001

Mr. Ira Palmer, Branch Chief
Fisheries and Wildlife Division
D.C. Department of Health
51 N Street, NE, 5th floor
Washington, DC 20002

Mr. Jerry N. Johnson
General Manager
D.C. Water and Sewer Authority
5000 Overlook Avenue, SW
Washington, DC 20032

Mr. Neil O. Albert, Director
D.C. Parks and Recreation Department
3149 16th Street, NW
Washington, DC 20010

Mr. Joe Fletcher
Fletcher's Boat House, Inc.
4940 Canal Road, N.W.
Washington, DC 20007

Mr. Daniel McKeever
City Manager
City of Falls Church
300 Park Avenue
Falls Church, VA 22046

Ms. Patricia E. Gallagher
Executive Director
National Capital Planning Commission
401 9th Street, NW, Suite 500
Washington, DC 20576

Mr. Douglas M. Duncan, County Executive
Executive Office Building
101 Monroe Street
Rockville, MD 20850

Adrian H. Thompson, Chief
District of Columbia Fire and Emergency
Medical Services
District of Columbia
1923 Vermont Avenue, NW
Washington, DC 20001

Charles H. Ramsey, Chief of Police
Metropolitan Police Department
Government of the District of Columbia
300 Indiana Avenue, NW
Washington, DC 20001

Mr. David J. Robertson
Executive Director
Metropolitan Washington Council of
Governments
777 North Capitol Street, NE, Suite 300
Washington, DC 20002-4201

Mr. John Wolflin, Field Supervisor
Chesapeake Bay Field Office
U.S. Fish and Wildlife Service
177 Admiral Cochrane Drive
Annapolis, MD 21401

Mr. Terry R. Carlstrom, Director
National Capital Region
National Park Service
1100 Ohio Drive, SW
Washington, DC 20242

Ms. Mary Colligan, Assistant Regional
Administrator
Protected Resource Division
National Marine Fisheries Services
One Blackburn Drive
Gloucester, MA 01930-2298

Ms. Joyce A. Wilson
Deputy County Manager
Arlington County
2100 Clarendon Boulevard
Arlington, VA 22201

Mr. Robert Spagnoletti
Attorney General for the District of Columbia
1350 Pennsylvania Avenue, NW
Suite 409
Washington, DC 20004

Honorable Daniel E. Gardner
Mayor, City of Falls Church
300 Park Avenue
Falls Church, VA 22046

Mr. Sam Kem, Director
Department of Public Works
Arlington County
2100 Clarendon Boulevard
Arlington, VA 22201

Mr. James A. Caldwell, Director
Montgomery County Government
Department of Environmental Protection
255 Rockville Pike
Rockville, MD 20850

Mr. Albert J. Genetti, Jr., Director
Montgomery County Department of Public
Works and Transportation
101 Monroe Street; 10th Floor
Rockville, MD 20850-2450

Mr. Howard A. Denis
District 1 Councilmember
Montgomery County Council
100 Maryland Avenue
Rockville, MD 20850

Mr. Robert M. Summers, Director
Water Management Administration
Maryland Department of the Environment
1800 Washington Boulevard
Baltimore, MD 21230

Ms. Carol Schwartz
DC Council Chair of Public Works Committee
The John A. Wilson Building
1350 Pennsylvania Avenue, NW, Suite 105
Washington, DC 20004

Mr. Eric W. Price
Office of the Deputy Mayor for Planning and
Economic Development
John A. Wilson Building
1350 Pennsylvania Avenue, NW, Suite 317
Washington, DC 20004

Mr. James R, Collier, P.E.
Chief, Bureau of Environmental Quality
D.C. Department of Health
51 N Street, NE, 5th Floor
Washington, DC 20002

Mr. Donald Wambsgans, Program Manager
Air Quality Division
D.C. Department of Health
51 N Street, NE, 5th Floor
Washington, DC 20002

Ms. Cheryl Amisial, Program Manager
Soil Resources Management
D.C. Department of Health
51 N Street, NE, 6th Floor
Washington, DC 20002

Honorable Paul S. Sarbanes
309 Hart Senate Office Building
U.S. Senate
Washington, DC 20510

Mr. Michael Nussman, President and CEO
American Sportfishing Association
225 Reinekers Lane, Suite 420
Alexandria, VA 22314

Mr. Tom Birch, Chair
ANC 2E
3265 S Street, NW
Washington, DC 20007

Mr. Burton Gray, President
Cabin John Citizens Association
PO Box 31
Cabin John, MD 20818

Mr. Jerry L. Price
Chief Operating Officer
Sibley Memorial Hospital
5255 Loughboro Road, NW
Washington, DC 20016-2695

Mr. Jim Graham
Councilmember Ward 1
1350 Pennsylvania Avenue, NW, Suite 406
Washington, DC 20004

Mr. Rob Gordon, Executive Director
National Wilderness Institute
P.O. Box 25766
Georgetown Station
Washington, D.C. 20007

Mr. Jack Evans
Ward 2 Councilmember
John A. Wilson Building
1350 Pennsylvania Avenue, NW, Room 106
Washington, DC 20004

Mr. David Brewster
Office of Maryland Senator Brian Frosh
446 Miller Senate Office Building
Annapolis, MD 21401-1991

Ms. Kathy Patterson
Councilwoman Ward 3
1350 Pennsylvania Avenue, NW, Suite 107
Washington, DC 20004

Mr. Charles H. Atherton, Secretary
U.S. Commission of Fine Arts
National Building Museum
401 F Street, NW, Suite 312
Washington, DC 20001-2728

Mr. Nat Williams, Director
The Nature Conservancy of Maryland/D.C.
5410 Grosvenor Lane, Suite 100
Bethesda, MD 20814

Ms. Barbara Favola, Chairman
Arlington County Board
2100 Clarendon Boulevard, Suite 300
Arlington, VA 22201

Mr. Don L. Klima, Director
Office of Federal Agency Programs
Advisory Council on Historic Preservation
1100 Pennsylvania Avenue, NW, Suite 803
Washington, DC 20004

Ms. Deborah R. Thomas, Chair
ANC 1B
P.O. Box 73710
Washington, DC 20009

Mr. Raymond Roach
Washington DC Regional Office
Natural Resources Defense Council
1200 New York Ave., NW, Suite 400
Washington, DC 20005

Honorable Eleanor Holmes Norton
United States House of Representatives
2136 Rayburn House Office Building
Washington, DC 20515

Honorable Chris Van Hollen
United States House of Representatives
1419 Longworth House Office Building
Washington, DC 20515

Honorable Jim Moran
United States House of Representatives
2239 Rayburn Building
Washington, DC 20515-4608

Dr. Hamid Karimi, Program Manager
Watershed Protection Division
D.C. Department of Health
51 N Street, NE, 5th floor
Washington, DC 20002

Ms. Brenda Creel, General Manager for
Environmental Services
City of Falls Church
300 Park Avenue
Falls Church, VA 22046

Mr. W. Tayloe Murphy, Jr.
Secretary of Natural Resources
Ninth Street Office Building, 7th Floor
202 N. Ninth Street
Richmond, VA 23219

Ms. Lisa Burcham, State Historic Preservation
Officer
Historic Preservation Division
D.C. Office of Planning
801 North Capitol Street, NE, Suite 4000
Washington, DC 20002

Ms. Lucia Leith
Western Avenue Citizens Association
4626 Western Avenue
Bethesda, MD 20816

Ms. Melissa J. Lane, Chair
ANC 3B
PO Box 32312
Calvert Station
Washington, DC 20007

Ms. Nancy MacWood, Chair
ANC 3C
2737 Devonshire Place, NW
Washington, DC 20008

Ms. Amy Bauer McVey, Chair
ANC 3E
PO Box 9953
Friendship Station
Washington, DC 20016

Mr. Stu Ross, President
Palisades Citizens Association
PO Box 40603
Palisades Station
Washington, DC 20016

Mr. John Finney
ANC 3D Commissioner
5275 Watson Street, NW
Washington, DC 20016

Mr. George S. Rizzo
Mail Code: 3WP22
U.S. EPA Region III
1650 Arch Street
Philadelphia, PA 19103-2029

Mr. Robert G. Burnley, Director
Virginia Department of Environmental Quality
629 East Main Street
Richmond, Virginia 23219

Mr. Neal Fitzpatrick, Executive Director
Audubon Naturalist Society
8940 Jones Mill Road
Chevy Chase, Maryland 20815

Mr. Dean F. Amel, Chair
Arlington County Environment and Energy Conservation Commission
3013 N. 4th St.
Arlington, VA 22201

Ms. Mary Letzkus
U.S. EPA Region III
Mail Code: 3WP13
1650 Arch Street
Philadelphia, PA 19103-2029

Mr. Eric Olson
NRDC
1200 New York Avenue, NW, Suite 400
Washington, DC 20005

Ms. Debra Graham
Westmoreland Citizens Association
5407 Duvall Drive
Bethesda, MD 20816

Mr. William Haprop, President
Spring Valley-Wesley Heights Citizens Association
3615 49th Street, NW
Washington, DC 20016

Honorable George P. Radanovich
Chairman Subcommittee on National Parks, Recreation, and Public Lands
United States House of Representatives
187 Ford House Office Building
Washington, DC 20515

Mr. Gregory Hope
Water Quality Division
DC Department of Health
51 N. Street, NE, 5th Floor
Washington, DC 20002

Ms. Ellie L. Irons, Program Manager
Office of Environmental Impact Review
P.O. Box 10009
Richmond, Virginia 23240

Ms. Elizabeth Adams
Westmoreland Citizens Association
5111 Dalecarlia Drive
Bethesda, MD 20816

Honorable Barbara A. Mikulski
709 Hart Senate Office Building
U.S. Senate
Washington, D.C. 20510

Mr. William S. Arguto
U.S. EPA Region III
Mail Code: 3EA30
1650 Arch Street
Philadelphia, PA 19103-2029

Mr. Peter Rousselot, Chair
Arlington County Fiscal Affairs Advisory Commission
3182 Key Boulevard
Arlington, Virginia 22201

Mr. Kevin Brandt, Superintendent
C&O Canal NHP Headquarters
1850 Dual Highway, Suite 100
Hagerstown, MD 21740

Ms. Alma H. Gates
Chair, ANC 3D
PO Box 40846
Palisades Station
Washington, DC 20016

Mr. Ron Tripp
Citizens' Cooperating Committee on Friendship Heights
5330 Sherrill Ave
Chevy Chase, MD 20815

Letter #5

Mr. William O. Howland, Interim Director
D.C. Department of Public Works
2000 14th Street, NW
Washington, DC 20001

Mr. Dan Tangherlini, Director
D.C. Department of Transportation
2000 14th Street, NW, 6th Floor
Washington, DC 20001

Mr. Tom Henderson, Administrator
Solid Waste Management
D.C. Department of Public Works
2000 14th Street, NW
Washington, DC 20001

Mr. Ira Palmer, Branch Chief
Fisheries and Wildlife Division
D.C. Department of Health
51 N Street, NE, 5th floor
Washington, DC 20002

Mr. Jerry N. Johnson
General Manager
D.C. Water and Sewer Authority
5000 Overlook Avenue, SW
Washington, DC 20032

Mr. Neil O. Albert, Director
D.C. Parks and Recreation Department
3149 16th Street, NW
Washington, DC 20010

Mr. Joe Fletcher
Fletcher's Boat House, Inc.
4940 Canal Road, N.W.
Washington, DC 20007

Mr. Daniel McKeever
City Manager
City of Falls Church
300 Park Avenue
Falls Church, VA 22046

Ms. Patricia E. Gallagher
Executive Director
National Capital Planning Commission
401 9th Street, NW, Suite 500
Washington, DC 20576

Mr. Douglas M. Duncan, County Executive
Executive Office Building
101 Monroe Street
Rockville, MD 20850

Adrian H. Thompson, Chief
District of Columbia Fire and Emergency Medical Services
District of Columbia
1923 Vermont Avenue, NW
Washington, DC 20001

Charles H. Ramsey, Chief of Police
Metropolitan Police Department
Government of the District of Columbia
300 Indiana Avenue, NW
Washington, DC 20001

Mr. David J. Robertson
Executive Director
Metropolitan Washington Council of Governments
777 North Capitol Street, NE, Suite 300
Washington, DC 20002-4201

Mr. John Wolflin, Field Supervisor
Chesapeake Bay Field Office
U.S. Fish and Wildlife Service
177 Admiral Cochrane Drive
Annapolis, MD 21401

Mr. Terry R. Carlstrom, Director
National Capital Region
National Park Service
1100 Ohio Drive, SW
Washington, DC 20242

Ms. Mary Colligan, Assistant Regional Administrator
Protected Resource Division
National Marine Fisheries Services
One Blackburn Drive
Gloucester, MA 01930-2298

Ms. Joyce A. Wilson
Deputy County Manager
Arlington County
2100 Clarendon Boulevard
Arlington, VA 22201

Mr. Robert Spagnoletti
Attorney General for the District of Columbia
1350 Pennsylvania Avenue, NW
Suite 409
Washington, DC 20004

Honorable Daniel E. Gardner
Mayor, City of Falls Church
300 Park Avenue
Falls Church, VA 22046

Mr. Randy Bartlett, Director
Department of Environmental Services
One Courthouse Plaza, Suite 807
Arlington, VA 22202

Mr. James A. Caldwell, Director
Montgomery County Government
Department of Environmental Protection
255 Rockville Pike
Rockville, MD 20850

Mr. Albert J. Genetti, Jr., Director
Montgomery County Department of Public Works and Transportation
101 Monroe Street; 10th Floor
Rockville, MD 20850-2450

Mr. Howard A. Denis
District 1 Councilmember
Montgomery County Council
100 Maryland Avenue
Rockville, MD 20850

Mr. Robert M. Summers, Director
Water Management Administration
Maryland Department of the Environment
1800 Washington Boulevard
Baltimore, MD 21230

Ms. Carol Schwartz
DC Council Chair of Public Works Committee
The John A. Wilson Building
1350 Pennsylvania Avenue, NW, Suite 105
Washington, DC 20004

Mr. Eric W. Price
Office of the Deputy Mayor for Planning and Economic Development
John A. Wilson Building
1350 Pennsylvania Avenue, NW, Suite 317
Washington, DC 20004

Mr. James R, Collier, P.E.
Chief, Bureau of Environmental Quality
D.C. Department of Health
51 N Street, NE, 5th Floor
Washington, DC 20002

Mr. Donald Wambsgans, Program Manager
Air Quality Division
D.C. Department of Health
51 N Street, NE, 5th Floor
Washington, DC 20002

Ms. Cheryl Amisial, Program Manager
Soil Resources Management
D.C. Department of Health
51 N Street, NE, 6th Floor
Washington, DC 20002

Honorable Paul S. Sarbanes
309 Hart Senate Office Building
U.S. Senate
Washington, DC 20510

Mr. Michael Nussman, President and CEO
American Sportfishing Association
225 Reinekers Lane, Suite 420
Alexandria, VA 22314

Mr. Tom Birch, Chair
ANC 2E
3265 S Street, NW
Washington, DC 20007

Mr. Burton Gray, President
Cabin John Citizens Association
PO Box 31
Cabin John, MD 20818

Mr. Jerry L. Price
Chief Operating Officer
Sibley Memorial Hospital
5255 Loughboro Road, NW
Washington, DC 20016-2695

Mr. Jim Graham
Councilmember Ward 1
1350 Pennsylvania Avenue, NW, Suite 406
Washington, DC 20004

Mr. Rob Gordon, Executive Director
National Wilderness Institute
P.O. Box 25766
Georgetown Station
Washington, D.C. 20007

Mr. Jack Evans
Ward 2 Councilmember
John A. Wilson Building
1350 Pennsylvania Avenue, NW, Room 106
Washington, DC 20004

Mr. David Brewster
Office of Maryland Senator Brian Frosh
446 Miller Senate Office Building
Annapolis, MD 21401-1991

Ms. Kathy Patterson
Councilwoman Ward 3
1350 Pennsylvania Avenue, NW, Suite 107
Washington, DC 20004

Mr. Charles H. Atherton, Secretary
U.S. Commission of Fine Arts
National Building Museum
401 F Street, NW, Suite 312
Washington, DC 20001-2728

Mr. Nat Williams, Director
The Nature Conservancy of Maryland/D.C.
5410 Grosvenor Lane, Suite 100
Bethesda, MD 20814

Ms. Barbara Favola, Chairman
Arlington County Board
2100 Clarendon Boulevard, Suite 300
Arlington, VA 22201

Mr. Don L. Klima, Director
Office of Federal Agency Programs
Advisory Council on Historic Preservation
1100 Pennsylvania Avenue, NW, Suite 803
Washington, DC 20004

Ms. Deborah R. Thomas, Chair
ANC 1B
P.O. Box 73710
Washington, DC 20009

Mr. Raymond Roach
Washington DC Regional Office
Natural Resources Defense Council
1200 New York Ave., NW, Suite 400
Washington, DC 20005

Honorable Eleanor Holmes Norton
United States House of Representatives
2136 Rayburn House Office Building
Washington, DC 20515

Honorable Chris Van Hollen
United States House of Representatives
1419 Longworth House Office Building
Washington, DC 20515

Honorable Jim Moran
United States House of Representatives
2239 Rayburn Building
Washington, DC 20515-4608

Dr. Hamid Karimi, Program Manager
Watershed Protection Division
D.C. Department of Health
51 N Street, NE, 5th floor
Washington, DC 20002

Ms. Brenda Creel, General Manager for
Environmental Services
City of Falls Church
300 Park Avenue
Falls Church, VA 22046

Mr. W. Tayloe Murphy, Jr.
Secretary of Natural Resources
Ninth Street Office Building, 7th Floor
202 N. Ninth Street
Richmond, VA 23219

Ms. Lisa Burcham, State Historic Preservation
Officer
Historic Preservation Division
D.C. Office of Planning
801 North Capitol Street, NE, Suite 4000
Washington, DC 20002

Ms. Lucia Leith
Western Avenue Citizens Association
4626 Western Avenue
Bethesda, MD 20816

Ms. Melissa J. Lane, Chair
ANC 3B
PO Box 32312
Calvert Station
Washington, DC 20007

Ms. Nancy MacWood, Chair
ANC 3C
2737 Devonshire Place, NW
Washington, DC 20008

Ms. Amy Bauer McVey, Chair
ANC 3E
PO Box 9953
Friendship Station
Washington, DC 20016

Mr. Stu Ross, President
Palisades Citizens Association
PO Box 40603
Palisades Station
Washington, DC 20016

Mr. John Finney
ANC 3D Commissioner
5275 Watson Street, NW
Washington, DC 20016

Mr. George S. Rizzo
Mail Code: 3WP22
U.S. EPA Region III
1650 Arch Street
Philadelphia, PA 19103-2029

Mr. Robert G. Burnley, Director
Virginia Department of Environmental Quality
629 East Main Street
Richmond, Virginia 23219

Mr. Neal Fitzpatrick, Executive Director
Audubon Naturalist Society
8940 Jones Mill Road
Chevy Chase, Maryland 20815

Honorable George P. Radanovich
Chairman Subcommittee on National Parks,
Recreation, and Public Lands
United States House of Representatives
187 Ford House Office Building
Washington, DC 20515

Mr. William S. Arguto
U.S. EPA Region III
Mail Code: 3EA30
1650 Arch Street
Philadelphia, PA 19103-2029

Mr. Dean F. Amel, Chair
Arlington County Environment and Energy
Conservation Commission
3013 N. 4th St.
Arlington, VA 22201

Mr. Gregory Hope
Water Quality Division
DC Department of Health
51 N. Street, NE, 5th Floor
Washington, DC 20002

Mr. Peter Rousselot, Chair
Arlington County Fiscal Affairs Advisory
Commission
3182 Key Boulevard
Arlington, Virginia 22201

Ms. Mary Letzkus
U.S. EPA Region III
Mail Code: 3WP13
1650 Arch Street
Philadelphia, PA 19103-2029

Ms. Ellie L. Irons, Program Manager
Office of Environmental Impact Review
P.O. Box 10009
Richmond, Virginia 23240

Mr. Kevin Brandt, Superintendent
C&O Canal NHP Headquarters
1850 Dual Highway, Suite 100
Hagerstown, MD 21740

Ms. Tania Tully, State Historic Preservation
Officer
Maryland Historical Trust
Division of Historical and Cultural Programs
100 Community Place
Crownsville, MD 21032-2023

Ms. Tanya Tomasko Spano
Department of Environmental Programs
777 North Capitol Street, NE
Washington, DC 20002-4226

Ms. Alma H. Gates
Chair, ANC 3D
PO Box 40846
Palisades Station
Washington, DC 20016

Ms. Debra Graham
Westmoreland Citizens Association
5407 Duvall Drive
Bethesda, MD 20816

Ms. Elizabeth Adams
Westmoreland Citizens Association
5111 Dalecarlia Drive
Bethesda, MD 20816

Mr. Ron Tripp
Citizens' Cooperating Committee on Friendship
Heights
5330 Sherrill Ave
Chevy Chase, MD 20815

Mr. William Haprop, President
Spring Valley-Wesley Heights Citizens
Association
3615 49th Street, NW
Washington, DC 20016

Honorable Barbara A. Mikulski
709 Hart Senate Office Building
U.S. Senate
Washington, D.C. 20510

Mr. Eric Olson
NRDC
1200 New York Avenue, NW, Suite 400
Washington, DC 20005

Mr. John Trypus
DCWASA - DETS
5000 Overlook Ave., SW
Washington, DC 20032

Ms. Lori Byrne, Environmental Review
Specialist
MD DNR - Wildlife and Heritage Service
Tawes State Office Building, E-1
580 Taylor Avenue
Annapolis, MD 21401

Letter #6

Mr. William O. Howland, Interim Director
D.C. Department of Public Works
2000 14th Street, NW
Washington, DC 20001

Mr. Dan Tangherlini, Director
D.C. Department of Transportation
2000 14th Street, NW, 6th Floor
Washington, DC 20001

Mr. Tom Henderson, Administrator
Solid Waste Management
D.C. Department of Public Works
2000 14th Street, NW
Washington, DC 20001

Mr. Ira Palmer, Branch Chief
Fisheries and Wildlife Division
D.C. Department of Health
51 N Street, NE, 5th floor
Washington, DC 20002

Mr. Jerry N. Johnson
General Manager
D.C. Water and Sewer Authority
5000 Overlook Avenue, SW
Washington, DC 20032

Mr. Neil O. Albert, Director
D.C. Parks and Recreation Department
3149 16th Street, NW
Washington, DC 20010

Mr. Joe Fletcher
Fletcher's Boat House, Inc.
4940 Canal Road, N.W.
Washington, DC 20007

Mr. Daniel McKeever
City Manager
City of Falls Church
300 Park Avenue
Falls Church, VA 22046

Ms. Patricia E. Gallagher
Executive Director
National Capital Planning Commission
401 9th Street, NW, Suite 500
Washington, DC 20576

Mr. Douglas M. Duncan, County Executive
Executive Office Building
101 Monroe Street
Rockville, MD 20850

Adrian H. Thompson, Chief
District of Columbia Fire and Emergency Medical Services
District of Columbia
1923 Vermont Avenue, NW
Washington, DC 20001

Charles H. Ramsey, Chief of Police
Metropolitan Police Department
Government of the District of Columbia
300 Indiana Avenue, NW
Washington, DC 20001

Mr. David J. Robertson
Executive Director
Metropolitan Washington Council of Governments
777 North Capitol Street, NE, Suite 300
Washington, DC 20002-4201

Mr. John Wolflin, Field Supervisor
Chesapeake Bay Field Office
U.S. Fish and Wildlife Service
177 Admiral Cochrane Drive
Annapolis, MD 21401

Mr. Terry R. Carlstrom, Director
National Capital Region
National Park Service
1100 Ohio Drive, SW
Washington, DC 20242

Ms. Mary Colligan, Assistant Regional Administrator
Protected Resource Division
National Marine Fisheries Services
One Blackburn Drive
Gloucester, MA 01930-2298

Mr. Ron Carlee, County Manager
Arlington County
1 Courthouse Plaza
2100 Clarendon Boulevard
Arlington, VA 22201

Mr. Robert Spagnoletti
Attorney General for the District of Columbia
1350 Pennsylvania Avenue, NW
Suite 409
Washington, DC 20004

Honorable Daniel E. Gardner
Mayor, City of Falls Church
300 Park Avenue
Falls Church, VA 22046

Mr. Randy Bartlett, Director
Department of Environmental Services
One Courthouse Plaza, Suite 807
Arlington, VA 22201

Mr. James A. Caldwell, Director
Montgomery County Government
Department of Environmental Protection
255 Rockville Pike
Rockville, MD 20850

Mr. Michael C. Hoyt, Acting Director
Montgomery County Department of Public Works and Transportation
101 Monroe Street; 10th Floor
Rockville, MD 20850-2450

Mr. Howard A. Denis
District 1 Councilmember
Montgomery County Council
100 Maryland Avenue
Rockville, MD 20850

Mr. Robert M. Summers, Director
Water Management Administration
Maryland Department of the Environment
1800 Washington Boulevard
Baltimore, MD 21230

Ms. Carol Schwartz
DC Council Chair of Public Works Committee
The John A. Wilson Building
1350 Pennsylvania Avenue, NW, Suite 105
Washington, DC 20004

Mr. Eric W. Price
Office of the Deputy Mayor for Planning and Economic Development
John A. Wilson Building
1350 Pennsylvania Avenue, NW, Suite 317
Washington, DC 20004

Mr. James R, Collier, P.E.
Chief, Bureau of Environmental Quality
D.C. Department of Health
51 N Street, NE, 5th Floor
Washington, DC 20002

Mr. Donald Wambsgans, Program Manager
Air Quality Division
D.C. Department of Health
51 N Street, NE, 5th Floor
Washington, DC 20002

Ms. Cheryl Amisial, Program Manager
Soil Resources Management
D.C. Department of Health
51 N Street, NE, 6th Floor
Washington, DC 20002

Honorable Paul S. Sarbanes
309 Hart Senate Office Building
U.S. Senate
Washington, DC 20510

Mr. Michael Nussman, President and CEO
American Sportfishing Association
225 Reinekers Lane, Suite 420
Alexandria, VA 22314

Mr. Tom Birch, Chair
ANC 2E
3265 S Street, NW
Washington, DC 20007

Mr. Burton Gray, President
Cabin John Citizens Association
PO Box 31
Cabin John, MD 20818

Mr. Jerry L. Price
Chief Operating Officer
Sibley Memorial Hospital
5255 Loughboro Road, NW
Washington, DC 20016-2695

Mr. Jim Graham
Councilmember Ward 1
1350 Pennsylvania Avenue, NW, Suite 406
Washington, DC 20004

Mr. Rob Gordon, Executive Director
National Wilderness Institute
P.O. Box 25766
Georgetown Station
Washington, D.C. 20007

Mr. Jack Evans
Ward 2 Councilmember
John A. Wilson Building
1350 Pennsylvania Avenue, NW, Room 106
Washington, DC 20004

Mr. David Brewster
Office of Maryland Senator Brian Frosh
446 Miller Senate Office Building
Annapolis, MD 21401-1991

Ms. Kathy Patterson
Councilwoman Ward 3
1350 Pennsylvania Avenue, NW, Suite 107
Washington, DC 20004

Mr. Charles H. Atherton, Secretary
U.S. Commission of Fine Arts
National Building Museum
401 F Street, NW, Suite 312
Washington, DC 20001-2728

Mr. Nat Williams, Director
The Nature Conservancy of Maryland/D.C.
5410 Grosvenor Lane, Suite 100
Bethesda, MD 20814

Ms. Barbara Favola, Chairman
Arlington County Board
2100 Clarendon Boulevard, Suite 300
Arlington, VA 22201

Mr. Don L. Klima, Director
Office of Federal Agency Programs
Advisory Council on Historic Preservation
1100 Pennsylvania Avenue, NW, Suite 803
Washington, DC 20004

Ms. Deborah R. Thomas, Chair
ANC 1B
P.O. Box 73710
Washington, DC 20009

Mr. Raymond Roach
Washington DC Regional Office
Natural Resources Defense Council
1200 New York Ave., NW, Suite 400
Washington, DC 20005

Honorable Eleanor Holmes Norton
United States House of Representatives
2136 Rayburn House Office Building
Washington, DC 20515

Honorable Chris Van Hollen
United States House of Representatives
1419 Longworth House Office Building
Washington, DC 20515

Honorable Jim Moran
United States House of Representatives
2239 Rayburn Building
Washington, DC 20515-4608

Dr. Hamid Karimi, Program Manager
Watershed Protection Division
D.C. Department of Health
51 N Street, NE, 5th floor
Washington, DC 20002

Ms. Brenda Creel, General Manager for Environmental Services
City of Falls Church
300 Park Avenue
Falls Church, VA 22046

Mr. W. Tayloe Murphy, Jr.
Secretary of Natural Resources
Ninth Street Office Building, 7th Floor
202 N. Ninth Street
Richmond, VA 23219

Ms. Lisa Burcham, State Historic Preservation Officer
Historic Preservation Division
D.C. Office of Planning
801 North Capitol Street, NE, Suite 4000
Washington, DC 20002

Ms. Lucia Leith
Western Avenue Citizens Association
4626 Western Avenue
Bethesda, MD 20816

Ms. Melissa J. Lane, Chair
ANC 3B
PO Box 32312
Calvert Station
Washington, DC 20007

Ms. Nancy MacWood, Chair
ANC 3C
2737 Devonshire Place, NW
Washington, DC 20008

Ms. Amy Bauer McVey, Chair
ANC 3E
PO Box 9953
Friendship Station
Washington, DC 20016

Mr. Stu Ross, President
Palisades Citizens Association
PO Box 40603
Palisades Station
Washington, DC 20016

Mr. John Finney
ANC 3D Commissioner
5275 Watson Street, NW
Washington, DC 20016

Mr. George S. Rizzo
Mail Code: 3WP22
U.S. EPA Region III
1650 Arch Street
Philadelphia, PA 19103-2029

Mr. Robert G. Burnley, Director
Virginia Department of Environmental Quality
629 East Main Street
Richmond, Virginia 23219

Mr. Neal Fitzpatrick, Executive Director
Audubon Naturalist Society
8940 Jones Mill Road
Chevy Chase, Maryland 20815

Mr. Dean F. Amel, Chair
Arlington County Environment and Energy Conservation Commission
3013 N. 4th St.
Arlington, VA 22201

Ms. Mary Letzkus
U.S. EPA Region III
Mail Code: 3WP13
1650 Arch Street
Philadelphia, PA 19103-2029

Ms. Tania Tully, State Historic Preservation Officer
Maryland Historical Trust
Division of Historical and Cultural Programs
100 Community Place
Crownsville, MD 21032-2023

Ms. Debra Graham
Westmoreland Citizens Association
5407 Duvall Drive
Bethesda, MD 20816

Mr. William Haprop, President
Spring Valley-Wesley Heights Citizens Association
3615 49th Street, NW
Washington, DC 20016

Mr. John Trypus
DCWASA - DETS
5000 Overlook Ave., SW
Washington, DC 20032

Ms. Sandra C. Allen
Councilmember Ward 8
The John A. Wilson Building
1350 Pennsylvania Avenue, N. W., Suite 408
Washington, DC 20004

Mr. Harold Brazil
Councilmember-At-Large
The John A. Wilson Building
1350 Pennsylvania Avenue, NW, Suite 404
Washington, DC 20004

Honorable George P. Radanovich
Chairman Subcommittee on National Parks, Recreation, and Public Lands
United States House of Representatives
187 Ford House Office Building
Washington, DC 20515

Mr. Gregory Hope
Water Quality Division
DC Department of Health
51 N. Street, NE, 5th Floor
Washington, DC 20002

Ms. Ellie L. Irons, Program Manager
Office of Environmental Impact Review
P.O. Box 10009
Richmond, Virginia 23240

Ms. Lori Byrne, Environmental Review Specialist
MD DNR - Wildlife and Heritage Service
Tawes State Office Building, E-1
580 Taylor Avenue
Annapolis, MD 21401

Ms. Elizabeth Adams
Westmoreland Citizens Association
5111 Dalecarlia Drive
Bethesda, MD 20816

Honorable Barbara A. Mikulski
709 Hart Senate Office Building
U.S. Senate
Washington, D.C. 20510

Ms. Tanya Tomasko Spano
Department of Environmental Programs
777 North Capitol Street, NE
Washington, DC 20002-4226

Mr. David A. Catania
Councilmember-At-Large
The John A. Wilson Building
1350 Pennsylvania Avenue, NW, Suite 110
Washington, DC 20004

Mr. William S. Arguto
U.S. EPA Region III
Mail Code: 3EA30
1650 Arch Street
Philadelphia, PA 19103-2029

Mr. Peter Rousselot, Chair
Arlington County Fiscal Affairs Advisory Commission
3182 Key Boulevard
Arlington, Virginia 22201

Mr. Kevin Brandt, Superintendent
C&O Canal NHP Headquarters
1850 Dual Highway, Suite 100
Hagerstown, MD 21740

Ms. Alma H. Gates
Chair, ANC 3D
PO Box 40846
Palisades Station
Washington, DC 20016

Mr. Ron Tripp
Citizens' Cooperating Committee on Friendship Heights
5330 Sherrill Ave
Chevy Chase, MD 20815

Mr. Eric Olson
NRDC
1200 New York Avenue, NW, Suite 400
Washington, DC 20005

Ms. Sherry Krest
Chesapeake Bay Field Office
U.S. Fish and Wildlife Service
177 Admiral Cochrane Drive
Annapolis, MD 21401

Mr. Phil Mendelson
Councilmember-At-Large
The John A. Wilson Building
1350 Pennsylvania Avenue, NW, Suite 400
Washington, DC 20004

MARYLAND
DEPARTMENT OF
NATURAL RESOURCES

Robert L. Ehrlich, Jr., *Governor*
Michael S. Steele, *Lt. Governor*
C. Ronald Franks, *Secretary*

October 12, 2004

8/10 Mile P.

Mr. Thomas P. Jacobus
Department of the Army
Washington Aqueduct
US Army Corps of Engineers, Baltimore District
5900 MacArthur Boulevard, NW
Washington, DC 20016-2514

RE: Environmental Review for Washington Aqueduct's Proposed Residuals Management Process, Washington, D.C.

Dear Mr. Jacobus:

The Wildlife and Heritage Service has determined that while most of the proposed alternatives are outside of our area of review, we would encourage that any alternative chosen, avoid impacts to the environmentally sensitive Potomac Gorge area. This area includes the Potomac River and the unique habitat along its banks and shorelines that support numerous rare, threatened and endangered species. It is also important to note that the utilization of state funds, or the need to obtain a state authorized permit may warrant additional evaluations that could lead to protection or survey recommendations by the Wildlife and Heritage Service. If this project falls into one of these categories, please contact us for further coordination.

Thank you for allowing us the opportunity to review this project. If you should have any further questions regarding this information, please contact me at (410) 260-8573.

Sincerely,

Lori A. Byrne

Lori A. Byrne,
Environmental Review Coordinator
Wildlife and Heritage Service
MD Dept. of Natural Resources

ER #2004.1717.dc
Cc: R. Wiegand, DNR

CENAB-WA April 9, 2005

Memorandum for the Record

Subject: Coordination with National Park Service re Residuals Processing Draft EIS

1. On December 29, 2004, Washington Aqueduct wrote to the National Park Service, National Capital Region requesting their input on the concept of building an access road from the Dalecarlia Water Treatment Plant to Clara Barton Parkway and using the parkway to truck solids from a facility sited at Dalecarlia. That letter also requested input on siting a facility on the grounds of the Navy's facility at Carderock.

2. We have had further consultations with the NPS and have seen a draft of their response. While not finalized, we believe that it is the view of the NPS that access to and use of the Clara Barton Parkway is not consistent with their stewardship mission of the National Park system.

3. The Navy declined our request to use the Carderock facility so the NPS's involvement at that site is moot.

4. When the signed letter is received from the NPS it will be included in the final EIS.

Thomas P. Jacobus
General Manager

Water Treatment Residuals Management Project

NEWS

- The December 20, 2004 document required by paragraph 21 in the Federal Facility Compliance Agreement is now available. This document describes the analysis of alternatives included in the development of the Draft Environmental Impact Statement.

- Washington Aqueduct is currently seeking input from the public regarding any alternatives not already considered. The Description of Proposed Action and Alternatives includes information on the project Purpose and Need, including the project objectives, as well as lists the alternatives initially considered. The Feasibility Study is a document that contains additional details and analysis on the alternatives initially considered. The December 20, 2004 document contains analysis and discussion of the initially considered alternatives and of the alternatives suggested during the comment period that ended on November 15, 2004. New alternatives may be proposed to Washington Aqueduct by ***February 14, 2005*** by using the website comment form, by sending an email to michael.c.peterson@usace.army.mil, or by sending a letter to:

  Washington Aqueduct
  5900 MacArthur Boulevard, NW
  Washington, DC 20016
  Attn: Michael Peterson

- Two documents (four separate volumes) referenced in the Feasibility Study are now available in **Adobe Acrobat** format. The documents have also been bundled in a zip file and are very sizable. Contact michael.c.peterson@usace.army.mil if you have difficulties downloading the documents. Download the zipped documents here (file size - 172 MB) or retrieve the individual files below.

The two documents are:

- Department of the Army Baltimore District, Corps of Engineers, Washington Aqueduct. (1996) "Dalecarlia Treatment Plant and Georgetown Reservoir Residuals Collection and Treatment (35% Design)." Volume 1, Volume 2 and Volume 3.
- Department of the Army Baltimore District, Corps of Engineers, Washington Aqueduct. (1995) "Dalecarlia Water Treatment Plant and Georgetown Reservoir Residuals Disposal Facilities - Residuals Disposal Study."

- Letter to neighbors of Washington Aqueduct dated September 10, 2004.
- Letter to neighbors of Washington Aqueduct dated August 12, 2004.
- The Scope of Statement, which is a work plan for the Draft Environmental Impact Statement, is now available.
- Summary of Alternatives under consideration in the Draft Environmental Impact Statement is now available.

Points of Contact for This Page:	
For Content: Call the Residuals Project Environmental Engineer at 202-764-0025	**For Technical Support:** Paula Schultz, CENAB-IM 410-962-4000 Paula.Schultz@usace.army.mil

DEPARTMENT OF THE ARMY
WASHINGTON AQUEDUCT
U.S. ARMY CORPS OF ENGINEERS, BALTIMORE DISTRICT
5900 MACARTHUR BOULEVARD, N.W.
WASHINGTON, D.C. 20016-2514

February 18, 2005

Office of the General Manager

Mr. Andy Moser
Chesapeake Bay Field Office
U.S. Fish and Wildlife Service
177 Admiral Cochrane Drive
Annapolis, MD 21401

Dear Mr. Moser:

The purpose of this letter is to update you on the progress of developing the Draft Environmental Impact Statement (DEIS) for Washington Aqueduct's Proposed Residuals Management Process in Washington, D.C. In addition, this is a formal request per Section 7(c)(1) of the Endangered Species Act for information on any proposed or listed species or their critical habitats are present within the project sites. We previously submitted a similar request to you on August 9, 2004 that included four proposed alternatives. That letter and attachment is enclosed. An additional alternative that was recommended by various stakeholders is now also under consideration, and we request you include this alternative with our original consultation request.

The additional alternative would include collecting the water treatment residuals from the Dalecarlia Water Treatment Plant and the Georgetown Reservoir, transporting the material to a site on Washington Aqueduct property adjacent to Little Falls Road and Sibley Memorial Hospital in the District of Columbia. At this site the water treatment residuals would be thickened, dewatered, and disposed of by trucking to an off-site disposal facility. The estimated daily average number of trucks needed to transport the water treatment residuals is approximately ten (during the 5-day workweek) at the 20-year predicted residuals production level. More details concerning this alternative, and others suggested by the public but determined to not be in conformance with the project purpose and need requirements, can be found in a document dated December 20, 2004. This document is included with the other project documents in the enclosed CD. These documents are also available on our project website at http://washingtonaqueduct.nab.usace.army.mil/aqueduct.htm.

In order to keep on our DEIS schedule, we request your response by March 22, 2005. Similar requests are being sent to the United States National Marine Fisheries Service, the District of Columbia Department of Health Fisheries and Wildlife Division, and to the Maryland Department of Natural Resources – Wildlife Heritage Service.

Thank you for your efforts to date on this project. If you have any questions please contact Mr. Michael Peterson at 202-764-0025.

Sincerely,

Thomas P. Jacobus
General Manager

Enclosures

DEPARTMENT OF THE ARMY
WASHINGTON AQUEDUCT
U.S. ARMY CORPS OF ENGINEERS, BALTIMORE DISTRICT
5900 MACARTHUR BOULEVARD, N.W.
WASHINGTON, D.C. 20016-2514

August 9, 2004

Office of the General Manager

Mr. John Wolflin, Field Supervisor
Chesapeake Bay Field Office
U.S. Fish and Wildlife Service
177 Admiral Cochrane Drive
Annapolis, MD 21401

Dear Mr. Wolfin

John

The purpose of this letter is to consult with your office regarding the Draft Environmental Impact Statement (DEIS) that is being prepared for Washington Aqueduct's Proposed Residuals Management Process in Washington, D.C. The DEIS evaluates the potential environmental consequences of implementing the alternative actions including a No-Action and preferred alternative.

Background:

The U.S. Army Corps of Engineers, Baltimore District, Washington Aqueduct operates the Dalecarlia and McMillan Water Treatment Plants in Washington, D.C., serving over one million persons in the District of Columbia and Northern Virginia area with potable water. The treatment process removes solid particles (river silt) from the Potomac River supply water, treats and disinfects the water, and distributes the finished water to the metropolitan service area. The solids removed during the treatment process have historically been returned to the river, but a recently reissued version of the Washington Aqueduct National Pollutant Discharge Elimination System (NPDES) permit (Permit No. DC 0000019) effectively precludes the discharge of water treatment solids, or residuals, to the river.

Consequently, Washington Aqueduct is in the process of evaluating water treatment residuals management options to minimize or eliminate the discharge of residuals to the Potomac River. The residuals management option that will ultimately be selected has a potential to affect the human environment, and thus development of the residuals management plan must comply with the National Environmental Policy Act (NEPA) and also Section 106 of the National Historic Preservation Act (NHPA).

A Description of Proposed Actions and Alternatives (DOPAA) as well as an Engineering Feasibility Study have been completed. This process has narrowed the list of potential alternatives from 26 alternatives to four, including the no-action alternative. These alternatives will be evaluated in the DEIS that is currently being prepared.

We have attached a brief description of the alternatives and also a copy of our Scope of Statement. The Scope of Statement describes in detail the technical approach for evaluating the alternatives in the DEIS.

The complete text of the DOPAA, the Feasibility Study and the Scope of Statement are available on the project web page. http://washingtonaqueduct.nab.usace.army.mil/aqueduct.

We will be holding a public meeting in the auditorium of Sibley Memorial Hospital on September 7, 2004 at 7:00 PM in order to provide our stakeholders an opportunity to learn about the progress of the project, to see visual simulations of facilities for the different alternatives, and to ask questions to Washington Aqueduct directly.

In accordance with Section 7(c)(1) of the Endangered Species Act, we are requesting information on whether any proposed or listed species or their critical habitats are present within the project sites. Your response within 30 days from the receipt of this letter will be greatly appreciated. Similar requests are being sent to the District of Columbia Department of Health Fisheries and Wildlife Division, the United States National Marine Fisheries Service and to the Maryland Department of Natural Resources – Wildlife Heritage Service.

If you have any questions please contact Mr. Michael Peterson at 202-764-0025.

Sincerely,

Thomas P. Jacobus
General Manager

Enclosures

Summary Description of Proposed Alternatives

A 20-year period of examination will form the basis for the DEIS. Consequently, residuals quantities and sizing of facilities will be based on anticipated water production over the 20-year period. Similarly, the evaluation of impacts of the alternatives will be based on the 20-year period of examination.

Alternative 2: Process Water Treatment Residuals at Dalecarlia WTP and Dispose in a Newly Constructed Dalecarlia Monofill. Process Forebay Residuals by Current Methods and Periodically Haul

Residuals from the Dalecarlia Sedimentation Basins and the Georgetown Reservoir would be collected and thickened/dewatered at the Dalecarlia WTP before being disposed of in a newly constructed Dalecarlia monofill. Residuals from the Forebay would be processed separately as is currently practiced and periodically hauled offsite or could also be disposed of in the Dalecarlia monofill.

Facilities. The site figure indicates the sedimentation basins to be upgraded, the preliminary location of thickening and dewatering facilities, and the approximate footprint of the monofill. As currently conceived, the monofill would be approximately 50 ft tall on the Dalecarlia Parkway side and 80 ft tall on the Dalecarlia Reservoir side. The footprint of the monofill is anticipated to occupy approximately 30 acres.

Conveyance and Transport. Pipelines would convey coagulated residuals from both the Dalecarlia sedimentation basins and the Georgetown Reservoir to the Dalecarlia thickening facility. After thickening and dewatering, onsite trucks would be used to haul the residuals to the monofill. On average, six onsite truck trips per day (6 days per week) would be required.

Alternative 5: Thicken Water Treatment Residuals at Dalecarlia WTP, Then Pump via a New Pipeline to Blue Plains. Process Forebay Residuals by Current Methods and Periodically Haul

This alternative would eliminate truck traffic associated with residuals on the roads surrounding the Washington Aqueduct Reservation by conveying coagulated residuals to the Blue Plains Wastewater Treatment Plant for further processing and disposal. Residuals from the Forebay would be processed separately as is currently practiced.

Facilities. This alternative would involve similar sedimentation basin modifications and new thickening facilities. Dewatering facilities would be located at Blue Plains.

Conveyance and Transport. Pipelines would convey coagulated residuals from both the onsite sedimentation basins and the Georgetown Reservoir to the Dalecarlia thickening facility. Another dedicated pair of pipelines within the right-of-way of the Potomac Interceptor would convey the thickened residuals to Blue Plains for final processing. These buried pipes would be approximately 10 miles in length and 12 inches in diameter.

Alternative 25: Process Water Treatment Residuals at the Dalecarlia WTP and Dispose via Contract Hauling. Process Forebay Residuals by Current Methods and Periodically Haul

This alternative consists of thickening and dewatering water treatment residuals at the Dalecarlia WTP. Residuals from the Dalecarlia sedimentation basins and the Georgetown Reservoir would be collected and thickened/dewatered at the Dalecarlia WTP. The disposal method would be contract hauling from Dalecarlia WTP to a permitted disposal facility. Residuals from the Forebay would be processed separately as is currently practiced and periodically hauled offsite or could also be disposed of onsite.

Facilities. The figures indicate the sedimentation basins to be upgraded and the preliminary location of thickening and dewatering facilities.

Conveyance and Transport. Pipelines would convey water treatment residuals from both the onsite sedimentation basins and the Georgetown Reservoir to the Dalecarlia thickening facility. After thickening and dewatering, the residuals would be hauled by truck to a permitted offsite disposal facility. The estimated average number of trucks for handling the residuals is approximately ten per day (during the 5-day workweek) at the 20-year predicted residuals production level.

Washington Aqueduct Residuals Processing Alternatives

The Washington Aqueduct operates the Dalecarlia and McMillan water treatment plants in Washington, D.C., serving over one million persons in the District of Columbia and Northern Virginia area with potable water. The treatment process adds coagulant to remove solid particles (river silt) from the water withdrawn from the Potomac River, filters and disinfects the water, and distributes the finished water to the metropolitan service area. The solids generated during the treatment process have historically been returned to the Potomac River, but a recently reissued version of Washington Aqueduct's National Pollutant Discharge Elimination System permit (Permit No. DC 0000019) effectively precludes the return of the of water treatment solids to the river.

Consequently, Washington Aqueduct is in the process of evaluating water treatment residuals management options to minimize or eliminate the discharge of residuals to the Potomac River. The residuals management option that will ultimately be selected has the potential to affect the human environment, and thus development of the residuals management plan must comply with the National Environmental Policy Act and also Section 106 of the National Historic Preservation Act.

The Draft Environmental Impact Statement will consider a 20-year period of operations. Consequently, residuals quantities and sizing of facilities will be based on anticipated water production over the 20-year period. Similarly, the evaluation of impacts of the alternatives will be based on the 20-year period of examination.

Alternative A: Process Water Treatment Residuals at Dalecarlia Water Treatment Plant and Dispose in a Newly Constructed Dalecarlia Monofill. Process Dalecarlia Reservoir Forebay Residuals by Current Methods and Periodically Haul

Residuals from the Dalecarlia sedimentation basins and the Georgetown sedimentation basins would be collected and thickened/dewatered at the Dalecarlia water treatment plant before being disposed of in a newly constructed Dalecarlia monofill. Residuals from the Dalecarlia Reservoir forebay would be processed separately as is currently practiced and periodically hauled offsite or could also be disposed of in the Dalecarlia monofill.

Facilities. Sedimentation basins at Dalecarlia and Georgetown would be upgraded. A residuals thickening and dewatering facility has been preliminarily located west of the Capital Crescent Trail as it passes through the Dalecarlia water treatment plant. The mechanical processing area of this facility could rise approximately 70 feet. The approximate location of the monofill is between the Dalecarlia Reservoir and the Dalecarlia Parkway. As currently conceived, the monofill would rise approximately 50 feet from ground level on the Dalecarlia Parkway side and 80 feet on the Dalecarlia Reservoir side. For comparison, the existing trees in that area are in the range of 100 feet tall. The monofill would occupy about 30 acres.

Conveyance and Transport. Pipelines would convey coagulated residuals from both the Dalecarlia sedimentation basins and the Georgetown sedimentation basins to the Dalecarlia thickening facility. After thickening and dewatering, the solids would be moved by truck across MacArthur Boulevard to the monofill. On average, six onsite truck trips per day (six days per week) would be required.

Alternative B: Process Water Treatment Residuals at the Dalecarlia Water Treatment Plant and Dispose via Contract Hauling. Process Dalecarlia Reservoir Forebay Residuals by Current Methods and Periodically Haul

This alternative consists of thickening and dewatering water treatment residuals at the Dalecarlia water treatment plant. Residuals from the Dalecarlia sedimentation basins and the Georgetown sedimentation basins would be collected and thickened/dewatered at the Dalecarlia water treatment plant. The disposal method would be contract hauling from Dalecarlia water treatment plant to a permitted disposal facility.

MORE ON REVERSE

Residuals from the Dalecarlia Reservoir forebay would be processed separately as is currently practiced and periodically hauled offsite or could also be disposed of onsite.

Facilities. The facilities to complete this option are similar to alternative A, but without the creation of the monofill on the Dalecarlia Reservoir grounds.

Conveyance and Transport. Pipelines would convey water treatment residuals from both the Dalecarlia sedimentation basins and the Georgetown sedimentation basins to the Dalecarlia thickening facility. After thickening and dewatering, the residuals would be hauled by truck to a permitted offsite disposal facility. The estimated average number of trucks for handling the residuals is approximately ten per day (during the five-day workweek) at the 20-year predicted residuals production level.

Alternative C: Thicken Water Treatment Residuals at Dalecarlia Water Treatment Plant, then Pump via a New Pipeline to Blue Plains. Process Dalecarlia Reservoir Forebay Residuals by Current Methods and Periodically Haul

This alternative would eliminate truck traffic associated with residuals on the roads surrounding the Washington Aqueduct Dalecarlia and Georgetown operations by conveying coagulated residuals to the Blue Plains advanced wastewater treatment plant for further processing and disposal. Residuals from the Dalecarlia Reservoir forebay would be processed separately as is currently practiced.

Facilities. This alternative would involve similar sedimentation basin modifications and new thickening facilities. Dewatering facilities would be located at Blue Plains.

Conveyance and Transport. Pipelines would convey coagulated residuals from both the onsite sedimentation basins and the Georgetown sedimentation basins to the Dalecarlia thickening facility. Another dedicated pair of pipelines within the right-of-way of the Potomac Interceptor sewer would convey the thickened residuals to Blue Plains for final processing. These buried pipes would be approximately 10 miles in length and 12 inches in diameter.

Alternative D: No-Action Alternative

This alternative would result in non-compliance with Permit No. DC 0000019 and the Clean Water Act.

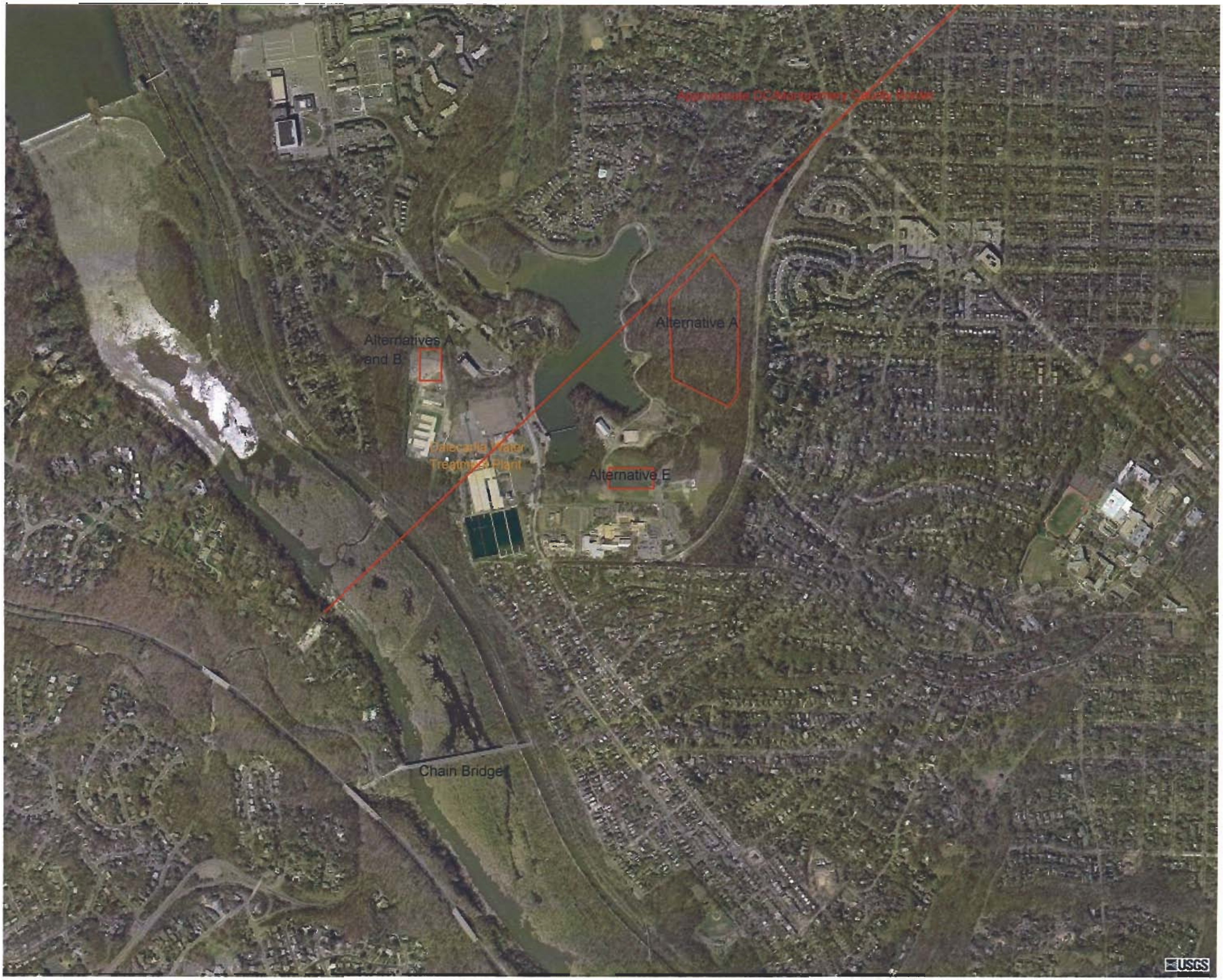
Alternative E: Process Water Treatment Residuals at the Dalecarlia Water Treatment Plant and Dispose via Contract Hauling. Process Dalecarlia Reservoir Forebay Residuals by Current Methods and Periodically Haul

This alternative consists of thickening and dewatering water treatment residuals at the Dalecarlia water treatment plant. Residuals from the Dalecarlia sedimentation basins and the Georgetown sedimentation basins would be collected and thickened/dewatered at the Dalecarlia water treatment plant. The disposal method would be contract hauling from Dalecarlia water treatment plant to a permitted disposal facility. Residuals from the Dalecarlia Reservoir forebay would be processed separately as is currently practiced and periodically hauled offsite or could also be disposed of onsite.

Facilities. The facilities to complete this option are similar to alternative A and B, but located adjacent to Little Falls Road on existing Washington Aqueduct property and also without the creation of a monofill (Alternative A) on the Dalecarlia Reservoir grounds.

Conveyance and Transport. Pipelines would convey water treatment residuals from both the Dalecarlia sedimentation basins and the Georgetown sedimentation basins to the Dalecarlia thickening facility. After thickening and dewatering, the residuals would be hauled by truck to a permitted offsite disposal facility. The estimated average number of trucks for handling the residuals is approximately ten per day (during the five-day workweek) at the 20-year predicted residuals production level.


Dalecarlia WTP
Georgetown
Reservoir
Blue Plains
Advance WWTP
USGS



Approximate DC/Montgomery County Border
Alternative A
Alternatives A
and B
Dalecarlia Water
Treatment Plant
Alternative E
Chain Bridge
USGS

DEPARTMENT OF THE ARMY
WASHINGTON AQUEDUCT
U.S. ARMY CORPS OF ENGINEERS, BALTIMORE DISTRICT
5900 MACARTHUR BOULEVARD, N.W.
WASHINGTON, D.C. 20016-2514

August 9, 2004

Office of the General Manager

Mr. Kevin Brandt, Superintendent
C&O Canal NHP Headquarters
1850 Dual Highway, Suite 100
Hagerstown, MD 21740

Dear ~~Mr. Brandt~~ Kevin:

The purpose of this letter is to consult with your office regarding the Draft Environmental Impact Statement (DEIS) that is being prepared for Washington Aqueduct's Proposed Residuals Management Process in Washington, D.C. The DEIS evaluates the potential environmental consequences of implementing the alternative actions including a No-Action and preferred alternative.

Background:

The U.S. Army Corps of Engineers, Baltimore District, Washington Aqueduct operates the Dalecarlia and McMillan Water Treatment Plants in Washington, D.C., serving over one million persons in the District of Columbia and Northern Virginia area with potable water. The treatment process removes solid particles (river silt) from the Potomac River supply water, treats and disinfects the water, and distributes the finished water to the metropolitan service area. The solids removed during the treatment process have historically been returned to the river, but a recently reissued version of the Washington Aqueduct National Pollutant Discharge Elimination System (NPDES) permit (Permit No. DC 0000019) effectively precludes the discharge of water treatment solids, or residuals, to the river.

Consequently, Washington Aqueduct is in the process of evaluating water treatment residuals management options to minimize or eliminate the discharge of residuals to the Potomac River. The residuals management option that will ultimately be selected has a potential to affect the human environment, and thus development of the residuals management plan must comply with the National Environmental Policy Act (NEPA) and also Section 106 of the National Historic Preservation Act (NHPA).

A Description of Proposed Actions and Alternatives (DOPAA) as well as an Engineering Feasibility Study have been completed. This process has narrowed the list of potential alternatives from 26 alternatives to four, including the no-action alternative. These alternatives will be evaluated in the DEIS that is currently being prepared.

We have attached a brief description of the alternatives and also a copy of our Scope of Statement. The Scope of Statement describes in detail the technical approach for evaluating the alternatives in the DEIS.

The complete text of the DOPAA, the Feasibility Study and the Scope of Statement are available on the project web page. http://washingtonaqueduct.nab.usace.army.mil/aqueduct.

We would like to schedule a meeting with you and your staff to discuss the project and the potential alternatives and to understand your possible concerns and issues. We would welcome a meeting at our facility, in case you would like to drive to the area in question, or we can meet at your offices. We will be contacting you very soon to set up a meeting.

In addition, we will be holding a public meeting in the auditorium of Sibley Memorial Hospital on September 7, 2004 at 7:00 PM in order to provide our stakeholders an opportunity to learn about the progress of the project, to see visual simulations of facilities for the different alternatives, and to ask questions to Washington Aqueduct directly.

If you have any questions please contact Mr. Michael Peterson at 202-764-0025.

Sincerely,

Thomas P. Jacobus
General Manager

Enclosures

Summary Description of Proposed Alternatives

A 20-year period of examination will form the basis for the DEIS. Consequently, residuals quantities and sizing of facilities will be based on anticipated water production over the 20-year period. Similarly, the evaluation of impacts of the alternatives will be based on the 20-year period of examination.

Alternative 2: Process Water Treatment Residuals at Dalecarlia WTP and Dispose in a Newly Constructed Dalecarlia Monofill. Process Forebay Residuals by Current Methods and Periodically Haul

Residuals from the Dalecarlia Sedimentation Basins and the Georgetown Reservoir would be collected and thickened/dewatered at the Dalecarlia WTP before being disposed of in a newly constructed Dalecarlia monofill. Residuals from the Forebay would be processed separately as is currently practiced and periodically hauled offsite or could also be disposed of in the Dalecarlia monofill.

Facilities. The site figure indicates the sedimentation basins to be upgraded, the preliminary location of thickening and dewatering facilities, and the approximate footprint of the monofill. As currently conceived, the monofill would be approximately 50 ft tall on the Dalecarlia Parkway side and 80 ft tall on the Dalecarlia Reservoir side. The footprint of the monofill is anticipated to occupy approximately 30 acres.

Conveyance and Transport. Pipelines would convey coagulated residuals from both the Dalecarlia sedimentation basins and the Georgetown Reservoir to the Dalecarlia thickening facility. After thickening and dewatering, onsite trucks would be used to haul the residuals to the monofill. On average, six onsite truck trips per day (6 days per week) would be required.

Alternative 5: Thicken Water Treatment Residuals at Dalecarlia WTP, Then Pump via a New Pipeline to Blue Plains. Process Forebay Residuals by Current Methods and Periodically Haul

This alternative would eliminate truck traffic associated with residuals on the roads surrounding the Washington Aqueduct Reservation by conveying coagulated residuals to the Blue Plains Wastewater Treatment Plant for further processing and disposal. Residuals from the Forebay would be processed separately as is currently practiced.

Facilities. This alternative would involve similar sedimentation basin modifications and new thickening facilities. Dewatering facilities would be located at Blue Plains.

Conveyance and Transport. Pipelines would convey coagulated residuals from both the onsite sedimentation basins and the Georgetown Reservoir to the Dalecarlia thickening facility. Another dedicated pair of pipelines within the right-of-way of the Potomac Interceptor would convey the thickened residuals to Blue Plains for final processing. These buried pipes would be approximately 10 miles in length and 12 inches in diameter.

Alternative 25: Process Water Treatment Residuals at the Dalecarlia WTP and Dispose via Contract Hauling. Process Forebay Residuals by Current Methods and Periodically Haul

This alternative consists of thickening and dewatering water treatment residuals at the Dalecarlia WTP. Residuals from the Dalecarlia sedimentation basins and the Georgetown Reservoir would be collected and thickened/dewatered at the Dalecarlia WTP. The disposal method would be contract hauling from Dalecarlia WTP to a permitted disposal facility. Residuals from the Forebay would be processed separately as is currently practiced and periodically hauled offsite or could also be disposed of onsite.

Facilities. The figures indicate the sedimentation basins to be upgraded and the preliminary location of thickening and dewatering facilities.

Conveyance and Transport. Pipelines would convey water treatment residuals from both the onsite sedimentation basins and the Georgetown Reservoir to the Dalecarlia thickening facility. After thickening and dewatering, the residuals would be hauled by truck to a permitted offsite disposal facility. The estimated average number of trucks for handling the residuals is approximately ten per day (during the 5-day workweek) at the 20-year predicted residuals production level.

DEPARTMENT OF THE ARMY
WASHINGTON AQUEDUCT
U.S. ARMY CORPS OF ENGINEERS, BALTIMORE DISTRICT
5900 MACARTHUR BOULEVARD, N.W.
WASHINGTON, D.C. 20016-2514

August 17, 2004

Office of the General Manager

Mr. Kevin Brandt, Superintendent
C&O Canal NHP Headquarters
1850 Dual Highway, Suite 100
Hagerstown, MD 21740

Dear ~~Mr. Brandt~~ Kevin:

I previously sent a letter to you on August 9, 2004 in part notifying you of a public meeting that Washington Aqueduct will be holding on September 7, 2004. The location of that meeting has been changed to the Dalecarlia Water Treatment Plant which is located at 5900 MacArthur Boulevard, NW, Washington DC 20016. The first part of the meeting will be an open house where members of Washington Aqueduct staff and its consultants will be available with displays and will be prepared to answer questions. That portion will be followed by a group meeting to summarize the material and address any stakeholder issues. The meeting will start at 6:30 pm, and we expect to conclude at 9:00 pm.

If you have any questions please contact Mr. Michael Peterson at 202-764-0025.

Sincerely,

Thomas P. Jacobus
General Manager

DEPARTMENT OF THE ARMY
WASHINGTON AQUEDUCT
U.S. ARMY CORPS OF ENGINEERS, BALTIMORE DISTRICT
5900 MACARTHUR BOULEVARD, N.W.
WASHINGTON, D.C. 20016-2514

August 9, 2004

Office of the General Manager

Mr. John Wolflin, Field Supervisor
Chesapeake Bay Field Office
U.S. Fish and Wildlife Service
177 Admiral Cochrane Drive
Annapolis, MD 21401

Dear Mr. Wolfin John

The purpose of this letter is to consult with your office regarding the Draft Environmental Impact Statement (DEIS) that is being prepared for Washington Aqueduct's Proposed Residuals Management Process in Washington, D.C. The DEIS evaluates the potential environmental consequences of implementing the alternative actions including a No-Action and preferred alternative.

Background:

The U.S. Army Corps of Engineers, Baltimore District, Washington Aqueduct operates the Dalecarlia and McMillan Water Treatment Plants in Washington, D.C., serving over one million persons in the District of Columbia and Northern Virginia area with potable water. The treatment process removes solid particles (river silt) from the Potomac River supply water, treats and disinfects the water, and distributes the finished water to the metropolitan service area. The solids removed during the treatment process have historically been returned to the river, but a recently reissued version of the Washington Aqueduct National Pollutant Discharge Elimination System (NPDES) permit (Permit No. DC 0000019) effectively precludes the discharge of water treatment solids, or residuals, to the river.

Consequently, Washington Aqueduct is in the process of evaluating water treatment residuals management options to minimize or eliminate the discharge of residuals to the Potomac River. The residuals management option that will ultimately be selected has a potential to affect the human environment, and thus development of the residuals management plan must comply with the National Environmental Policy Act (NEPA) and also Section 106 of the National Historic Preservation Act (NHPA).

A Description of Proposed Actions and Alternatives (DOPAA) as well as an Engineering Feasibility Study have been completed. This process has narrowed the list of potential alternatives from 26 alternatives to four, including the no-action alternative. These alternatives will be evaluated in the DEIS that is currently being prepared.

We have attached a brief description of the alternatives and also a copy of our Scope of Statement. The Scope of Statement describes in detail the technical approach for evaluating the alternatives in the DEIS.

The complete text of the DOPAA, the Feasibility Study and the Scope of Statement are available on the project web page. http://washingtonaqueduct.nab.usace.army.mil/aqueduct.

We will be holding a public meeting in the auditorium of Sibley Memorial Hospital on September 7, 2004 at 7:00 PM in order to provide our stakeholders an opportunity to learn about the progress of the project, to see visual simulations of facilities for the different alternatives, and to ask questions to Washington Aqueduct directly.

In accordance with Section 7(c)(1) of the Endangered Species Act, we are requesting information on whether any proposed or listed species or their critical habitats are present within the project sites. Your response within 30 days from the receipt of this letter will be greatly appreciated. Similar requests are being sent to the District of Columbia Department of Health Fisheries and Wildlife Division, the United States National Marine Fisheries Service and to the Maryland Department of Natural Resources – Wildlife Heritage Service.

If you have any questions please contact Mr. Michael Peterson at 202-764-0025.

Sincerely,

Thomas P. Jacobus
General Manager

Enclosures

DEPARTMENT OF THE ARMY
WASHINGTON AQUEDUCT
U.S. ARMY CORPS OF ENGINEERS, BALTIMORE DISTRICT
5900 MACARTHUR BOULEVARD, N.W.
WASHINGTON, D.C. 20016-2514

February 18, 2005

Office of the General Manager

Mr. Andy Moser
Chesapeake Bay Field Office
U.S. Fish and Wildlife Service
177 Admiral Cochrane Drive
Annapolis, MD 21401

Dear Mr. Moser:

The purpose of this letter is to update you on the progress of developing the Draft Environmental Impact Statement (DEIS) for Washington Aqueduct's Proposed Residuals Management Process in Washington, D.C. In addition, this is a formal request per Section 7(c)(1) of the Endangered Species Act for information on any proposed or listed species or their critical habitats are present within the project sites. We previously submitted a similar request to you on August 9, 2004 that included four proposed alternatives. That letter and attachment is enclosed. An additional alternative that was recommended by various stakeholders is now also under consideration, and we request you include this alternative with our original consultation request.

The additional alternative would include collecting the water treatment residuals from the Dalecarlia Water Treatment Plant and the Georgetown Reservoir, transporting the material to a site on Washington Aqueduct property adjacent to Little Falls Road and Sibley Memorial Hospital in the District of Columbia. At this site the water treatment residuals would be thickened, dewatered, and disposed of by trucking to an off-site disposal facility. The estimated daily average number of trucks needed to transport the water treatment residuals is approximately ten (during the 5-day workweek) at the 20-year predicted residuals production level. More details concerning this alternative, and others suggested by the public but determined to not be in conformance with the project purpose and need requirements, can be found in a document dated December 20, 2004. This document is included with the other project documents in the enclosed CD. These documents are also available on our project website at http://washingtonaqueduct.nab.usace.army.mil/aqueduct.htm.

In order to keep on our DEIS schedule, we request your response by March 22, 2005. Similar requests are being sent to the United States National Marine Fisheries Service, the District of Columbia Department of Health Fisheries and Wildlife Division, and to the Maryland Department of Natural Resources – Wildlife Heritage Service.

Thank you for your efforts to date on this project. If you have any questions please contact Mr. Michael Peterson at 202-764-0025.

Sincerely,

Thomas P. Jacobus
General Manager

Enclosures

Summary Description of Proposed Alternatives

A 20-year period of examination will form the basis for the DEIS. Consequently, residuals quantities and sizing of facilities will be based on anticipated water production over the 20-year period. Similarly, the evaluation of impacts of the alternatives will be based on the 20-year period of examination.

Alternative 2: Process Water Treatment Residuals at Dalecarlia WTP and Dispose in a Newly Constructed Dalecarlia Monofill. Process Forebay Residuals by Current Methods and Periodically Haul

Residuals from the Dalecarlia Sedimentation Basins and the Georgetown Reservoir would be collected and thickened/dewatered at the Dalecarlia WTP before being disposed of in a newly constructed Dalecarlia monofill. Residuals from the Forebay would be processed separately as is currently practiced and periodically hauled offsite or could also be disposed of in the Dalecarlia monofill.

Facilities. The site figure indicates the sedimentation basins to be upgraded, the preliminary location of thickening and dewatering facilities, and the approximate footprint of the monofill. As currently conceived, the monofill would be approximately 50 ft tall on the Dalecarlia Parkway side and 80 ft tall on the Dalecarlia Reservoir side. The footprint of the monofill is anticipated to occupy approximately 30 acres.

Conveyance and Transport. Pipelines would convey coagulated residuals from both the Dalecarlia sedimentation basins and the Georgetown Reservoir to the Dalecarlia thickening facility. After thickening and dewatering, onsite trucks would be used to haul the residuals to the monofill. On average, six onsite truck trips per day (6 days per week) would be required.

Alternative 5: Thicken Water Treatment Residuals at Dalecarlia WTP, Then Pump via a New Pipeline to Blue Plains. Process Forebay Residuals by Current Methods and Periodically Haul

This alternative would eliminate truck traffic associated with residuals on the roads surrounding the Washington Aqueduct Reservation by conveying coagulated residuals to the Blue Plains Wastewater Treatment Plant for further processing and disposal. Residuals from the Forebay would be processed separately as is currently practiced.

Facilities. This alternative would involve similar sedimentation basin modifications and new thickening facilities. Dewatering facilities would be located at Blue Plains.

Conveyance and Transport. Pipelines would convey coagulated residuals from both the onsite sedimentation basins and the Georgetown Reservoir to the Dalecarlia thickening facility. Another dedicated pair of pipelines within the right-of-way of the Potomac Interceptor would convey the thickened residuals to Blue Plains for final processing. These buried pipes would be approximately 10 miles in length and 12 inches in diameter.

Alternative 25: Process Water Treatment Residuals at the Dalecarlia WTP and Dispose via Contract Hauling. Process Forebay Residuals by Current Methods and Periodically Haul

This alternative consists of thickening and dewatering water treatment residuals at the Dalecarlia WTP. Residuals from the Dalecarlia sedimentation basins and the Georgetown Reservoir would be collected and thickened/dewatered at the Dalecarlia WTP. The disposal method would be contract hauling from Dalecarlia WTP to a permitted disposal facility. Residuals from the Forebay would be processed separately as is currently practiced and periodically hauled offsite or could also be disposed of onsite.

Facilities. The figures indicate the sedimentation basins to be upgraded and the preliminary location of thickening and dewatering facilities.

Conveyance and Transport. Pipelines would convey water treatment residuals from both the onsite sedimentation basins and the Georgetown Reservoir to the Dalecarlia thickening facility. After thickening and dewatering, the residuals would be hauled by truck to a permitted offsite disposal facility. The estimated average number of trucks for handling the residuals is approximately ten per day (during the 5-day workweek) at the 20-year predicted residuals production level.

DEPARTMENT OF THE ARMY
WASHINGTON AQUEDUCT
U.S. ARMY CORPS OF ENGINEERS, BALTIMORE DISTRICT
5900 MACARTHUR BOULEVARD, N.W.
WASHINGTON, D.C. 20016-2514

August 9, 2004

Office of the General Manager

Ms. Lori Byrne, Environmental Review Specialist
MD DNR - Wildlife and Heritage Service
Tawes State Office Building, E-1
580 Taylor Avenue
Annapolis, MD 21401

Dear Ms. Byrne:

The purpose of this letter is to consult with your office regarding the Draft Environmental Impact Statement (DEIS) that is being prepared for Washington Aqueduct's Proposed Residuals Management Process in Washington, D.C. The DEIS evaluates the potential environmental consequences of implementing the alternative actions including a No-Action and preferred alternative.

Background:

The U.S. Army Corps of Engineers, Baltimore District, Washington Aqueduct operates the Dalecarlia and McMillan Water Treatment Plants in Washington, D.C., serving over one million persons in the District of Columbia and Northern Virginia area with potable water. The treatment process removes solid particles (river silt) from the Potomac River supply water, treats and disinfects the water, and distributes the finished water to the metropolitan service area. The solids removed during the treatment process have historically been returned to the river, but a recently reissued version of the Washington Aqueduct National Pollutant Discharge Elimination System (NPDES) permit (Permit No. DC 0000019) effectively precludes the discharge of water treatment solids, or residuals, to the river.

Consequently, Washington Aqueduct is in the process of evaluating water treatment residuals management options to minimize or eliminate the discharge of residuals to the Potomac River. The residuals management option that will ultimately be selected has a potential to affect the human environment, and thus development of the residuals management plan must comply with the National Environmental Policy Act (NEPA) and also Section 106 of the National Historic Preservation Act (NHPA).

A Description of Proposed Actions and Alternatives (DOPAA) as well as an Engineering Feasibility Study have been completed. This process has narrowed the list of potential alternatives from 26 alternatives to four, including the no-action alternative. These alternatives will be evaluated in the DEIS that is currently being prepared.

We have attached a brief description of the alternatives and also a copy of our Scope of Statement. The Scope of Statement describes in detail the technical approach for evaluating the alternatives in the DEIS.

The complete text of the DOPAA, the Feasibility Study and the Scope of Statement are available on the project web page. http://washingtonaqueduct.nab.usace.army.mil/aqueduct.

We will be holding a public meeting in the auditorium of Sibley Memorial Hospital on September 7, 2004 at 7:00 PM in order to provide our stakeholders an opportunity to learn about the progress of the project, to see visual simulations of facilities for the different alternatives, and to ask questions to Washington Aqueduct directly.

In accordance with Section 7(c)(1) of the Endangered Species Act, we are requesting information on whether any proposed or listed species or their critical habitats are present within the project sites. Your response within 30 days from the receipt of this letter will be greatly appreciated. Similar requests are being sent to the United States Fish and Wildlife Service, the United States National Marine Fisheries Service and to the District of Columbia Department of Health Fisheries and Wildlife Division.

If you have any questions please contact Mr. Michael Peterson at 202-764-0025.

Sincerely,

Thomas P. Jacobus
General Manager

Enclosures

Summary Description of Proposed Alternatives

A 20-year period of examination will form the basis for the DEIS. Consequently, residuals quantities and sizing of facilities will be based on anticipated water production over the 20-year period. Similarly, the evaluation of impacts of the alternatives will be based on the 20-year period of examination.

Alternative 2: Process Water Treatment Residuals at Dalecarlia WTP and Dispose in a Newly Constructed Dalecarlia Monofill. Process Forebay Residuals by Current Methods and Periodically Haul

Residuals from the Dalecarlia Sedimentation Basins and the Georgetown Reservoir would be collected and thickened/dewatered at the Dalecarlia WTP before being disposed of in a newly constructed Dalecarlia monofill. Residuals from the Forebay would be processed separately as is currently practiced and periodically hauled offsite or could also be disposed of in the Dalecarlia monofill.

Facilities. The site figure indicates the sedimentation basins to be upgraded, the preliminary location of thickening and dewatering facilities, and the approximate footprint of the monofill. As currently conceived, the monofill would be approximately 50 ft tall on the Dalecarlia Parkway side and 80 ft tall on the Dalecarlia Reservoir side. The footprint of the monofill is anticipated to occupy approximately 30 acres.

Conveyance and Transport. Pipelines would convey coagulated residuals from both the Dalecarlia sedimentation basins and the Georgetown Reservoir to the Dalecarlia thickening facility. After thickening and dewatering, onsite trucks would be used to haul the residuals to the monofill. On average, six onsite truck trips per day (6 days per week) would be required.

Alternative 5: Thicken Water Treatment Residuals at Dalecarlia WTP, Then Pump via a New Pipeline to Blue Plains. Process Forebay Residuals by Current Methods and Periodically Haul

This alternative would eliminate truck traffic associated with residuals on the roads surrounding the Washington Aqueduct Reservation by conveying coagulated residuals to the Blue Plains Wastewater Treatment Plant for further processing and disposal. Residuals from the Forebay would be processed separately as is currently practiced.

Facilities. This alternative would involve similar sedimentation basin modifications and new thickening facilities. Dewatering facilities would be located at Blue Plains.

Conveyance and Transport. Pipelines would convey coagulated residuals from both the onsite sedimentation basins and the Georgetown Reservoir to the Dalecarlia thickening facility. Another dedicated pair of pipelines within the right-of-way of the Potomac Interceptor would convey the thickened residuals to Blue Plains for final processing. These buried pipes would be approximately 10 miles in length and 12 inches in diameter.

Alternative 25: Process Water Treatment Residuals at the Dalecarlia WTP and Dispose via Contract Hauling. Process Forebay Residuals by Current Methods and Periodically Haul

This alternative consists of thickening and dewatering water treatment residuals at the Dalecarlia WTP. Residuals from the Dalecarlia sedimentation basins and the Georgetown Reservoir would be collected and thickened/dewatered at the Dalecarlia WTP. The disposal method would be contract hauling from Dalecarlia WTP to a permitted disposal facility. Residuals from the Forebay would be processed separately as is currently practiced and periodically hauled offsite or could also be disposed of onsite.

Facilities. The figures indicate the sedimentation basins to be upgraded and the preliminary location of thickening and dewatering facilities.

Conveyance and Transport. Pipelines would convey water treatment residuals from both the onsite sedimentation basins and the Georgetown Reservoir to the Dalecarlia thickening facility. After thickening and dewatering, the residuals would be hauled by truck to a permitted offsite disposal facility. The estimated average number of trucks for handling the residuals is approximately ten per day (during the 5-day workweek) at the 20-year predicted residuals production level.

DEPARTMENT OF THE ARMY
WASHINGTON AQUEDUCT
U.S. ARMY CORPS OF ENGINEERS, BALTIMORE DISTRICT
5900 MACARTHUR BOULEVARD, N.W.
WASHINGTON, D.C. 20016-2514

August 17, 2004

Office of the General Manager

Ms. Lori Byrne, Environmental Review Specialist
MD DNR - Wildlife and Heritage Service
Tawes State Office Building, E-1
580 Taylor Avenue
Annapolis, MD 21401

Dear Ms. Byrne:

I previously sent a letter to you on August 9, 2004 in part notifying you of a public meeting that Washington Aqueduct will be holding on September 7, 2004. The location of that meeting has been changed to the Dalecarlia Water Treatment Plant which is located at 5900 MacArthur Boulevard, NW, Washington DC 20016. The first part of the meeting will be an open house where members of Washington Aqueduct staff and its consultants will be available with displays and will be prepared to answer questions. That portion will be followed by a group meeting to summarize the material and address any stakeholder issues. The meeting will start at 6:30 pm, and we expect to conclude at 9:00 pm.

If you have any questions please contact Mr. Michael Peterson at 202-764-0025.

Sincerely,

Thomas P. Jacobus
General Manager

DEPARTMENT OF THE ARMY
WASHINGTON AQUEDUCT
U.S. ARMY CORPS OF ENGINEERS, BALTIMORE DISTRICT
5900 MACARTHUR BOULEVARD, N.W.
WASHINGTON, D.C. 20016-2514

February 18, 2005

Office of the General Manager

Ms. Lori Byrne, Environmental Review Specialist
MD DNR - Wildlife and Heritage Service
Tawes State Office Building, E-1
580 Taylor Avenue
Annapolis, MD 21401

Dear Ms. Byrne:

The purpose of this letter is to update you on the progress of developing the Draft Environmental Impact Statement (DEIS) for Washington Aqueduct's Proposed Residuals Management Process in Washington, D.C. In addition, this is a formal request per Section 7(c)(1) of the Endangered Species Act for information on any proposed or listed species or their critical habitats are present within the project sites. We previously submitted a similar request to you on August 9, 2004 that included four proposed alternatives. That letter and attachment is enclosed. An additional alternative that was recommended by various stakeholders is now also under consideration, and we request you include this alternative with our original consultation request.

The additional alternative would include collecting the water treatment residuals from the Dalecarlia Water Treatment Plant and the Georgetown Reservoir, transporting the material to a site on Washington Aqueduct property adjacent to Little Falls Road and Sibley Memorial Hospital in the District of Columbia. At this site the water treatment residuals would be thickened, dewatered, and disposed of by trucking to an off-site disposal facility. The estimated daily average number of trucks needed to transport the water treatment residuals is approximately ten (during the 5-day workweek) at the 20-year predicted residuals production level. More details concerning this alternative, and others suggested by the public but determined to not be in conformance with the project purpose and need requirements, can be found in a document dated December 20, 2004. This document is included with the other project documents in the enclosed CD. These documents are also available on our project website at http://washingtonaqueduct.nab.usace.army.mil/aqueduct.htm.

In order to keep on our DEIS schedule, we request your response by March 22, 2005. Similar requests are being sent to the United States Fish and Wildlife Service, the United States National Marine Fisheries Service and to the District of Columbia Department of Health Fisheries and Wildlife Division.

Thank you for your efforts to date on this project. If you have any questions please contact Mr. Michael Peterson at 202-764-0025.

Sincerely,

Thomas P. Jacobus
General Manager

Enclosures

DEPARTMENT OF THE ARMY
WASHINGTON AQUEDUCT
U.S. ARMY CORPS OF ENGINEERS, BALTIMORE DISTRICT
5900 MACARTHUR BOULEVARD, N.W.
WASHINGTON, D.C. 20016-2514

August 9, 2004

Office of the General Manager

Ms. Lori Byrne, Environmental Review Specialist
MD DNR - Wildlife and Heritage Service
Tawes State Office Building, E-1
580 Taylor Avenue
Annapolis, MD 21401

Dear Ms. Byrne:

The purpose of this letter is to consult with your office regarding the Draft Environmental Impact Statement (DEIS) that is being prepared for Washington Aqueduct's Proposed Residuals Management Process in Washington, D.C. The DEIS evaluates the potential environmental consequences of implementing the alternative actions including a No-Action and preferred alternative.

Background:

The U.S. Army Corps of Engineers, Baltimore District, Washington Aqueduct operates the Dalecarlia and McMillan Water Treatment Plants in Washington, D.C., serving over one million persons in the District of Columbia and Northern Virginia area with potable water. The treatment process removes solid particles (river silt) from the Potomac River supply water, treats and disinfects the water, and distributes the finished water to the metropolitan service area. The solids removed during the treatment process have historically been returned to the river, but a recently reissued version of the Washington Aqueduct National Pollutant Discharge Elimination System (NPDES) permit (Permit No. DC 0000019) effectively precludes the discharge of water treatment solids, or residuals, to the river.

Consequently, Washington Aqueduct is in the process of evaluating water treatment residuals management options to minimize or eliminate the discharge of residuals to the Potomac River. The residuals management option that will ultimately be selected has a potential to affect the human environment, and thus development of the residuals management plan must comply with the National Environmental Policy Act (NEPA) and also Section 106 of the National Historic Preservation Act (NHPA).

A Description of Proposed Actions and Alternatives (DOPAA) as well as an Engineering Feasibility Study have been completed. This process has narrowed the list of potential alternatives from 26 alternatives to four, including the no-action alternative. These alternatives will be evaluated in the DEIS that is currently being prepared.

We have attached a brief description of the alternatives and also a copy of our Scope of Statement. The Scope of Statement describes in detail the technical approach for evaluating the alternatives in the DEIS.

The complete text of the DOPAA, the Feasibility Study and the Scope of Statement are available on the project web page. http://washingtonaqueduct.nab.usace.army.mil/aqueduct.

We will be holding a public meeting in the auditorium of Sibley Memorial Hospital on September 7, 2004 at 7:00 PM in order to provide our stakeholders an opportunity to learn about the progress of the project, to see visual simulations of facilities for the different alternatives, and to ask questions to Washington Aqueduct directly.

In accordance with Section 7(c)(1) of the Endangered Species Act, we are requesting information on whether any proposed or listed species or their critical habitats are present within the project sites. Your response within 30 days from the receipt of this letter will be greatly appreciated. Similar requests are being sent to the United States Fish and Wildlife Service, the United States National Marine Fisheries Service and to the District of Columbia Department of Health Fisheries and Wildlife Division.

If you have any questions please contact Mr. Michael Peterson at 202-764-0025.

Sincerely,

Thomas P. Jacobus
General Manager

Enclosures

Summary Description of Proposed Alternatives

A 20-year period of examination will form the basis for the DEIS. Consequently, residuals quantities and sizing of facilities will be based on anticipated water production over the 20-year period. Similarly, the evaluation of impacts of the alternatives will be based on the 20-year period of examination.

Alternative 2: Process Water Treatment Residuals at Dalecarlia WTP and Dispose in a Newly Constructed Dalecarlia Monofill. Process Forebay Residuals by Current Methods and Periodically Haul

Residuals from the Dalecarlia Sedimentation Basins and the Georgetown Reservoir would be collected and thickened/dewatered at the Dalecarlia WTP before being disposed of in a newly constructed Dalecarlia monofill. Residuals from the Forebay would be processed separately as is currently practiced and periodically hauled offsite or could also be disposed of in the Dalecarlia monofill.

Facilities. The site figure indicates the sedimentation basins to be upgraded, the preliminary location of thickening and dewatering facilities, and the approximate footprint of the monofill. As currently conceived, the monofill would be approximately 50 ft tall on the Dalecarlia Parkway side and 80 ft tall on the Dalecarlia Reservoir side. The footprint of the monofill is anticipated to occupy approximately 30 acres.

Conveyance and Transport. Pipelines would convey coagulated residuals from both the Dalecarlia sedimentation basins and the Georgetown Reservoir to the Dalecarlia thickening facility. After thickening and dewatering, onsite trucks would be used to haul the residuals to the monofill. On average, six onsite truck trips per day (6 days per week) would be required.

Alternative 5: Thicken Water Treatment Residuals at Dalecarlia WTP, Then Pump via a New Pipeline to Blue Plains. Process Forebay Residuals by Current Methods and Periodically Haul

This alternative would eliminate truck traffic associated with residuals on the roads surrounding the Washington Aqueduct Reservation by conveying coagulated residuals to the Blue Plains Wastewater Treatment Plant for further processing and disposal. Residuals from the Forebay would be processed separately as is currently practiced.

Facilities. This alternative would involve similar sedimentation basin modifications and new thickening facilities. Dewatering facilities would be located at Blue Plains.

Conveyance and Transport. Pipelines would convey coagulated residuals from both the onsite sedimentation basins and the Georgetown Reservoir to the Dalecarlia thickening facility. Another dedicated pair of pipelines within the right-of-way of the Potomac Interceptor would convey the thickened residuals to Blue Plains for final processing. These buried pipes would be approximately 10 miles in length and 12 inches in diameter.

DEPARTMENT OF THE ARMY
WASHINGTON AQUEDUCT
U.S. ARMY CORPS OF ENGINEERS, BALTIMORE DISTRICT
5900 MACARTHUR BOULEVARD, N.W.
WASHINGTON, D.C. 20016-2514

August 9, 2004

Office of the General Manager

Ms. Lisa Burcham, State Historic Preservation Officer
Historic Preservation Division
D.C. Office of Planning
801 North Capitol Street, NE, Suite 4000
Washington, DC 20002

Dear Ms. Burcham:

The purpose of this letter is to consult with your office regarding the Draft Environmental Impact Statement (DEIS) that is being prepared for Washington Aqueduct's Proposed Residuals Management Process in Washington, D.C. The DEIS evaluates the potential environmental consequences of implementing the alternative actions including a No-Action and preferred alternative.

Background:

The U.S. Army Corps of Engineers, Baltimore District, Washington Aqueduct operates the Dalecarlia and McMillan Water Treatment Plants in Washington, D.C., serving over one million persons in the District of Columbia and Northern Virginia area with potable water. The treatment process removes solid particles (river silt) from the Potomac River supply water, treats and disinfects the water, and distributes the finished water to the metropolitan service area. The solids removed during the treatment process have historically been returned to the river, but a recently reissued version of the Washington Aqueduct National Pollutant Discharge Elimination System (NPDES) permit (Permit No. DC 0000019) effectively precludes the discharge of water treatment solids, or residuals, to the river.

Consequently, Washington Aqueduct is in the process of evaluating water treatment residuals management options to minimize or eliminate the discharge of residuals to the Potomac River. The residuals management option that will ultimately be selected has a potential to affect the human environment, and thus development of the residuals management plan must comply with the National Environmental Policy Act (NEPA) and also Section 106 of the National Historic Preservation Act (NHPA).

A Description of Proposed Actions and Alternatives (DOPAA) as well as an Engineering Feasibility Study have been completed. This process has narrowed the list of potential alternatives from 26 alternatives to four, including the no-action alternative. These alternatives will be evaluated in the DEIS that is currently being prepared.

We have attached a brief description of the alternatives and also a copy of our Scope of Statement. The Scope of Statement describes in detail the technical approach for evaluating the alternatives in the DEIS.

The complete text of the DOPAA, the Feasibility Study and the Scope of Statement are available on the project web page. http://washingtonaqueduct.nab.usace.army.mil/aqueduct.

We would like to schedule a meeting with you and your staff to discuss the project and the potential alternatives and to understand your possible concerns and issues. We would welcome a meeting at our facility, in case you would like to drive to the area in question, or we can meet at your offices. We will be contacting you very soon to set up a meeting.

In addition, we will be holding a public meeting in the auditorium of Sibley Memorial Hospital on September 7, 2004 at 7:00 PM in order to provide our stakeholders an opportunity to learn about the progress of the project, to see visual simulations of facilities for the different alternatives, and to ask questions to Washington Aqueduct directly.

If you have any questions please contact Mr. Michael Peterson at 202-764-0025.

Sincerely,

Thomas P. Jacobus
General Manager

Enclosures

Summary Description of Proposed Alternatives

A 20-year period of examination will form the basis for the DEIS. Consequently, residuals quantities and sizing of facilities will be based on anticipated water production over the 20-year period. Similarly, the evaluation of impacts of the alternatives will be based on the 20-year period of examination.

Alternative 2: Process Water Treatment Residuals at Dalecarlia WTP and Dispose in a Newly Constructed Dalecarlia Monofill. Process Forebay Residuals by Current Methods and Periodically Haul

Residuals from the Dalecarlia Sedimentation Basins and the Georgetown Reservoir would be collected and thickened/dewatered at the Dalecarlia WTP before being disposed of in a newly constructed Dalecarlia monofill. Residuals from the Forebay would be processed separately as is currently practiced and periodically hauled offsite or could also be disposed of in the Dalecarlia monofill.

Facilities. The site figure indicates the sedimentation basins to be upgraded, the preliminary location of thickening and dewatering facilities, and the approximate footprint of the monofill. As currently conceived, the monofill would be approximately 50 ft tall on the Dalecarlia Parkway side and 80 ft tall on the Dalecarlia Reservoir side. The footprint of the monofill is anticipated to occupy approximately 30 acres.

Conveyance and Transport. Pipelines would convey coagulated residuals from both the Dalecarlia sedimentation basins and the Georgetown Reservoir to the Dalecarlia thickening facility. After thickening and dewatering, onsite trucks would be used to haul the residuals to the monofill. On average, six onsite truck trips per day (6 days per week) would be required.

Alternative 5: Thicken Water Treatment Residuals at Dalecarlia WTP, Then Pump via a New Pipeline to Blue Plains. Process Forebay Residuals by Current Methods and Periodically Haul

This alternative would eliminate truck traffic associated with residuals on the roads surrounding the Washington Aqueduct Reservation by conveying coagulated residuals to the Blue Plains Wastewater Treatment Plant for further processing and disposal. Residuals from the Forebay would be processed separately as is currently practiced.

Facilities. This alternative would involve similar sedimentation basin modifications and new thickening facilities. Dewatering facilities would be located at Blue Plains.

Conveyance and Transport. Pipelines would convey coagulated residuals from both the onsite sedimentation basins and the Georgetown Reservoir to the Dalecarlia thickening facility. Another dedicated pair of pipelines within the right-of-way of the Potomac Interceptor would convey the thickened residuals to Blue Plains for final processing. These buried pipes would be approximately 10 miles in length and 12 inches in diameter.

Alternative 25: Process Water Treatment Residuals at the Dalecarlia WTP and Dispose via Contract Hauling. Process Forebay Residuals by Current Methods and Periodically Haul

This alternative consists of thickening and dewatering water treatment residuals at the Dalecarlia WTP. Residuals from the Dalecarlia sedimentation basins and the Georgetown Reservoir would be collected and thickened/dewatered at the Dalecarlia WTP. The disposal method would be contract hauling from Dalecarlia WTP to a permitted disposal facility. Residuals from the Forebay would be processed separately as is currently practiced and periodically hauled offsite or could also be disposed of onsite.

Facilities. The figures indicate the sedimentation basins to be upgraded and the preliminary location of thickening and dewatering facilities.

Conveyance and Transport. Pipelines would convey water treatment residuals from both the onsite sedimentation basins and the Georgetown Reservoir to the Dalecarlia thickening facility. After thickening and dewatering, the residuals would be hauled by truck to a permitted offsite disposal facility. The estimated average number of trucks for handling the residuals is approximately ten per day (during the 5-day workweek) at the 20-year predicted residuals production level.

DEPARTMENT OF THE ARMY
WASHINGTON AQUEDUCT
U.S. ARMY CORPS OF ENGINEERS, BALTIMORE DISTRICT
5900 MACARTHUR BOULEVARD, N.W.
WASHINGTON, D.C. 20016-2514

August 17, 2004

Office of the General Manager

Ms. Lisa Burcham, State Historic Preservation Officer
Historic Preservation Division
D.C. Office of Planning
801 North Capitol Street, NE, Suite 4000
Washington, DC 20002

Dear Ms. Burcham:

I previously sent a letter to you on August 9, 2004 in part notifying you of a public meeting that Washington Aqueduct will be holding on September 7, 2004. The location of that meeting has been changed to the Dalecarlia Water Treatment Plant which is located at 5900 MacArthur Boulevard, NW, Washington DC 20016. The first part of the meeting will be an open house where members of Washington Aqueduct staff and its consultants will be available with displays and will be prepared to answer questions. That portion will be followed by a group meeting to summarize the material and address any stakeholder issues. The meeting will start at 6:30 pm, and we expect to conclude at 9:00 pm.

If you have any questions please contact Mr. Michael Peterson at 202-764-0025.

Sincerely,

Thomas P. Jacobus
General Manager

DEPARTMENT OF THE ARMY
WASHINGTON AQUEDUCT
U.S. ARMY CORPS OF ENGINEERS, BALTIMORE DISTRICT
5900 MACARTHUR BOULEVARD, N.W.
WASHINGTON, D.C. 20016-2514

February 18, 2005

Office of the General Manager

Ms. Lisa Burcham, State Historic Preservation Officer
Historic Preservation Division
D.C. Office of Planning
801 North Capitol Street, NE, Suite 4000
Washington, DC 20002

Dear Ms. Burcham:

The purpose of this letter is to update you on the progress of developing the Draft Environmental Impact Statement (DEIS) for Washington Aqueduct's Proposed Residuals Management Process in Washington, D.C. We previously submitted a consultation letter to your office on August 9, 2004. It included four proposed alternatives. That letter and attachment is enclosed. An additional alternative that was recommended by various stakeholders is now also under consideration, and we request you include this alternative with our original consultation request.

The additional alternative would include collecting the water treatment residuals from the Dalecarlia Water Treatment Plant and the Georgetown Reservoir, transporting the material to a site on Washington Aqueduct property adjacent to Little Falls Road and Sibley Memorial Hospital in the District of Columbia. At this site the water treatment residuals would be thickened, dewatered, and disposed of by trucking to an off-site permitted disposal facility. The estimated daily average number of trucks needed to transport the water treatment residuals is approximately ten (during the 5-day workweek) at the 20-year predicted residuals production level. More details concerning this alternative, and others suggested by the public but determined to not be in conformance with the project purpose and need requirements, can be found in a document dated December 20, 2004. This document is included with the other project documents in the enclosed CD. These documents are also available on our project website at http://washingtonaqueduct.nab.usace.army.mil/aqueduct.htm.

Thank you for your efforts supporting the DEIS development process to date. If you have any questions, please contact Mr. Michael Peterson at 202-764-0025.

Sincerely,

Thomas P. Jacobus
General Manager

Enclosures

DEPARTMENT OF THE ARMY
WASHINGTON AQUEDUCT
U.S. ARMY CORPS OF ENGINEERS, BALTIMORE DISTRICT
5900 MACARTHUR BOULEVARD, N.W.
WASHINGTON, D.C. 20016-2514

August 9, 2004

Office of the General Manager

Ms. Lisa Burcham, State Historic Preservation Officer
Historic Preservation Division
D.C. Office of Planning
801 North Capitol Street, NE, Suite 4000
Washington, DC 20002

Dear Ms. Burcham:

The purpose of this letter is to consult with your office regarding the Draft Environmental Impact Statement (DEIS) that is being prepared for Washington Aqueduct's Proposed Residuals Management Process in Washington, D.C. The DEIS evaluates the potential environmental consequences of implementing the alternative actions including a No-Action and preferred alternative.

Background:

The U.S. Army Corps of Engineers, Baltimore District, Washington Aqueduct operates the Dalecarlia and McMillan Water Treatment Plants in Washington, D.C., serving over one million persons in the District of Columbia and Northern Virginia area with potable water. The treatment process removes solid particles (river silt) from the Potomac River supply water, treats and disinfects the water, and distributes the finished water to the metropolitan service area. The solids removed during the treatment process have historically been returned to the river, but a recently reissued version of the Washington Aqueduct National Pollutant Discharge Elimination System (NPDES) permit (Permit No. DC 0000019) effectively precludes the discharge of water treatment solids, or residuals, to the river.

Consequently, Washington Aqueduct is in the process of evaluating water treatment residuals management options to minimize or eliminate the discharge of residuals to the Potomac River. The residuals management option that will ultimately be selected has a potential to affect the human environment, and thus development of the residuals management plan must comply with the National Environmental Policy Act (NEPA) and also Section 106 of the National Historic Preservation Act (NHPA).

A Description of Proposed Actions and Alternatives (DOPAA) as well as an Engineering Feasibility Study have been completed. This process has narrowed the list of potential alternatives from 26 alternatives to four, including the no-action alternative. These alternatives will be evaluated in the DEIS that is currently being prepared.

We have attached a brief description of the alternatives and also a copy of our Scope of Statement. The Scope of Statement describes in detail the technical approach for evaluating the alternatives in the DEIS.

The complete text of the DOPAA, the Feasibility Study and the Scope of Statement are available on the project web page. http://washingtonaqueduct.nab.usace.army.mil/aqueduct.

We would like to schedule a meeting with you and your staff to discuss the project and the potential alternatives and to understand your possible concerns and issues. We would welcome a meeting at our facility, in case you would like to drive to the area in question, or we can meet at your offices. We will be contacting you very soon to set up a meeting.

In addition, we will be holding a public meeting in the auditorium of Sibley Memorial Hospital on September 7, 2004 at 7:00 PM in order to provide our stakeholders an opportunity to learn about the progress of the project, to see visual simulations of facilities for the different alternatives, and to ask questions to Washington Aqueduct directly.

If you have any questions please contact Mr. Michael Peterson at 202-764-0025.

Sincerely,

Thomas P. Jacobus
General Manager

Enclosures

Summary Description of Proposed Alternatives

A 20-year period of examination will form the basis for the DEIS. Consequently, residuals quantities and sizing of facilities will be based on anticipated water production over the 20-year period. Similarly, the evaluation of impacts of the alternatives will be based on the 20-year period of examination.

Alternative 2: Process Water Treatment Residuals at Dalecarlia WTP and Dispose in a Newly Constructed Dalecarlia Monofill. Process Forebay Residuals by Current Methods and Periodically Haul

Residuals from the Dalecarlia Sedimentation Basins and the Georgetown Reservoir would be collected and thickened/dewatered at the Dalecarlia WTP before being disposed of in a newly constructed Dalecarlia monofill. Residuals from the Forebay would be processed separately as is currently practiced and periodically hauled offsite or could also be disposed of in the Dalecarlia monofill.

Facilities. The site figure indicates the sedimentation basins to be upgraded, the preliminary location of thickening and dewatering facilities, and the approximate footprint of the monofill. As currently conceived, the monofill would be approximately 50 ft tall on the Dalecarlia Parkway side and 80 ft tall on the Dalecarlia Reservoir side. The footprint of the monofill is anticipated to occupy approximately 30 acres.

Conveyance and Transport. Pipelines would convey coagulated residuals from both the Dalecarlia sedimentation basins and the Georgetown Reservoir to the Dalecarlia thickening facility. After thickening and dewatering, onsite trucks would be used to haul the residuals to the monofill. On average, six onsite truck trips per day (6 days per week) would be required.

Alternative 5: Thicken Water Treatment Residuals at Dalecarlia WTP, Then Pump via a New Pipeline to Blue Plains. Process Forebay Residuals by Current Methods and Periodically Haul

This alternative would eliminate truck traffic associated with residuals on the roads surrounding the Washington Aqueduct Reservation by conveying coagulated residuals to the Blue Plains Wastewater Treatment Plant for further processing and disposal. Residuals from the Forebay would be processed separately as is currently practiced.

Facilities. This alternative would involve similar sedimentation basin modifications and new thickening facilities. Dewatering facilities would be located at Blue Plains.

Conveyance and Transport. Pipelines would convey coagulated residuals from both the onsite sedimentation basins and the Georgetown Reservoir to the Dalecarlia thickening facility. Another dedicated pair of pipelines within the right-of-way of the Potomac Interceptor would convey the thickened residuals to Blue Plains for final processing. These buried pipes would be approximately 10 miles in length and 12 inches in diameter.

DEPARTMENT OF THE ARMY
WASHINGTON AQUEDUCT
U.S. ARMY CORPS OF ENGINEERS, BALTIMORE DISTRICT
5900 MACARTHUR BOULEVARD, N.W.
WASHINGTON, D.C. 20016-2514

August 9, 2004

Office of the General Manager

Mr. Terry R. Carlstrom, Director
National Capital Region
National Park Service
1100 Ohio Drive, SW
Washington, DC 20242

Dear Mr. Carlstrom:

The purpose of this letter is to consult with your office regarding the Draft Environmental Impact Statement (DEIS) that is being prepared for Washington Aqueduct's Proposed Residuals Management Process in Washington, D.C. The DEIS evaluates the potential environmental consequences of implementing the alternative actions including a No-Action and preferred alternative.

Background:

The U.S. Army Corps of Engineers, Baltimore District, Washington Aqueduct operates the Dalecarlia and McMillan Water Treatment Plants in Washington, D.C., serving over one million persons in the District of Columbia and Northern Virginia area with potable water. The treatment process removes solid particles (river silt) from the Potomac River supply water, treats and disinfects the water, and distributes the finished water to the metropolitan service area. The solids removed during the treatment process have historically been returned to the river, but a recently reissued version of the Washington Aqueduct National Pollutant Discharge Elimination System (NPDES) permit (Permit No. DC 0000019) effectively precludes the discharge of water treatment solids, or residuals, to the river.

Consequently, Washington Aqueduct is in the process of evaluating water treatment residuals management options to minimize or eliminate the discharge of residuals to the Potomac River. The residuals management option that will ultimately be selected has a potential to affect the human environment, and thus development of the residuals management plan must comply with the National Environmental Policy Act (NEPA) and also Section 106 of the National Historic Preservation Act (NHPA).

A Description of Proposed Actions and Alternatives (DOPAA) as well as an Engineering Feasibility Study have been completed. This process has narrowed the list of potential alternatives from 26 alternatives to four, including the no-action alternative. These alternatives will be evaluated in the DEIS that is currently being prepared.

We have attached a brief description of the alternatives and also a copy of our Scope of Statement. The Scope of Statement describes in detail the technical approach for evaluating the alternatives in the DEIS.

The complete text of the DOPAA, the Feasibility Study and the Scope of Statement are available on the project web page. http://washingtonaqueduct.nab.usace.army.mil/aqueduct.

We would like to schedule a meeting with you and your staff to discuss the project and the potential alternatives and to understand your possible concerns and issues. We would welcome a meeting at our facility, in case you would like to drive to the area in question, or we can meet at your offices. We will be contacting you very soon to set up a meeting.

In addition, we will be holding a public meeting in the auditorium of Sibley Memorial Hospital on September 7, 2004 at 7:00 PM in order to provide our stakeholders an opportunity to learn about the progress of the project, to see visual simulations of facilities for the different alternatives, and to ask questions to Washington Aqueduct directly.

If you have any questions please contact Mr. Michael Peterson at 202-764-0025.

Sincerely,

Thomas P. Jacobus
General Manager

Enclosures

Summary Description of Proposed Alternatives

A 20-year period of examination will form the basis for the DEIS. Consequently, residuals quantities and sizing of facilities will be based on anticipated water production over the 20-year period. Similarly, the evaluation of impacts of the alternatives will be based on the 20-year period of examination.

Alternative 2: Process Water Treatment Residuals at Dalecarlia WTP and Dispose in a Newly Constructed Dalecarlia Monofill. Process Forebay Residuals by Current Methods and Periodically Haul

Residuals from the Dalecarlia Sedimentation Basins and the Georgetown Reservoir would be collected and thickened/dewatered at the Dalecarlia WTP before being disposed of in a newly constructed Dalecarlia monofill. Residuals from the Forebay would be processed separately as is currently practiced and periodically hauled offsite or could also be disposed of in the Dalecarlia monofill.

Facilities. The site figure indicates the sedimentation basins to be upgraded, the preliminary location of thickening and dewatering facilities, and the approximate footprint of the monofill. As currently conceived, the monofill would be approximately 50 ft tall on the Dalecarlia Parkway side and 80 ft tall on the Dalecarlia Reservoir side. The footprint of the monofill is anticipated to occupy approximately 30 acres.

Conveyance and Transport. Pipelines would convey coagulated residuals from both the Dalecarlia sedimentation basins and the Georgetown Reservoir to the Dalecarlia thickening facility. After thickening and dewatering, onsite trucks would be used to haul the residuals to the monofill. On average, six onsite truck trips per day (6 days per week) would be required.

Alternative 5: Thicken Water Treatment Residuals at Dalecarlia WTP, Then Pump via a New Pipeline to Blue Plains. Process Forebay Residuals by Current Methods and Periodically Haul

This alternative would eliminate truck traffic associated with residuals on the roads surrounding the Washington Aqueduct Reservation by conveying coagulated residuals to the Blue Plains Wastewater Treatment Plant for further processing and disposal. Residuals from the Forebay would be processed separately as is currently practiced.

Facilities. This alternative would involve similar sedimentation basin modifications and new thickening facilities. Dewatering facilities would be located at Blue Plains.

Conveyance and Transport. Pipelines would convey coagulated residuals from both the onsite sedimentation basins and the Georgetown Reservoir to the Dalecarlia thickening facility. Another dedicated pair of pipelines within the right-of-way of the Potomac Interceptor would convey the thickened residuals to Blue Plains for final processing. These buried pipes would be approximately 10 miles in length and 12 inches in diameter.

Alternative 25: Process Water Treatment Residuals at the Dalecarlia WTP and Dispose via Contract Hauling. Process Forebay Residuals by Current Methods and Periodically Haul

This alternative consists of thickening and dewatering water treatment residuals at the Dalecarlia WTP. Residuals from the Dalecarlia sedimentation basins and the Georgetown Reservoir would be collected and thickened/dewatered at the Dalecarlia WTP. The disposal method would be contract hauling from Dalecarlia WTP to a permitted disposal facility. Residuals from the Forebay would be processed separately as is currently practiced and periodically hauled offsite or could also be disposed of onsite.

Facilities. The figures indicate the sedimentation basins to be upgraded and the preliminary location of thickening and dewatering facilities.

Conveyance and Transport. Pipelines would convey water treatment residuals from both the onsite sedimentation basins and the Georgetown Reservoir to the Dalecarlia thickening facility. After thickening and dewatering, the residuals would be hauled by truck to a permitted offsite disposal facility. The estimated average number of trucks for handling the residuals is approximately ten per day (during the 5-day workweek) at the 20-year predicted residuals production level.

DEPARTMENT OF THE ARMY
WASHINGTON AQUEDUCT
U.S. ARMY CORPS OF ENGINEERS, BALTIMORE DISTRICT
5900 MACARTHUR BOULEVARD, N.W.
WASHINGTON, D.C. 20016-2514

August 17, 2004

Office of the General Manager

Mr. Terry R. Carlstrom, Director
National Capital Region
National Park Service
1100 Ohio Drive, SW
Washington, DC 20242

Dear Mr. Carlstrom:

I previously sent a letter to you on August 9, 2004 in part notifying you of a public meeting that Washington Aqueduct will be holding on September 7, 2004. The location of that meeting has been changed to the Dalecarlia Water Treatment Plant which is located at 5900 MacArthur Boulevard, NW, Washington DC 20016. The first part of the meeting will be an open house where members of Washington Aqueduct staff and its consultants will be available with displays and will be prepared to answer questions. That portion will be followed by a group meeting to summarize the material and address any stakeholder issues. The meeting will start at 6:30 pm, and we expect to conclude at 9:00 pm.

If you have any questions please contact Mr. Michael Peterson at 202-764-0025.

Sincerely,

Thomas P. Jacobus
General Manager

DEPARTMENT OF THE ARMY
WASHINGTON AQUEDUCT
U.S. ARMY CORPS OF ENGINEERS, BALTIMORE DISTRICT
5900 MACARTHUR BOULEVARD, N.W.
WASHINGTON, D.C. 20016-2514

August 9, 2004

Office of the General Manager

Ms. Mary Colligan, Assistant Regional Administrator
Protected Resource Division
National Marine Fisheries Services
One Blackburn Drive
Gloucester, MA 01930-2298

Dear Ms. Colligan:

The purpose of this letter is to consult with your office regarding the Draft Environmental Impact Statement (DEIS) that is being prepared for Washington Aqueduct's Proposed Residuals Management Process in Washington, D.C. The DEIS evaluates the potential environmental consequences of implementing the alternative actions including a No-Action and preferred alternative.

Background:

The U.S. Army Corps of Engineers, Baltimore District, Washington Aqueduct operates the Dalecarlia and McMillan Water Treatment Plants in Washington, D.C., serving over one million persons in the District of Columbia and Northern Virginia area with potable water. The treatment process removes solid particles (river silt) from the Potomac River supply water, treats and disinfects the water, and distributes the finished water to the metropolitan service area. The solids removed during the treatment process have historically been returned to the river, but a recently reissued version of the Washington Aqueduct National Pollutant Discharge Elimination System (NPDES) permit (Permit No. DC 0000019) effectively precludes the discharge of water treatment solids, or residuals, to the river.

Consequently, Washington Aqueduct is in the process of evaluating water treatment residuals management options to minimize or eliminate the discharge of residuals to the Potomac River. The residuals management option that will ultimately be selected has a potential to affect the human environment, and thus development of the residuals management plan must comply with the National Environmental Policy Act (NEPA) and also Section 106 of the National Historic Preservation Act (NHPA).

A Description of Proposed Actions and Alternatives (DOPAA) as well as an Engineering Feasibility Study have been completed. This process has narrowed the list of potential alternatives from 26 alternatives to four, including the no-action alternative. These alternatives will be evaluated in the DEIS that is currently being prepared.

We have attached a brief description of the alternatives and also a copy of our Scope of Statement. The Scope of Statement describes in detail the technical approach for evaluating the alternatives in the DEIS.

The complete text of the DOPAA, the Feasibility Study and the Scope of Statement are available on the project web page. http://washingtonaqueduct.nab.usace.army.mil/aqueduct.

We will be holding a public meeting in the auditorium of Sibley Memorial Hospital on September 7, 2004 at 7:00 PM in order to provide our stakeholders an opportunity to learn about the progress of the project, to see visual simulations of facilities for the different alternatives, and to ask questions to Washington Aqueduct directly.

In accordance with Section 7(c)(1) of the Endangered Species Act, we are requesting information on whether any proposed or listed species or their critical habitats are present within the project sites. Your response within 30 days from the receipt of this letter will be greatly appreciated. Similar requests are being sent to the United States Fish and Wildlife Service, the District of Columbia Department of Health Fisheries and Wildlife Division, and to the Maryland Department of Natural Resources – Wildlife Heritage Service.

If you have any questions please contact Mr. Michael Peterson at 202-764-0025.

Sincerely,

Thomas P. Jacobus
General Manager

Enclosures

Summary Description of Proposed Alternatives

A 20-year period of examination will form the basis for the DEIS. Consequently, residuals quantities and sizing of facilities will be based on anticipated water production over the 20-year period. Similarly, the evaluation of impacts of the alternatives will be based on the 20-year period of examination.

Alternative 2: Process Water Treatment Residuals at Dalecarlia WTP and Dispose in a Newly Constructed Dalecarlia Monofill. Process Forebay Residuals by Current Methods and Periodically Haul

Residuals from the Dalecarlia Sedimentation Basins and the Georgetown Reservoir would be collected and thickened/dewatered at the Dalecarlia WTP before being disposed of in a newly constructed Dalecarlia monofill. Residuals from the Forebay would be processed separately as is currently practiced and periodically hauled offsite or could also be disposed of in the Dalecarlia monofill.

Facilities. The site figure indicates the sedimentation basins to be upgraded, the preliminary location of thickening and dewatering facilities, and the approximate footprint of the monofill. As currently conceived, the monofill would be approximately 50 ft tall on the Dalecarlia Parkway side and 80 ft tall on the Dalecarlia Reservoir side. The footprint of the monofill is anticipated to occupy approximately 30 acres.

Conveyance and Transport. Pipelines would convey coagulated residuals from both the Dalecarlia sedimentation basins and the Georgetown Reservoir to the Dalecarlia thickening facility. After thickening and dewatering, onsite trucks would be used to haul the residuals to the monofill. On average, six onsite truck trips per day (6 days per week) would be required.

Alternative 5: Thicken Water Treatment Residuals at Dalecarlia WTP, Then Pump via a New Pipeline to Blue Plains. Process Forebay Residuals by Current Methods and Periodically Haul

This alternative would eliminate truck traffic associated with residuals on the roads surrounding the Washington Aqueduct Reservation by conveying coagulated residuals to the Blue Plains Wastewater Treatment Plant for further processing and disposal. Residuals from the Forebay would be processed separately as is currently practiced.

Facilities. This alternative would involve similar sedimentation basin modifications and new thickening facilities. Dewatering facilities would be located at Blue Plains.

Conveyance and Transport. Pipelines would convey coagulated residuals from both the onsite sedimentation basins and the Georgetown Reservoir to the Dalecarlia thickening facility. Another dedicated pair of pipelines within the right-of-way of the Potomac Interceptor would convey the thickened residuals to Blue Plains for final processing. These buried pipes would be approximately 10 miles in length and 12 inches in diameter.

Alternative 25: Process Water Treatment Residuals at the Dalecarlia WTP and Dispose via Contract Hauling. Process Forebay Residuals by Current Methods and Periodically Haul

This alternative consists of thickening and dewatering water treatment residuals at the Dalecarlia WTP. Residuals from the Dalecarlia sedimentation basins and the Georgetown Reservoir would be collected and thickened/dewatered at the Dalecarlia WTP. The disposal method would be contract hauling from Dalecarlia WTP to a permitted disposal facility. Residuals from the Forebay would be processed separately as is currently practiced and periodically hauled offsite or could also be disposed of onsite.

Facilities. The figures indicate the sedimentation basins to be upgraded and the preliminary location of thickening and dewatering facilities.

Conveyance and Transport. Pipelines would convey water treatment residuals from both the onsite sedimentation basins and the Georgetown Reservoir to the Dalecarlia thickening facility. After thickening and dewatering, the residuals would be hauled by truck to a permitted offsite disposal facility. The estimated average number of trucks for handling the residuals is approximately ten per day (during the 5-day workweek) at the 20-year predicted residuals production level.

DEPARTMENT OF THE ARMY
WASHINGTON AQUEDUCT
U.S. ARMY CORPS OF ENGINEERS, BALTIMORE DISTRICT
5900 MACARTHUR BOULEVARD, N.W.
WASHINGTON, D.C. 20016-2514

August 17, 2004

Office of the General Manager

Ms. Mary Colligan, Assistant Regional Administrator
Protected Resource Division
National Marine Fisheries Services
One Blackburn Drive
Gloucester, MA 01930-2298

Dear Ms. Colligan:

I previously sent a letter to you on August 9, 2004 in part notifying you of a public meeting that Washington Aqueduct will be holding on September 7, 2004. The location of that meeting has been changed to the Dalecarlia Water Treatment Plant which is located at 5900 MacArthur Boulevard, NW, Washington DC 20016. The first part of the meeting will be an open house where members of Washington Aqueduct staff and its consultants will be available with displays and will be prepared to answer questions. That portion will be followed by a group meeting to summarize the material and address any stakeholder issues. The meeting will start at 6:30 pm, and we expect to conclude at 9:00 pm.

If you have any questions please contact Mr. Michael Peterson at 202-764-0025.

Sincerely,

Thomas P. Jacobus
General Manager

DEPARTMENT OF THE ARMY
WASHINGTON AQUEDUCT
U.S. ARMY CORPS OF ENGINEERS, BALTIMORE DISTRICT
5900 MACARTHUR BOULEVARD, N.W.
WASHINGTON, D.C. 20016-2514

February 18, 2005

Office of the General Manager

Ms. Mary Colligan, Assistant Regional Administrator
Protected Resource Division
National Marine Fisheries Services
One Blackburn Drive
Gloucester, MA 01930-2298

Dear ~~Ms. Colligan~~ Mary:

The purpose of this letter is to update you on the progress of developing the Draft Environmental Impact Statement (DEIS) for Washington Aqueduct's Proposed Residuals Management Process in Washington, D.C. In addition, this is a formal request per Section 7(c)(1) of the Endangered Species Act for information on any proposed or listed species or their critical habitats are present within the project sites. We previously submitted a similar request to you on August 9, 2004 that included four proposed alternatives. That letter and attachment is enclosed. An additional alternative that was recommended by various stakeholders is now also under consideration, and we request you include this alternative with our original consultation request.

The additional alternative would include collecting the water treatment residuals from the Dalecarlia Water Treatment Plant and the Georgetown Reservoir, transporting the material to a site on Washington Aqueduct property adjacent to Little Falls Road and Sibley Memorial Hospital in the District of Columbia. At this site the water treatment residuals would be thickened, dewatered, and disposed of by trucking to an off-site disposal facility. The estimated daily average number of trucks needed to transport the water treatment residuals is approximately ten (during the 5-day workweek) at the 20-year predicted residuals production level. More details concerning this alternative, and others suggested by the public but determined to not be in conformance with the project purpose and need requirements, can be found in a document dated December 20, 2004. This document is included with the other project documents in the enclosed CD. These documents are also available on our project website at http://washingtonaqueduct.nab.usace.army.mil/aqueduct.htm.

In order to keep on our DEIS schedule, we request your response by March 22, 2005. Similar requests are being sent to the United States Fish and Wildlife Service, the District of Columbia Department of Health Fisheries and Wildlife Division, and to the Maryland Department of Natural Resources – Wildlife Heritage Service.

Thank you for your efforts to date on this project. If you have any questions please contact Mr. Michael Peterson at 202-764-0025.

Sincerely,

Thomas P. Jacobus
General Manager

Enclosures

DEPARTMENT OF THE ARMY
WASHINGTON AQUEDUCT
U.S. ARMY CORPS OF ENGINEERS, BALTIMORE DISTRICT
5900 MACARTHUR BOULEVARD, N.W.
WASHINGTON, D.C. 20016-2514

August 9, 2004

Office of the General Manager

Ms. Mary Colligan, Assistant Regional Administrator
Protected Resource Division
National Marine Fisheries Services
One Blackburn Drive
Gloucester, MA 01930-2298

Dear Ms. Colligan:

The purpose of this letter is to consult with your office regarding the Draft Environmental Impact Statement (DEIS) that is being prepared for Washington Aqueduct's Proposed Residuals Management Process in Washington, D.C. The DEIS evaluates the potential environmental consequences of implementing the alternative actions including a No-Action and preferred alternative.

Background:

The U.S. Army Corps of Engineers, Baltimore District, Washington Aqueduct operates the Dalecarlia and McMillan Water Treatment Plants in Washington, D.C., serving over one million persons in the District of Columbia and Northern Virginia area with potable water. The treatment process removes solid particles (river silt) from the Potomac River supply water, treats and disinfects the water, and distributes the finished water to the metropolitan service area. The solids removed during the treatment process have historically been returned to the river, but a recently reissued version of the Washington Aqueduct National Pollutant Discharge Elimination System (NPDES) permit (Permit No. DC 0000019) effectively precludes the discharge of water treatment solids, or residuals, to the river.

Consequently, Washington Aqueduct is in the process of evaluating water treatment residuals management options to minimize or eliminate the discharge of residuals to the Potomac River. The residuals management option that will ultimately be selected has a potential to affect the human environment, and thus development of the residuals management plan must comply with the National Environmental Policy Act (NEPA) and also Section 106 of the National Historic Preservation Act (NHPA).

A Description of Proposed Actions and Alternatives (DOPAA) as well as an Engineering Feasibility Study have been completed. This process has narrowed the list of potential alternatives from 26 alternatives to four, including the no-action alternative. These alternatives will be evaluated in the DEIS that is currently being prepared.

We have attached a brief description of the alternatives and also a copy of our Scope of Statement. The Scope of Statement describes in detail the technical approach for evaluating the alternatives in the DEIS.

The complete text of the DOPAA, the Feasibility Study and the Scope of Statement are available on the project web page. http://washingtonaqueduct.nab.usace.army.mil/aqueduct.

We will be holding a public meeting in the auditorium of Sibley Memorial Hospital on September 7, 2004 at 7:00 PM in order to provide our stakeholders an opportunity to learn about the progress of the project, to see visual simulations of facilities for the different alternatives, and to ask questions to Washington Aqueduct directly.

In accordance with Section 7(c)(1) of the Endangered Species Act, we are requesting information on whether any proposed or listed species or their critical habitats are present within the project sites. Your response within 30 days from the receipt of this letter will be greatly appreciated. Similar requests are being sent to the United States Fish and Wildlife Service, the District of Columbia Department of Health Fisheries and Wildlife Division, and to the Maryland Department of Natural Resources – Wildlife Heritage Service.

If you have any questions please contact Mr. Michael Peterson at 202-764-0025.

Sincerely,

Thomas P. Jacobus
General Manager

Enclosures

Summary Description of Proposed Alternatives

A 20-year period of examination will form the basis for the DEIS. Consequently, residuals quantities and sizing of facilities will be based on anticipated water production over the 20-year period. Similarly, the evaluation of impacts of the alternatives will be based on the 20-year period of examination.

Alternative 2: Process Water Treatment Residuals at Dalecarlia WTP and Dispose in a Newly Constructed Dalecarlia Monofill. Process Forebay Residuals by Current Methods and Periodically Haul

Residuals from the Dalecarlia Sedimentation Basins and the Georgetown Reservoir would be collected and thickened/dewatered at the Dalecarlia WTP before being disposed of in a newly constructed Dalecarlia monofill. Residuals from the Forebay would be processed separately as is currently practiced and periodically hauled offsite or could also be disposed of in the Dalecarlia monofill.

Facilities. The site figure indicates the sedimentation basins to be upgraded, the preliminary location of thickening and dewatering facilities, and the approximate footprint of the monofill. As currently conceived, the monofill would be approximately 50 ft tall on the Dalecarlia Parkway side and 80 ft tall on the Dalecarlia Reservoir side. The footprint of the monofill is anticipated to occupy approximately 30 acres.

Conveyance and Transport. Pipelines would convey coagulated residuals from both the Dalecarlia sedimentation basins and the Georgetown Reservoir to the Dalecarlia thickening facility. After thickening and dewatering, onsite trucks would be used to haul the residuals to the monofill. On average, six onsite truck trips per day (6 days per week) would be required.

Alternative 5: Thicken Water Treatment Residuals at Dalecarlia WTP, Then Pump via a New Pipeline to Blue Plains. Process Forebay Residuals by Current Methods and Periodically Haul

This alternative would eliminate truck traffic associated with residuals on the roads surrounding the Washington Aqueduct Reservation by conveying coagulated residuals to the Blue Plains Wastewater Treatment Plant for further processing and disposal. Residuals from the Forebay would be processed separately as is currently practiced.

Facilities. This alternative would involve similar sedimentation basin modifications and new thickening facilities. Dewatering facilities would be located at Blue Plains.

Conveyance and Transport. Pipelines would convey coagulated residuals from both the onsite sedimentation basins and the Georgetown Reservoir to the Dalecarlia thickening facility. Another dedicated pair of pipelines within the right-of-way of the Potomac Interceptor would convey the thickened residuals to Blue Plains for final processing. These buried pipes would be approximately 10 miles in length and 12 inches in diameter.

DEPARTMENT OF THE ARMY
WASHINGTON AQUEDUCT
U.S. ARMY CORPS OF ENGINEERS, BALTIMORE DISTRICT
5900 MACARTHUR BOULEVARD, N.W.
WASHINGTON, D.C. 20016-2514

August 9, 2004

Office of the General Manager

Mr. James R. Collier, P.E., Chief
Bureau of Environmental Quality
D.C. Department of Health
51 N Street, NE, 5th Floor
Washington, DC 20002

Dear Mr. Collier:

The purpose of this letter is to consult with your office regarding the Draft Environmental Impact Statement (DEIS) that is being prepared for Washington Aqueduct's Proposed Residuals Management Process in Washington, D.C. The DEIS evaluates the potential environmental consequences of implementing the alternative actions including a No-Action and preferred alternative.

Background:

The U.S. Army Corps of Engineers, Baltimore District, Washington Aqueduct operates the Dalecarlia and McMillan Water Treatment Plants in Washington, D.C., serving over one million persons in the District of Columbia and Northern Virginia area with potable water. The treatment process removes solid particles (river silt) from the Potomac River supply water, treats and disinfects the water, and distributes the finished water to the metropolitan service area. The solids removed during the treatment process have historically been returned to the river, but a recently reissued version of the Washington Aqueduct National Pollutant Discharge Elimination System (NPDES) permit (Permit No. DC 0000019) effectively precludes the discharge of water treatment solids, or residuals, to the river.

Consequently, Washington Aqueduct is in the process of evaluating water treatment residuals management options to minimize or eliminate the discharge of residuals to the Potomac River. The residuals management option that will ultimately be selected has a potential to affect the human environment, and thus development of the residuals management plan must comply with the National Environmental Policy Act (NEPA) and also Section 106 of the National Historic Preservation Act (NHPA).

A Description of Proposed Actions and Alternatives (DOPAA) as well as an Engineering Feasibility Study have been completed. This process has narrowed the list of potential alternatives from 26 alternatives to four, including the no-action alternative. These alternatives will be evaluated in the DEIS that is currently being prepared.

We have attached a brief description of the alternatives and also a copy of our Scope of Statement. The Scope of Statement describes in detail the technical approach for evaluating the alternatives in the DEIS.

The complete text of the DOPAA, the Feasibility Study and the Scope of Statement are available on the project web page. http://washingtonaqueduct.nab.usace.army.mil/aqueduct.

We would like to schedule a meeting with you and your staff to discuss the project and the potential alternatives and to understand your possible concerns and issues. We would welcome a meeting at our facility, in case you would like to drive to the area in question, or we can meet at your offices. We will be contacting you very soon to set up a meeting.

In addition, we will be holding a public meeting in the auditorium of Sibley Memorial Hospital on September 7, 2004 at 7:00 PM in order to provide our stakeholders an opportunity to learn about the progress of the project, to see visual simulations of facilities for the different alternatives, and to ask questions to Washington Aqueduct directly.

If you have any questions please contact Mr. Michael Peterson at 202-764-0025.

Sincerely,

Thomas P. Jacobus
General Manager

Enclosures

Summary Description of Proposed Alternatives

A 20-year period of examination will form the basis for the DEIS. Consequently, residuals quantities and sizing of facilities will be based on anticipated water production over the 20-year period. Similarly, the evaluation of impacts of the alternatives will be based on the 20-year period of examination.

Alternative 2: Process Water Treatment Residuals at Dalecarlia WTP and Dispose in a Newly Constructed Dalecarlia Monofill. Process Forebay Residuals by Current Methods and Periodically Haul

Residuals from the Dalecarlia Sedimentation Basins and the Georgetown Reservoir would be collected and thickened/dewatered at the Dalecarlia WTP before being disposed of in a newly constructed Dalecarlia monofill. Residuals from the Forebay would be processed separately as is currently practiced and periodically hauled offsite or could also be disposed of in the Dalecarlia monofill.

Facilities. The site figure indicates the sedimentation basins to be upgraded, the preliminary location of thickening and dewatering facilities, and the approximate footprint of the monofill. As currently conceived, the monofill would be approximately 50 ft tall on the Dalecarlia Parkway side and 80 ft tall on the Dalecarlia Reservoir side. The footprint of the monofill is anticipated to occupy approximately 30 acres.

Conveyance and Transport. Pipelines would convey coagulated residuals from both the Dalecarlia sedimentation basins and the Georgetown Reservoir to the Dalecarlia thickening facility. After thickening and dewatering, onsite trucks would be used to haul the residuals to the monofill. On average, six onsite truck trips per day (6 days per week) would be required.

Alternative 5: Thicken Water Treatment Residuals at Dalecarlia WTP, Then Pump via a New Pipeline to Blue Plains. Process Forebay Residuals by Current Methods and Periodically Haul

This alternative would eliminate truck traffic associated with residuals on the roads surrounding the Washington Aqueduct Reservation by conveying coagulated residuals to the Blue Plains Wastewater Treatment Plant for further processing and disposal. Residuals from the Forebay would be processed separately as is currently practiced.

Facilities. This alternative would involve similar sedimentation basin modifications and new thickening facilities. Dewatering facilities would be located at Blue Plains.

Conveyance and Transport. Pipelines would convey coagulated residuals from both the onsite sedimentation basins and the Georgetown Reservoir to the Dalecarlia thickening facility. Another dedicated pair of pipelines within the right-of-way of the Potomac Interceptor would convey the thickened residuals to Blue Plains for final processing. These buried pipes would be approximately 10 miles in length and 12 inches in diameter.

Alternative 25: Process Water Treatment Residuals at the Dalecarlia WTP and Dispose via Contract Hauling. Process Forebay Residuals by Current Methods and Periodically Haul

This alternative consists of thickening and dewatering water treatment residuals at the Dalecarlia WTP. Residuals from the Dalecarlia sedimentation basins and the Georgetown Reservoir would be collected and thickened/dewatered at the Dalecarlia WTP. The disposal method would be contract hauling from Dalecarlia WTP to a permitted disposal facility. Residuals from the Forebay would be processed separately as is currently practiced and periodically hauled offsite or could also be disposed of onsite.

Facilities. The figures indicate the sedimentation basins to be upgraded and the preliminary location of thickening and dewatering facilities.

Conveyance and Transport. Pipelines would convey water treatment residuals from both the onsite sedimentation basins and the Georgetown Reservoir to the Dalecarlia thickening facility. After thickening and dewatering, the residuals would be hauled by truck to a permitted offsite disposal facility. The estimated average number of trucks for handling the residuals is approximately ten per day (during the 5-day workweek) at the 20-year predicted residuals production level.

DEPARTMENT OF THE ARMY
WASHINGTON AQUEDUCT
U.S. ARMY CORPS OF ENGINEERS, BALTIMORE DISTRICT
5900 MACARTHUR BOULEVARD, N.W.
WASHINGTON, D.C. 20016-2514

August 17, 2004

Office of the General Manager

Mr. James R, Collier, P.E., Chief
Bureau of Environmental Quality
D.C. Department of Health
51 N Street, NE, 5th Floor
Washington, DC 20002

~~Dear Mr. Collier~~: Jim

I previously sent a letter to you on August 9, 2004 in part notifying you of a public meeting that Washington Aqueduct will be holding on September 7, 2004. The location of that meeting has been changed to the Dalecarlia Water Treatment Plant which is located at 5900 MacArthur Boulevard, NW, Washington DC 20016. The first part of the meeting will be an open house where members of Washington Aqueduct staff and its consultants will be available with displays and will be prepared to answer questions. That portion will be followed by a group meeting to summarize the material and address any stakeholder issues. The meeting will start at 6:30 pm, and we expect to conclude at 9:00 pm.

If you have any questions please contact Mr. Michael Peterson at 202-764-0025.

Sincerely,

Tom Jacobus

Thomas P. Jacobus
General Manager

DEPARTMENT OF THE ARMY
WASHINGTON AQUEDUCT
U.S. ARMY CORPS OF ENGINEERS, BALTIMORE DISTRICT
5900 MACARTHUR BOULEVARD, N.W.
WASHINGTON, D.C. 20016-2514

February 18, 2005

Office of the General Manager

Mr. James R. Collier, P.E.
Chief, Bureau of Environmental Quality
D.C. Department of Health
51 N Street, NE, 5th Floor
Washington, DC 20002

Dear ~~Mr. Collier~~:

The purpose of this letter is to update you on the progress of developing the Draft Environmental Impact Statement (DEIS) for Washington Aqueduct's Proposed Residuals Management Process in Washington, D.C. We previously submitted a consultation letter to your office on August 9, 2004. It included four proposed alternatives. That letter and attachment is enclosed. An additional alternative that was recommended by various stakeholders is now also under consideration, and we request you include this alternative with our original consultation request.

The additional alternative would include collecting the water treatment residuals from the Dalecarlia Water Treatment Plant and the Georgetown Reservoir, transporting the material to a site on Washington Aqueduct property adjacent to Little Falls Road and Sibley Memorial Hospital in the District of Columbia. At this site the water treatment residuals would be thickened, dewatered, and disposed of by trucking to an off-site permitted disposal facility. The estimated daily average number of trucks needed to transport the water treatment residuals is approximately ten (during the 5-day workweek) at the 20-year predicted residuals production level. More details concerning this alternative, and others suggested by the public but determined to not be in conformance with the project purpose and need requirements, can be found in a document dated December 20, 2004. This document is included with the other project documents in the enclosed CD. These documents are also available on our project website at http://washingtonaqueduct.nab.usace.army.mil/aqueduct.htm.

Thank you for your efforts supporting the DEIS development process to date. If you have any questions, please contact Mr. Michael Peterson at 202-764-0025.

Sincerely,

Tom

Thomas P. Jacobus
General Manager

Enclosures

DEPARTMENT OF THE ARMY
WASHINGTON AQUEDUCT
U.S. ARMY CORPS OF ENGINEERS, BALTIMORE DISTRICT
5900 MACARTHUR BOULEVARD, N.W.
WASHINGTON, D.C. 20016-2514

August 9, 2004

Office of the General Manager

Mr. James R, Collier, P.E., Chief
Bureau of Environmental Quality
D.C. Department of Health
51 N Street, NE, 5th Floor
Washington, DC 20002

Dear Mr. Collier: Jim

The purpose of this letter is to consult with your office regarding the Draft Environmental Impact Statement (DEIS) that is being prepared for Washington Aqueduct's Proposed Residuals Management Process in Washington, D.C. The DEIS evaluates the potential environmental consequences of implementing the alternative actions including a No-Action and preferred alternative.

Background:

The U.S. Army Corps of Engineers, Baltimore District, Washington Aqueduct operates the Dalecarlia and McMillan Water Treatment Plants in Washington, D.C., serving over one million persons in the District of Columbia and Northern Virginia area with potable water. The treatment process removes solid particles (river silt) from the Potomac River supply water, treats and disinfects the water, and distributes the finished water to the metropolitan service area. The solids removed during the treatment process have historically been returned to the river, but a recently reissued version of the Washington Aqueduct National Pollutant Discharge Elimination System (NPDES) permit (Permit No. DC 0000019) effectively precludes the discharge of water treatment solids, or residuals, to the river.

Consequently, Washington Aqueduct is in the process of evaluating water treatment residuals management options to minimize or eliminate the discharge of residuals to the Potomac River. The residuals management option that will ultimately be selected has a potential to affect the human environment, and thus development of the residuals management plan must comply with the National Environmental Policy Act (NEPA) and also Section 106 of the National Historic Preservation Act (NHPA).

A Description of Proposed Actions and Alternatives (DOPAA) as well as an Engineering Feasibility Study have been completed. This process has narrowed the list of potential alternatives from 26 alternatives to four, including the no-action alternative. These alternatives will be evaluated in the DEIS that is currently being prepared.

We have attached a brief description of the alternatives and also a copy of our Scope of Statement. The Scope of Statement describes in detail the technical approach for evaluating the alternatives in the DEIS.

The complete text of the DOPAA, the Feasibility Study and the Scope of Statement are available on the project web page. http://washingtonaqueduct.nab.usace.army.mil/aqueduct.

We would like to schedule a meeting with you and your staff to discuss the project and the potential alternatives and to understand your possible concerns and issues. We would welcome a meeting at our facility, in case you would like to drive to the area in question, or we can meet at your offices. We will be contacting you very soon to set up a meeting.

In addition, we will be holding a public meeting in the auditorium of Sibley Memorial Hospital on September 7, 2004 at 7:00 PM in order to provide our stakeholders an opportunity to learn about the progress of the project, to see visual simulations of facilities for the different alternatives, and to ask questions to Washington Aqueduct directly.

If you have any questions please contact Mr. Michael Peterson at 202-764-0025.

Sincerely,

Thomas P. Jacobus
General Manager

Enclosures

Summary Description of Proposed Alternatives

A 20-year period of examination will form the basis for the DEIS. Consequently, residuals quantities and sizing of facilities will be based on anticipated water production over the 20-year period. Similarly, the evaluation of impacts of the alternatives will be based on the 20-year period of examination.

Alternative 2: Process Water Treatment Residuals at Dalecarlia WTP and Dispose in a Newly Constructed Dalecarlia Monofill. Process Forebay Residuals by Current Methods and Periodically Haul

Residuals from the Dalecarlia Sedimentation Basins and the Georgetown Reservoir would be collected and thickened/dewatered at the Dalecarlia WTP before being disposed of in a newly constructed Dalecarlia monofill. Residuals from the Forebay would be processed separately as is currently practiced and periodically hauled offsite or could also be disposed of in the Dalecarlia monofill.

Facilities. The site figure indicates the sedimentation basins to be upgraded, the preliminary location of thickening and dewatering facilities, and the approximate footprint of the monofill. As currently conceived, the monofill would be approximately 50 ft tall on the Dalecarlia Parkway side and 80 ft tall on the Dalecarlia Reservoir side. The footprint of the monofill is anticipated to occupy approximately 30 acres.

Conveyance and Transport. Pipelines would convey coagulated residuals from both the Dalecarlia sedimentation basins and the Georgetown Reservoir to the Dalecarlia thickening facility. After thickening and dewatering, onsite trucks would be used to haul the residuals to the monofill. On average, six onsite truck trips per day (6 days per week) would be required.

Alternative 5: Thicken Water Treatment Residuals at Dalecarlia WTP, Then Pump via a New Pipeline to Blue Plains. Process Forebay Residuals by Current Methods and Periodically Haul

This alternative would eliminate truck traffic associated with residuals on the roads surrounding the Washington Aqueduct Reservation by conveying coagulated residuals to the Blue Plains Wastewater Treatment Plant for further processing and disposal. Residuals from the Forebay would be processed separately as is currently practiced.

Facilities. This alternative would involve similar sedimentation basin modifications and new thickening facilities. Dewatering facilities would be located at Blue Plains.

Conveyance and Transport. Pipelines would convey coagulated residuals from both the onsite sedimentation basins and the Georgetown Reservoir to the Dalecarlia thickening facility. Another dedicated pair of pipelines within the right-of-way of the Potomac Interceptor would convey the thickened residuals to Blue Plains for final processing. These buried pipes would be approximately 10 miles in length and 12 inches in diameter.

DEPARTMENT OF THE ARMY
WASHINGTON AQUEDUCT
U.S. ARMY CORPS OF ENGINEERS, BALTIMORE DISTRICT
5900 MACARTHUR BOULEVARD, N.W.
WASHINGTON, D.C. 20016-2514

August 9, 2004

Office of the General Manager

Ms. Patricia E. Gallagher, Executive Director
National Capital Planning Commission
401 9th Street, NW, Suite 500
Washington, DC 20576

Dear Ms. Gallagher:

The purpose of this letter is to consult with your office regarding the Draft Environmental Impact Statement (DEIS) that is being prepared for Washington Aqueduct's Proposed Residuals Management Process in Washington, D.C. The DEIS evaluates the potential environmental consequences of implementing the alternative actions including a No-Action and preferred alternative.

Background:

The U.S. Army Corps of Engineers, Baltimore District, Washington Aqueduct operates the Dalecarlia and McMillan Water Treatment Plants in Washington, D.C., serving over one million persons in the District of Columbia and Northern Virginia area with potable water. The treatment process removes solid particles (river silt) from the Potomac River supply water, treats and disinfects the water, and distributes the finished water to the metropolitan service area. The solids removed during the treatment process have historically been returned to the river, but a recently reissued version of the Washington Aqueduct National Pollutant Discharge Elimination System (NPDES) permit (Permit No. DC 0000019) effectively precludes the discharge of water treatment solids, or residuals, to the river.

Consequently, Washington Aqueduct is in the process of evaluating water treatment residuals management options to minimize or eliminate the discharge of residuals to the Potomac River. The residuals management option that will ultimately be selected has a potential to affect the human environment, and thus development of the residuals management plan must comply with the National Environmental Policy Act (NEPA) and also Section 106 of the National Historic Preservation Act (NHPA).

A Description of Proposed Actions and Alternatives (DOPAA) as well as an Engineering Feasibility Study have been completed. This process has narrowed the list of potential alternatives from 26 alternatives to four, including the no-action alternative. These alternatives will be evaluated in the DEIS that is currently being prepared.

We have attached a brief description of the alternatives and also a copy of our Scope of Statement. The Scope of Statement describes in detail the technical approach for evaluating the alternatives in the DEIS.

The complete text of the DOPAA, the Feasibility Study and the Scope of Statement are available on the project web page. http://washingtonaqueduct.nab.usace.army.mil/aqueduct.

We would like to schedule a meeting with you and your staff to discuss the project and the potential alternatives and to understand your possible concerns and issues. We would welcome a meeting at our facility, in case you would like to drive to the area in question, or we can meet at your offices. We will be contacting you very soon to set up a meeting.

In addition, we will be holding a public meeting in the auditorium of Sibley Memorial Hospital on September 7, 2004 at 7:00 PM in order to provide our stakeholders an opportunity to learn about the progress of the project, to see visual simulations of facilities for the different alternatives, and to ask questions to Washington Aqueduct directly.

If you have any questions please contact Mr. Michael Peterson at 202-764-0025.

Sincerely,

Thomas P. Jacobus
General Manager

Enclosures

Summary Description of Proposed Alternatives

A 20-year period of examination will form the basis for the DEIS. Consequently, residuals quantities and sizing of facilities will be based on anticipated water production over the 20-year period. Similarly, the evaluation of impacts of the alternatives will be based on the 20-year period of examination.

Alternative 2: Process Water Treatment Residuals at Dalecarlia WTP and Dispose in a Newly Constructed Dalecarlia Monofill. Process Forebay Residuals by Current Methods and Periodically Haul

Residuals from the Dalecarlia Sedimentation Basins and the Georgetown Reservoir would be collected and thickened/dewatered at the Dalecarlia WTP before being disposed of in a newly constructed Dalecarlia monofill. Residuals from the Forebay would be processed separately as is currently practiced and periodically hauled offsite or could also be disposed of in the Dalecarlia monofill.

Facilities. The site figure indicates the sedimentation basins to be upgraded, the preliminary location of thickening and dewatering facilities, and the approximate footprint of the monofill. As currently conceived, the monofill would be approximately 50 ft tall on the Dalecarlia Parkway side and 80 ft tall on the Dalecarlia Reservoir side. The footprint of the monofill is anticipated to occupy approximately 30 acres.

Conveyance and Transport. Pipelines would convey coagulated residuals from both the Dalecarlia sedimentation basins and the Georgetown Reservoir to the Dalecarlia thickening facility. After thickening and dewatering, onsite trucks would be used to haul the residuals to the monofill. On average, six onsite truck trips per day (6 days per week) would be required.

Alternative 5: Thicken Water Treatment Residuals at Dalecarlia WTP, Then Pump via a New Pipeline to Blue Plains. Process Forebay Residuals by Current Methods and Periodically Haul

This alternative would eliminate truck traffic associated with residuals on the roads surrounding the Washington Aqueduct Reservation by conveying coagulated residuals to the Blue Plains Wastewater Treatment Plant for further processing and disposal. Residuals from the Forebay would be processed separately as is currently practiced.

Facilities. This alternative would involve similar sedimentation basin modifications and new thickening facilities. Dewatering facilities would be located at Blue Plains.

Conveyance and Transport. Pipelines would convey coagulated residuals from both the onsite sedimentation basins and the Georgetown Reservoir to the Dalecarlia thickening facility. Another dedicated pair of pipelines within the right-of-way of the Potomac Interceptor would convey the thickened residuals to Blue Plains for final processing. These buried pipes would be approximately 10 miles in length and 12 inches in diameter.

Alternative 25: Process Water Treatment Residuals at the Dalecarlia WTP and Dispose via Contract Hauling. Process Forebay Residuals by Current Methods and Periodically Haul

This alternative consists of thickening and dewatering water treatment residuals at the Dalecarlia WTP. Residuals from the Dalecarlia sedimentation basins and the Georgetown Reservoir would be collected and thickened/dewatered at the Dalecarlia WTP. The disposal method would be contract hauling from Dalecarlia WTP to a permitted disposal facility. Residuals from the Forebay would be processed separately as is currently practiced and periodically hauled offsite or could also be disposed of onsite.

Facilities. The figures indicate the sedimentation basins to be upgraded and the preliminary location of thickening and dewatering facilities.

Conveyance and Transport. Pipelines would convey water treatment residuals from both the onsite sedimentation basins and the Georgetown Reservoir to the Dalecarlia thickening facility. After thickening and dewatering, the residuals would be hauled by truck to a permitted offsite disposal facility. The estimated average number of trucks for handling the residuals is approximately ten per day (during the 5-day workweek) at the 20-year predicted residuals production level.

DEPARTMENT OF THE ARMY
WASHINGTON AQUEDUCT
U.S. ARMY CORPS OF ENGINEERS, BALTIMORE DISTRICT
5900 MACARTHUR BOULEVARD, N.W.
WASHINGTON, D.C. 20016-2514

August 17, 2004

Office of the General Manager

Ms. Patricia E. Gallagher, Executive Director
National Capital Planning Commission
401 9th Street, NW, Suite 500
Washington, DC 20576

Dear Ms. Gallagher:

I previously sent a letter to you on August 9, 2004 in part notifying you of a public meeting that Washington Aqueduct will be holding on September 7, 2004. The location of that meeting has been changed to the Dalecarlia Water Treatment Plant which is located at 5900 MacArthur Boulevard, NW, Washington DC 20016. The first part of the meeting will be an open house where members of Washington Aqueduct staff and its consultants will be available with displays and will be prepared to answer questions. That portion will be followed by a group meeting to summarize the material and address any stakeholder issues. The meeting will start at 6:30 pm, and we expect to conclude at 9:00 pm.

If you have any questions please contact Mr. Michael Peterson at 202-764-0025.

Sincerely,

Thomas P. Jacobus
General Manager

DEPARTMENT OF THE ARMY
WASHINGTON AQUEDUCT
U.S. ARMY CORPS OF ENGINEERS, BALTIMORE DISTRICT
5900 MACARTHUR BOULEVARD, N.W.
WASHINGTON, D.C. 20016-2514

February 18, 2005

Office of the General Manager

Ms. Patricia E. Gallagher, Executive Director
National Capital Planning Commission
401 9th Street, NW, Suite 500
Washington, DC 20576

Dear Ms. Gallagher:

The purpose of this letter is to update you on the progress of developing the Draft Environmental Impact Statement (DEIS) for Washington Aqueduct's Proposed Residuals Management Process in Washington, D.C. We previously submitted a consultation letter to your office on August 9, 2004. It included four proposed alternatives. That letter and attachment is enclosed. An additional alternative that was recommended by various stakeholders is now also under consideration, and we request you include this alternative with our original consultation request.

The additional alternative would include collecting the water treatment residuals from the Dalecarlia Water Treatment Plant and the Georgetown Reservoir, transporting the material to a site on Washington Aqueduct property adjacent to Little Falls Road and Sibley Memorial Hospital in the District of Columbia. At this site the water treatment residuals would be thickened, dewatered, and disposed of by trucking to an off-site permitted disposal facility. The estimated daily average number of trucks needed to transport the water treatment residuals is approximately ten (during the 5-day workweek) at the 20-year predicted residuals production level. More details concerning this alternative, and others suggested by the public but determined to not be in conformance with the project purpose and need requirements, can be found in a document dated December 20, 2004. This document is included with the other project documents in the enclosed CD. These documents are also available on our project website at http://washingtonaqueduct.nab.usace.army.mil/aqueduct.htm.

Thank you for your efforts supporting the DEIS development process to date. If you have any questions, please contact Mr. Michael Peterson at 202-764-0025.

Sincerely,

Thomas P. Jacobus
General Manager

Enclosures

DEPARTMENT OF THE ARMY
WASHINGTON AQUEDUCT
U.S. ARMY CORPS OF ENGINEERS, BALTIMORE DISTRICT
5900 MACARTHUR BOULEVARD, N.W.
WASHINGTON, D.C. 20016-2514

August 9, 2004

Office of the General Manager

Ms. Patricia E. Gallagher, Executive Director
National Capital Planning Commission
401 9th Street, NW, Suite 500
Washington, DC 20576

Dear Ms. Gallagher:

The purpose of this letter is to consult with your office regarding the Draft Environmental Impact Statement (DEIS) that is being prepared for Washington Aqueduct's Proposed Residuals Management Process in Washington, D.C. The DEIS evaluates the potential environmental consequences of implementing the alternative actions including a No-Action and preferred alternative.

Background:

The U.S. Army Corps of Engineers, Baltimore District, Washington Aqueduct operates the Dalecarlia and McMillan Water Treatment Plants in Washington, D.C., serving over one million persons in the District of Columbia and Northern Virginia area with potable water. The treatment process removes solid particles (river silt) from the Potomac River supply water, treats and disinfects the water, and distributes the finished water to the metropolitan service area. The solids removed during the treatment process have historically been returned to the river, but a recently reissued version of the Washington Aqueduct National Pollutant Discharge Elimination System (NPDES) permit (Permit No. DC 0000019) effectively precludes the discharge of water treatment solids, or residuals, to the river.

Consequently, Washington Aqueduct is in the process of evaluating water treatment residuals management options to minimize or eliminate the discharge of residuals to the Potomac River. The residuals management option that will ultimately be selected has a potential to affect the human environment, and thus development of the residuals management plan must comply with the National Environmental Policy Act (NEPA) and also Section 106 of the National Historic Preservation Act (NHPA).

A Description of Proposed Actions and Alternatives (DOPAA) as well as an Engineering Feasibility Study have been completed. This process has narrowed the list of potential alternatives from 26 alternatives to four, including the no-action alternative. These alternatives will be evaluated in the DEIS that is currently being prepared.

We have attached a brief description of the alternatives and also a copy of our Scope of Statement. The Scope of Statement describes in detail the technical approach for evaluating the alternatives in the DEIS.

The complete text of the DOPAA, the Feasibility Study and the Scope of Statement are available on the project web page. http://washingtonaqueduct.nab.usace.army.mil/aqueduct.

We would like to schedule a meeting with you and your staff to discuss the project and the potential alternatives and to understand your possible concerns and issues. We would welcome a meeting at our facility, in case you would like to drive to the area in question, or we can meet at your offices. We will be contacting you very soon to set up a meeting.

In addition, we will be holding a public meeting in the auditorium of Sibley Memorial Hospital on September 7, 2004 at 7:00 PM in order to provide our stakeholders an opportunity to learn about the progress of the project, to see visual simulations of facilities for the different alternatives, and to ask questions to Washington Aqueduct directly.

If you have any questions please contact Mr. Michael Peterson at 202-764-0025.

Sincerely,

Thomas P. Jacobus
General Manager

Enclosures

Summary Description of Proposed Alternatives

A 20-year period of examination will form the basis for the DEIS. Consequently, residuals quantities and sizing of facilities will be based on anticipated water production over the 20-year period. Similarly, the evaluation of impacts of the alternatives will be based on the 20-year period of examination.

Alternative 2: Process Water Treatment Residuals at Dalecarlia WTP and Dispose in a Newly Constructed Dalecarlia Monofill. Process Forebay Residuals by Current Methods and Periodically Haul

Residuals from the Dalecarlia Sedimentation Basins and the Georgetown Reservoir would be collected and thickened/dewatered at the Dalecarlia WTP before being disposed of in a newly constructed Dalecarlia monofill. Residuals from the Forebay would be processed separately as is currently practiced and periodically hauled offsite or could also be disposed of in the Dalecarlia monofill.

Facilities. The site figure indicates the sedimentation basins to be upgraded, the preliminary location of thickening and dewatering facilities, and the approximate footprint of the monofill. As currently conceived, the monofill would be approximately 50 ft tall on the Dalecarlia Parkway side and 80 ft tall on the Dalecarlia Reservoir side. The footprint of the monofill is anticipated to occupy approximately 30 acres.

Conveyance and Transport. Pipelines would convey coagulated residuals from both the Dalecarlia sedimentation basins and the Georgetown Reservoir to the Dalecarlia thickening facility. After thickening and dewatering, onsite trucks would be used to haul the residuals to the monofill. On average, six onsite truck trips per day (6 days per week) would be required.

Alternative 5: Thicken Water Treatment Residuals at Dalecarlia WTP, Then Pump via a New Pipeline to Blue Plains. Process Forebay Residuals by Current Methods and Periodically Haul

This alternative would eliminate truck traffic associated with residuals on the roads surrounding the Washington Aqueduct Reservation by conveying coagulated residuals to the Blue Plains Wastewater Treatment Plant for further processing and disposal. Residuals from the Forebay would be processed separately as is currently practiced.

Facilities. This alternative would involve similar sedimentation basin modifications and new thickening facilities. Dewatering facilities would be located at Blue Plains.

Conveyance and Transport. Pipelines would convey coagulated residuals from both the onsite sedimentation basins and the Georgetown Reservoir to the Dalecarlia thickening facility. Another dedicated pair of pipelines within the right-of-way of the Potomac Interceptor would convey the thickened residuals to Blue Plains for final processing. These buried pipes would be approximately 10 miles in length and 12 inches in diameter.

DEPARTMENT OF THE ARMY
WASHINGTON AQUEDUCT
U.S. ARMY CORPS OF ENGINEERS, BALTIMORE DISTRICT
5900 MACARTHUR BOULEVARD, N.W.
WASHINGTON, D.C. 20016-2514

August 9, 2004

Office of the General Manager

Mr. Tom Henderson, Administrator
Solid Waste Management
D.C. Department of Public Works
2000 14th Street, NW
Washington, DC 20001

Dear Mr. Henderson:

The purpose of this letter is to consult with your office regarding the Draft Environmental Impact Statement (DEIS) that is being prepared for Washington Aqueduct's Proposed Residuals Management Process in Washington, D.C. The DEIS evaluates the potential environmental consequences of implementing the alternative actions including a No-Action and preferred alternative.

Background:

The U.S. Army Corps of Engineers, Baltimore District, Washington Aqueduct operates the Dalecarlia and McMillan Water Treatment Plants in Washington, D.C., serving over one million persons in the District of Columbia and Northern Virginia area with potable water. The treatment process removes solid particles (river silt) from the Potomac River supply water, treats and disinfects the water, and distributes the finished water to the metropolitan service area. The solids removed during the treatment process have historically been returned to the river, but a recently reissued version of the Washington Aqueduct National Pollutant Discharge Elimination System (NPDES) permit (Permit No. DC 0000019) effectively precludes the discharge of water treatment solids, or residuals, to the river.

Consequently, Washington Aqueduct is in the process of evaluating water treatment residuals management options to minimize or eliminate the discharge of residuals to the Potomac River. The residuals management option that will ultimately be selected has a potential to affect the human environment, and thus development of the residuals management plan must comply with the National Environmental Policy Act (NEPA) and also Section 106 of the National Historic Preservation Act (NHPA).

A Description of Proposed Actions and Alternatives (DOPAA) as well as an Engineering Feasibility Study have been completed. This process has narrowed the list of potential alternatives from 26 alternatives to four, including the no-action alternative. These alternatives will be evaluated in the DEIS that is currently being prepared.

We have attached a brief description of the alternatives and also a copy of our Scope of Statement. The Scope of Statement describes in detail the technical approach for evaluating the alternatives in the DEIS.

The complete text of the DOPAA, the Feasibility Study and the Scope of Statement are available on the project web page. http://washingtonaqueduct.nab.usace.army.mil/aqueduct.

We would like to schedule a meeting with you and your staff to discuss the project and the potential alternatives and to understand your possible concerns and issues. We would welcome a meeting at our facility, in case you would like to drive to the area in question, or we can meet at your offices. We will be contacting you very soon to set up a meeting.

In addition, we will be holding a public meeting in the auditorium of Sibley Memorial Hospital on September 7, 2004 at 7:00 PM in order to provide our stakeholders an opportunity to learn about the progress of the project, to see visual simulations of facilities for the different alternatives, and to ask questions to Washington Aqueduct directly.

If you have any questions please contact Mr. Michael Peterson at 202-764-0025.

Sincerely,

Thomas P. Jacobus
General Manager

Enclosures

Summary Description of Proposed Alternatives

A 20-year period of examination will form the basis for the DEIS. Consequently, residuals quantities and sizing of facilities will be based on anticipated water production over the 20-year period. Similarly, the evaluation of impacts of the alternatives will be based on the 20-year period of examination.

Alternative 2: Process Water Treatment Residuals at Dalecarlia WTP and Dispose in a Newly Constructed Dalecarlia Monofill. Process Forebay Residuals by Current Methods and Periodically Haul

Residuals from the Dalecarlia Sedimentation Basins and the Georgetown Reservoir would be collected and thickened/dewatered at the Dalecarlia WTP before being disposed of in a newly constructed Dalecarlia monofill. Residuals from the Forebay would be processed separately as is currently practiced and periodically hauled offsite or could also be disposed of in the Dalecarlia monofill.

Facilities. The site figure indicates the sedimentation basins to be upgraded, the preliminary location of thickening and dewatering facilities, and the approximate footprint of the monofill. As currently conceived, the monofill would be approximately 50 ft tall on the Dalecarlia Parkway side and 80 ft tall on the Dalecarlia Reservoir side. The footprint of the monofill is anticipated to occupy approximately 30 acres.

Conveyance and Transport. Pipelines would convey coagulated residuals from both the Dalecarlia sedimentation basins and the Georgetown Reservoir to the Dalecarlia thickening facility. After thickening and dewatering, onsite trucks would be used to haul the residuals to the monofill. On average, six onsite truck trips per day (6 days per week) would be required.

Alternative 5: Thicken Water Treatment Residuals at Dalecarlia WTP, Then Pump via a New Pipeline to Blue Plains. Process Forebay Residuals by Current Methods and Periodically Haul

This alternative would eliminate truck traffic associated with residuals on the roads surrounding the Washington Aqueduct Reservation by conveying coagulated residuals to the Blue Plains Wastewater Treatment Plant for further processing and disposal. Residuals from the Forebay would be processed separately as is currently practiced.

Facilities. This alternative would involve similar sedimentation basin modifications and new thickening facilities. Dewatering facilities would be located at Blue Plains.

Conveyance and Transport. Pipelines would convey coagulated residuals from both the onsite sedimentation basins and the Georgetown Reservoir to the Dalecarlia thickening facility. Another dedicated pair of pipelines within the right-of-way of the Potomac Interceptor would convey the thickened residuals to Blue Plains for final processing. These buried pipes would be approximately 10 miles in length and 12 inches in diameter.

Alternative 25: Process Water Treatment Residuals at the Dalecarlia WTP and Dispose via Contract Hauling. Process Forebay Residuals by Current Methods and Periodically Haul

This alternative consists of thickening and dewatering water treatment residuals at the Dalecarlia WTP. Residuals from the Dalecarlia sedimentation basins and the Georgetown Reservoir would be collected and thickened/dewatered at the Dalecarlia WTP. The disposal method would be contract hauling from Dalecarlia WTP to a permitted disposal facility. Residuals from the Forebay would be processed separately as is currently practiced and periodically hauled offsite or could also be disposed of onsite.

Facilities. The figures indicate the sedimentation basins to be upgraded and the preliminary location of thickening and dewatering facilities.

Conveyance and Transport. Pipelines would convey water treatment residuals from both the onsite sedimentation basins and the Georgetown Reservoir to the Dalecarlia thickening facility. After thickening and dewatering, the residuals would be hauled by truck to a permitted offsite disposal facility. The estimated average number of trucks for handling the residuals is approximately ten per day (during the 5-day workweek) at the 20-year predicted residuals production level.

DEPARTMENT OF THE ARMY
WASHINGTON AQUEDUCT
U.S. ARMY CORPS OF ENGINEERS, BALTIMORE DISTRICT
5900 MACARTHUR BOULEVARD, N.W.
WASHINGTON, D.C. 20016-2514

August 17, 2004

Office of the General Manager

Mr. Tom Henderson, Administrator
Solid Waste Management
D.C. Department of Public Works
2000 14th Street, NW
Washington, DC 20001

Dear Mr. Henderson:

I previously sent a letter to you on August 9, 2004 in part notifying you of a public meeting that Washington Aqueduct will be holding on September 7, 2004. The location of that meeting has been changed to the Dalecarlia Water Treatment Plant which is located at 5900 MacArthur Boulevard, NW, Washington DC 20016. The first part of the meeting will be an open house where members of Washington Aqueduct staff and its consultants will be available with displays and will be prepared to answer questions. That portion will be followed by a group meeting to summarize the material and address any stakeholder issues. The meeting will start at 6:30 pm, and we expect to conclude at 9:00 pm.

If you have any questions please contact Mr. Michael Peterson at 202-764-0025.

Sincerely,

Thomas P. Jacobus
General Manager

DEPARTMENT OF THE ARMY
WASHINGTON AQUEDUCT
U.S. ARMY CORPS OF ENGINEERS, BALTIMORE DISTRICT
5900 MACARTHUR BOULEVARD, N.W.
WASHINGTON, D.C. 20016-2514

August 17, 2004

Office of the General Manager

Lt Col Dennis Jasinski, Commander
11th CES
370 Brookley Ave.
Bolling AFB, DC 20032-5403

Dear Colonel Jasinski:

Washington Aqueduct will be changing the way we have historically disposed of the solids that collect in the sedimentation basins at the Dalecarlia water treatment plant and the basins at Georgetown. I wanted to update you on the progress we are making as we analyze and subsequently select a preferred alternative for construction.

As you may know, we are operating under a Federal Facility Compliance Agreement issued by the United States Environmental Protection Agency Region III. That agreement and the accompanying National Pollutant Discharge Elimination System permit will cause us to completely cease returning the solids to the Potomac River by December 31, 2009. While that seems like a long time in the future, most of this time will be required for the construction of facilities and procurement of equipment.

We are at the stage where we have identified three feasible alternatives that currently match our screening criteria as well as the project purpose and need. The criteria include meeting the terms and conditions of the permit and compliance agreement, preserving the reliability and redundancy of the existing water production system and considering the economic effects of the various options.

We are beginning to acquire data for the Draft Environmental Impact Statement to evaluate these feasible alternatives. All of the environmental resources such as air quality, land use, noise, socioeconomic, transportation, etc. are included in this data acquisition process. We know that the collection, transport and disposal of the solids is going to change the way we currently operate and that both immediate neighbors as well as other stakeholders have an interest in not only the decision we make, but also the process we use to arrive at that decision.

Therefore, we are holding a public meeting that we have designed to provide up to date information on our progress and process. The first part of the meeting will be an open house where members of Washington Aqueduct staff and its consultants will be available with displays and will be prepared to answer questions. That portion will be followed by a group meeting to summarize the material and address issues you may have. The meeting will be held on September 7, 2004 at the Dalecarlia Water Treatment Plant at 5900 MacArthur Boulevard, NW, Washington D.C. The meeting will start at 6:30 pm, and we expect to conclude at 9:00 pm.

From a number of inquires we have received, I believe that some individuals may have gotten the impression that a decision on which course of action to pursue has already been made. That is not correct. We are working with three options that achieve compliance with our permit in ways that have different measurable effects on peoples' lives and the environment.

One option involves local processing and hauling via commercial trucks to a disposal site outside the immediate area, such as farmlands. Another option will analyze an alternative to trucking the solids through the neighborhoods. This is the option that would essentially build a hill adjacent to the Dalecarlia Reservoir on land owned by Washington Aqueduct. The third option will analyze a smaller local collection and treatment facility and a pipeline in the trace of the major sewer that goes in the immediate vicinity of the Dalecarlia water treatment plant to the Blue Plains advanced wastewater treatment plant. The solids would then be disposed of along with the existing biosolids that are trucked daily from Blue Plains.

I have included with this letter a more detailed description of each alternative we plan to study as well as additional background on the project. Other documents are available on our project website at http://washingtonaqueduct.nab.usace.army.mil/aqueduct.htm such as the Description of Proposed Action and Alternatives, the Engineering Feasibility Study, and the recently completed Scope of Statement.

We plan to complete the Draft Environmental Impact Statement by mid-November and it will be available to the public for formal comment. It will contain the preferred alternative with the supporting rationale.

If you or a member of your staff cannot attend the September 7 meeting, you may send us your comments via our website or you may write to us at 5900 MacArthur Boulevard, Washington, DC 20016, Attention: Michael Peterson.

Sincerely,

Thomas P. Jacobus
General Manager

Enclosure

DEPARTMENT OF THE ARMY
WASHINGTON AQUEDUCT
U.S. ARMY CORPS OF ENGINEERS, BALTIMORE DISTRICT
5900 MACARTHUR BOULEVARD, N.W.
WASHINGTON, D.C. 20016-2514

February 18, 2005

Office of the General Manager

Mr. Charles R. Loehr, Director
Montgomery County Department of Park & Planning
The Maryland-National Capital Park & Planning Commission
8787 Georgia Avenue
Silver Spring, Maryland 20910

Dear Mr. Loehr:

The purpose of this letter is to consult with your office regarding the Draft Environmental Impact Statement (DEIS) that is being prepared for Washington Aqueduct's Proposed Residuals Management Process in Washington, D.C. The DEIS evaluates the potential environmental consequences of implementing the alternative actions including a No-Action and preferred alternative.

Background:

The U.S. Army Corps of Engineers, Baltimore District, Washington Aqueduct operates the Dalecarlia and McMillan Water Treatment Plants in Washington, D.C., serving over one million persons in the District of Columbia and Northern Virginia area with potable water. The treatment process removes solid particles (river silt) from the Potomac River supply water, treats and disinfects the water, and distributes the finished water to the metropolitan service area. The solids removed during the treatment process have historically been returned to the river, but a recently reissued version of the Washington Aqueduct National Pollutant Discharge Elimination System (NPDES) permit (Permit No. DC 0000019) effectively precludes the discharge of water treatment solids, or residuals, to the river.

Consequently, Washington Aqueduct is in the process of evaluating water treatment residuals management options to minimize or eliminate the discharge of residuals to the Potomac River. The residuals management options that will ultimately be selected has potential to affect the human environment, and thus development of the residuals management plan must comply with the National Environmental Policy Act (NEPA) and also Section 106 of the National Historic Preservation Act (NHPA).

At this time, Washington Aqueduct has performed preliminary evaluation on 128 alternatives or options. Various stakeholders suggested 103 of these alternatives during various public comment periods that have been offered. The preliminary evaluation identified five of these alternatives, including the no-action alternative, that will be evaluated in detail in the DEIS.

We have attached a brief description of these five alternatives and also a CD containing all of the documents that we have developed as part of this project to date. Included is the Scope of Statement which describes in detail the technical approach for evaluating the alternatives in the DEIS. These documents are also available on our website which is located at: http://washingtonaqueduct.nab.usace.army.mil/aqueduct.htm.

Additionally, 40 recently suggested alternatives are currently undergoing preliminary evaluation. If any of these alternatives are identified for evaluation in the DEIS, we will contact you and provide you with a description.

The process of evaluating the five alternatives in the DEIS has revealed significant obstacles that will not allow us to select Alternative A or Alternative B. In addition, because Alternative D (no-action alternative) would not allow compliance with our NPDES permit, it cannot be selected. Therefore, the two alternatives that could still be selected are Alternative C and Alternative E. Due to the proximity of the Capital Crescent Trail through the Dalecarlia Water Treatment Plant, there may be a potential for these two alternatives to impact users of the trail in different ways and to different extents. The potential impacts to the users of the trail will be detailed in the DEIS.

We would like to schedule a meeting with you and your staff to discuss the project and the potential alternatives and to understand your possible concerns and issues. We would welcome a meeting at our facility, in case you would like to visit the areas in question, or we can meet at your offices.

Please contact Mr. Michael Peterson at 202-764-0025 to arrange this meeting if you are interested, or with any other questions.

Sincerely,

Thomas P. Jacobus
General Manager

Enclosures

Washington Aqueduct Residuals Processing Alternatives

The Washington Aqueduct operates the Dalecarlia and McMillan water treatment plants in Washington, D.C., serving over one million persons in the District of Columbia and Northern Virginia area with potable water. The treatment process adds coagulant to remove solid particles (river silt) from the water withdrawn from the Potomac River, filters and disinfects the water, and distributes the finished water to the metropolitan service area. The solids generated during the treatment process have historically been returned to the Potomac River, but a recently reissued version of Washington Aqueduct's National Pollutant Discharge Elimination System permit (Permit No. DC 0000019) effectively precludes the return of the of water treatment solids to the river.

Consequently, Washington Aqueduct is in the process of evaluating water treatment residuals management options to minimize or eliminate the discharge of residuals to the Potomac River. The residuals management option that will ultimately be selected has the potential to affect the human environment, and thus development of the residuals management plan must comply with the National Environmental Policy Act and also Section 106 of the National Historic Preservation Act.

The Draft Environmental Impact Statement will consider a 20-year period of operations. Consequently, residuals quantities and sizing of facilities will be based on anticipated water production over the 20-year period. Similarly, the evaluation of impacts of the alternatives will be based on the 20-year period of examination.

Alternative A: Process Water Treatment Residuals at Dalecarlia Water Treatment Plant and Dispose in a Newly Constructed Dalecarlia Monofill. Process Dalecarlia Reservoir Forebay Residuals by Current Methods and Periodically Haul

Residuals from the Dalecarlia sedimentation basins and the Georgetown sedimentation basins would be collected and thickened/dewatered at the Dalecarlia water treatment plant before being disposed of in a newly constructed Dalecarlia monofill. Residuals from the Dalecarlia Reservoir forebay would be processed separately as is currently practiced and periodically hauled offsite or could also be disposed of in the Dalecarlia monofill.

Facilities. Sedimentation basins at Dalecarlia and Georgetown would be upgraded. A residuals thickening and dewatering facility has been preliminarily located west of the Capital Crescent Trail as it passes through the Dalecarlia water treatment plant. The mechanical processing area of this facility could rise approximately 70 feet. The approximate location of the monofill is between the Dalecarlia Reservoir and the Dalecarlia Parkway. As currently conceived, the monofill would rise approximately 50 feet from ground level on the Dalecarlia Parkway side and 80 feet on the Dalecarlia Reservoir side. For comparison, the existing trees in that area are in the range of 100 feet tall. The monofill would occupy about 30 acres.

Conveyance and Transport. Pipelines would convey coagulated residuals from both the Dalecarlia sedimentation basins and the Georgetown sedimentation basins to the Dalecarlia thickening facility. After thickening and dewatering, the solids would be moved by truck across MacArthur Boulevard to the monofill. On average, six onsite truck trips per day (six days per week) would be required.

Alternative B: Process Water Treatment Residuals at the Dalecarlia Water Treatment Plant and Dispose via Contract Hauling. Process Dalecarlia Reservoir Forebay Residuals by Current Methods and Periodically Haul

This alternative consists of thickening and dewatering water treatment residuals at the Dalecarlia water treatment plant. Residuals from the Dalecarlia sedimentation basins and the Georgetown sedimentation basins would be collected and thickened/dewatered at the Dalecarlia water treatment plant. The disposal method would be contract hauling from Dalecarlia water treatment plant to a permitted disposal facility.

MORE ON REVERSE

Residuals from the Dalecarlia Reservoir forebay would be processed separately as is currently practiced and periodically hauled offsite or could also be disposed of onsite.

Facilities. The facilities to complete this option are similar to alternative A, but without the creation of the monofill on the Dalecarlia Reservoir grounds.

Conveyance and Transport. Pipelines would convey water treatment residuals from both the Dalecarlia sedimentation basins and the Georgetown sedimentation basins to the Dalecarlia thickening facility. After thickening and dewatering, the residuals would be hauled by truck to a permitted offsite disposal facility. The estimated average number of trucks for handling the residuals is approximately ten per day (during the five-day workweek) at the 20-year predicted residuals production level.

Alternative C: Thicken Water Treatment Residuals at Dalecarlia Water Treatment Plant, then Pump via a New Pipeline to Blue Plains. Process Dalecarlia Reservoir Forebay Residuals by Current Methods and Periodically Haul

This alternative would eliminate truck traffic associated with residuals on the roads surrounding the Washington Aqueduct Dalecarlia and Georgetown operations by conveying coagulated residuals to the Blue Plains advanced wastewater treatment plant for further processing and disposal. Residuals from the Dalecarlia Reservoir forebay would be processed separately as is currently practiced.

Facilities. This alternative would involve similar sedimentation basin modifications and new thickening facilities. Dewatering facilities would be located at Blue Plains.

Conveyance and Transport. Pipelines would convey coagulated residuals from both the onsite sedimentation basins and the Georgetown sedimentation basins to the Dalecarlia thickening facility. Another dedicated pair of pipelines within the right-of-way of the Potomac Interceptor sewer would convey the thickened residuals to Blue Plains for final processing. These buried pipes would be approximately 10 miles in length and 12 inches in diameter.

Alternative D: No-Action Alternative

This alternative would result in non-compliance with Permit No. DC 0000019 and the Clean Water Act.

Alternative E: Process Water Treatment Residuals at the Dalecarlia Water Treatment Plant and Dispose via Contract Hauling. Process Dalecarlia Reservoir Forebay Residuals by Current Methods and Periodically Haul

This alternative consists of thickening and dewatering water treatment residuals at the Dalecarlia water treatment plant. Residuals from the Dalecarlia sedimentation basins and the Georgetown sedimentation basins would be collected and thickened/dewatered at the Dalecarlia water treatment plant. The disposal method would be contract hauling from Dalecarlia water treatment plant to a permitted disposal facility. Residuals from the Dalecarlia Reservoir forebay would be processed separately as is currently practiced and periodically hauled offsite or could also be disposed of onsite.

Facilities. The facilities to complete this option are similar to alternative A and B, but located adjacent to Little Falls Road on existing Washington Aqueduct property and also without the creation of a monofill (Alternative A) on the Dalecarlia Reservoir grounds.

Conveyance and Transport. Pipelines would convey water treatment residuals from both the Dalecarlia sedimentation basins and the Georgetown sedimentation basins to the Dalecarlia thickening facility. After thickening and dewatering, the residuals would be hauled by truck to a permitted offsite disposal facility. The estimated average number of trucks for handling the residuals is approximately ten per day (during the five-day workweek) at the 20-year predicted residuals production level.

DEPARTMENT OF THE ARMY
WASHINGTON AQUEDUCT
U.S. ARMY CORPS OF ENGINEERS, BALTIMORE DISTRICT
5900 MACARTHUR BOULEVARD, N.W.
WASHINGTON, D.C. 20016-2514

August 9, 2004

Office of the General Manager

Mr. Ira Palmer, Branch Chief
Fisheries and Wildlife Division
D.C. Department of Health
51 N Street, NE, 5th floor
Washington, DC 20002

Dear Mr. Palmer:

The purpose of this letter is to consult with your office regarding the Draft Environmental Impact Statement (DEIS) that is being prepared for Washington Aqueduct's Proposed Residuals Management Process in Washington, D.C. The DEIS evaluates the potential environmental consequences of implementing the alternative actions including a No-Action and preferred alternative.

Background:

The U.S. Army Corps of Engineers, Baltimore District, Washington Aqueduct operates the Dalecarlia and McMillan Water Treatment Plants in Washington, D.C., serving over one million persons in the District of Columbia and Northern Virginia area with potable water. The treatment process removes solid particles (river silt) from the Potomac River supply water, treats and disinfects the water, and distributes the finished water to the metropolitan service area. The solids removed during the treatment process have historically been returned to the river, but a recently reissued version of the Washington Aqueduct National Pollutant Discharge Elimination System (NPDES) permit (Permit No. DC 0000019) effectively precludes the discharge of water treatment solids, or residuals, to the river.

Consequently, Washington Aqueduct is in the process of evaluating water treatment residuals management options to minimize or eliminate the discharge of residuals to the Potomac River. The residuals management option that will ultimately be selected has a potential to affect the human environment, and thus development of the residuals management plan must comply with the National Environmental Policy Act (NEPA) and also Section 106 of the National Historic Preservation Act (NHPA).

A Description of Proposed Actions and Alternatives (DOPAA) as well as an Engineering Feasibility Study have been completed. This process has narrowed the list of potential alternatives from 26 alternatives to four, including the no-action alternative. These alternatives will be evaluated in the DEIS that is currently being prepared.

We have attached a brief description of the alternatives and also a copy of our Scope of Statement. The Scope of Statement describes in detail the technical approach for evaluating the alternatives in the DEIS.

The complete text of the DOPAA, the Feasibility Study and the Scope of Statement are available on the project web page. http://washingtonaqueduct.nab.usace.army.mil/aqueduct.

We will be holding a public meeting in the auditorium of Sibley Memorial Hospital on September 7, 2004 at 7:00 PM in order to provide our stakeholders an opportunity to learn about the progress of the project, to see visual simulations of facilities for the different alternatives, and to ask questions to Washington Aqueduct directly.

In accordance with Section 7(c)(1) of the Endangered Species Act, we are requesting information on whether any proposed or listed species or their critical habitats are present within the project sites. Your response within 30 days from the receipt of this letter will be greatly appreciated. Similar requests are being sent to the United States Fish and Wildlife Service, the United States National Marine Fisheries Service and to the Maryland Department of Natural Resources – Wildlife Heritage Service.

If you have any questions please contact Mr. Michael Peterson at 202-764-0025.

Sincerely,

Thomas P. Jacobus
General Manager

Enclosures

Summary Description of Proposed Alternatives

A 20-year period of examination will form the basis for the DEIS. Consequently, residuals quantities and sizing of facilities will be based on anticipated water production over the 20-year period. Similarly, the evaluation of impacts of the alternatives will be based on the 20-year period of examination.

Alternative 2: Process Water Treatment Residuals at Dalecarlia WTP and Dispose in a Newly Constructed Dalecarlia Monofill. Process Forebay Residuals by Current Methods and Periodically Haul

Residuals from the Dalecarlia Sedimentation Basins and the Georgetown Reservoir would be collected and thickened/dewatered at the Dalecarlia WTP before being disposed of in a newly constructed Dalecarlia monofill. Residuals from the Forebay would be processed separately as is currently practiced and periodically hauled offsite or could also be disposed of in the Dalecarlia monofill.

Facilities. The site figure indicates the sedimentation basins to be upgraded, the preliminary location of thickening and dewatering facilities, and the approximate footprint of the monofill. As currently conceived, the monofill would be approximately 50 ft tall on the Dalecarlia Parkway side and 80 ft tall on the Dalecarlia Reservoir side. The footprint of the monofill is anticipated to occupy approximately 30 acres.

Conveyance and Transport. Pipelines would convey coagulated residuals from both the Dalecarlia sedimentation basins and the Georgetown Reservoir to the Dalecarlia thickening facility. After thickening and dewatering, onsite trucks would be used to haul the residuals to the monofill. On average, six onsite truck trips per day (6 days per week) would be required.

Alternative 5: Thicken Water Treatment Residuals at Dalecarlia WTP, Then Pump via a New Pipeline to Blue Plains. Process Forebay Residuals by Current Methods and Periodically Haul

This alternative would eliminate truck traffic associated with residuals on the roads surrounding the Washington Aqueduct Reservation by conveying coagulated residuals to the Blue Plains Wastewater Treatment Plant for further processing and disposal. Residuals from the Forebay would be processed separately as is currently practiced.

Facilities. This alternative would involve similar sedimentation basin modifications and new thickening facilities. Dewatering facilities would be located at Blue Plains.

Conveyance and Transport. Pipelines would convey coagulated residuals from both the onsite sedimentation basins and the Georgetown Reservoir to the Dalecarlia thickening facility. Another dedicated pair of pipelines within the right-of-way of the Potomac Interceptor would convey the thickened residuals to Blue Plains for final processing. These buried pipes would be approximately 10 miles in length and 12 inches in diameter.

Alternative 25: Process Water Treatment Residuals at the Dalecarlia WTP and Dispose via Contract Hauling. Process Forebay Residuals by Current Methods and Periodically Haul

This alternative consists of thickening and dewatering water treatment residuals at the Dalecarlia WTP. Residuals from the Dalecarlia sedimentation basins and the Georgetown Reservoir would be collected and thickened/dewatered at the Dalecarlia WTP. The disposal method would be contract hauling from Dalecarlia WTP to a permitted disposal facility. Residuals from the Forebay would be processed separately as is currently practiced and periodically hauled offsite or could also be disposed of onsite.

Facilities. The figures indicate the sedimentation basins to be upgraded and the preliminary location of thickening and dewatering facilities.

Conveyance and Transport. Pipelines would convey water treatment residuals from both the onsite sedimentation basins and the Georgetown Reservoir to the Dalecarlia thickening facility. After thickening and dewatering, the residuals would be hauled by truck to a permitted offsite disposal facility. The estimated average number of trucks for handling the residuals is approximately ten per day (during the 5-day workweek) at the 20-year predicted residuals production level.

DEPARTMENT OF THE ARMY
WASHINGTON AQUEDUCT
U.S. ARMY CORPS OF ENGINEERS, BALTIMORE DISTRICT
5900 MACARTHUR BOULEVARD, N.W.
WASHINGTON, D.C. 20016-2514

August 17, 2004

Office of the General Manager

Mr. Ira Palmer, Branch Chief
Fisheries and Wildlife Division
D.C. Department of Health
51 N Street, NE, 5th floor
Washington, DC 20002

Dear Mr. Palmer:

I previously sent a letter to you on August 9, 2004 in part notifying you of a public meeting that Washington Aqueduct will be holding on September 7, 2004. The location of that meeting has been changed to the Dalecarlia Water Treatment Plant which is located at 5900 MacArthur Boulevard, NW, Washington DC 20016. The first part of the meeting will be an open house where members of Washington Aqueduct staff and its consultants will be available with displays and will be prepared to answer questions. That portion will be followed by a group meeting to summarize the material and address any stakeholder issues. The meeting will start at 6:30 pm, and we expect to conclude at 9:00 pm.

If you have any questions please contact Mr. Michael Peterson at 202-764-0025.

Sincerely,

Thomas P. Jacobus
General Manager

DEPARTMENT OF THE ARMY
WASHINGTON AQUEDUCT
U.S. ARMY CORPS OF ENGINEERS, BALTIMORE DISTRICT
5900 MACARTHUR BOULEVARD, N.W.
WASHINGTON, D.C. 20016-2514

February 18, 2005

Office of the General Manager

Mr. Ira Palmer, Branch Chief
Fisheries and Wildlife Division
D.C. Department of Health
51 N Street, NE, 5th floor
Washington, DC 20002

Dear Mr. Palmer:

The purpose of this letter is to update you on the progress of developing the Draft Environmental Impact Statement (DEIS) for Washington Aqueduct's Proposed Residuals Management Process in Washington, D.C. In addition, this is a formal request per Section 7(c)(1) of the Endangered Species Act for information on any proposed or listed species or their critical habitats are present within the project sites. We previously submitted a similar request to you on August 9, 2004 that included four proposed alternatives. That letter and attachment is enclosed. An additional alternative that was recommended by various stakeholders is now also under consideration, and we request you include this alternative with our original consultation request.

The additional alternative would include collecting the water treatment residuals from the Dalecarlia Water Treatment Plant and the Georgetown Reservoir, transporting the material to a site on Washington Aqueduct property adjacent to Little Falls Road and Sibley Memorial Hospital in the District of Columbia. At this site the water treatment residuals would be thickened, dewatered, and disposed of by trucking to an off-site disposal facility. The estimated daily average number of trucks needed to transport the water treatment residuals is approximately ten (during the 5-day workweek) at the 20-year predicted residuals production level. More details concerning this alternative, and others suggested by the public but determined to not be in conformance with the project purpose and need requirements, can be found in a document dated December 20, 2004. This document is included with the other project documents in the enclosed CD. These documents are also available on our project website at http://washingtonaqueduct.nab.usace.army.mil/aqueduct.htm.

In order to keep on our DEIS schedule, we request your response by March 22, 2005. Similar requests are being sent to the United States Fish and Wildlife Service, the United States National Marine Fisheries Service and to the Maryland Department of Natural Resources – Wildlife Heritage Service.

Thank you for your efforts to date on this project. If you have any questions please contact Mr. Michael Peterson at 202-764-0025.

Sincerely,

Thomas P. Jacobus
General Manager

Enclosures

DEPARTMENT OF THE ARMY
WASHINGTON AQUEDUCT
U.S. ARMY CORPS OF ENGINEERS, BALTIMORE DISTRICT
5900 MACARTHUR BOULEVARD, N.W.
WASHINGTON, D.C. 20016-2514

August 9, 2004

Office of the General Manager

Mr. Ira Palmer, Branch Chief
Fisheries and Wildlife Division
D.C. Department of Health
51 N Street, NE, 5th floor
Washington, DC 20002

Dear Mr. Palmer:

The purpose of this letter is to consult with your office regarding the Draft Environmental Impact Statement (DEIS) that is being prepared for Washington Aqueduct's Proposed Residuals Management Process in Washington, D.C. The DEIS evaluates the potential environmental consequences of implementing the alternative actions including a No-Action and preferred alternative.

Background:

The U.S. Army Corps of Engineers, Baltimore District, Washington Aqueduct operates the Dalecarlia and McMillan Water Treatment Plants in Washington, D.C., serving over one million persons in the District of Columbia and Northern Virginia area with potable water. The treatment process removes solid particles (river silt) from the Potomac River supply water, treats and disinfects the water, and distributes the finished water to the metropolitan service area. The solids removed during the treatment process have historically been returned to the river, but a recently reissued version of the Washington Aqueduct National Pollutant Discharge Elimination System (NPDES) permit (Permit No. DC 0000019) effectively precludes the discharge of water treatment solids, or residuals, to the river.

Consequently, Washington Aqueduct is in the process of evaluating water treatment residuals management options to minimize or eliminate the discharge of residuals to the Potomac River. The residuals management option that will ultimately be selected has a potential to affect the human environment, and thus development of the residuals management plan must comply with the National Environmental Policy Act (NEPA) and also Section 106 of the National Historic Preservation Act (NHPA).

A Description of Proposed Actions and Alternatives (DOPAA) as well as an Engineering Feasibility Study have been completed. This process has narrowed the list of potential alternatives from 26 alternatives to four, including the no-action alternative. These alternatives will be evaluated in the DEIS that is currently being prepared.

We have attached a brief description of the alternatives and also a copy of our Scope of Statement. The Scope of Statement describes in detail the technical approach for evaluating the alternatives in the DEIS.

The complete text of the DOPAA, the Feasibility Study and the Scope of Statement are available on the project web page. http://washingtonaqueduct.nab.usace.army.mil/aqueduct.

We will be holding a public meeting in the auditorium of Sibley Memorial Hospital on September 7, 2004 at 7:00 PM in order to provide our stakeholders an opportunity to learn about the progress of the project, to see visual simulations of facilities for the different alternatives, and to ask questions to Washington Aqueduct directly.

In accordance with Section 7(c)(1) of the Endangered Species Act, we are requesting information on whether any proposed or listed species or their critical habitats are present within the project sites. Your response within 30 days from the receipt of this letter will be greatly appreciated. Similar requests are being sent to the United States Fish and Wildlife Service, the United States National Marine Fisheries Service and to the Maryland Department of Natural Resources – Wildlife Heritage Service.

If you have any questions please contact Mr. Michael Peterson at 202-764-0025.

Sincerely,

Thomas P. Jacobus
General Manager

Enclosures

Summary Description of Proposed Alternatives

A 20-year period of examination will form the basis for the DEIS. Consequently, residuals quantities and sizing of facilities will be based on anticipated water production over the 20-year period. Similarly, the evaluation of impacts of the alternatives will be based on the 20-year period of examination.

Alternative 2: Process Water Treatment Residuals at Dalecarlia WTP and Dispose in a Newly Constructed Dalecarlia Monofill. Process Forebay Residuals by Current Methods and Periodically Haul

Residuals from the Dalecarlia Sedimentation Basins and the Georgetown Reservoir would be collected and thickened/dewatered at the Dalecarlia WTP before being disposed of in a newly constructed Dalecarlia monofill. Residuals from the Forebay would be processed separately as is currently practiced and periodically hauled offsite or could also be disposed of in the Dalecarlia monofill.

Facilities. The site figure indicates the sedimentation basins to be upgraded, the preliminary location of thickening and dewatering facilities, and the approximate footprint of the monofill. As currently conceived, the monofill would be approximately 50 ft tall on the Dalecarlia Parkway side and 80 ft tall on the Dalecarlia Reservoir side. The footprint of the monofill is anticipated to occupy approximately 30 acres.

Conveyance and Transport. Pipelines would convey coagulated residuals from both the Dalecarlia sedimentation basins and the Georgetown Reservoir to the Dalecarlia thickening facility. After thickening and dewatering, onsite trucks would be used to haul the residuals to the monofill. On average, six onsite truck trips per day (6 days per week) would be required.

Alternative 5: Thicken Water Treatment Residuals at Dalecarlia WTP, Then Pump via a New Pipeline to Blue Plains. Process Forebay Residuals by Current Methods and Periodically Haul

This alternative would eliminate truck traffic associated with residuals on the roads surrounding the Washington Aqueduct Reservation by conveying coagulated residuals to the Blue Plains Wastewater Treatment Plant for further processing and disposal. Residuals from the Forebay would be processed separately as is currently practiced.

Facilities. This alternative would involve similar sedimentation basin modifications and new thickening facilities. Dewatering facilities would be located at Blue Plains.

Conveyance and Transport. Pipelines would convey coagulated residuals from both the onsite sedimentation basins and the Georgetown Reservoir to the Dalecarlia thickening facility. Another dedicated pair of pipelines within the right-of-way of the Potomac Interceptor would convey the thickened residuals to Blue Plains for final processing. These buried pipes would be approximately 10 miles in length and 12 inches in diameter.

DEPARTMENT OF THE ARMY
WASHINGTON AQUEDUCT
U.S. ARMY CORPS OF ENGINEERS, BALTIMORE DISTRICT
5900 MACARTHUR BOULEVARD, N.W.
WASHINGTON, D.C. 20016-2514

August 23, 2004

Office of the General Manager

Mr. Robert Spagnoletti
Attorney General for the District of Columbia
1350 Pennsylvania Avenue, NW
Suite 409
Washington, DC 20004

Dear Mr. Spagnoletti:

Washington Aqueduct will be changing the way we have historically disposed of the solids that collect in the sedimentation basins at the Dalecarlia water treatment plant and the basins at Georgetown. I wanted to update you on the progress we are making as we analyze and subsequently select a preferred alternative for construction.

As you may know, we are operating under a Federal Facility Compliance Agreement issued by the United States Environmental Protection Agency Region III. That agreement and the accompanying National Pollutant Discharge Elimination System permit will cause us to completely cease returning the solids to the Potomac River by December 31, 2009. While that seems like a long time in the future, most of this time will be required for the construction of facilities and procurement of equipment.

We are at the stage where we have identified three feasible alternatives that currently match our screening criteria as well as the project purpose and need. The criteria include meeting the terms and conditions of the permit and compliance agreement, preserving the reliability and redundancy of the existing water production system and considering the economic effects of the various options.

We are beginning to acquire data for the Draft Environmental Impact Statement to evaluate these feasible alternatives. All of the environmental resources such as air quality, land use, noise, socioeconomic, transportation, etc. are included in this data acquisition process. We know that the collection, transport and disposal of the solids is going to change the way we currently operate and that both immediate neighbors as well as other stakeholders have an interest in not only the decision we make, but also the process we use to arrive at that decision.

Therefore, we are holding a public meeting that we have designed to provide up to date information on our progress and process. The first part of the meeting will be an open house where members of Washington Aqueduct staff and its consultants will be available with displays and will be prepared to answer questions. That portion will be followed by a group meeting to summarize the material and address issues you may have. The meeting will be held on September 7, 2004 at the Dalecarlia Water Treatment Plant at 5900 MacArthur Boulevard, NW, Washington D.C. The meeting will start at 6:30 pm, and we expect to conclude at 9:00 pm.

From a number of inquires we have received, I believe that some individuals may have gotten the impression that a decision on which course of action to pursue has already been made. That is not correct. We are working with three options that achieve compliance with our permit in ways that have different measurable effects on peoples' lives and the environment.

One option involves local processing and hauling via commercial trucks to a disposal site outside the immediate area, such as farmlands. Another option will analyze an alternative to trucking the solids through the neighborhoods. This is the option that would essentially build a hill adjacent to the Dalecarlia Reservoir on land owned by Washington Aqueduct. The third option will analyze a smaller local collection and treatment facility and a pipeline in the trace of the major sewer that goes in the immediate vicinity of the Dalecarlia water treatment plant to the Blue Plains advanced wastewater treatment plant. The solids would then be disposed of along with the existing biosolids that are trucked daily from Blue Plains.

I have included with this letter a more detailed description of each alternative we plan to study as well as additional background on the project. Other documents are available on our project website at http://washingtonaqueduct.nab.usace.army.mil/aqueduct.htm such as the Description of Proposed Action and Alternatives, the Engineering Feasibility Study, and the recently completed Scope of Statement.

We plan to complete the Draft Environmental Impact Statement by mid-November and it will be available to the public for formal comment. It will contain the preferred alternative with the supporting rationale.

We would like to schedule a meeting with you or your staff to discuss the project and potential alternatives and to understand your possible concerns and issues. We would welcome a meeting at our facility, in case you would like to drive to the area in questions, or we can meet at your offices. We will be contacting you very soon to set up a meeting.

If you have any questions please contact Mr. Michael Peterson at 202-764-0025.

Sincerely,

Thomas P. Jacobus
General Manager

Enclosure

Washington Aqueduct
5900 MacArthur Boulevard, NW
Washington, DC 20016-2514

Fax 202-764-1823

FAX

TO: Mr. Robert Spagnoletti, Mr. Alan Bergstein
FAX NUMBER: 202-724-6590

FROM: Michael Peterson
TELEPHONE: 202-764-0025

DATE: 24 August 2004
SUBJECT: Washington Aqueduct Residuals Draft EIS

PAGES 4 PLUS COVER SHEET

NOTES

If you are not the intended recipient and have received this erroneously, please notify Washington Aqueduct at 202-764-0025 so we may redirect it. If you did receive it erroneously, please dispose of it in an appropriate manner as it may contain personal information.

DEPARTMENT OF THE ARMY
WASHINGTON AQUEDUCT
U.S. ARMY CORPS OF ENGINEERS, BALTIMORE DISTRICT
5900 MACARTHUR BOULEVARD, N.W.
WASHINGTON, D.C. 20016-2514

August 9, 2004

Office of the General Manager

Ms. Tania Tully
State Historic Preservation Officer
Maryland Historic Trust
Division of Historical and Cultural Programs
100 Community Place
Crownsville, MD 21032-2023

Dear Ms. Tully:

The purpose of this letter is to consult with your office regarding the Draft Environmental Impact Statement (DEIS) that is being prepared for Washington Aqueduct's Proposed Residuals Management Process in Washington, D.C. The DEIS evaluates the potential environmental consequences of implementing the alternative actions including a No-Action and preferred alternative.

Background:

The U.S. Army Corps of Engineers, Baltimore District, Washington Aqueduct operates the Dalecarlia and McMillan Water Treatment Plants in Washington, D.C., serving over one million persons in the District of Columbia and Northern Virginia area with potable water. The treatment process removes solid particles (river silt) from the Potomac River supply water, treats and disinfects the water, and distributes the finished water to the metropolitan service area. The solids removed during the treatment process have historically been returned to the river, but a recently reissued version of the Washington Aqueduct National Pollutant Discharge Elimination System (NPDES) permit (Permit No. DC 0000019) effectively precludes the discharge of water treatment solids, or residuals, to the river.

Consequently, Washington Aqueduct is in the process of evaluating water treatment residuals management options to minimize or eliminate the discharge of residuals to the Potomac River. The residuals management option that will ultimately be selected has a potential to affect the human environment, and thus development of the residuals management plan must comply with the National Environmental Policy Act (NEPA) and also Section 106 of the National Historic Preservation Act (NHPA).

A Description of Proposed Actions and Alternatives (DOPAA) as well as an Engineering Feasibility Study have been completed. This process has narrowed the list of potential alternatives from 26 alternatives to four, including the no-action alternative. These alternatives will be evaluated in the DEIS that is currently being prepared.

We have attached a brief description of the alternatives and also a copy of our Scope of Statement. The Scope of Statement describes in detail the technical approach for evaluating the alternatives in the DEIS.

The complete text of the DOPAA, the Feasibility Study and the Scope of Statement are available on the project web page. http://washingtonaqueduct.nab.usace.army.mil/aqueduct.

We would like to schedule a meeting with you and your staff to discuss the project and the potential alternatives and to understand your possible concerns and issues. We would welcome a meeting at our facility, in case you would like to drive to the area in question, or we can meet at your offices. We will be contacting you very soon to set up a meeting.

In addition, we will be holding a public meeting in the auditorium of Sibley Memorial Hospital on September 7, 2004 at 7:00 PM in order to provide our stakeholders an opportunity to learn about the progress of the project, to see visual simulations of facilities for the different alternatives, and to ask questions to Washington Aqueduct directly.

If you have any questions please contact Mr. Michael Peterson at 202-764-0025.

Sincerely,

Thomas P. Jacobus
General Manager

Enclosures

Summary Description of Proposed Alternatives

A 20-year period of examination will form the basis for the DEIS. Consequently, residuals quantities and sizing of facilities will be based on anticipated water production over the 20-year period. Similarly, the evaluation of impacts of the alternatives will be based on the 20-year period of examination.

Alternative 2: Process Water Treatment Residuals at Dalecarlia WTP and Dispose in a Newly Constructed Dalecarlia Monofill. Process Forebay Residuals by Current Methods and Periodically Haul

Residuals from the Dalecarlia Sedimentation Basins and the Georgetown Reservoir would be collected and thickened/dewatered at the Dalecarlia WTP before being disposed of in a newly constructed Dalecarlia monofill. Residuals from the Forebay would be processed separately as is currently practiced and periodically hauled offsite or could also be disposed of in the Dalecarlia monofill.

Facilities. The site figure indicates the sedimentation basins to be upgraded, the preliminary location of thickening and dewatering facilities, and the approximate footprint of the monofill. As currently conceived, the monofill would be approximately 50 ft tall on the Dalecarlia Parkway side and 80 ft tall on the Dalecarlia Reservoir side. The footprint of the monofill is anticipated to occupy approximately 30 acres.

Conveyance and Transport. Pipelines would convey coagulated residuals from both the Dalecarlia sedimentation basins and the Georgetown Reservoir to the Dalecarlia thickening facility. After thickening and dewatering, onsite trucks would be used to haul the residuals to the monofill. On average, six onsite truck trips per day (6 days per week) would be required.

Alternative 5: Thicken Water Treatment Residuals at Dalecarlia WTP, Then Pump via a New Pipeline to Blue Plains. Process Forebay Residuals by Current Methods and Periodically Haul

This alternative would eliminate truck traffic associated with residuals on the roads surrounding the Washington Aqueduct Reservation by conveying coagulated residuals to the Blue Plains Wastewater Treatment Plant for further processing and disposal. Residuals from the Forebay would be processed separately as is currently practiced.

Facilities. This alternative would involve similar sedimentation basin modifications and new thickening facilities. Dewatering facilities would be located at Blue Plains.

Conveyance and Transport. Pipelines would convey coagulated residuals from both the onsite sedimentation basins and the Georgetown Reservoir to the Dalecarlia thickening facility. Another dedicated pair of pipelines within the right-of-way of the Potomac Interceptor would convey the thickened residuals to Blue Plains for final processing. These buried pipes would be approximately 10 miles in length and 12 inches in diameter.

Alternative 25: Process Water Treatment Residuals at the Dalecarlia WTP and Dispose via Contract Hauling. Process Forebay Residuals by Current Methods and Periodically Haul

This alternative consists of thickening and dewatering water treatment residuals at the Dalecarlia WTP. Residuals from the Dalecarlia sedimentation basins and the Georgetown Reservoir would be collected and thickened/dewatered at the Dalecarlia WTP. The disposal method would be contract hauling from Dalecarlia WTP to a permitted disposal facility. Residuals from the Forebay would be processed separately as is currently practiced and periodically hauled offsite or could also be disposed of onsite.

Facilities. The figures indicate the sedimentation basins to be upgraded and the preliminary location of thickening and dewatering facilities.

Conveyance and Transport. Pipelines would convey water treatment residuals from both the onsite sedimentation basins and the Georgetown Reservoir to the Dalecarlia thickening facility. After thickening and dewatering, the residuals would be hauled by truck to a permitted offsite disposal facility. The estimated average number of trucks for handling the residuals is approximately ten per day (during the 5-day workweek) at the 20-year predicted residuals production level.

DEPARTMENT OF THE ARMY
WASHINGTON AQUEDUCT
U.S. ARMY CORPS OF ENGINEERS, BALTIMORE DISTRICT
5900 MACARTHUR BOULEVARD, N.W.
WASHINGTON, D.C. 20016-2514

August 17, 2004

Office of the General Manager

Ms. Tania Tully
State Historic Preservation Officer
Maryland Historic Trust
Division of Historical and Cultural Programs
100 Community Place
Crownsville, MD 21032-2023

Dear Ms. Tully:

I previously sent a letter to you on August 9, 2004 in part notifying you of a public meeting that Washington Aqueduct will be holding on September 7, 2004. The location of that meeting has been changed to the Dalecarlia Water Treatment Plant which is located at 5900 MacArthur Boulevard, NW, Washington DC 20016. The first part of the meeting will be an open house where members of Washington Aqueduct staff and its consultants will be available with displays and will be prepared to answer questions. That portion will be followed by a group meeting to summarize the material and address any stakeholder issues. The meeting will start at 6:30 pm, and we expect to conclude at 9:00 pm.

If you have any questions please contact Mr. Michael Peterson at 202-764-0025.

Sincerely,

Thomas P. Jacobus
General Manager

DEPARTMENT OF THE ARMY
WASHINGTON AQUEDUCT
U.S. ARMY CORPS OF ENGINEERS, BALTIMORE DISTRICT
5900 MACARTHUR BOULEVARD, N.W.
WASHINGTON, D.C. 20016-2514

February 18, 2005

Office of the General Manager

Ms. Tania Tully, State Historic Preservation Officer
Maryland Historical Trust
Division of Historical and Cultural Programs
100 Community Place
Crownsville, MD 21032-2023

Dear Ms. Tully:

The purpose of this letter is to update you on the progress of developing the Draft Environmental Impact Statement (DEIS) for Washington Aqueduct's Proposed Residuals Management Process in Washington, D.C. We previously submitted a consultation letter to your office on August 9, 2004. It included four proposed alternatives. That letter and attachment is enclosed. An additional alternative that was recommended by various stakeholders is now also under consideration, and we request you include this alternative with our original consultation request.

The additional alternative would include collecting the water treatment residuals from the Dalecarlia Water Treatment Plant and the Georgetown Reservoir, transporting the material to a site on Washington Aqueduct property adjacent to Little Falls Road and Sibley Memorial Hospital in the District of Columbia. At this site the water treatment residuals would be thickened, dewatered, and disposed of by trucking to an off-site permitted disposal facility. The estimated daily average number of trucks needed to transport the water treatment residuals is approximately ten (during the 5-day workweek) at the 20-year predicted residuals production level. More details concerning this alternative, and others suggested by the public but [illegible] determined to not be in conformance with the project purpose and need requirements, can be found in a document dated December 20, 2004. This document is included with the other project documents in the enclosed CD. These documents are also available on our project website at http://washingtonaqueduct.nab.usace.army.mil/aqueduct.htm.

Thank you for your efforts supporting the DEIS development process to date. If you have any questions, please contact Mr. Michael Peterson at 202-764-0025.

Sincerely,

Thomas P. Jacobus
General Manager

Enclosures

DEPARTMENT OF THE ARMY
WASHINGTON AQUEDUCT
U.S. ARMY CORPS OF ENGINEERS, BALTIMORE DISTRICT
5900 MACARTHUR BOULEVARD, N.W.
WASHINGTON, D.C. 20016-2514

August 9, 2004

Office of the General Manager

Ms. Tania Tully
State Historic Preservation Officer
Maryland Historic Trust
Division of Historical and Cultural Programs
100 Community Place
Crownsville, MD 21032-2023

Dear Ms. Tully:

The purpose of this letter is to consult with your office regarding the Draft Environmental Impact Statement (DEIS) that is being prepared for Washington Aqueduct's Proposed Residuals Management Process in Washington, D.C. The DEIS evaluates the potential environmental consequences of implementing the alternative actions including a No-Action and preferred alternative.

Background:

The U.S. Army Corps of Engineers, Baltimore District, Washington Aqueduct operates the Dalecarlia and McMillan Water Treatment Plants in Washington, D.C., serving over one million persons in the District of Columbia and Northern Virginia area with potable water. The treatment process removes solid particles (river silt) from the Potomac River supply water, treats and disinfects the water, and distributes the finished water to the metropolitan service area. The solids removed during the treatment process have historically been returned to the river, but a recently reissued version of the Washington Aqueduct National Pollutant Discharge Elimination System (NPDES) permit (Permit No. DC 0000019) effectively precludes the discharge of water treatment solids, or residuals, to the river.

Consequently, Washington Aqueduct is in the process of evaluating water treatment residuals management options to minimize or eliminate the discharge of residuals to the Potomac River. The residuals management option that will ultimately be selected has a potential to affect the human environment, and thus development of the residuals management plan must comply with the National Environmental Policy Act (NEPA) and also Section 106 of the National Historic Preservation Act (NHPA).

A Description of Proposed Actions and Alternatives (DOPAA) as well as an Engineering Feasibility Study have been completed. This process has narrowed the list of potential alternatives from 26 alternatives to four, including the no-action alternative. These alternatives will be evaluated in the DEIS that is currently being prepared.

We have attached a brief description of the alternatives and also a copy of our Scope of Statement. The Scope of Statement describes in detail the technical approach for evaluating the alternatives in the DEIS.

The complete text of the DOPAA, the Feasibility Study and the Scope of Statement are available on the project web page. http://washingtonaqueduct.nab.usace.army.mil/aqueduct.

We would like to schedule a meeting with you and your staff to discuss the project and the potential alternatives and to understand your possible concerns and issues. We would welcome a meeting at our facility, in case you would like to drive to the area in question, or we can meet at your offices. We will be contacting you very soon to set up a meeting.

In addition, we will be holding a public meeting in the auditorium of Sibley Memorial Hospital on September 7, 2004 at 7:00 PM in order to provide our stakeholders an opportunity to learn about the progress of the project, to see visual simulations of facilities for the different alternatives, and to ask questions to Washington Aqueduct directly.

If you have any questions please contact Mr. Michael Peterson at 202-764-0025.

Sincerely,

Thomas P. Jacobus
General Manager

Enclosures

Summary Description of Proposed Alternatives

A 20-year period of examination will form the basis for the DEIS. Consequently, residuals quantities and sizing of facilities will be based on anticipated water production over the 20-year period. Similarly, the evaluation of impacts of the alternatives will be based on the 20-year period of examination.

Alternative 2: Process Water Treatment Residuals at Dalecarlia WTP and Dispose in a Newly Constructed Dalecarlia Monofill. Process Forebay Residuals by Current Methods and Periodically Haul

Residuals from the Dalecarlia Sedimentation Basins and the Georgetown Reservoir would be collected and thickened/dewatered at the Dalecarlia WTP before being disposed of in a newly constructed Dalecarlia monofill. Residuals from the Forebay would be processed separately as is currently practiced and periodically hauled offsite or could also be disposed of in the Dalecarlia monofill.

Facilities. The site figure indicates the sedimentation basins to be upgraded, the preliminary location of thickening and dewatering facilities, and the approximate footprint of the monofill. As currently conceived, the monofill would be approximately 50 ft tall on the Dalecarlia Parkway side and 80 ft tall on the Dalecarlia Reservoir side. The footprint of the monofill is anticipated to occupy approximately 30 acres.

Conveyance and Transport. Pipelines would convey coagulated residuals from both the Dalecarlia sedimentation basins and the Georgetown Reservoir to the Dalecarlia thickening facility. After thickening and dewatering, onsite trucks would be used to haul the residuals to the monofill. On average, six onsite truck trips per day (6 days per week) would be required.

Alternative 5: Thicken Water Treatment Residuals at Dalecarlia WTP, Then Pump via a New Pipeline to Blue Plains. Process Forebay Residuals by Current Methods and Periodically Haul

This alternative would eliminate truck traffic associated with residuals on the roads surrounding the Washington Aqueduct Reservation by conveying coagulated residuals to the Blue Plains Wastewater Treatment Plant for further processing and disposal. Residuals from the Forebay would be processed separately as is currently practiced.

Facilities. This alternative would involve similar sedimentation basin modifications and new thickening facilities. Dewatering facilities would be located at Blue Plains.

Conveyance and Transport. Pipelines would convey coagulated residuals from both the onsite sedimentation basins and the Georgetown Reservoir to the Dalecarlia thickening facility. Another dedicated pair of pipelines within the right-of-way of the Potomac Interceptor would convey the thickened residuals to Blue Plains for final processing. These buried pipes would be approximately 10 miles in length and 12 inches in diameter.

DEPARTMENT OF THE ARMY
WASHINGTON AQUEDUCT
U.S. ARMY CORPS OF ENGINEERS, BALTIMORE DISTRICT
5900 MACARTHUR BOULEVARD, N.W.
WASHINGTON, D.C. 20016-2514

August 17, 2004

Office of the General Manager

Lieutenant Mike Wischnewski, Facility Manager
Anacostia Naval Station
121 DIA Access Road, SW
Washington, DC 20374

Dear Lieutenant Wischnewski:

Washington Aqueduct will be changing the way we have historically disposed of the solids that collect in the sedimentation basins at the Dalecarlia water treatment plant and the basins at Georgetown. I wanted to update you on the progress we are making as we analyze and subsequently select a preferred alternative for construction.

As you may know, we are operating under a Federal Facility Compliance Agreement issued by the United States Environmental Protection Agency Region III. That agreement and the accompanying National Pollutant Discharge Elimination System permit will cause us to completely cease returning the solids to the Potomac River by December 31, 2009. While that seems like a long time in the future, most of this time will be required for the construction of facilities and procurement of equipment.

We are at the stage where we have identified three feasible alternatives that currently match our screening criteria as well as the project purpose and need. The criteria include meeting the terms and conditions of the permit and compliance agreement, preserving the reliability and redundancy of the existing water production system and considering the economic effects of the various options.

We are beginning to acquire data for the Draft Environmental Impact Statement to evaluate these feasible alternatives. All of the environmental resources such as air quality, land use, noise, socioeconomic, transportation, etc. are included in this data acquisition process. We know that the collection, transport and disposal of the solids is going to change the way we currently operate and that both immediate neighbors as well as other stakeholders have an interest in not only the decision we make, but also the process we use to arrive at that decision.

Therefore, we are holding a public meeting that we have designed to provide up to date information on our progress and process. The first part of the meeting will be an open house where members of Washington Aqueduct staff and its consultants will be available with displays and will be prepared to answer questions. That portion will be followed by a group meeting to summarize the material and address issues you may have. The meeting will be held on September 7, 2004 at the Dalecarlia Water Treatment Plant at 5900 MacArthur Boulevard, NW, Washington D.C. The meeting will start at 6:30 pm, and we expect to conclude at 9:00 pm.

From a number of inquires we have received, I believe that some individuals may have gotten the impression that a decision on which course of action to pursue has already been made. That is not correct. We are working with three options that achieve compliance with our permit in ways that have different measurable effects on peoples' lives and the environment.

One option involves local processing and hauling via commercial trucks to a disposal site outside the immediate area, such as farmlands. Another option will analyze an alternative to trucking the solids through the neighborhoods. This is the option that would essentially build a hill adjacent to the Dalecarlia Reservoir on land owned by Washington Aqueduct. The third option will analyze a smaller local collection and treatment facility and a pipeline in the trace of the major sewer that goes in the immediate vicinity of the Dalecarlia water treatment plant to the Blue Plains advanced wastewater treatment plant. The solids would then be disposed of along with the existing biosolids that are trucked daily from Blue Plains.

I have included with this letter a more detailed description of each alternative we plan to study as well as additional background on the project. Other documents are available on our project website at http://washingtonaqueduct.nab.usace.army.mil/aqueduct.htm such as the Description of Proposed Action and Alternatives, the Engineering Feasibility Study, and the recently completed Scope of Statement.

We plan to complete the Draft Environmental Impact Statement by mid-November and it will be available to the public for formal comment. It will contain the preferred alternative with the supporting rationale.

If you or a member of your staff cannot attend the September 7 meeting, you may send us your comments via our website or you may write to us at 5900 MacArthur Boulevard, Washington, DC 20016, Attention: Michael Peterson.

Sincerely,

Thomas P. Jacobus
General Manager

Enclosure

DEPARTMENT OF THE ARMY
WASHINGTON AQUEDUCT
U.S. ARMY CORPS OF ENGINEERS, BALTIMORE DISTRICT
5900 MACARTHUR BOULEVARD, N.W.
WASHINGTON, D.C. 20016-2514

August 9, 2004

Office of the General Manager

Mr. John Wolflin, Field Supervisor
Chesapeake Bay Field Office
U.S. Fish and Wildlife Service
177 Admiral Cochrane Drive
Annapolis, MD 21401

Dear Mr. Wolfin:

John

The purpose of this letter is to consult with your office regarding the Draft Environmental Impact Statement (DEIS) that is being prepared for Washington Aqueduct's Proposed Residuals Management Process in Washington, D.C. The DEIS evaluates the potential environmental consequences of implementing the alternative actions including a No-Action and preferred alternative.

Background:

The U.S. Army Corps of Engineers, Baltimore District, Washington Aqueduct operates the Dalecarlia and McMillan Water Treatment Plants in Washington, D.C., serving over one million persons in the District of Columbia and Northern Virginia area with potable water. The treatment process removes solid particles (river silt) from the Potomac River supply water, treats and disinfects the water, and distributes the finished water to the metropolitan service area. The solids removed during the treatment process have historically been returned to the river, but a recently reissued version of the Washington Aqueduct National Pollutant Discharge Elimination System (NPDES) permit (Permit No. DC 0000019) effectively precludes the discharge of water treatment solids, or residuals, to the river.

Consequently, Washington Aqueduct is in the process of evaluating water treatment residuals management options to minimize or eliminate the discharge of residuals to the Potomac River. The residuals management option that will ultimately be selected has a potential to affect the human environment, and thus development of the residuals management plan must comply with the National Environmental Policy Act (NEPA) and also Section 106 of the National Historic Preservation Act (NHPA).

A Description of Proposed Actions and Alternatives (DOPAA) as well as an Engineering Feasibility Study have been completed. This process has narrowed the list of potential alternatives from 26 alternatives to four, including the no-action alternative. These alternatives will be evaluated in the DEIS that is currently being prepared.

We have attached a brief description of the alternatives and also a copy of our Scope of Statement. The Scope of Statement describes in detail the technical approach for evaluating the alternatives in the DEIS.

The complete text of the DOPAA, the Feasibility Study and the Scope of Statement are available on the project web page. http://washingtonaqueduct.nab.usace.army.mil/aqueduct.

We will be holding a public meeting in the auditorium of Sibley Memorial Hospital on September 7, 2004 at 7:00 PM in order to provide our stakeholders an opportunity to learn about the progress of the project, to see visual simulations of facilities for the different alternatives, and to ask questions to Washington Aqueduct directly.

In accordance with Section 7(c)(1) of the Endangered Species Act, we are requesting information on whether any proposed or listed species or their critical habitats are present within the project sites. Your response within 30 days from the receipt of this letter will be greatly appreciated. Similar requests are being sent to the District of Columbia Department of Health Fisheries and Wildlife Division, the United States National Marine Fisheries Service and to the Maryland Department of Natural Resources – Wildlife Heritage Service.

If you have any questions please contact Mr. Michael Peterson at 202-764-0025.

Sincerely,

Thomas P. Jacobus
General Manager

Enclosures

Summary Description of Proposed Alternatives

A 20-year period of examination will form the basis for the DEIS. Consequently, residuals quantities and sizing of facilities will be based on anticipated water production over the 20-year period. Similarly, the evaluation of impacts of the alternatives will be based on the 20-year period of examination.

Alternative 2: Process Water Treatment Residuals at Dalecarlia WTP and Dispose in a Newly Constructed Dalecarlia Monofill. Process Forebay Residuals by Current Methods and Periodically Haul

Residuals from the Dalecarlia Sedimentation Basins and the Georgetown Reservoir would be collected and thickened/dewatered at the Dalecarlia WTP before being disposed of in a newly constructed Dalecarlia monofill. Residuals from the Forebay would be processed separately as is currently practiced and periodically hauled offsite or could also be disposed of in the Dalecarlia monofill.

Facilities. The site figure indicates the sedimentation basins to be upgraded, the preliminary location of thickening and dewatering facilities, and the approximate footprint of the monofill. As currently conceived, the monofill would be approximately 50 ft tall on the Dalecarlia Parkway side and 80 ft tall on the Dalecarlia Reservoir side. The footprint of the monofill is anticipated to occupy approximately 30 acres.

Conveyance and Transport. Pipelines would convey coagulated residuals from both the Dalecarlia sedimentation basins and the Georgetown Reservoir to the Dalecarlia thickening facility. After thickening and dewatering, onsite trucks would be used to haul the residuals to the monofill. On average, six onsite truck trips per day (6 days per week) would be required.

Alternative 5: Thicken Water Treatment Residuals at Dalecarlia WTP, Then Pump via a New Pipeline to Blue Plains. Process Forebay Residuals by Current Methods and Periodically Haul

This alternative would eliminate truck traffic associated with residuals on the roads surrounding the Washington Aqueduct Reservation by conveying coagulated residuals to the Blue Plains Wastewater Treatment Plant for further processing and disposal. Residuals from the Forebay would be processed separately as is currently practiced.

Facilities. This alternative would involve similar sedimentation basin modifications and new thickening facilities. Dewatering facilities would be located at Blue Plains.

Conveyance and Transport. Pipelines would convey coagulated residuals from both the onsite sedimentation basins and the Georgetown Reservoir to the Dalecarlia thickening facility. Another dedicated pair of pipelines within the right-of-way of the Potomac Interceptor would convey the thickened residuals to Blue Plains for final processing. These buried pipes would be approximately 10 miles in length and 12 inches in diameter.

Alternative 25: Process Water Treatment Residuals at the Dalecarlia WTP and Dispose via Contract Hauling. Process Forebay Residuals by Current Methods and Periodically Haul

This alternative consists of thickening and dewatering water treatment residuals at the Dalecarlia WTP. Residuals from the Dalecarlia sedimentation basins and the Georgetown Reservoir would be collected and thickened/dewatered at the Dalecarlia WTP. The disposal method would be contract hauling from Dalecarlia WTP to a permitted disposal facility. Residuals from the Forebay would be processed separately as is currently practiced and periodically hauled offsite or could also be disposed of onsite.

Facilities. The figures indicate the sedimentation basins to be upgraded and the preliminary location of thickening and dewatering facilities.

Conveyance and Transport. Pipelines would convey water treatment residuals from both the onsite sedimentation basins and the Georgetown Reservoir to the Dalecarlia thickening facility. After thickening and dewatering, the residuals would be hauled by truck to a permitted offsite disposal facility. The estimated average number of trucks for handling the residuals is approximately ten per day (during the 5-day workweek) at the 20-year predicted residuals production level.

DEPARTMENT OF THE ARMY
WASHINGTON AQUEDUCT
U.S. ARMY CORPS OF ENGINEERS, BALTIMORE DISTRICT
5900 MACARTHUR BOULEVARD, N.W.
WASHINGTON, D.C. 20016-2514

August 17, 2004

Office of the General Manager

Mr. John Wolflin, Field Supervisor
Chesapeake Bay Field Office
U.S. Fish and Wildlife Service
177 Admiral Cochrane Drive
Annapolis, MD 21401

Dear Mr. Wolfin:

I previously sent a letter to you on August 9, 2004 in part notifying you of a public meeting that Washington Aqueduct will be holding on September 7, 2004. The location of that meeting has been changed to the Dalecarlia Water Treatment Plant which is located at 5900 MacArthur Boulevard, NW, Washington DC 20016. The first part of the meeting will be an open house where members of Washington Aqueduct staff and its consultants will be available with displays and will be prepared to answer questions. That portion will be followed by a group meeting to summarize the material and address any stakeholder issues. The meeting will start at 6:30 pm, and we expect to conclude at 9:00 pm.

If you have any questions please contact Mr. Michael Peterson at 202-764-0025.

Sincerely,

Thomas P. Jacobus
General Manager

MARYLAND
DEPARTMENT OF
NATURAL RESOURCES

Robert L. Ehrlich, Jr., *Governor*
Michael S. Steele, *Lt. Governor*
C. Ronald Franks, *Secretary*

October 12, 2004

Mr. Thomas P. Jacobus
Department of the Army
Washington Aqueduct
US Army Corps of Engineers, Baltimore District
5900 MacArthur Boulevard, NW
Washington, DC 20016-2514

RE: Environmental Review for Washington Aqueduct's Proposed Residuals Management Process, Washington, D.C.

Dear Mr. Jacobus:

The Wildlife and Heritage Service has determined that while most of the proposed alternatives are outside of our area of review, we would encourage that any alternative chosen, avoid impacts to the environmentally sensitive Potomac Gorge area. This area includes the Potomac River and the unique habitat along its banks and shorelines that support numerous rare, threatened and endangered species. It is also important to note that the utilization of state funds, or the need to obtain a state authorized permit may warrant additional evaluations that could lead to protection or survey recommendations by the Wildlife and Heritage Service. If this project falls into one of these categories, please contact us for further coordination.

Thank you for allowing us the opportunity to review this project. If you should have any further questions regarding this information, please contact me at (410) 260-8573.

Sincerely,

Lori A. Byrne

Lori A. Byrne,
Environmental Review Coordinator
Wildlife and Heritage Service
MD Dept. of Natural Resources

ER #2004.1717.dc
Cc: R. Wiegand, DNR

COMMONWEALTH *of* VIRGINIA

DEPARTMENT OF ENVIRONMENTAL QUALITY

W. Tayloe Murphy, Jr.
Secretary of Natural Resources

Street address: 629 East Main Street, Richmond, Virginia 23219
Mailing address: P.O. Box 10009, Richmond, Virginia 23240
Fax (804) 698-4500 TDD (804) 698-4021
www.deq.state.va.us

Robert G. Burnley
Director

(804) 698-4000
1-800-592-5482

August 23, 2004

Mr. Thomas P. Jacobus
General Manager
Washington Aqueduct
Army Corps of Engineers, Baltimore District
5900 MacArthur Boulevard, N.W.
Washington, D.C. 20016

No enclosure received 27Aug.

RE: Washington Aqueduct Residuals Processing Alternatives

Dear Mr. Jacobus:

This letter responds to your August 12, 2004 letter to Mr. Robert Burnley, our Director, concerning the Washington Aqueduct's progress in changing the method of disposal of solids from the Dalecarlia water treatment plant and the basins at Georgetown.

The Department of Environmental Quality's Office of Environmental Impact Review coordinates Virginia's review of federal NEPA documents and responds to appropriate federal officials on behalf of the Commonwealth. In addition, this Office is the lead agency for Virginia's review of federal consistency determinations and certifications submitted pursuant to the Coastal Zone Management Act. Accordingly, we will be interested in coordinating the State's review of the Environmental Impact Statement (EIS) that you expect to complete in November.

Environmental Review and Scoping

We have shared your letter with the Department of Environmental Quality's Division of Water Quality and its Northern Virginia Regional Office. Depending on the implications of this undertaking for Virginia, we will include other state agencies, localities, and regional planning district commissions in the review of the EIS when it is published. Our typical review process includes the following state agencies (starred (*) agencies administer one or more of the Enforceable Policies of the Virginia Coastal Resources Management Program; see "Federal Consistency...," below):

Department of Environmental Quality, including:
- Office of Environmental Impact Review* (this Office)
- Northern Virginia Regional Office* (mentioned above)
- Division of Water Quality* (mentioned above)
- Waste Division
- Air Programs Coordination Division*

Department of Game and Inland Fisheries*
Department of Agriculture and Consumer Services
Department of Conservation and Recreation,* including:
Division of Chesapeake Bay Local Assistance*
Division of Soil and Water Conservation*
Division of Natural Heritage
Department of Historic Resources
Department of Mines, Minerals, and Energy
Department of Forestry.

In order to ensure an effective coordinated review of the EIS and the consistency determination, we will require 18 copies of the document when it is published. While this Office does not participate in scoping efforts beyond the advice given herein, other agencies are free to provide scoping comments concerning the EIS.

Federal Consistency under the Coastal Zone Management Act

Pursuant to the Coastal Zone Management Act of 1972, as amended, federal activities affecting Virginia's coastal resources or coastal uses must be consistent with the Virginia Coastal Resources Management Program (VCP) (see section 307(c)(1) of the Act and the Federal Consistency Regulations, 15 CFR Part 930, sub-part C). The Washington Aqueduct must provide a consistency determination which involves an analysis of the activities in light of the Enforceable Policies of the VCP (first enclosure), and a commitment to comply with the Enforceable Policies. In addition, we invite your attention to the Advisory Policies of the VCP (second enclosure). The federal consistency determination may be provided as part of the EIS or independently, depending on your agency's preference. Including the consistency determination in the EIS offers advantages of time and efficiency for both of us. Section 930.39 of the Federal Consistency Regulations gives content requirements for the consistency determination.

If you have questions about the environmental review process or the federal consistency review process, please feel free to call me (telephone 698-4325) or Charles Ellis of this Office (telephone 698-4488).

I hope this information is helpful to you. Thanks again for writing.

Sincerely,
Ellie

Ellie L. Irons
Program Manager
Office of Environmental Impact Review

Enclosures

cc: John D. Bowden, DEQ-NVRO
Ellen Gilinsky, DEQ-Water

UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE
NORTHEAST REGION
One Blackburn Drive
Gloucester, MA 01930-2298

AUG 26 2004

Thomas P. Jacobus 9 31 Aug
General Manager, Washington Aqueduct
Department of the Army
US Army Corps of Engineers, Baltimore District
5900 Macarthur Boulevard, NW
Washington, DC 20016-2514

Dear Mr. Jacobus,

This is in response to your letter dated August 9, 2004 regarding the Draft Environmental Impact Statement (DEIS) that is being prepared for Washington Aqueduct's Proposed Residuals Management Process. The DEIS will evaluate the potential environmental consequences of implementing the four alternative actions, including a no-action alternative and a preferred alternative. Included in your letter was a request for information on the presence of any proposed or listed species or their critical habitats present within the project sites.

A population of the federally endangered shortnose sturgeon (*Acipenser brevirostrum*) exists in the Chesapeake Bay and several of its tidal tributaries, including the Potomac River. Welsh et al. (1999) summarizes historical and recent evidence of shortnose sturgeon presence in the Chesapeake Bay. The first published account of shortnose sturgeon in the Chesapeake system was an 1876 record from the Potomac River reported in a general list of fishes of Maryland (Uhler and Lugger 1876). Other historical records of shortnose sturgeon in the Chesapeake include: the Potomac River (Smith and Bean 1899), the upper Bay near the mouth of the Susquehanna River in the early 1980's, and the lower Bay near the mouths of the James and Rappahannock rivers in the late 1970's (Dadswell et al. 1984). As indicated previously, the FWS Reward Program for Atlantic Sturgeon began in 1996. Shortnose sturgeon have been incidentally captured via this program as well. As of May 2003, fifty-four shortnose sturgeon were captured via the reward program in the Chesapeake Bay and its tributaries – two from the Susquehanna Flats, eight from the Susquehanna River, two in the Bohemia River, six in the Potomac River, one in the Sassafras River, one in the Elk River, two south of the Bay Bridge near Kent Island, one near Howell Point, one just north of Hoopers Island, and two in Fishing Bay. The remaining shortnose sturgeon were captured in the upper Bay north of Hart-Miller Island. These fish were captured alive in either commercial gillnets, poundnets, fykenets, eel pots, hoop nets, or catfish traps.

The six shortnose sturgeon captured in the Potomac River were documented in the following locations: two at the mouth of the river near Ophelia, Virginia (May 3, 2000 and March 26, 2001); one at the mouth of the Saint Mary's River (April 21, 1998); and three at the mouth of the

Potomac Creek (May 17, 1996 and March 8, 2002). The locations of these captures are between 55 and 123 miles downstream from the Washington Aqueduct discharge sites near Little Falls.

As you know, a consultation pursuant to Section 7 of the Endangered Species Act (ESA) was conducted between the US Environmental Protection Agency (EPA) and the National Marine Fisheries Service (NOAA Fisheries) on the National Pollutant Discharge Elimination System (NPDES) Permit issued by EPA for the Washington Aqueduct as well as on the Washington Aqueduct's Federal Facilities Compliance Agreement (FFCA). This consultation culminated in a Biological Opinion issued by NOAA Fisheries on July 15, 2003. The incidental take statement (ITS), included with the BO pursuant to Section 7 (b)(4) of the ESA, states that in the event that the bypass provision is invoked one time during the five year duration of the permit and a discharge occurs during the prohibited time period either between March 1 and May 15 or when Potomac River water temperatures near Little Falls exceed 8°C (when shortnose sturgeon are expected to be present), it will result in the incidental take through injury and/or mortality of all shortnose sturgeon eggs and larvae present within 144 m of Outfall 002 and 453 m of Outfalls 003 and 004.

The FFCA for the Washington Aqueduct requires that an alternative to discharging into the Potomac River be implemented by the end of 2009. For this reason, NOAA Fisheries understands that the no-action alternative is not feasible for the continued operation of the Washington Aqueduct because it would lead to the continued discharge of sediment into the Potomac River. NOAA Fisheries encourages the development of alternatives that do not require the discharge of effluent or sediment into the Potomac River or its tributaries and looks forward to reviewing the EIS once it is developed. Should you have any questions regarding these comments, please contact Julie Crocker at (978)281-9328 x6350.

Sincerely,

Mary Colligan

Mary A. Colligan
Assistant Regional Administrator
for Protected Resources

Cc: Scida, F/NER3
Letzkus, EPA

File Code: EPA/ACOE Washington Aqueduct EIS

DEPARTMENT OF THE ARMY
WASHINGTON AQUEDUCT
U.S. ARMY CORPS OF ENGINEERS, BALTIMORE DISTRICT
5900 MACARTHUR BOULEVARD, N.W.
WASHINGTON, D.C. 20016-2514

December 29, 2004

Office of the General Manager

Mr. Terry R. Carlstrom, Director
National Capital Region
National Park Service
1100 Ohio Drive, SW
Washington, DC 20242

Dear Mr. Carlstrom:

To comply with our NPDES permit concerning discharges from Washington Aqueduct's water treatment operations – specifically the solids from the sedimentation basins – we are performing an analysis of options available under the provisions of NEPA.

We have briefed NPS staff from GWMP, C&O Canal Historic Park, Rock Creek Park, National Mall Memorials and Parks and others from your regional office to inform them of the progress of our investigations and how the alternatives under consideration might affect land, roads and national memorials and monuments managed by the Department of the Interior.

One alternative that involves a pipeline from the Dalecarlia site in NW Washington to the Blue Plains waste water treatment plant has been eliminated from consideration as the potential preferred alternative because of disruption of public spaces, excessive costs and time delay in construction a pipeline through DOI controlled property and because the capacity and future operating regime of WASA's waste water treatment plant are not consistent with delivering our solids to them.

One modification to an alternative being studied would be to build a road from the west boundary of the Dalecarlia WTP to the Clara Barton Parkway though NPS land. This road would provide an alternate access to a dewatering facility constructed on the Dalecarlia site that would eliminate truck traffic through residential neighborhoods. Presently there are no access routes to the Dalecarlia site that do not go through residential neighborhoods. To accomplish this WA would need permission from NPS to acquire permanent access to a parcel containing the to-be-constructed road as well as permission to use Clara Barton Parkway as a route for the trucks to get either to Canal Road or to Interstate 495. On average, there would be approximately nine truckloads of solids per day leaving this facility, except on infrequent, peak residuals production days, when the number of trucks could be somewhat higher. A sketch of that alternative with this modification is enclosed.

An additional alternative is currently under consideration. The concept for this alternative is to locate the dewatering facilities on the grounds of the Navy's Carderock facility. At this point, we have requested a decision, but have not received a formal indication from the Navy as to whether they would allow the Army (i.e., the Corps of Engineers) to lease sufficient property from them to accommodate the dewatering facility. Our request for access to the Navy installation must go before their planning board. We requested that we be placed on the agenda for the next board meeting in mid-January.

If the Navy agrees to accommodating our dewatering operations we will need your comment on whether this potential facility would adhere to the MOU that the Navy has with NPS relating to the view shed from the Clara Barton Parkway. Further, we would require an average of nine truckloads per day of solids, except on infrequent, peak residuals production days, when the number of trucks could be higher, to be taken from the potential dewatering facility for disposal at an off-site location. In addition to your comment on the view shed, we will need your comment on the availability of using the parkway as a route from the Navy site to the I-495.

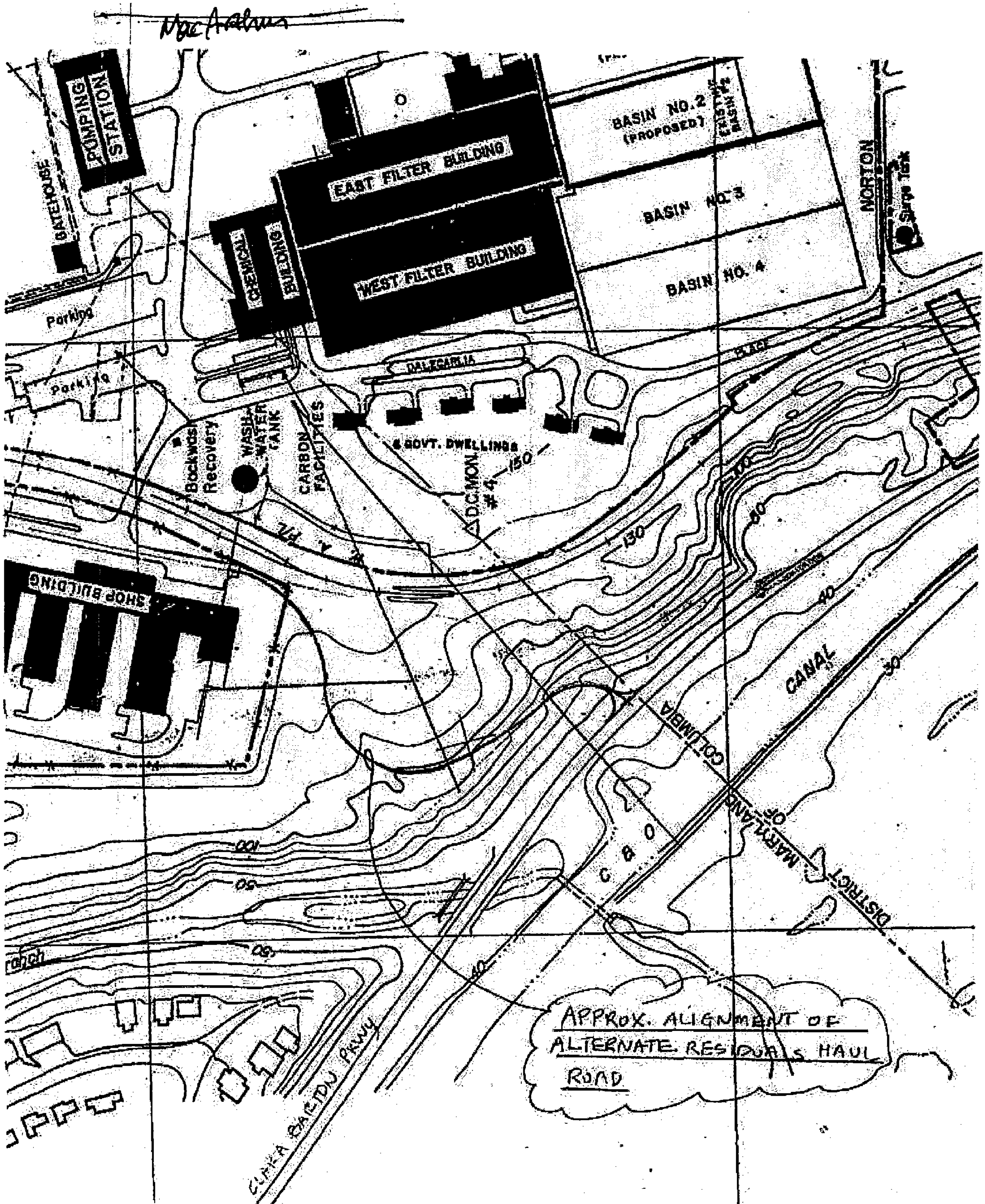
Please comment on the concept of leaving the Dalecarlia site and accessing the Clara Barton parkway as soon as practicable via a letter back to us. That will become part of the supporting documentation in the EIS for that particular option.

Thank you for your consideration of this matter.

Sincerely,

Thomas P. Jacobus
General Manager

Enclosure



WASHINGTON AQUEDUCT RESIDUALS PROJECT

1" = 200

DEPARTMENT OF THE ARMY
WASHINGTON AQUEDUCT
U.S. ARMY CORPS OF ENGINEERS, BALTIMORE DISTRICT
5900 MACARTHUR BOULEVARD, N.W.
WASHINGTON, D.C. 20016-2514

March 3, 2005

Office of the General Manager

Mr. Thomas O. Heikkinen, Chief of Plant Operations
Washington Suburban Sanitary Commission
14501 Sweitzer Lane
Laurel, Maryland 20707

Dear Mr. ~~Heikkinen~~ Tom:

As you know we are preparing an Environmental Impact Statement to address the consequences of options developed in our feasibility study to collect and dispose of water treatment solids.

I have previously discussed with you one of the options that would involve piping solids generated by Washington Aqueduct to a WSSC treatment plant where they would be mixed with your solids and disposed of.

I am attaching a record of the e-mail correspondence.

In finalizing the work on the Draft EIS, we believe it would be better if we had a letter on your corporate letterhead restating the WSSC position.

We would appreciate receiving this by March 25 so that we can appropriately compile the administrate record.

Thank you.

Sincerely,

Tom J.

Thomas P. Jacobus
General Manager

Enclosure

Jacobus, Thomas P WAD

From: Heikkinen, Tom [tHeikki@wsscwater.com]
Sent: Wednesday, December 01, 2004 4:50 PM
To: Jacobus, Thomas P WAD; Charlie Crowder
Cc: chuckmurray
Subject: RE: Washington Aqueduct Residuals Processing Project

Tom J.,

We considered this idea in the past and came to the conclusion that it was not in the best interest of the Commission to have such a large portion of the material being processed at our Potomac Solids Facility originating from a non-Commission source. That assessment still stands. I wish you luck in selecting a feasible alternative for your project.

Tom Heikkinen
Chief of Plant Operations
WSSC Production Team
301.206.7010 office

-----Original Message-----
From: Jacobus, Thomas P WAD [mailto:Thomas.P.Jacobus@wad01.usace.army.mil]
Sent: Wednesday, December 01, 2004 4:16 PM
To: Charlie Crowder; Tom Heikkinen
Cc: chuckmurray
Subject: Washington Aqueduct Residuals Processing Project

Charlie and Tom,

We're nearing the end of the analytical work in preparing our Draft Environmental Impact Statement for our solids project. We're looking at three alternatives: Collect and thicken and send to Blue Plains for further treatment and disposal from there; collect, thicken and dewater on site at the Dalecarlia Water Treatment Plant and then either store in a monofill on the grounds of the Dalecarlia Reservoir (that would be constructed) or truck from Dalecarlia to an off-site disposal location.

Charlie will recall this, but since I dealt with Chuck Murray at the time, you won't, Tom.

In January 2003, I paid a visit to each of your offices. At that time we were very close to the end of the permit process with EPA Region 3 and it was clear that there would be a permit that required the collection and disposal of the solids in some way that didn't involve the Potomac River. We were briefing EPA on the range of options we believed could be used to alternatively handle the solids.

Because we knew that trucking in the local neighborhoods was not favored by many and that the solids composition may be inconsistent with the process used at Blue Plains, we wanted to be very open to other ideas.

Since each of you had or were soon to have solids processing facilities on site at Corbalis and Potomac respectively, I inquired about your corporate interest in receiving solids form Washington Aqueduct to be processed for a fee (plus whatever other capital improvements might be necessary at your plants).

Tom, after my meeting with Chuck at WSSC, I left with the response (verbal) that he did not believe it was in WSSC's current or future interest to process water treatment solids for others.

Charlie after listening to my presentation you asked for some time to reflect. You then subsequently communicated to me that at that stage of the development of the options you thought it best if Fairfax Water was not considered as a receiver and processor of the solids.

What I am requesting now is to ascertain if there has been any change in your evaluation of the situation with respect to your interest in receiving solids from Washington Aqueduct for processing at your plants.

Thank you for your consideration

Tom J
202-764-0031

DEPARTMENT OF THE ARMY
WASHINGTON AQUEDUCT
U.S. ARMY CORPS OF ENGINEERS, BALTIMORE DISTRICT
5900 MACARTHUR BOULEVARD, N.W.
WASHINGTON, D.C. 20016-2514

March 3, 2005

Office of the General Manager

Central Intelligence Agency
ATTN: Chief of Facilities Support
5X62 NHB
Washington DC 20505

Sent Via Facsimile (703) 905-5544 (original to follow via U.S. mail)

Dear Sir or Madam:

The purpose of this request is to determine if it would be to the benefit of your agency to lease/license approximately six acres of land at the Langley site to the US Army Corps of Engineers for the purpose of constructing and operating a facility to dewater and truck away solids produced as a consequence of the operation of the Dalecarlia and McMillan water treatment plants in the District of Columbia.

The Washington Aqueduct is in the process of complying with a Federal Facilities Compliance Order accompanying a National Pollutant Discharge Elimination System Permit that will require that the sediment removed during the production of drinking water no longer be returned to the Potomac River. We have evaluated many different ideas for obtaining compliance and are nearing the end of the preparation of a Draft Environmental Impact Statement. Public input to this process has resulted in a suggestion to site the dewatering facility at your Langley site as an alternative to one of our options to site these facilities on the grounds of the Dalecarlia Water Treatment Plant on MacArthur Boulevard. The rationale for this suggestion is that a relocation of this part of the treatment would reduce construction adjacent to the residential neighborhoods here and would eliminate from District of Columbia and Montgomery County, Maryland streets the seven to eight commercial dump trucks per day that would be required on average to service the dewatering facilities.

If you were to grant permission for siting our facility at Langley, it would involve not only the initial construction, but daily staffing to operate and maintain as well as the aforementioned truck traffic in and out.

This would be a permanent installation.

For your reference we have also included a cd containing the project documents created to date.

I have spoken with Mr. Dave Muldvey in Facilities Support Operations and given him additional background on this request.

As we are on a schedule to publish the Draft EIS in April, we would appreciate a response by March 25, 2005.

I may be reached at 202-764-0031. Our project engineer is Mr. Michael Peterson. He may be reached at 202-764-0025.

Sincerely,

Thomas P. Jacobus
General Manager

Enclosure

Washington Aqueduct Residuals Processing Alternatives

The Washington Aqueduct operates the Dalecarlia and McMillan water treatment plants in Washington, D.C., serving over one million persons in the District of Columbia and Northern Virginia area with potable water. The treatment process adds coagulant to remove solid particles (river silt) from the water withdrawn from the Potomac River, filters and disinfects the water, and distributes the finished water to the metropolitan service area. The solids generated during the treatment process have historically been returned to the Potomac River, but a recently reissued version of Washington Aqueduct's National Pollutant Discharge Elimination System permit (Permit No. DC 0000019) effectively precludes the return of the of water treatment solids to the river.

Consequently, Washington Aqueduct is in the process of evaluating water treatment residuals management options to minimize or eliminate the discharge of residuals to the Potomac River. The residuals management option that will ultimately be selected has the potential to affect the human environment, and thus development of the residuals management plan must comply with the National Environmental Policy Act and also Section 106 of the National Historic Preservation Act.

The Draft Environmental Impact Statement will consider a 20-year period of operations. Consequently, residuals quantities and sizing of facilities will be based on anticipated water production over the 20-year period. Similarly, the evaluation of impacts of the alternatives will be based on the 20-year period of examination.

Alternative A: Process Water Treatment Residuals at Dalecarlia Water Treatment Plant and Dispose in a Newly Constructed Dalecarlia Monofill. Process Dalecarlia Reservoir Forebay Residuals by Current Methods and Periodically Haul

Residuals from the Dalecarlia sedimentation basins and the Georgetown sedimentation basins would be collected and thickened/dewatered at the Dalecarlia water treatment plant before being disposed of in a newly constructed Dalecarlia monofill. Residuals from the Dalecarlia Reservoir forebay would be processed separately as is currently practiced and periodically hauled offsite or could also be disposed of in the Dalecarlia monofill.

Facilities. Sedimentation basins at Dalecarlia and Georgetown would be upgraded. A residuals thickening and dewatering facility has been preliminarily located west of the Capital Crescent Trail as it passes through the Dalecarlia water treatment plant. The mechanical processing area of this facility could rise approximately 70 feet. The approximate location of the monofill is between the Dalecarlia Reservoir and the Dalecarlia Parkway. As currently conceived, the monofill would rise approximately 50 feet from ground level on the Dalecarlia Parkway side and 80 feet on the Dalecarlia Reservoir side. For comparison, the existing trees in that area are in the range of 100 feet tall. The monofill would occupy about 30 acres.

Conveyance and Transport. Pipelines would convey coagulated residuals from both the Dalecarlia sedimentation basins and the Georgetown sedimentation basins to the Dalecarlia thickening facility. After thickening and dewatering, the solids would be moved by truck across MacArthur Boulevard to the monofill. On average, six onsite truck trips per day (six days per week) would be required.

Alternative B: Process Water Treatment Residuals at the Dalecarlia Water Treatment Plant and Dispose via Contract Hauling. Process Dalecarlia Reservoir Forebay Residuals by Current Methods and Periodically Haul

This alternative consists of thickening and dewatering water treatment residuals at the Dalecarlia water treatment plant. Residuals from the Dalecarlia sedimentation basins and the Georgetown sedimentation basins would be collected and thickened/dewatered at the Dalecarlia water treatment plant. The disposal method would be contract hauling from Dalecarlia water treatment plant to a permitted disposal facility.

MORE ON REVERSE

Residuals from the Dalecarlia Reservoir forebay would be processed separately as is currently practiced and periodically hauled offsite or could also be disposed of onsite.

Facilities. The facilities to complete this option are similar to alternative A, but without the creation of the monofill on the Dalecarlia Reservoir grounds.

Conveyance and Transport. Pipelines would convey water treatment residuals from both the Dalecarlia sedimentation basins and the Georgetown sedimentation basins to the Dalecarlia thickening facility. After thickening and dewatering, the residuals would be hauled by truck to a permitted offsite disposal facility. The estimated average number of trucks for handling the residuals is approximately ten per day (during the five-day workweek) at the 20-year predicted residuals production level.

Alternative C: Thicken Water Treatment Residuals at Dalecarlia Water Treatment Plant, then Pump via a New Pipeline to Blue Plains. Process Dalecarlia Reservoir Forebay Residuals by Current Methods and Periodically Haul

This alternative would eliminate truck traffic associated with residuals on the roads surrounding the Washington Aqueduct Dalecarlia and Georgetown operations by conveying coagulated residuals to the Blue Plains advanced wastewater treatment plant for further processing and disposal. Residuals from the Dalecarlia Reservoir forebay would be processed separately as is currently practiced.

Facilities. This alternative would involve similar sedimentation basin modifications and new thickening facilities. Dewatering facilities would be located at Blue Plains.

Conveyance and Transport. Pipelines would convey coagulated residuals from both the onsite sedimentation basins and the Georgetown sedimentation basins to the Dalecarlia thickening facility. Another dedicated pair of pipelines within the right-of-way of the Potomac Interceptor sewer would convey the thickened residuals to Blue Plains for final processing. These buried pipes would be approximately 10 miles in length and 12 inches in diameter.

Alternative D: No-Action Alternative

This alternative would result in non-compliance with Permit No. DC 0000019 and the Clean Water Act.

Alternative E: Process Water Treatment Residuals at the Dalecarlia Water Treatment Plant and Dispose via Contract Hauling. Process Dalecarlia Reservoir Forebay Residuals by Current Methods and Periodically Haul

This alternative consists of thickening and dewatering water treatment residuals at the Dalecarlia water treatment plant. Residuals from the Dalecarlia sedimentation basins and the Georgetown sedimentation basins would be collected and thickened/dewatered at the Dalecarlia water treatment plant. The disposal method would be contract hauling from Dalecarlia water treatment plant to a permitted disposal facility. Residuals from the Dalecarlia Reservoir forebay would be processed separately as is currently practiced and periodically hauled offsite or could also be disposed of onsite.

Facilities. The facilities to complete this option are similar to alternative A and B, but located adjacent to Little Falls Road on existing Washington Aqueduct property and also without the creation of a monofill (Alternative A) on the Dalecarlia Reservoir grounds.

Conveyance and Transport. Pipelines would convey water treatment residuals from both the Dalecarlia sedimentation basins and the Georgetown sedimentation basins to the Dalecarlia thickening facility. After thickening and dewatering, the residuals would be hauled by truck to a permitted offsite disposal facility. The estimated average number of trucks for handling the residuals is approximately ten per day (during the five-day workweek) at the 20-year predicted residuals production level.

DEPARTMENT OF THE ARMY
WASHINGTON AQUEDUCT
U.S. ARMY CORPS OF ENGINEERS, BALTIMORE DISTRICT
5900 MACARTHUR BOULEVARD, N.W.
WASHINGTON, D.C. 20016-2514

March 3, 2005

Office of the General Manager

Mr. Charles M. Murray, Executive Officer
Fairfax Water
8570 Executive Park Ave.
Fairfax, Virginia 22031-2218

Dear ~~Mr. Murray~~ Charlie:

As you know we are preparing an Environmental Impact Statement to address the consequences of options developed in our feasibility study to collect and dispose of water treatment solids.

I have previously discussed with you one of the options that would involve piping solids generated by Washington Aqueduct to a Fairfax Water treatment plant where they would be mixed with your solids and disposed of.

I am attaching a record of the e-mail correspondence.

In finalizing the work on the Draft EIS, we believe it would be better if we had a letter on your corporate letterhead restating Fairfax Water's position.

We would appreciate receiving this by March 25 so that we can appropriately compile the administrate record.

Thank you.

Sincerely,

Tom

Thomas ~~P.~~ Jacobus
General Manager

Enclosure

Jacobus, Thomas P WAD

From: Charlie Crowder [ccrowder@fairfaxwater.org]
Sent: Friday, December 03, 2004 10:25 AM
To: Jacobus, Thomas P WAD
Cc: Charles Murray; Dave Binning
Subject: RE: Washington Aqueduct Residuals Processing Project

Tom,

Fairfax Water does not have available operational capacity to receive additional solids from others at this time and we do not expect that we will ever be in a position to receive additional residual solids from the Washington Aqueduct or others in the future. I appreciate the challenge that solids handling places on the staff and customers of the Washington Aqueduct and, if you think it would be helpful, offer to share our history and experience with solids handling as you finalize plans.

Good luck with your project,
Charlie

Charlie Crowder
703/289-6011 office
703/203-9013 cell
571/722-6893 BlackBerry
703/698-1759 fax
www.fairfaxwater.org

-----Original Message-----
From: Jacobus, Thomas P WAD [mailto:Thomas.P.Jacobus@wad01.usace.army.mil]
Sent: Wednesday, December 01, 2004 4:16 PM
To: Charlie Crowder; Tom Heikkinen
Cc: chuckmurray
Subject: Washington Aqueduct Residuals Processing Project

Charlie and Tom,

We're nearing the end of the analytical work in preparing our Draft Environmental Impact Statement for our solids project. We're looking at three alternatives: Collect and thicken and send to Blue Plains for further treatment and disposal from there; collect, thicken and dewater on site at the Dalecarlia Water Treatment Plant and then either store in a monofill on the grounds of the Dalecarlia Reservoir (that would be constructed) or truck from Dalecarlia to an off-site disposal location.

Charlie will recall this, but since I dealt with Chuck Murray at the time, you won't, Tom.

In January 2003, I paid a visit to each of your offices. At that time we were very close to the end of the permit process with EPA Region 3 and it was clear that there would be a permit that required the collection and disposal of the solids in some way that didn't involve the Potomac River. We were briefing EPA on the range of options we believed could be used to alternatively handle the solids.

Because we knew that trucking in the local neighborhoods was not favored by many and that the solids composition may be inconsistent with the process used at Blue Plains, we wanted to be very open to other ideas.

Since each of you had or were soon to have solids processing facilities on site at Corbalis and Potomac respectively, I inquired about your corporate interest in receiving solids form Washington Aqueduct to be processed for a fee (plus whatever other capital improvements might be necessary at your plants).

Tom, after my meeting with Chuck at WSSC, I left with the response (verbal) that he did not believe it was in WSSC's current or future interest to process water treatment solids for others.

Charlie after listening to my presentation you asked for some time to reflect. You then subsequently communicated to me that at that stage of the development of the options you thought it best if Fairfax Water was not considered as a receiver and processor of the solids.

What I am requesting now is to ascertain if there has been any change in your evaluation of the situation with respect to your interest in receiving solids from Washington Aqueduct for processing at your plants.

Thank you for your consideration.

Tom J
202-764-0031

DEPARTMENT OF THE ARMY
WASHINGTON AQUEDUCT
U.S. ARMY CORPS OF ENGINEERS, BALTIMORE DISTRICT
5900 MACARTHUR BOULEVARD, N.W.
WASHINGTON, D.C. 20016-2514

March 22, 2005

Office of the General Manager

Ms. Paula Ewen, Director
Office of Information and Management Services
Federal Highway Administration
400 7th Street, SW
HAIM-1, Room 4423
Washington, DC 20590

Sent Via Facsimile (202) 366-3473 (original to follow via U.S. mail)

Dear Ms. Ewen:

The purpose of this request is to determine if it would be to the benefit of your agency to lease/license approximately six acres of land at your McLean, Virginia facility site to the US Army Corps of Engineers for the purpose of constructing and operating a facility to dewater and truck away solids produced as a consequence of the operation of the Dalecarlia and McMillan water treatment plants in the District of Columbia.

The Washington Aqueduct is in the process of complying with a Federal Facilities Compliance Agreement accompanying a National Pollutant Discharge Elimination System Permit that will require that the sediment removed during the production of drinking water no longer be returned to the Potomac River. We have evaluated many different ideas for obtaining compliance and are nearing the end of the preparation of a Draft Environmental Impact Statement. Public input to this process has resulted in a suggestion to site the dewatering facility at your McLean facility as an alternative to one of our options to site these facilities on the grounds of the Dalecarlia Water Treatment Plant on MacArthur Boulevard. The rationale for this suggestion is that a relocation of this part of the treatment would reduce construction adjacent to the residential neighborhoods here and would eliminate from District of Columbia and Montgomery County, Maryland streets the seven to eight commercial dump trucks per day that would be required on average to service the dewatering facilities.

If you were to grant permission for siting our facility at your McLean facility, it would involve not only the initial construction, but daily staffing to operate and maintain as well as the aforementioned truck traffic in and out.

This would be a permanent installation.

For your reference we have also included a cd containing the project documents created to date.

I may be reached at 202-764-0031. Our project engineer is Mr. Michael Peterson. He may be reached at 202-764-0025.

Sincerely,

Thomas P. Jacobus
General Manager

Enclosure

DEPARTMENT OF THE ARMY
WASHINGTON AQUEDUCT
U.S. ARMY CORPS OF ENGINEERS, BALTIMORE DISTRICT
5900 MACARTHUR BOULEVARD, N.W.
WASHINGTON, D.C. 20016-2514

March 25, 2005

Office of the General Manager

Ms. Susan T. Straus, PE
Chief Engineer, Environment
City of Rockville, Public Works
111 Maryland Avenue
Rockville, MD 20850

Dear Ms. ~~Straus~~ Susan:

The purpose of this request is to determine if the City of Rockville could possibly accept the water treatment residuals from the Washington Aqueduct, with compensation, for processing at your Rockville Water Treatment Plant permanently.

The Washington Aqueduct is in the process of complying with a Federal Facilities Compliance Agreement accompanying a National Pollutant Discharge Elimination System Permit that will require that the sediment removed during the production of drinking water no longer be returned to the Potomac River. We have evaluated many different ideas for obtaining compliance and are nearing the end of the preparation of a Draft Environmental Impact Statement. Public input to this process has resulted in a suggestion to locate a water treatment residuals processing operation at your facility as an alternative to siting the operation on the grounds of the Dalecarlia Water Treatment Plant and Reservoir on MacArthur Boulevard. The rationale for this suggestion is that a relocation of this part of the treatment would reduce construction adjacent to the residential neighborhoods here and would avoid the additional traffic on local Maryland and District of Columbia streets in the vicinity of the Dalecarlia site.

The two Washington Aqueduct water treatment plants produce approximately 180 MGD finished drinking water on average with a peak of approximately 250 MGD. The amount of dry solids expected to be generated on a daily basis has been estimated to be approximately 33 tons on average with wet year peaks on the order of five to six times the average. Mechanical dewatering for this material is expected to result in a 30 percent solid cake. For your reference we have also included a cd containing the project documents created to date.

I may be reached at 202-764-0031 Our project engineer is Mr. Michael Peterson. He may be reached at 202-764-0025.

Sincerely,

Thomas P. Jacobus
General Manager

Enclosure

DEPARTMENT OF THE ARMY
WASHINGTON AQUEDUCT
U.S. ARMY CORPS OF ENGINEERS, BALTIMORE DISTRICT
5900 MACARTHUR BOULEVARD, N.W.
WASHINGTON, D.C. 20016-2514

July 28, 2004

Office of the General Manager

Mr. John Trypus
DCWASA - DETS
5000 Overlook Avenue SW
Washington, DC 20032

Subject: Washington Aqueduct Residuals Management Plan and Environmental Impact Statement - Information Needs

Dear Mr. Trypus:

The Washington Aqueduct is currently working on an Environmental Impact Statement (EIS) and residuals management plan for water treatment residuals to comply with our National Pollutant Discharge Elimination System (NPDES) Permit (Permit No. DC 0000019). The schedule for implementation of this project and for compliance with the discharge permit is dictated by requirements of the Federal Facilities Compliance Agreement (FFCA), which has been agreed to by both Washington Aqueduct and EPA Region III.

An Engineering Feasibility Study has recently been completed by our consultant, CH2M HILL, in support of the EIS. Three feasible options for the processing and disposal of water treatment residuals were identified. One option would involve the transport of thickened water treatment residuals to Blue Plains for dewatering and disposal via two, new forcemains that would parallel existing pipelines within the rights of way for the Potomac Interceptor and the other interceptors and forcemains on the route between the Washington Aqueduct and Blue Plains. The dewatered residuals would ultimately be hauled from Blue Plains for beneficial reuse via land application. The other two options under evaluation would involve thickening and dewatering at the Dalecarlia Water Treatment Plant, followed by either offsite land application or onsite disposal in a monofill.

Separate, parallel pipelines to Blue Plains were recommended to eliminate the potentially negative impact of water treatment residuals on wastewater processes at Blue Plains, and the potential for a possible discharge of water treatment residuals to the Potomac River via a combined-sewer overflow (CSO) event.

In order to complete the EIS, a more detailed evaluation of the each of the selected options must be completed. The potential viability of each option in specific areas such as land use, zoning, permitting, cost, and schedule and the potential impacts of each option on existing biological, cultural, surface water, wetland, visual, and transportation resources will be included in the evaluation.

Additional information on the potential pipeline route to Blue Plains is needed by CH2M HILL to complete the evaluation of the Blue Plains option. While the level of detail only needs to be at the "planning and evaluation" level, the information must also be accurate, sound, and defensible. To that end, please provide assistance to CH2M HILL in their efforts to obtain information from the resources of DC WASA on the potential pipeline route. Glenn Palen is the Project Manager for the residuals project, and Ed Fleischer has already contacted you regarding this matter. Both can be reached at (703) 471-1441. The point of contact at the Washington Aqueduct is Patty Gamby. She can be reached at (202) 764-2639.

The attached table summarizes information needs that have been identified related to the engineering evaluation of the pipeline route for the Blue Plains option. Any other information that you may have with regard to the potential environmental impacts of the option would also be appreciated.

In addition, it would be helpful for CH2M HILL to meet with you (or your staff) to discuss the proposed option in more detail. Thank you for your efforts.

Sincerely,

Thomas P. Jacobus
General Manager

John — Thank you for your help with the analysis of this alternative. Obviously, it would be a far simpler solution for us to simply reject the [illegible] limited [illegible] solids with the Potomac tide together. Indications to date are that Blue Plains could not efficiently accept our solids at the head of your treatment process. But perhaps that notion is in error and that there would be a feasible way to use the existing sewer line w/o having to install new lines in that right of way. I'd appreciate your evaluation of both new lines to the dewatering facility and the use of the existing sewer.

Tom J

TABLE 1

Washington Aqueduct Residuals Management Plan - Environmental Impact Statement

Information Needs for Evaluation of the Blue Plains Residuals Processing Alternative

Information Needs	Purpose	Information Source
Pipeline Route		
Location of the existing pipeline route from the Washington Aqueduct to Blue Plains. The pipeline route (dual force mains) would follow the existing sewer line route from Washington Aqueduct to Blue Plains. The assumed route would follow existing right of ways (ROWs) for the Potomac Interceptor to the Upper Potomac Relief Sewer to the Potomac Pump Station to Blue Plains via existing force main routes.	Processing of water treatment residuals at Blue Plains was identified as a potentially viable option as part of the Engineering Feasibility Study for the Environmental Impact Statement to develop a residuals management plan for the Washington Aqueduct. The Blue Plain option would provide for separate transport of water treatment residuals to Blue Plains and separate processing at Blue Plains to eliminate the impact of water treatment residuals on treatment processes at Blue Plains.	Source: DC WASA. Existing maps, Record Drawings, and GIS layers could all be used to develop the information. Level of detail required: Planning Level
Location and Width of Existing ROW	ROW information is needed to access viability of the existing route.	Source: DC WASA. Existing maps, Record Drawings, and GIS layers could all be used to develop the information. Level of detail required: Planning Level
Pipe Sizes and Locations within ROW	May be helpful for identifying potential construction means and methods.	
Manhole Locations and Inverts (Depths)	May be helpful for identifying potential construction means and methods.	

DEPARTMENT OF THE ARMY
WASHINGTON AQUEDUCT
U.S. ARMY CORPS OF ENGINEERS, BALTIMORE DISTRICT
5900 MACARTHUR BOULEVARD, N.W.
WASHINGTON, D.C. 20016-2514

December 10, 2004

Office of the General Manager

Commander Al Demedeiros
North Area Operations
Nebraska Avenue Complex
4290 Mt Vernon Drive, N.W., Suite 18-145
Washington, D.C. 20393

Dear Commander Demedeiros:

Washington Aqueduct is the US Army Corps of Engineers organization that is responsible for providing drinking water to the District of Columbia as well as Arlington County Virginia and the City of Falls Church service area in Virginia. All water processed in Washington Aqueduct's two treatment plants comes from the Potomac River. During the drinking water treatment process, the sediment from the Potomac River water is removed. The Environmental Protection Agency issued a National Pollutant Discharge Elimination System (NPDES) permit that in essence requires Washington Aqueduct to cease returning the sediments, along with the coagulant used in the process, to the Potomac River. We refer to that material as "solids" or "residuals."

To comply with our NPDES permit we are performing an analysis of the available collection and disposal options and methods under the provisions of the National Environmental Policy Act (NEPA).

One alternative that is being evaluated involves thickening and dewatering residuals at the Dalecarlia water treatment plant site in Northwest Washington and trucking the dewatered solids -- on average nine truckloads per day -- from that site for disposal. This alternative is promising, but there are concerns regarding trucking through the adjacent neighborhoods and concerns about the siting of the dewatering building.

During the public comment period we were asked to evaluate the feasibility of siting the dewatering building at another location closer to major traffic routes. One site specifically suggested was the Carderock installation. This site was suggested because of its proximity to the beltway and because it is Federally owned land.

If you agreed to allow Washington Aqueduct to utilize some of the land at Carderock, and if we adopted this alternative, the residuals from our sedimentation basins would be collected at Dalecarlia. They would be piped to Carderock within or adjacent to the existing raw water conduits aligned with MacArthur Boulevard. At Carderock there would be a structure approximately 148' by 76' by 71' high that housed equipment to dewater the material and hoppers to collect it and drop it into trucks for offsite disposal. The dewatering operations in that building would be staffed by Washington Aqueduct personnel and would operate continuously. The trucking of the solids from this building would be either five or six days per week and would require the same on average nine commercial dump trucks per day as it would if the facility were built on the Dalecarlia site.

We cannot proceed with our analysis until we know if you are willing to consider the location of this activity on your property. This activity would be of an indefinite term, and the appropriate real estate transaction would be effected between our services. In the interest of identifying the range of potential solutions for managing the water treatment residuals and in order to fully execute our responsibilities under NEPA, we request that you evaluate this potential alternative.

There are advantages and disadvantages to this alternative compared to alternatives presently being evaluated. We recognize that there would be challenges associated with the Carderock site if it were to be used as a location for the dewatering operation. To mention a few, there could potentially be concerns from both the neighborhoods and the National Park Service with visual, noise and other impacts related to the operation itself and there would be transportation concerns since the current haul route for the site is through an adjacent neighborhood. If this option were to be considered all of these issues would need to be addressed.

Based on this proposal, we request that your office comment on whether this facility could be located at the Carderock installation. As this proposal has surfaced late in our analytical process and because we are under a compliance order from US EPA Region III and must submit a report to them by December 20, 2004, we would appreciate by December 17, 2004 an indication of your ability to favorably consider this request.

Thank you for your consideration of this matter. I may be reached at 202-764-0031 or by email at Thomas.p.jacobus@usace.army.mil.

Sincerely,

Thomas P. Jacobus
General Manager

DEPARTMENT OF THE ARMY
WASHINGTON AQUEDUCT
U.S. ARMY CORPS OF ENGINEERS, BALTIMORE DISTRICT
5900 MACARTHUR BOULEVARD, N.W.
WASHINGTON, D.C. 20016-2514

December 13, 2004

Office of the General Manager

Lieutenant Amanda Brooks
NDW Det North APWO
BLDG 14
National Naval Medical Center
8901 Wisconsin Avenue
Bethesda, MD 20889

Dear Lieutenant Brooks:

Washington Aqueduct is the US Army Corps of Engineers organization that is responsible for providing drinking water to the District of Columbia as well as Arlington County Virginia and the City of Falls Church service area in Virginia. All water processed in Washington Aqueduct's two treatment plants comes from the Potomac River. During the drinking water treatment process, the sediment from the Potomac River water is removed. The Environmental Protection Agency issued a National Pollutant Discharge Elimination System (NPDES) permit that in essence requires Washington Aqueduct to cease returning the sediments, along with the coagulant used in the process, to the Potomac River. We refer to that material as "solids" or "residuals."

To comply with our NPDES permit we are performing an analysis of the available collection and disposal options and methods under the provisions of the National Environmental Policy Act (NEPA).

One alternative that is being evaluated involves thickening and dewatering residuals at the Dalecarlia water treatment plant site in Northwest Washington and trucking the dewatered solids -- on average nine truckloads per day -- from that site for disposal. This alternative is promising, but there are concerns regarding trucking through the adjacent neighborhoods and concerns about the siting of the dewatering building.

During the public comment period we were asked to evaluate the feasibility of siting the dewatering building at another location closer to major traffic routes. One site specifically suggested was the Carderock installation. This site was suggested because of its proximity to the beltway and because it is Federally owned land.

If you agreed to allow Washington Aqueduct to utilize some of the land at Carderock, and if we adopted this alternative, the residuals from our sedimentation basins would be collected at Dalecarlia. They would be piped to Carderock within or adjacent to the existing raw water conduits aligned with MacArthur Boulevard. At Carderock there would be a structure approximately 148' by 76' by 71' high that housed equipment to dewater the material and hoppers to collect it and drop it into trucks for offsite disposal. The dewatering operations in that building would be staffed by Washington Aqueduct personnel and would operate continuously. The trucking of the solids from this building would be either five or six days per week and would require the same on average nine commercial dump trucks per day as it would if the facility were built on the Dalecarlia site.

We cannot proceed with our analysis until we know if you are willing to consider the location of this activity on your property. This activity would be of an indefinite term, and the appropriate real estate transaction would be effected between our services. In the interest of identifying the range of potential solutions for managing the water treatment residuals and in order to fully execute our responsibilities under NEPA, we request that you evaluate this potential alternative.

There are advantages and disadvantages to this alternative compared to alternatives presently being evaluated. We recognize that there would be challenges associated with the Carderock site if it were to be used as a location for the dewatering operation. To mention a few, there could potentially be concerns from both the neighborhoods and the National Park Service with visual, noise and other impacts related to the operation itself and there would be transportation concerns since the current haul route for the site is through an adjacent neighborhood. If this option were to be considered all of these issues would need to be addressed.

Based on this proposal, we request that your office comment on whether this facility could be located at the Carderock installation. As this proposal has surfaced late in our analytical process and because we are under a compliance order from US EPA Region III and must submit a report to them by December 20, 2004, we would appreciate by December 17, 2004 an indication of your ability to favorably consider this request.

Thank you for your consideration of this matter. I mat be reached at 202-764-0031 or by email at thomas.p.jacobus@usace.army.mil.

Sincerely

Thomas P. Jacobus
General Manager

WASHINGTON SUBURBAN
SANITARY COMMISSION

14501 Sweitzer Lane Laurel, Maryland 20707-5902

March 8, 2005

Mr. Thomas P. Jacobus 14 MAR 05
General Manager
Department of the Army
Washington Aqueduct
5900 MacArthur Boulevard, N.W.
Washington, D.C. 20016-2514

Dear Mr. Jacobus:

I understand that one of the alternatives under consideration for the processing of Washington Aqueduct Water Treatment residuals is to utilize existing WSSC facilities through a cooperative arrangement. We considered this idea in the past and came to the conclusion that it was not in the best interest of the Commission to have such a large portion of the material being processed at our Potomac Solids Facility originating from a non-Commission source. This assessment still stands.

I wish you luck in selecting a feasible alternative for your project. Please feel free to contact me at (301) 206-7010 should you have any questions.

Sincerely,

T. Heikkinen

Thomas O. Heikkinen, Chief
Plant Operations

Central Intelligence Agency

Washington, D.C. 20505

22 March 2005

Dear Mr. Jacobus:

The following is in response to your letter of March 3, 2005, received via fax by the Central Intelligence Agency (CIA) on that date, regarding the proposal to construct and operate a facility at CIA Headquarters at Langley, Virginia, to dewater and truck away solids produced as a consequence of water treatment plant operations in the District of Columbia.

Because CIA Headquarters is by definition a highly secure National Security Facility, it would not be possible to locate such an operation as you propose within or immediately adjacent to the perimeter of this site. You should also be aware that this Headquarters is located adjacent to U.S. Park Service property and several private residences, which historically have shown significant sensitivity to proposals that could result in threats to the environment, increases in traffic and noise, and other changes such as you describe in this proposal to establish an industrial facility in the area. Given these considerations CIA must decline the offer to host the water treatment plant.

Sincerely,

Camille Hersh

Camille Hersh
Chief, Facilities Support

Fairfax Water

FAIRFAX COUNTY WATER AUTHORITY
8570 Executive Park Avenue
Fairfax, Virginia 22031-2218

CHARLIE C. CROWDER, JR.
GENERAL MANAGER
TELEPHONE (703) 289-6011

CHARLES M. MURRAY
EXECUTIVE OFFICER
TELEPHONE (703) 289-6013

FAX: (703) 698-1759

March 10, 2005

Thomas P. Jacobus
General Manager
Washington Aqueduct
U.S. Army Corps of Engineers
5900 MacArthur Boulevard, NW
Washington, D.C. 20016-2514

Re: Solids Project

Dear Mr. Jacobus:

This letter is in response to your request that Fairfax Water consider the feasibility of treating and disposing of the solids produced by the Washington Aqueduct facilities at Fairfax Water's facilities.

Fairfax Water does not have operational capacity to receive additional solids from others at this time. I appreciate the challenge that solids-handling places on the staff and customers of the Washington Aqueduct and, if you think it would be helpful, we would be pleased to share our history and experience with solids-handling as you finalize plans.

Good luck with your project.

Sincerely,

Charlie C. Crowder, Jr.
General Manager

CC: C. David Binning, Director, Planning & Engineering

City of Rockville
111 Maryland Avenue
Rockville, Maryland
20850-2364
www.rockvillemd.gov

Public Works
240-314-8600
TTY 240-314-8137
FAX 240-314-8539

Public Works Operations
240-314-8570
FAX 240-314-8589

Motor Vehicle Maintenance
240-314-8485
FAX 240-314-8499

Water Treatment Plant
240-314-8555
FAX 240-314-8564

April 5, 2005

Mr. Thomas P. Jacobus
General Manager
Washington Aqueduct
5900 MacArthur Boulevard, N.W.
Washington, DC 20016-2514

SUBJECT: Washington Aqueduct Water Treatment Residuals

Dear Mr. Jacobus:

This is in response to your letter dated March 25, 2005 with regard to the possibility of having the City of Rockville accept water treatment residuals from the aqueduct for processing at our treatment plant.

Please note that the City's Water Treatment Plant is a small plant with an average water production of about 6 mgd and a dry solid handling capacity of an average of 2½ to 3 tons per day. With the large quantity of dry solids from the Aqueduct (33 tons), we cannot possibly handle it without an additional plant.

The Water Treatment Plant compound is severely limited in space. It is not feasible to locate any substantial piece of land for expansion. Our treatment plant is located in a quiet residential neighborhood near the Potomac River. The access road to the plant is an unsurfaced one lane rural road that cannot handle any increase in truck traffic for the transportation of additional solid waste. It will certainly be an uphill battle for the City of Rockville to obtain agreement from the nearby community on any large addition to the plant.

In view of the above facts, I regret to inform you that we cannot meet your request. However, I shall be glad to offer any other assistance you may require.

Sincerely,

Susan T. Straus

Susan T. Straus, P.E.
Acting Director of Public Works

STS/EYW/kz

Cc: Bill Sizemore, Water Treatment Plant Superintendent
Edwin Woo, Civil Engineer II-Environment
Day File

K:\AH\Files\Woo\Aqdct for WTP dtd 04-05-05.doc

DCWASA

DISTRICT OF COLUMBIA WATER AND SEWER AUTHORITY

5000 OVERLOOK AVENUE, S.W., WASHINGTON, D.C. 20032

OFFICE OF THE GENERAL MANAGER
TEL: 202-787-2609
FAX: 202-787-2333

October 28, 2004

Mr. Thomas P. Jacobus 9/11/2
General Manager
Washington Aqueduct Division
U.S. Army Corps of Engineers, Baltimore District
5900 MacArthur Blvd, N.W.
Washington, DC 20016-2514

SUBJECT: Residuals Project – Draft EIS Alternatives

Dear Mr. Jacobus:

The District of Columbia Water and Sewer Authority (DCWASA) has received your letters, dated September 10th and 17th, 2004, welcoming our participation in the subject project as well as to advise us of the public meeting that was held on September 28, 2004. I appreciate your coordination with DCWASA, and would like to express our committed involvement to this project. As you know, DCWASA contributes approximately 75% of the cost for capital and operating expenses by the Washington Aqueduct Division (WAD), and as such we have a vested interest in serving our ratepayers with potable water at the highest quality and lowest possible cost, while protecting the environment.

It is our understanding that the WAD has developed 26 alternatives that were screened as part of their Environmental Impact Statement (EIS) process. Of the 26 screened alternatives, it was indicated that three were determined to be feasible, not including the 'not action' alternative. While each of these three alternatives are of great interest to DCWASA, the alternative that proposes piping the thickened residuals to the Blue Plains Advanced Wastewater Treatment Plant (AWTP) for dewatering and offsite disposal poses the greatest concern. Based on our understanding of this alternative (Alternative C) we must conclude that it is, in fact not feasible.

Alternative C in the screened alternatives would require a dual 12-inch diameter forcemain to be constructed from the Dalecarlia Water Treatment Plant to the Blue Plains AWTP. Thickened residuals would be pumped to the Blue Plains AWTP where it is envisioned that a newly constructed dewatering facility would be used to dewater the thickened residuals for offsite disposal by trucking. While DCWASA understands that this option has yet to be fully evaluated, we would like to state our concerns with this alternative.

Current regulatory initiatives require that we conserve the limited Blue Plains AWTP site to construct additional facilities needed to meet near term changes expected in the Plants NPDES Permit. The regulatory initiatives include the following:

1) Chesapeake Bay Program (CBP) goals and TMDLs for the District, as well as our joint users in Maryland and Virginia and associated increased nutrient removal by the Blue Plains AWTP.

2) Combined Sewer Overflow (CSO) Long Term Control Plan (LTCP), which will require Storage of CSO in newly constructed tunnels and the subsequent pump-out for treatment at Blue Plains AWTP.

3) Draft Blending Policy that will result in more stringent permit limits for the Plant's excess flow outfall.

In addition, future growth in the Metropolitan Washington region may require the need for additional treatment capacity at the Blue Plains AWTP by the District of Columbia and our joint suburban users. As you are aware, the Blue Plains facility has limited space available as it is confined to the north by the Naval Research Laboratory, to the east by I-295, and to the west and south by the Potomac River.

Additionally, WASA's Biosolids Management Program (BMP) is based on utilization of our biosolids, which are organic in nature, in a land application program. The biosolids are land applied predominately in Virginia and at this point the State of Virginia is proposing increased regulatory requirements on land application. This is merely the latest in a series of regulatory and legislative actions that could impact DCWASA's BMP. Large amounts of inorganic solids, such as the water treatment residuals proposed for piping to Blue Plains AWTP in Alternative C, would add considerable pressure to a valuable recycling program already facing constant regulatory and public pressures.

For the reasons stated above WASA concludes that Alternate C is not feasible due to both site constraints at the Blue Plains AWTP and incompatibility with WASA's Biosolids Management Plan.

Please feel free to contact me at 202-787-2610 should you wish to discuss any of the project issues. In addition, please have appropriate staff at the WAD coordinate project activities with Mr. John Trypus in our Department of Engineering and Technical Services. Mr. Trypus has been designated as DCWASA's primary contact for coordinating efforts related to our interests in the project, and he may be reached at 202-787-2406 or jtrypus@dcwasa.com.

Sincerely,

John T. Dunn

John T. Dunn, P.E.
Chief Engineer/Deputy General Manager

c: Jerry Johnson, General Manager, DCWASA
John Trypus, Project Manager, DCWASA

District of Columbia
Fairfax County
Montgomery County
Prince George's County
Washington Suburban Sanitary Commission

BLUE PLAINS REGIONAL COMMITTEE

c/o Metropolitan Washington Council of Governments
777 North Capitol Street, NE, Suite 300 • Washington, D.C. 20002-4239 • (202) 962-3200 • FAX (202) 962-3203

March 3, 2005

Thomas P. Jacobus Received 1 MAR 05
General Manager
Washington Aqueduct
U.S. Army Corps of Engineers, Baltimore District
5900 Mac Arthur Boulevard, N.W.
Washington, DC 20016-2514

RE: Blue Plains User's Comments Regarding the Washington Aqueduct's Water Treatment Residuals Management Project - Alternative C

Dear Mr. Jacobus,

On behalf of the Blue Plains Regional Committee (BPRC) I would like to express our appreciation for the very informative presentation you gave on December 21, 2004 about the Washington Aqueduct's (WAD) Residuals project. You were very forthcoming in addressing our questions, and we appreciate your efforts to keep us informed about this project.

We are also submitting the following comments regarding the proposed options for managing the WAD water treatment residuals -- in particular the Blue Plains option (Alternative C) - which is currently presented in your Alternatives Analysis document (December 2004). We understand that the WAD has ruled out that alternative as a 'preferred' option and that you are actively evaluating other alternatives. **However, we wish to state for the record that Alternative C is in fact 'not feasible' for the reasons outlined below.** We respectfully submit these comments as the WAD begins to prepare its Draft Environmental Impact Statement (DEIS) for this project.

As you are aware, the BPRC represents the interests of the Blue Plains Users (i.e. the District of Columbia; Fairfax County, Virginia; Prince George's and Montgomery Counties, Maryland; and the Washington Suburban Sanitary Commission) as defined under the terms of the 1985 Blue Plains Intermunicipal Agreement. These interests include ensuring that the long-term wastewater needs of the Users can continue to be addressed at the Blue Plains wastewater treatment plant. The Blue Plains plant, which is managed by the District of Columbia's Water and Sewer Authority (DC-WASA), is therefore an important regional resource.

As part of its regional long-term planning efforts, the BPRC recently completed a study of our collective long-term wastewater capacity needs through the year 2030. We are also actively participating in DC-WASA's current study - which is evaluating Blue Plains' process requirements in light of those capacity needs and pending regulations. It is appropriate, therefore, that we comment on the WAD's Alternative C because of its potential to negatively impact the Blue Plains plant and its programs. Please note that our concerns reinforce many of the same concerns previously outlined in the letter submitted by Mr. John Dunn, DC-WASA (October 28, 2004).

Competition for Limited On-Site Acreage & Blue Plains' Own Process Needs

The Blue Plains plant, as a 370 million gallon per day (MGD) facility, is by far the largest wastewater plant in the metropolitan Washington region and the Chesapeake Bay watershed, and the largest plant of its type in the United States. The plant's location within the District of Columbia is bounded by the Potomac River, the Naval Research Laboratory, and Interstate 295. As such, any and all wastewater and biosolids processes needs for the plant (both current and future) are constrained by those physical limitations and the location of the existing facilities, as well of those facilities that are planned and/or currently under construction.

The Blue Plains plant is currently undergoing extensive, multi-year capital construction projects to upgrade and enhance its wastewater and sludge treatment processes; and, is set to embark on a major capital project to build new sludge digesters on-site. In addition, DC-WASA's current study will determine the feasibility and potential impacts of:

a) Implementing its Combined Sewer System Long-term Control Plan (including identifying its on-site process needs);
b) Achieving additional nitrogen reductions to address new nutrient-based water quality standards for the Potomac River and the Chesapeake Bay;
c) Addressing increased treatment requirements for the plant's 'excess flows';
d) Ensuring that the projected wastewater capacity needs of the Blue Plains Users can be maintained given the above demands; and
e) Evaluating the potential to expand the plant's current capacity in order to address additional/future wastewater treatment needs of the Users.

Collectively all of these competing demands will continue to require very careful consideration as to the sizing and location of these new/expanded facilities. In addition to meeting the physical challenges of the site, these facilities must be constructed to ensure that the plant can continue to meet its National Pollution Discharge Elimination System (NPDES) permit conditions under all conditions. These efforts must also preserve acreage whenever possible in order to maximize the plant's ability to address future regulatory demands. These considerations are consistent with protecting the plant's primary mission – to provide cost-effective wastewater treatment for the region.

Given the many critical site constraints and permit demands facing Blue Plains; it would be inappropriate, therefore, to consider setting aside acreage at Blue Plains for the purpose of accommodating facilities to serve the WAD's residuals management needs.

Incompatibility with Blue Plains' Biosolids Management Program Objectives

As a direct result of providing wastewater treatment for the majority of the metropolitan Washington region, Blue Plains generates a tremendous amount of biosolids. The majority of these biosolids are, and will continue to be, land applied – which recycles the organic material in a responsible and environmentally sound manner. This practice will continue even after the new sludge digesters are put in service. DC-WASA's Biosolids Management Program (BMP) supports ongoing efforts to ensure that this valuable and cost-effective practice remains viable despite increased state regulatory requirements and public pressure. These efforts aim to promote Blue Plains' biosolids as a beneficial, organic soil amendment that can be land applied throughout the region in a cost-effective manner.

As previously noted, Blue Plains will shortly begin construction of new sludge digesters utilizing a state-of-the art digestion process. Two significant benefits of that process will be to produce fewer biosolids by volume and to produce a better end-product. These benefits, which are inherent in the BMP's goals, will allow greater diversity (i.e., end use options) for Blue Plains' biosolids. However, the WAD residuals are inherently inorganic and therefore lack the beneficial characteristics of Blue Plains' organic biosolids. They generally require different dewatering techniques and chemicals, and would also add a significant volume of material that would have to be dealt with both on and off-site. Adding these inorganic water treatment plant residuals to the digested organic biosolids product would increase volume, limit program diversity, and add competing demands on this important land application program – all of which are in conflict with the BMP's goals.

Given the importance of maintaining a successful and viable biosolids land application program for Blue Plains, and the need to minimize any actions that might be harmful to that program's goals, it would be incompatible with DC-WASA's Blue Plains' BMP to accommodate the dewatering and ultimately the off-site disposal of inorganic residuals from the WAD's facilities.

In closing, we recognize the need for the WAD and its consultant to explore options for addressing its water treatment residuals management. **However, we must state for the record that from both an engineering and a planning perspective, that the proposed Blue Plains option, Alternative C, should be deemed 'not feasible' for the reasons we have outlined above.**

If you have any questions about these comments please feel free to contact me at (703) 324-5033, or Tanya Spano, COG staff at (202) 962-3776.

Sincerely,

J. D. Jenkins

Jimmie Jenkins
Chairman
Blue Plains Regional Committee Chairman

cc: Jerry Johnson, General Manager, DC-WASA
Blue Plains Regional Committee
Blue Plains Technical Committee

DEPARTMENT OF THE NAVY
NAVAL DISTRICT WASHINGTON
1014 N STREET SE SUITE 200
WASHINGTON NAVY YARD DC 20374-5001

5775
Ser N01N/0086

FEB 16 2005

Thomas Jacobus
General Manager
Washington Aqueduct
U.S. Army Corps of Engineers, Baltimore District
5900 Macarthur Blvd, N.W.
Washington, D.C. 20016-2514

Dear Mr. Jacobus:

SUBJECT: REQUEST FOR DEWATERING FACILITY

I am writing in response to your letter of 13 December 2004, which requested consideration to locate a dewatering facility at Naval Surface Warfare Center, Carderock Division (NSWCCD). Unfortunately, construction of a public municipal facility within the fence line of NSWCCD is not consistent with the Navy's current and long-term plans for this installation.

The mission of NSWCCD requires considerable security and force protection measures that could potentially be compromised during the construction and during operation of such a facility. Additionally, the acreage required to construct and operate the proposed facility is well beyond the Navy's ability to accommodate your request.

In addition to the aforementioned, we anticipate the National Park Service and local residential neighborhoods may also have significant concerns with your proposal.

Accordingly, I regret to inform you that Naval District Washington (NDW) is unwilling to entertain your request for land on NSWCCD. Please let me know if I can provide any clarifying information on our position. I can be reached at (202) 764-0522 or by email at Al.Demedeiros@navy.mil.

Sincerely,

For Gilbert Elliott

AL de MEDEIROS
Commander, U.S. Navy Reserve
NDW North Area Operations
Officer
By direction of the Commandant

Summary of Noise Monitoring Data

Location	Event	Date Time	Duration (min)	Average Noise Level (dBa)	Maximum Noise Level (dBa)	Instantaneous Peak (dBa)	Sources of Noise
Residential	Day	7/1/2004					
Windward Place	1	10:30am	14	**38.3**	**80**	114.8	airplanes, truck, insects
	2	1:00pm	15	<40	77.3	113.8	airplanes
	3	2:30pm	15	<40	73.3	98.8	airplanes
Recreational Area		7/1/2004					
Bike Path	1	11:00am	14	**55.6**	**84.4**	117.7	airplanes
	2	1:30pm	15	<40	71.7	97.5	helicopter, airplanes
	3	3:00pm	15	<40	78	103.7	airplanes
Roadway		7/1/2004					
Loughboro Road	1	12:30pm	14	59.6	85.5	109.7	buses, trucks and motorcylce
	2	2:00pm	15	59.6	84.8	108.6	airplane, school bus, truck buses
	3	3:29pm	15	**64.4**	**91.7**	117.4	cars, trucks, motorcycle, airplane
Residential		7/1/2004					
Hutchins Place	1	5:45pm	15	<40	76.8	97.2	airplanes, helicopter
	2	6:05pm	15	**<40**	**79.6**	108.6	airplanes
	3	6:25pm	15	<40	73.4	100.1	airplanes, ambulance
Residential	Night	7/2/2004					
Windward Place	1	12:16am	14	**<40**	**76.7**	108.5	A/C system
	2	1:15am	15	<40	69.9	97.8	A/C system
Roadway		7/2/2004					
Loughboro Road	1	12:45am	15	**58.5**	**86.1**	109.5	cars, bus
	2	1:45am	15	<40	72.1	99	cars
Residential		7/2/2004					
Hutchins Place	1	2:14am	16	**<40**	**72.8**	101.6	
	2	2:45am	15	<40	69.9	94.4	car

O. R. GEORGE & ASSOCIATES, INC.

Traffic Engineers – Transportation Planners

10210 Greenbelt Road, Suite 310 • Greenbelt, MD 20706-2218
Tel: (301) 794-7700 Fax: (301) 794-4400
E-Mail: orgassoc@aol.com

July 7, 2004

Raymond C. Porter,
Senior Air Quality Meteorologist
CH2M HILL
25 New Chardon Street
Boston, MA 02114 - 4774

Re: Washington Aqueduct EIS – Noise Monitoring Program

Dear Mr. Porter:

In accordance with our Subcontract Agreement for the referenced project, and our meeting on June 30, 2004, we are pleased to confirm that we have completed the required noise monitoring activities. The surveys were undertaken during favorable weather conditions, and were not adversely impacted by any unexpected situations. The daytime surveys occurred in accordance with the agreed-upon schedule. The nighttime surveys began about forty-five minutes late, as the assigned technician was held up by a major traffic accident. Despite this setback, we were able to complete the two 15-minute intervals at each survey site, as required. We also had no problems in downloading and processing the collected data.

As requested, we are attaching herewith the following:

a) A revised Noise Survey Schedule which indicates the time periods surveyed and the "event" reference numbers;.

b) The software printout/results for each survey event. Please note that the last page of each event summary indicates the reasons for any sharp "spikes" in the readings, and the times when these occurred;

c) A floppy diskette containing Items (a) and (b); and

d) The assigned notebook containing our field notes.

The noise meter will be delivered to your Herndon Office, as discussed. We trust that the enclosed would satisfy your requirements. Should you have any questions or comments, please let us know. Thank you.

Sincerely,
O. R. GEORGE & ASSOCIATES, INC.

C. Elias

Cullen E. Elias
Vice President

CEE/mvd

Enclosure: As noted.

cc: Jed Campbell (CH2M Hill)

Noise Survey Schedule
Dalecarlia and Georgetown Reservoirs

Survey Time	Residential Area Dalecarlia Reservoir	Recreational Trail Dalecarlia Reservoir	Sibley Hospital Dalecarlia Reservoir	Georgetown Reservoir	Little Falls Rd Construction Area
Daytime Sampling Activities (Thursday, July 1, 2004)					
10:30 - 10:45	Event # 1				
11:00 - 11:15		Event # 2			
11:30 - 12:00					Events # 3 - 6
12:30 - 12:45			Event # 7		
13:00 - 13:15	Event # 8				
13:30 - 13:45		Event # 9			
14:00 - 14:15			Event # 10		
14:30 - 14:45	Event # 11				
15:00 - 15:15		Event # 12			
15:30 - 15:45			Event # 13		
17:45 - 18:00				Event # 14	
18:05 - 18:20				Event # 15	
18:25 - 18:40				Event # 16	
Nightime Sampling Activities (Friday, July 2, 2004)					
00:15 - 00:30	Events # [illegible] 18				
00:45 - 01:00			Event # 19		
01:15 - 01:30	Event # 20				
01:45 - 02:00			Event # 21		
02:15 - 02:30				Event # 22	
02:45 - 03:00				Event # 23	

Projected Dose in Increments of 0:01:00 (h:m:s)

Dosimeter	+0 Incr.	+1 Incr.	+2 Incr.	+3 Incr.	+4 Incr.
#1 - 0:00:00		0.00	0.00	0.00	0.00
#1 - 0:05:00	0.00	0.00	0.00	0.00	0.00
#1 - 0:10:00	0.00	0.00	0.00	0.00	0.00
#1 - 0:15:00	0.00	0.00	0.00	0.00	0.01
#1 - 0:20:00	0.01	0.01	0.01	0.01	0.01
#1 - 0:25:00	0.01	0.01	0.01	0.01	0.01
#1 - 0:30:00	0.01	0.01	0.01	0.01	0.01
#1 - 0:35:00	0.01	0.01	0.01	0.01	0.01
#1 - 0:40:00	0.01	0.01	0.01	0.01	0.01
#1 - 0:45:00	0.01	0.01	0.01	0.01	0.01
#1 - 0:50:00	0.01	0.01	0.01	0.01	0.01
#1 - 0:55:00	0.02	0.02	0.02	0.02	0.02
#1 - 1:00:00	0.02	0.02	0.02	0.02	0.02
#1 - 1:05:00	0.02	0.02	0.02	0.02	0.02
#1 - 1:10:00	0.02	0.02	0.02	0.02	0.02
#1 - 1:15:00	0.02	0.02	0.02	0.02	0.02
#1 - 1:20:00	0.02	0.02	0.02	0.02	0.02
#1 - 1:25:00	0.02	0.02	0.02	0.02	0.02
#1 - 1:30:00	0.02	0.02	0.03	0.03	0.03
#1 - 1:35:00	0.03	0.03	0.03	0.03	0.03
#1 - 1:40:00	0.03	0.03	0.03	0.03	0.03
#1 - 1:45:00	0.03	0.03	0.03	0.03	0.03
#1 - 1:50:00	0.03	0.03	0.03	0.03	0.03
#1 - 1:55:00	0.03	0.03	0.03	0.03	0.03
#1 - 2:00:00	0.03	0.03	0.03	0.03	0.03
#1 - 2:05:00	0.03	0.03	0.03	0.04	0.04
#1 - 2:10:00	0.04	0.04	0.04	0.04	0.04
#1 - 2:15:00	0.04	0.04	0.04	0.04	0.04
#1 - 2:20:00	0.04	0.04	0.04	0.04	0.04
#1 - 2:25:00	0.04	0.04	0.04	0.04	0.04
#1 - 2:30:00	0.04	0.04	0.04	0.04	0.04
#1 - 2:35:00	0.04	0.04	0.04	0.04	0.04
#1 - 2:40:00	0.04	0.04	0.04	0.04	0.04
#1 - 2:45:00	0.05	0.05	0.05	0.05	0.05
#1 - 2:50:00	0.05	0.05	0.05	0.05	0.05
#1 - 2:55:00	0.05	0.05	0.05	0.05	0.05
#1 - 3:00:00	0.05	0.05	0.05	0.05	0.05
#1 - 3:05:00	0.05	0.05	0.05	0.05	0.05
#1 - 3:10:00	0.05	0.05	0.05	0.05	0.05
#1 - 3:15:00	0.05	0.05	0.05	0.05	0.05
#1 - 3:20:00	0.05	0.06	0.06	0.06	0.06
#1 - 3:25:00	0.06	0.06	0.06	0.06	0.06
#1 - 3:30:00	0.06	0.06	0.06	0.06	0.06
#1 - 3:35:00	0.06	0.06	0.06	0.06	0.06

Projected Dose in Increments of 0:01:00 (h:m:s)

Dosimeter	+0 Incr.	+1 Incr.	+2 Incr.	+3 Incr.	+4 Incr.
#1 - 3:40:00	0.06	0.06	0.06	0.06	0.06
#1 - 3:45:00	0.06	0.06	0.06	0.06	0.06
#1 - 3:50:00	0.06	0.06	0.06	0.06	0.06
#1 - 3:55:00	0.06	0.06	0.07	0.07	0.07
#1 - 4:00:00	0.07	0.07	0.07	0.07	0.07
#1 - 4:05:00	0.07	0.07	0.07	0.07	0.07
#1 - 4:10:00	0.07	0.07	0.07	0.07	0.07
#1 - 4:15:00	0.07	0.07	0.07	0.07	0.07
#1 - 4:20:00	0.07	0.07	0.07	0.07	0.07
#1 - 4:25:00	0.07	0.07	0.07	0.07	0.07
#1 - 4:30:00	0.07	0.07	0.07	0.07	0.08
#1 - 4:35:00	0.08	0.08	0.08	0.08	0.08
#1 - 4:40:00	0.08	0.08	0.08	0.08	0.08
#1 - 4:45:00	0.08	0.08	0.08	0.08	0.08
#1 - 4:50:00	0.08	0.08	0.08	0.08	0.08
#1 - 4:55:00	0.08	0.08	0.08	0.08	0.08
#1 - 5:00:00	0.08	0.08	0.08	0.08	0.08
#1 - 5:05:00	0.08	0.08	0.08	0.08	0.08
#1 - 5:10:00	0.09	0.09	0.09	0.09	0.09
#1 - 5:15:00	0.09	0.09	0.09	0.09	0.09
#1 - 5:20:00	0.09	0.09	0.09	0.09	0.09
#1 - 5:25:00	0.09	0.09	0.09	0.09	0.09
#1 - 5:30:00	0.09	0.09	0.09	0.09	0.09
#1 - 5:35:00	0.09	0.09	0.09	0.09	0.09
#1 - 5:40:00	0.09	0.09	0.09	0.09	0.09
#1 - 5:45:00	0.09	0.09	0.10	0.10	0.10
#1 - 5:50:00	0.10	0.10	0.10	0.10	0.10
#1 - 5:55:00	0.10	0.10	0.10	0.10	0.10
#1 - 6:00:00	0.10	0.10	0.10	0.10	0.10
#1 - 6:05:00	0.10	0.10	0.10	0.10	0.10
#1 - 6:10:00	0.10	0.10	0.10	0.10	0.10
#1 - 6:15:00	0.10	0.10	0.10	0.10	0.10
#1 - 6:20:00	0.10	0.10	0.10	0.11	0.11
#1 - 6:25:00	0.11	0.11	0.11	0.11	0.11
#1 - 6:30:00	0.11	0.11	0.11	0.11	0.11
#1 - 6:35:00	0.11	0.11	0.11	0.11	0.11
#1 - 6:40:00	0.11	0.11	0.11	0.11	0.11
#1 - 6:45:00	0.11	0.11	0.11	0.11	0.11
#1 - 6:50:00	0.11	0.11	0.11	0.11	0.11
#1 - 6:55:00	0.11	0.11	0.11	0.11	0.11
#1 - 7:00:00	0.12	0.12	0.12	0.12	0.12
#1 - 7:05:00	0.12	0.12	0.12	0.12	0.12
#1 - 7:10:00	0.12	0.12	0.12	0.12	0.12
#1 - 7:15:00	0.12	0.12	0.12	0.12	0.12

Projected Dose in Increments of 0:01:00 (h:m:s)

Dosimeter	+0 Incr.	+1 Incr.	+2 Incr.	+3 Incr.	+4 Incr.
#1 - 7:20:00	0.12	0.12	0.12	0.12	0.12
#1 - 7:25:00	0.12	0.12	0.12	0.12	0.12
#1 - 7:30:00	0.12	0.12	0.12	0.12	0.12
#1 - 7:35:00	0.12	0.13	0.13	0.13	0.13
#1 - 7:40:00	0.13	0.13	0.13	0.13	0.13
#1 - 7:45:00	0.13	0.13	0.13	0.13	0.13
#1 - 7:50:00	0.13	0.13	0.13	0.13	0.13
#1 - 7:55:00	0.13	0.13	0.13	0.13	0.13
#1 - 8:00:00	0.13				
#2 - 0:00:00		0.00	0.00	0.00	0.00
#2 - 0:05:00	0.00	0.00	0.00	0.00	0.00
#2 - 0:10:00	0.00	0.00	0.00	0.00	0.00
#2 - 0:15:00	0.00	0.00	0.00	0.00	0.00
#2 - 0:20:00	0.00	0.00	0.00	0.00	0.00
#2 - 0:25:00	0.00	0.00	0.00	0.00	0.00
#2 - 0:30:00	0.00	0.00	0.00	0.00	0.00
#2 - 0:35:00	0.00	0.00	0.00	0.00	0.00
#2 - 0:40:00	0.00	0.00	0.00	0.00	0.00
#2 - 0:45:00	0.00	0.00	0.00	0.00	0.00
#2 - 0:50:00	0.00	0.00	0.00	0.00	0.00
#2 - 0:55:00	0.00	0.00	0.00	0.00	0.00
#2 - 1:00:00	0.00	0.00	0.00	0.00	0.00
#2 - 1:05:00	0.00	0.00	0.00	0.00	0.00
#2 - 1:10:00	0.00	0.00	0.00	0.01	0.01
#2 - 1:15:00	0.01	0.01	0.01	0.01	0.01
#2 - 1:20:00	0.01	0.01	0.01	0.01	0.01
#2 - 1:25:00	0.01	0.01	0.01	0.01	0.01
#2 - 1:30:00	0.01	0.01	0.01	0.01	0.01
#2 - 1:35:00	0.01	0.01	0.01	0.01	0.01
#2 - 1:40:00	0.01	0.01	0.01	0.01	0.01
#2 - 1:45:00	0.01	0.01	0.01	0.01	0.01
#2 - 1:50:00	0.01	0.01	0.01	0.01	0.01
#2 - 1:55:00	0.01	0.01	0.01	0.01	0.01
#2 - 2:00:00	0.01	0.01	0.01	0.01	0.01
#2 - 2:05:00	0.01	0.01	0.01	0.01	0.01
#2 - 2:10:00	0.01	0.01	0.01	0.01	0.01
#2 - 2:15:00	0.01	0.01	0.01	0.01	0.01
#2 - 2:20:00	0.01	0.01	0.01	0.01	0.01
#2 - 2:25:00	0.01	0.01	0.01	0.01	0.01
#2 - 2:30:00	0.01	0.01	0.01	0.01	0.01
#2 - 2:35:00	0.01	0.01	0.01	0.01	0.01
#2 - 2:40:00	0.01	0.01	0.01	0.01	0.01
#2 - 2:45:00	0.01	0.01	0.01	0.01	0.01

Projected Dose in Increments of 0:01:00 (h:m:s)

Dosimeter	+0 Incr.	+1 Incr.	+2 Incr.	+3 Incr.	+4 Incr.
#2 - 2:50:00	0.01	0.01	0.01	0.01	0.01
#2 - 2:55:00	0.01	0.01	0.01	0.01	0.01
#2 - 3:00:00	0.01	0.01	0.01	0.01	0.01
#2 - 3:05:00	0.01	0.01	0.01	0.01	0.01
#2 - 3:10:00	0.01	0.01	0.01	0.01	0.01
#2 - 3:15:00	0.01	0.01	0.01	0.01	0.01
#2 - 3:20:00	0.01	0.01	0.01	0.01	0.01
#2 - 3:25:00	0.01	0.01	0.01	0.01	0.01
#2 - 3:30:00	0.01	0.01	0.01	0.01	0.01
#2 - 3:35:00	0.01	0.01	0.01	0.01	0.02
#2 - 3:40:00	0.02	0.02	0.02	0.02	0.02
#2 - 3:45:00	0.02	0.02	0.02	0.02	0.02
#2 - 3:50:00	0.02	0.02	0.02	0.02	0.02
#2 - 3:55:00	0.02	0.02	0.02	0.02	0.02
#2 - 4:00:00	0.02	0.02	0.02	0.02	0.02
#2 - 4:05:00	0.02	0.02	0.02	0.02	0.02
#2 - 4:10:00	0.02	0.02	0.02	0.02	0.02
#2 - 4:15:00	0.02	0.02	0.02	0.02	0.02
#2 - 4:20:00	0.02	0.02	0.02	0.02	0.02
#2 - 4:25:00	0.02	0.02	0.02	0.02	0.02
#2 - 4:30:00	0.02	0.02	0.02	0.02	0.02
#2 - 4:35:00	0.02	0.02	0.02	0.02	0.02
#2 - 4:40:00	0.02	0.02	0.02	0.02	0.02
#2 - 4:45:00	0.02	0.02	0.02	0.02	0.02
#2 - 4:50:00	0.02	0.02	0.02	0.02	0.02
#2 - 4:55:00	0.02	0.02	0.02	0.02	0.02
#2 - 5:00:00	0.02	0.02	0.02	0.02	0.02
#2 - 5:05:00	0.02	0.02	0.02	0.02	0.02
#2 - 5:10:00	0.02	0.02	0.02	0.02	0.02
#2 - 5:15:00	0.02	0.02	0.02	0.02	0.02
#2 - 5:20:00	0.02	0.02	0.02	0.02	0.02
#2 - 5:25:00	0.02	0.02	0.02	0.02	0.02
#2 - 5:30:00	0.02	0.02	0.02	0.02	0.02
#2 - 5:35:00	0.02	0.02	0.02	0.02	0.02
#2 - 5:40:00	0.02	0.02	0.02	0.02	0.02
#2 - 5:45:00	0.02	0.02	0.02	0.02	0.02
#2 - 5:50:00	0.02	0.02	0.02	0.02	0.02
#2 - 5:55:00	0.02	0.02	0.02	0.02	0.02
#2 - 6:00:00	0.02	0.02	0.02	0.02	0.02
#2 - 6:05:00	0.03	0.03	0.03	0.03	0.03
#2 - 6:10:00	0.03	0.03	0.03	0.03	0.03
#2 - 6:15:00	0.03	0.03	0.03	0.03	0.03
#2 - 6:20:00	0.03	0.03	0.03	0.03	0.03
#2 - 6:25:00	0.03	0.03	0.03	0.03	0.03

Projected Dose in Increments of 0:01:00 (h:m:s)

Dosimeter	+0 Incr.	+1 Incr.	+2 Incr.	+3 Incr.	+4 Incr.
#2 - 6:30:00	0.03	0.03	0.03	0.03	0.03
#2 - 6:35:00	0.03	0.03	0.03	0.03	0.03
#2 - 6:40:00	0.03	0.03	0.03	0.03	0.03
#2 - 6:45:00	0.03	0.03	0.03	0.03	0.03
#2 - 6:50:00	0.03	0.03	0.03	0.03	0.03
#2 - 6:55:00	0.03	0.03	0.03	0.03	0.03
#2 - 7:00:00	0.03	0.03	0.03	0.03	0.03
#2 - 7:05:00	0.03	0.03	0.03	0.03	0.03
#2 - 7:10:00	0.03	0.03	0.03	0.03	0.03
#2 - 7:15:00	0.03	0.03	0.03	0.03	0.03
#2 - 7:20:00	0.03	0.03	0.03	0.03	0.03
#2 - 7:25:00	0.03	0.03	0.03	0.03	0.03
#2 - 7:30:00	0.03	0.03	0.03	0.03	0.03
#2 - 7:35:00	0.03	0.03	0.03	0.03	0.03
#2 - 7:40:00	0.03	0.03	0.03	0.03	0.03
#2 - 7:45:00	0.03	0.03	0.03	0.03	0.03
#2 - 7:50:00	0.03	0.03	0.03	0.03	0.03
#2 - 7:55:00	0.03	0.03	0.03	0.03	0.03
#2 - 8:00:00	0.03				
#3 - 0:00:00		0.00	0.00	0.00	0.00
#3 - 0:05:00	0.00	0.00	0.01	0.01	0.01
#3 - 0:10:00	0.01	0.01	0.01	0.01	0.01
#3 - 0:15:00	0.01	0.01	0.01	0.01	0.01
#3 - 0:20:00	0.02	0.02	0.02	0.02	0.02
#3 - 0:25:00	0.02	0.02	0.02	0.02	0.02
#3 - 0:30:00	0.02	0.02	0.03	0.03	0.03
#3 - 0:35:00	0.03	0.03	0.03	0.03	0.03
#3 - 0:40:00	0.03	0.03	0.03	0.03	0.03
#3 - 0:45:00	0.04	0.04	0.04	0.04	0.04
#3 - 0:50:00	0.04	0.04	0.04	0.04	0.04
#3 - 0:55:00	0.04	0.04	0.04	0.05	0.05
#3 - 1:00:00	0.05	0.05	0.05	0.05	0.05
#3 - 1:05:00	0.05	0.05	0.05	0.05	0.05
#3 - 1:10:00	0.06	0.06	0.06	0.06	0.06
#3 - 1:15:00	0.06	0.06	0.06	0.06	0.06
#3 - 1:20:00	0.06	0.06	0.06	0.07	0.07
#3 - 1:25:00	0.07	0.07	0.07	0.07	0.07
#3 - 1:30:00	0.07	0.07	0.07	0.07	0.07
#3 - 1:35:00	0.07	0.08	0.08	0.08	0.08
#3 - 1:40:00	0.08	0.08	0.08	0.08	0.08
#3 - 1:45:00	0.08	0.08	0.08	0.09	0.09
#3 - 1:50:00	0.09	0.09	0.09	0.09	0.09
#3 - 1:55:00	0.09	0.09	0.09	0.09	0.09

Projected Dose in Increments of 0:01:00 (h:m:s)

Dosimeter	+0 Incr.	+1 Incr.	+2 Incr.	+3 Incr.	+4 Incr.
#3 - 2:00:00	0.09	0.10	0.10	0.10	0.10
#3 - 2:05:00	0.10	0.10	0.10	0.10	0.10
#3 - 2:10:00	0.10	0.10	0.10	0.10	0.11
#3 - 2:15:00	0.11	0.11	0.11	0.11	0.11
#3 - 2:20:00	0.11	0.11	0.11	0.11	0.11
#3 - 2:25:00	0.11	0.12	0.12	0.12	0.12
#3 - 2:30:00	0.12	0.12	0.12	0.12	0.12
#3 - 2:35:00	0.12	0.12	0.12	0.12	0.13
#3 - 2:40:00	0.13	0.13	0.13	0.13	0.13
#3 - 2:45:00	0.13	0.13	0.13	0.13	0.13
#3 - 2:50:00	0.13	0.13	0.14	0.14	0.14
#3 - 2:55:00	0.14	0.14	0.14	0.14	0.14
#3 - 3:00:00	0.14	0.14	0.14	0.14	0.15
#3 - 3:05:00	0.15	0.15	0.15	0.15	0.15
#3 - 3:10:00	0.15	0.15	0.15	0.15	0.15
#3 - 3:15:00	0.15	0.15	0.16	0.16	0.16
#3 - 3:20:00	0.16	0.16	0.16	0.16	0.16
#3 - 3:25:00	0.16	0.16	0.16	0.16	0.16
#3 - 3:30:00	0.17	0.17	0.17	0.17	0.17
#3 - 3:35:00	0.17	0.17	0.17	0.17	0.17
#3 - 3:40:00	0.17	0.17	0.18	0.18	0.18
#3 - 3:45:00	0.18	0.18	0.18	0.18	0.18
#3 - 3:50:00	0.18	0.18	0.18	0.18	0.18
#3 - 3:55:00	0.19	0.19	0.19	0.19	0.19
#3 - 4:00:00	0.19	0.19	0.19	0.19	0.19
#3 - 4:05:00	0.19	0.19	0.19	0.20	0.20
#3 - 4:10:00	0.20	0.20	0.20	0.20	0.20
#3 - 4:15:00	0.20	0.20	0.20	0.20	0.20
#3 - 4:20:00	0.21	0.21	0.21	0.21	0.21
#3 - 4:25:00	0.21	0.21	0.21	0.21	0.21
#3 - 4:30:00	0.21	0.21	0.21	0.22	0.22
#3 - 4:35:00	0.22	0.22	0.22	0.22	0.22
#3 - 4:40:00	0.22	0.22	0.22	0.22	0.22
#3 - 4:45:00	0.22	0.23	0.23	0.23	0.23
#3 - 4:50:00	0.23	0.23	0.23	0.23	0.23
#3 - 4:55:00	0.23	0.23	0.23	0.23	0.24
#3 - 5:00:00	0.24	0.24	0.24	0.24	0.24
#3 - 5:05:00	0.24	0.24	0.24	0.24	0.24
#3 - 5:10:00	0.24	0.25	0.25	0.25	0.25
#3 - 5:15:00	0.25	0.25	0.25	0.25	0.25
#3 - 5:20:00	0.25	0.25	0.25	0.25	0.26
#3 - 5:25:00	0.26	0.26	0.26	0.26	0.26
#3 - 5:30:00	0.26	0.26	0.26	0.26	0.26
#3 - 5:35:00	0.26	0.26	0.27	0.27	0.27

Projected Dose in Increments of 0:01:00 (h:m:s)

Dosimeter	+0 Incr.	+1 Incr.	+2 Incr.	+3 Incr.	+4 Incr.
#3 - 5:40:00	0.27	0.27	0.27	0.27	0.27
#3 - 5:45:00	0.27	0.27	0.27	0.27	0.28
#3 - 5:50:00	0.28	0.28	0.28	0.28	0.28
#3 - 5:55:00	0.28	0.28	0.28	0.28	0.28
#3 - 6:00:00	0.28	0.28	0.29	0.29	0.29
#3 - 6:05:00	0.29	0.29	0.29	0.29	0.29
#3 - 6:10:00	0.29	0.29	0.29	0.29	0.29
#3 - 6:15:00	0.30	0.30	0.30	0.30	0.30
#3 - 6:20:00	0.30	0.30	0.30	0.30	0.30
#3 - 6:25:00	0.30	0.30	0.31	0.31	0.31
#3 - 6:30:00	0.31	0.31	0.31	0.31	0.31
#3 - 6:35:00	0.31	0.31	0.31	0.31	0.31
#3 - 6:40:00	0.32	0.32	0.32	0.32	0.32
#3 - 6:45:00	0.32	0.32	0.32	0.32	0.32
#3 - 6:50:00	0.32	0.32	0.32	0.33	0.33
#3 - 6:55:00	0.33	0.33	0.33	0.33	0.33
#3 - 7:00:00	0.33	0.33	0.33	0.33	0.33
#3 - 7:05:00	0.34	0.34	0.34	0.34	0.34
#3 - 7:10:00	0.34	0.34	0.34	0.34	0.34
#3 - 7:15:00	0.34	0.34	0.34	0.35	0.35
#3 - 7:20:00	0.35	0.35	0.35	0.35	0.35
#3 - 7:25:00	0.35	0.35	0.35	0.35	0.35
#3 - 7:30:00	0.35	0.36	0.36	0.36	0.36
#3 - 7:35:00	0.36	0.36	0.36	0.36	0.36
#3 - 7:40:00	0.36	0.36	0.36	0.37	0.37
#3 - 7:45:00	0.37	0.37	0.37	0.37	0.37
#3 - 7:50:00	0.37	0.37	0.37	0.37	0.37
#3 - 7:55:00	0.37	0.38	0.38	0.38	0.38
#3 - 8:00:00	0.38				

Projected TWA in Increments of 0:01:00 (h:m:s)

Dosimeter	+0 Incr.	+1 Incr.	+2 Incr.	+3 Incr.	+4 Incr.
#1 - 0:00:00		0.00	3.02	5.95	8.02
#1 - 0:05:00	9.63	10.95	12.06	13.02	13.87
#1 - 0:10:00	14.63	15.32	15.95	16.53	17.06
#1 - 0:15:00	17.56	18.02	18.46	18.87	19.26
#1 - 0:20:00	19.63	19.98	20.32	20.64	20.95
#1 - 0:25:00	21.24	21.53	21.80	22.06	22.31
#1 - 0:30:00	22.56	22.79	23.02	23.24	23.46
#1 - 0:35:00	23.67	23.87	24.07	24.26	24.45
#1 - 0:40:00	24.63	24.81	24.98	25.15	25.32
#1 - 0:45:00	25.48	25.64	25.80	25.95	26.10
#1 - 0:50:00	26.24	26.38	26.53	26.66	26.80
#1 - 0:55:00	26.93	27.06	27.19	27.31	27.44
#1 - 1:00:00	27.56	27.68	27.79	27.91	28.02
#1 - 1:05:00	28.13	28.24	28.35	28.46	28.57
#1 - 1:10:00	28.67	28.77	28.87	28.97	29.07
#1 - 1:15:00	29.17	29.26	29.36	29.45	29.54
#1 - 1:20:00	29.63	29.72	29.81	29.90	29.98
#1 - 1:25:00	30.07	30.15	30.24	30.32	30.40
#1 - 1:30:00	30.48	30.56	30.64	30.72	30.80
#1 - 1:35:00	30.87	30.95	31.02	31.10	31.17
#1 - 1:40:00	31.24	31.31	31.38	31.46	31.53
#1 - 1:45:00	31.59	31.66	31.73	31.80	31.86
#1 - 1:50:00	31.93	31.99	32.06	32.12	32.19
#1 - 1:55:00	32.25	32.31	32.37	32.44	32.50
#1 - 2:00:00	32.56	32.62	32.68	32.74	32.79
#1 - 2:05:00	32.85	32.91	32.97	33.02	33.08
#1 - 2:10:00	33.13	33.19	33.24	33.30	33.35
#1 - 2:15:00	33.41	33.46	33.51	33.57	33.62
#1 - 2:20:00	33.67	33.72	33.77	33.82	33.87
#1 - 2:25:00	33.92	33.97	34.02	34.07	34.12
#1 - 2:30:00	34.17	34.21	34.26	34.31	34.36
#1 - 2:35:00	34.40	34.45	34.50	34.54	34.59
#1 - 2:40:00	34.63	34.68	34.72	34.77	34.81
#1 - 2:45:00	34.85	34.90	34.94	34.98	35.03
#1 - 2:50:00	35.07	35.11	35.15	35.20	35.24
#1 - 2:55:00	35.28	35.32	35.36	35.40	35.44
#1 - 3:00:00	35.48	35.52	35.56	35.60	35.64
#1 - 3:05:00	35.68	35.72	35.76	35.80	35.83
#1 - 3:10:00	35.87	35.91	35.95	35.99	36.02
#1 - 3:15:00	36.06	36.10	36.13	36.17	36.21
#1 - 3:20:00	36.24	36.28	36.31	36.35	36.38
#1 - 3:25:00	36.42	36.46	36.49	36.53	36.56
#1 - 3:30:00	36.59	36.63	36.66	36.70	36.73
#1 - 3:35:00	36.76	36.80	36.83	36.86	36.90

Projected TWA in Increments of 0:01:00 (h:m:s)

Dosimeter	+0 Incr.	+1 Incr.	+2 Incr.	+3 Incr.	+4 Incr.
#1 - 3:40:00	36.93	36.96	36.99	37.03	37.06
#1 - 3:45:00	37.09	37.12	37.16	37.19	37.22
#1 - 3:50:00	37.25	37.28	37.31	37.34	37.37
#1 - 3:55:00	37.41	37.44	37.47	37.50	37.53
#1 - 4:00:00	37.56	37.59	37.62	37.65	37.68
#1 - 4:05:00	37.71	37.74	37.76	37.79	37.82
#1 - 4:10:00	37.85	37.88	37.91	37.94	37.97
#1 - 4:15:00	37.99	38.02	38.05	38.08	38.11
#1 - 4:20:00	38.13	38.16	38.19	38.22	38.24
#1 - 4:25:00	38.27	38.30	38.33	38.35	38.38
#1 - 4:30:00	38.41	38.43	38.46	38.49	38.51
#1 - 4:35:00	38.54	38.57	38.59	38.62	38.64
#1 - 4:40:00	38.67	38.69	38.72	38.75	38.77
#1 - 4:45:00	38.80	38.82	38.85	38.87	38.90
#1 - 4:50:00	38.92	38.95	38.97	39.00	39.02
#1 - 4:55:00	39.05	39.07	39.09	39.12	39.14
#1 - 5:00:00	39.17	39.19	39.21	39.24	39.26
#1 - 5:05:00	39.29	39.31	39.33	39.36	39.38
#1 - 5:10:00	39.40	39.43	39.45	39.47	39.50
#1 - 5:15:00	39.52	39.54	39.56	39.59	39.61
#1 - 5:20:00	39.63	39.65	39.68	39.70	39.72
#1 - 5:25:00	39.74	39.77	39.79	39.81	39.83
#1 - 5:30:00	39.85	39.88	39.90	39.92	39.94
#1 - 5:35:00	39.96	39.98	40.01	40.03	40.05
#1 - 5:40:00	40.07	40.09	40.11	40.13	40.15
#1 - 5:45:00	40.18	40.20	40.22	40.24	40.26
#1 - 5:50:00	40.28	40.30	40.32	40.34	40.36
#1 - 5:55:00	40.38	40.40	40.42	40.44	40.46
#1 - 6:00:00	40.48	40.50	40.52	40.54	40.56
#1 - 6:05:00	40.58	40.60	40.62	40.64	40.66
#1 - 6:10:00	40.68	40.70	40.72	40.74	40.76
#1 - 6:15:00	40.78	40.80	40.81	40.83	40.85
#1 - 6:20:00	40.87	40.89	40.91	40.93	40.95
#1 - 6:25:00	40.97	40.99	41.00	41.02	41.04
#1 - 6:30:00	41.06	41.08	41.10	41.11	41.13
#1 - 6:35:00	41.15	41.17	41.19	41.21	41.22
#1 - 6:40:00	41.24	41.26	41.28	41.30	41.31
#1 - 6:45:00	41.33	41.35	41.37	41.38	41.40
#1 - 6:50:00	41.42	41.44	41.46	41.47	41.49
#1 - 6:55:00	41.51	41.53	41.54	41.56	41.58
#1 - 7:00:00	41.59	41.61	41.63	41.65	41.66
#1 - 7:05:00	41.68	41.70	41.71	41.73	41.75
#1 - 7:10:00	41.76	41.78	41.80	41.81	41.83
#1 - 7:15:00	41.85	41.86	41.88	41.90	41.91

Projected TWA in Increments of 0:01:00 (h:m:s)

Dosimeter	+0 Incr.	+1 Incr.	+2 Incr.	+3 Incr.	+4 Incr.
#1 - 7:20:00	41.93	41.95	41.96	41.98	41.99
#1 - 7:25:00	42.01	42.03	42.04	42.06	42.08
#1 - 7:30:00	42.09	42.11	42.12	42.14	42.16
#1 - 7:35:00	42.17	42.19	42.20	42.22	42.23
#1 - 7:40:00	42.25	42.27	42.28	42.30	42.31
#1 - 7:45:00	42.33	42.34	42.36	42.37	42.39
#1 - 7:50:00	42.41	42.42	42.44	42.45	42.47
#1 - 7:55:00	42.48	42.50	42.51	42.53	42.54
#1 - 8:00:00	42.56				
#2 - 0:00:00		0.00	0.00	0.00	0.00
#2 - 0:05:00	0.00	1.25	2.36	3.32	4.17
#2 - 0:10:00	4.93	5.62	6.25	6.83	7.36
#2 - 0:15:00	7.86	8.32	8.76	9.17	9.56
#2 - 0:20:00	9.93	10.29	10.62	10.94	11.25
#2 - 0:25:00	11.54	11.83	12.10	12.36	12.61
#2 - 0:30:00	12.86	13.09	13.32	13.55	13.76
#2 - 0:35:00	13.97	14.17	14.37	14.56	14.75
#2 - 0:40:00	14.93	15.11	15.29	15.45	15.62
#2 - 0:45:00	15.78	15.94	16.10	16.25	16.40
#2 - 0:50:00	16.54	16.69	16.83	16.96	17.10
#2 - 0:55:00	17.23	17.36	17.49	17.61	17.74
#2 - 1:00:00	17.86	17.98	18.09	18.21	18.32
#2 - 1:05:00	18.44	18.55	18.65	18.76	18.87
#2 - 1:10:00	18.97	19.07	19.17	19.27	19.37
#2 - 1:15:00	19.47	19.56	19.66	19.75	19.84
#2 - 1:20:00	19.93	20.02	20.11	20.20	20.29
#2 - 1:25:00	20.37	20.45	20.54	20.62	20.70
#2 - 1:30:00	20.78	20.86	20.94	21.02	21.10
#2 - 1:35:00	21.17	21.25	21.32	21.40	21.47
#2 - 1:40:00	21.54	21.61	21.69	21.76	21.83
#2 - 1:45:00	21.89	21.96	22.03	22.10	22.16
#2 - 1:50:00	22.23	22.30	22.36	22.42	22.49
#2 - 1:55:00	22.55	22.61	22.68	22.74	22.80
#2 - 2:00:00	22.86	22.92	22.98	23.04	23.09
#2 - 2:05:00	23.15	23.21	23.27	23.32	23.38
#2 - 2:10:00	23.44	23.49	23.55	23.60	23.65
#2 - 2:15:00	23.71	23.76	23.81	23.87	23.92
#2 - 2:20:00	23.97	24.02	24.07	24.12	24.17
#2 - 2:25:00	24.22	24.27	24.32	24.37	24.42
#2 - 2:30:00	24.47	24.52	24.56	24.61	24.66
#2 - 2:35:00	24.70	24.75	24.80	24.84	24.89
#2 - 2:40:00	24.93	24.98	25.02	25.07	25.11
#2 - 2:45:00	25.16	25.20	25.24	25.29	25.33

Projected TWA in Increments of 0:01:00 (h:m:s)

Dosimeter	+0 Incr.	+1 Incr.	+2 Incr.	+3 Incr.	+4 Incr.
#2 - 2:50:00	25.37	25.41	25.45	25.50	25.54
#2 - 2:55:00	25.58	25.62	25.66	25.70	25.74
#2 - 3:00:00	25.78	25.82	25.86	25.90	25.94
#2 - 3:05:00	25.98	26.02	26.06	26.10	26.13
#2 - 3:10:00	26.17	26.21	26.25	26.29	26.32
#2 - 3:15:00	26.36	26.40	26.43	26.47	26.51
#2 - 3:20:00	26.54	26.58	26.61	26.65	26.69
#2 - 3:25:00	26.72	26.76	26.79	26.83	26.86
#2 - 3:30:00	26.89	26.93	26.96	27.00	27.03
#2 - 3:35:00	27.06	27.10	27.13	27.16	27.20
#2 - 3:40:00	27.23	27.26	27.30	27.33	27.36
#2 - 3:45:00	27.39	27.42	27.46	27.49	27.52
#2 - 3:50:00	27.55	27.58	27.61	27.64	27.68
#2 - 3:55:00	27.71	27.74	27.77	27.80	27.83
#2 - 4:00:00	27.86	27.89	27.92	27.95	27.98
#2 - 4:05:00	28.01	28.04	28.07	28.09	28.12
#2 - 4:10:00	28.15	28.18	28.21	28.24	28.27
#2 - 4:15:00	28.30	28.32	28.35	28.38	28.41
#2 - 4:20:00	28.44	28.46	28.49	28.52	28.55
#2 - 4:25:00	28.57	28.60	28.63	28.65	28.68
#2 - 4:30:00	28.71	28.73	28.76	28.79	28.81
#2 - 4:35:00	28.84	28.87	28.89	28.92	28.94
#2 - 4:40:00	28.97	29.00	29.02	29.05	29.07
#2 - 4:45:00	29.10	29.12	29.15	29.17	29.20
#2 - 4:50:00	29.22	29.25	29.27	29.30	29.32
#2 - 4:55:00	29.35	29.37	29.40	29.42	29.44
#2 - 5:00:00	29.47	29.49	29.52	29.54	29.56
#2 - 5:05:00	29.59	29.61	29.63	29.66	29.68
#2 - 5:10:00	29.70	29.73	29.75	29.77	29.80
#2 - 5:15:00	29.82	29.84	29.87	29.89	29.91
#2 - 5:20:00	29.93	29.96	29.98	30.00	30.02
#2 - 5:25:00	30.04	30.07	30.09	30.11	30.13
#2 - 5:30:00	30.16	30.18	30.20	30.22	30.24
#2 - 5:35:00	30.26	30.29	30.31	30.33	30.35
#2 - 5:40:00	30.37	30.39	30.41	30.43	30.45
#2 - 5:45:00	30.48	30.50	30.52	30.54	30.56
#2 - 5:50:00	30.58	30.60	30.62	30.64	30.66
#2 - 5:55:00	30.68	30.70	30.72	30.74	30.76
#2 - 6:00:00	30.78	30.80	30.82	30.84	30.86
#2 - 6:05:00	30.88	30.90	30.92	30.94	30.96
#2 - 6:10:00	30.98	31.00	31.02	31.04	31.06
#2 - 6:15:00	31.08	31.10	31.12	31.13	31.15
#2 - 6:20:00	31.17	31.19	31.21	31.23	31.25
#2 - 6:25:00	31.27	31.29	31.30	31.32	31.34

Projected TWA in Increments of 0:01:00 (h:m:s)

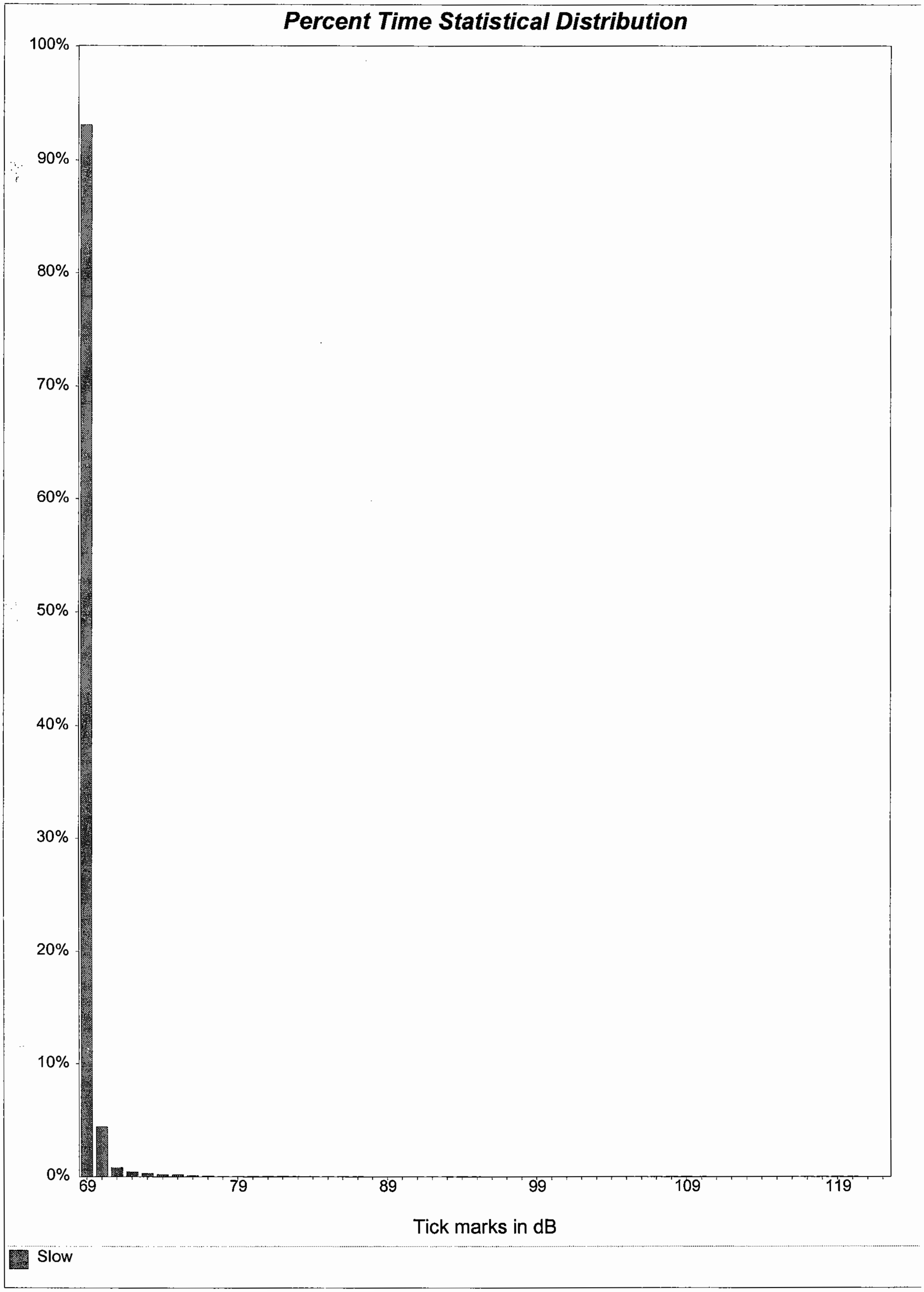
Dosimeter	+0 Incr.	+1 Incr.	+2 Incr.	+3 Incr.	+4 Incr.
#2 - 6:30:00	31.36	31.38	31.40	31.42	31.43
#2 - 6:35:00	31.45	31.47	31.49	31.51	31.52
#2 - 6:40:00	31.54	31.56	31.58	31.60	31.61
#2 - 6:45:00	31.63	31.65	31.67	31.69	31.70
#2 - 6:50:00	31.72	31.74	31.76	31.77	31.79
#2 - 6:55:00	31.81	31.83	31.84	31.86	31.88
#2 - 7:00:00	31.89	31.91	31.93	31.95	31.96
#2 - 7:05:00	31.98	32.00	32.01	32.03	32.05
#2 - 7:10:00	32.06	32.08	32.10	32.11	32.13
#2 - 7:15:00	32.15	32.16	32.18	32.20	32.21
#2 - 7:20:00	32.23	32.25	32.26	32.28	32.30
#2 - 7:25:00	32.31	32.33	32.34	32.36	32.38
#2 - 7:30:00	32.39	32.41	32.42	32.44	32.46
#2 - 7:35:00	32.47	32.49	32.50	32.52	32.54
#2 - 7:40:00	32.55	32.57	32.58	32.60	32.61
#2 - 7:45:00	32.63	32.64	32.66	32.68	32.69
#2 - 7:50:00	32.71	32.72	32.74	32.75	32.77
#2 - 7:55:00	32.78	32.80	32.81	32.83	32.84
#2 - 8:00:00	32.86				
#3 - 0:00:00		34.07	37.08	38.84	40.09
#3 - 0:05:00	41.06	41.85	42.52	43.10	43.61
#3 - 0:10:00	44.07	44.48	44.86	45.21	45.53
#3 - 0:15:00	45.83	46.11	46.38	46.62	46.86
#3 - 0:20:00	47.08	47.29	47.49	47.69	47.87
#3 - 0:25:00	48.05	48.22	48.38	48.54	48.69
#3 - 0:30:00	48.84	48.98	49.12	49.26	49.39
#3 - 0:35:00	49.51	49.63	49.75	49.87	49.98
#3 - 0:40:00	50.09	50.20	50.30	50.41	50.50
#3 - 0:45:00	50.60	50.70	50.79	50.88	50.97
#3 - 0:50:00	51.06	51.15	51.23	51.31	51.39
#3 - 0:55:00	51.47	51.55	51.63	51.70	51.78
#3 - 1:00:00	51.85	51.92	51.99	52.06	52.13
#3 - 1:05:00	52.20	52.27	52.33	52.40	52.46
#3 - 1:10:00	52.52	52.58	52.64	52.70	52.76
#3 - 1:15:00	52.82	52.88	52.94	52.99	53.05
#3 - 1:20:00	53.10	53.16	53.21	53.26	53.31
#3 - 1:25:00	53.36	53.42	53.47	53.51	53.56
#3 - 1:30:00	53.61	53.66	53.71	53.75	53.80
#3 - 1:35:00	53.85	53.89	53.94	53.98	54.03
#3 - 1:40:00	54.07	54.11	54.16	54.20	54.24
#3 - 1:45:00	54.28	54.32	54.36	54.40	54.44
#3 - 1:50:00	54.48	54.52	54.56	54.60	54.64
#3 - 1:55:00	54.68	54.71	54.75	54.79	54.83

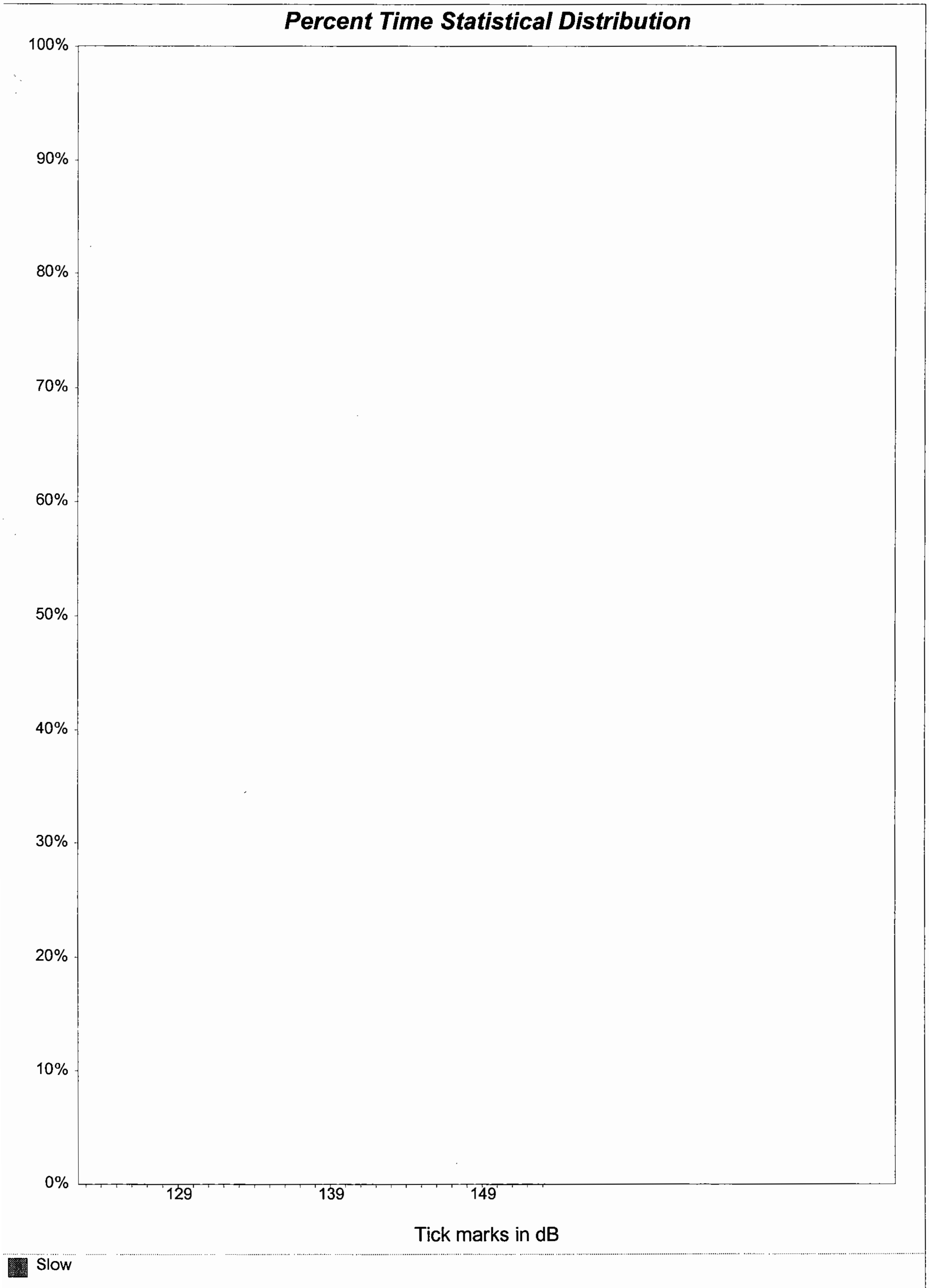
Projected TWA in Increments of 0:01:00 (h:m:s)

Dosimeter	+0 Incr.	+1 Incr.	+2 Incr.	+3 Incr.	+4 Incr.
#3 - 2:00:00	54.86	54.90	54.93	54.97	55.00
#3 - 2:05:00	55.04	55.07	55.11	55.14	55.18
#3 - 2:10:00	55.21	55.24	55.28	55.31	55.34
#3 - 2:15:00	55.37	55.41	55.44	55.47	55.50
#3 - 2:20:00	55.53	55.56	55.59	55.62	55.65
#3 - 2:25:00	55.68	55.71	55.74	55.77	55.80
#3 - 2:30:00	55.83	55.86	55.89	55.92	55.95
#3 - 2:35:00	55.97	56.00	56.03	56.06	56.08
#3 - 2:40:00	56.11	56.14	56.17	56.19	56.22
#3 - 2:45:00	56.24	56.27	56.30	56.32	56.35
#3 - 2:50:00	56.37	56.40	56.43	56.45	56.48
#3 - 2:55:00	56.50	56.52	56.55	56.57	56.60
#3 - 3:00:00	56.62	56.65	56.67	56.69	56.72
#3 - 3:05:00	56.74	56.76	56.79	56.81	56.83
#3 - 3:10:00	56.86	56.88	56.90	56.93	56.95
#3 - 3:15:00	56.97	56.99	57.01	57.04	57.06
#3 - 3:20:00	57.08	57.10	57.12	57.14	57.17
#3 - 3:25:00	57.19	57.21	57.23	57.25	57.27
#3 - 3:30:00	57.29	57.31	57.33	57.35	57.37
#3 - 3:35:00	57.39	57.41	57.43	57.45	57.47
#3 - 3:40:00	57.49	57.51	57.53	57.55	57.57
#3 - 3:45:00	57.59	57.61	57.63	57.65	57.67
#3 - 3:50:00	57.69	57.71	57.72	57.74	57.76
#3 - 3:55:00	57.78	57.80	57.82	57.84	57.85
#3 - 4:00:00	57.87	57.89	57.91	57.93	57.94
#3 - 4:05:00	57.96	57.98	58.00	58.01	58.03
#3 - 4:10:00	58.05	58.07	58.08	58.10	58.12
#3 - 4:15:00	58.14	58.15	58.17	58.19	58.20
#3 - 4:20:00	58.22	58.24	58.25	58.27	58.29
#3 - 4:25:00	58.30	58.32	58.33	58.35	58.37
#3 - 4:30:00	58.38	58.40	58.42	58.43	58.45
#3 - 4:35:00	58.46	58.48	58.49	58.51	58.53
#3 - 4:40:00	58.54	58.56	58.57	58.59	58.60
#3 - 4:45:00	58.62	58.63	58.65	58.66	58.68
#3 - 4:50:00	58.69	58.71	58.72	58.74	58.75
#3 - 4:55:00	58.77	58.78	58.80	58.81	58.83
#3 - 5:00:00	58.84	58.86	58.87	58.88	58.90
#3 - 5:05:00	58.91	58.93	58.94	58.96	58.97
#3 - 5:10:00	58.98	59.00	59.01	59.03	59.04
#3 - 5:15:00	59.05	59.07	59.08	59.09	59.11
#3 - 5:20:00	59.12	59.13	59.15	59.16	59.18
#3 - 5:25:00	59.19	59.20	59.22	59.23	59.24
#3 - 5:30:00	59.25	59.27	59.28	59.29	59.31
#3 - 5:35:00	59.32	59.33	59.35	59.36	59.37

Projected TWA in Increments of 0:01:00 (h:m:s)

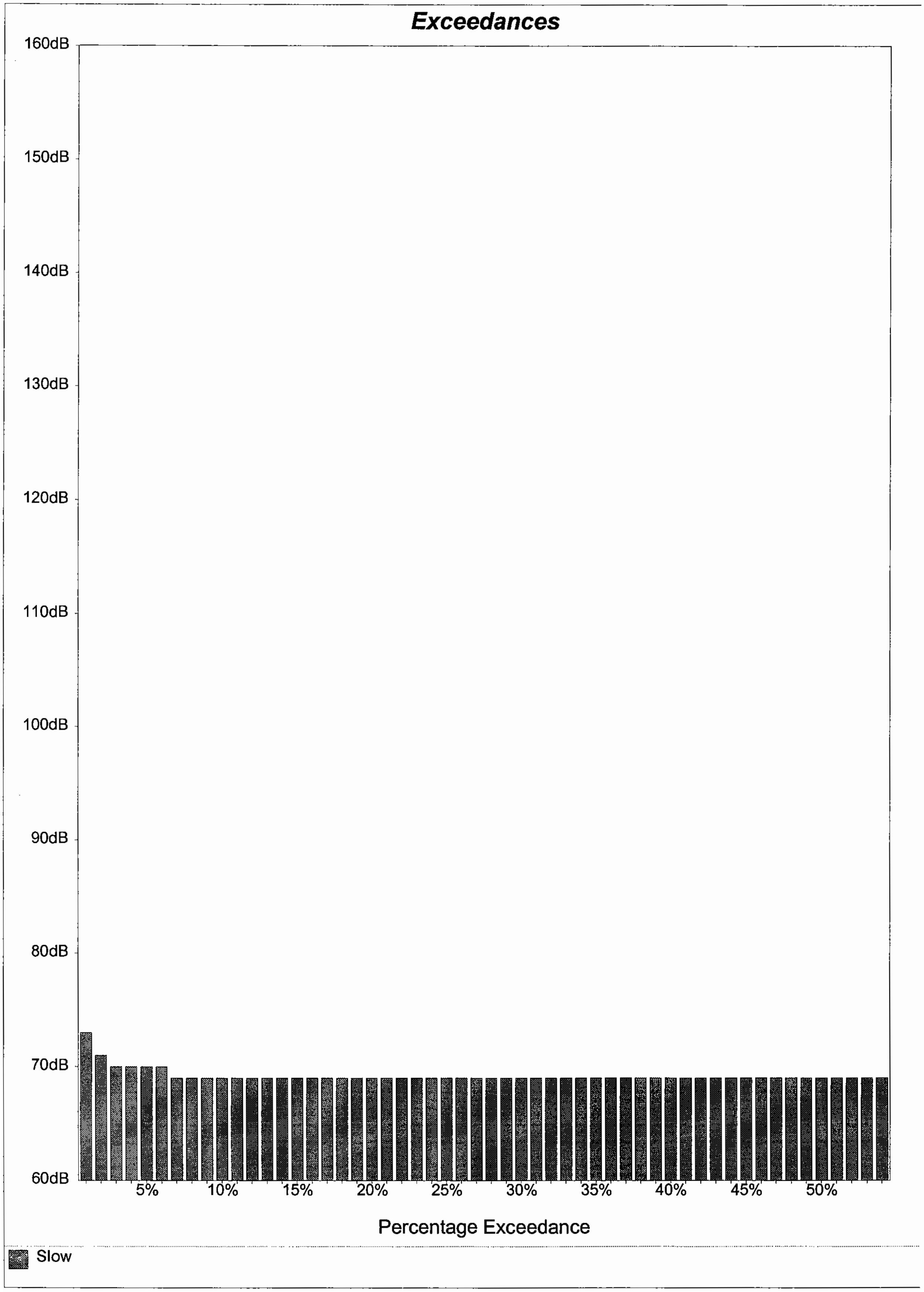
Dosimeter	+0 Incr.	+1 Incr.	+2 Incr.	+3 Incr.	+4 Incr.
#3 - 5:40:00	59.38	59.40	59.41	59.42	59.44
#3 - 5:45:00	59.45	59.46	59.47	59.49	59.50
#3 - 5:50:00	59.51	59.52	59.53	59.55	59.56
#3 - 5:55:00	59.57	59.58	59.60	59.61	59.62
#3 - 6:00:00	59.63	59.64	59.66	59.67	59.68
#3 - 6:05:00	59.69	59.70	59.72	59.73	59.74
#3 - 6:10:00	59.75	59.76	59.77	59.79	59.80
#3 - 6:15:00	59.81	59.82	59.83	59.84	59.86
#3 - 6:20:00	59.87	59.88	59.89	59.90	59.91
#3 - 6:25:00	59.92	59.94	59.95	59.96	59.97
#3 - 6:30:00	59.98	59.99	60.00	60.01	60.02
#3 - 6:35:00	60.04	60.05	60.06	60.07	60.08
#3 - 6:40:00	60.09	60.10	60.11	60.12	60.13
#3 - 6:45:00	60.14	60.15	60.17	60.18	60.19
#3 - 6:50:00	60.20	60.21	60.22	60.23	60.24
#3 - 6:55:00	60.25	60.26	60.27	60.28	60.29
#3 - 7:00:00	60.30	60.31	60.32	60.33	60.34
#3 - 7:05:00	60.35	60.36	60.37	60.38	60.39
#3 - 7:10:00	60.40	60.41	60.42	60.43	60.44
#3 - 7:15:00	60.45	60.46	60.47	60.48	60.49
#3 - 7:20:00	60.50	60.51	60.52	60.53	60.54
#3 - 7:25:00	60.55	60.56	60.57	60.58	60.59
#3 - 7:30:00	60.60	60.61	60.62	60.63	60.64
#3 - 7:35:00	60.65	60.66	60.67	60.68	60.69
#3 - 7:40:00	60.70	60.71	60.72	60.73	60.73
#3 - 7:45:00	60.74	60.75	60.76	60.77	60.78
#3 - 7:50:00	60.79	60.80	60.81	60.82	60.83
#3 - 7:55:00	60.84	60.85	60.85	60.86	60.87
#3 - 8:00:00	60.88				

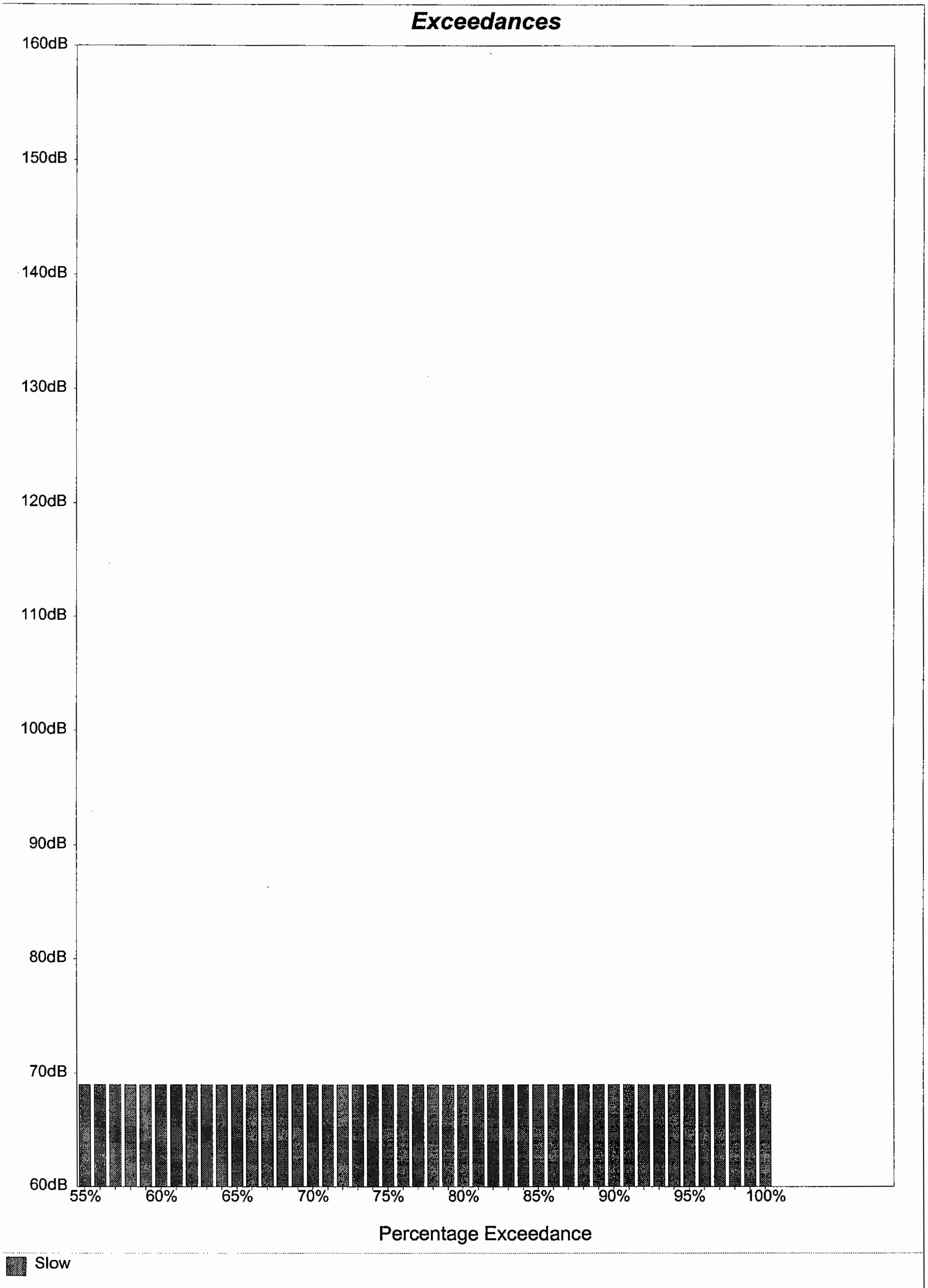

Percent Time Statistical Distribution
100%
90%
80%
70%
60%
50%
40%
30%
20%
10%
0%
69
79
89
99
109
119
Tick marks in dB
Slow


Percent Time Statistical Distribution
100%
90%
80%
70%
60%
50%
40%
30%
20%
10%
0%
129
139
149
Tick marks in dB
Slow

Percent Time Statistical Distribution

Dosimeter	0dB	1dB	2dB	3dB	4dB	5dB	6dB	7dB	8dB	9dB
Slow - 60dB										93.10
Slow - 70dB	4.43	0.81	0.42	0.28	0.21	0.18	0.12	0.09	0.06	0.05
Slow - 80dB	0.03	0.03	0.04	0.04	0.03	0.02	0.02	0.01	0.01	0.00
Slow - 90dB	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Slow - 100dB	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Slow - 110dB	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Slow - 120dB	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Slow - 130dB	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Slow - 140dB	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Slow - 150dB	0.00	0.00	0.00	0.00						


Exceedances
160dB
150dB
140dB
130dB
120dB
110dB
100dB
90dB
80dB
70dB
60dB
5%
10%
15%
20%
25%
30%
35%
40%
45%
50%
Percentage Exceedance
Slow



Exceedances
160dB
150dB
140dB
130dB
120dB
110dB
100dB
90dB
80dB
70dB
60dB
55%
60%
65%
70%
75%
80%
85%
90%
95%
100%
Percentage Exceedance
Slow

Exceedances

Dosimeter	0%	1%	2%	3%	4%	5%	6%	7%	8%	9%
Slow - 0%		73	71	70	70	70	70	69	69	69
Slow - 10%	69	69	69	69	69	69	69	69	69	69
Slow - 20%	69	69	69	69	69	69	69	69	69	69
Slow - 30%	69	69	69	69	69	69	69	69	69	69
Slow - 40%	69	69	69	69	69	69	69	69	69	69
Slow - 50%	69	69	69	69	69	69	69	69	69	69
Slow - 60%	69	69	69	69	69	69	69	69	69	69
Slow - 70%	69	69	69	69	69	69	69	69	69	69
Slow - 80%	69	69	69	69	69	69	69	69	69	69
Slow - 90%	69	69	69	69	69	69	69	69	69	69
Slow - 100%	69									

Logging Parameters

Model Number:	Q-300
Firmware:	2.60
Serial Number:	QC3010143
Meter Range:	70 - 140dB
Projected Period:	8:00

Parameters for Dosimeters 1 through 3

Weighting:	A	A	A
Threshold:	80dB	90dB	80dB
Exchange Rate:	5dB	5dB	3dB
Criterion:	90dB	90dB	85dB
Time Constant:	Slow	Slow	Slow
Upper Limit:	115dB	115dB	115dB
LDN:	Off		

Noise File Values

Run Time:	4:51:41		
Pause Time:	6:11:22		
Peak Level:	128.2dB 7/1/04 1:29:58 PM	128.2dB 7/1/04 1:29:58 PM	128.2dB 7/1/04 1:29:58 PM
Max Level:	98.7dB (Slow) 7/1/04 1:29:58 PM	98.7dB (Slow) 7/1/04 1:29:58 PM	98.7dB (Slow) 7/1/04 1:29:58 PM
Min Level:	69.9dB (Slow) 7/1/04 10:29:56 AM	69.9dB (Slow) 7/1/04 10:29:56 AM	69.9dB (Slow) 7/1/04 10:29:56 AM
LAVG:	42.6dB	32.9dB	60.9dB
TWA:	39.0dB	29.3dB	58.7dB
TWA [8:00]:	42.6dB	32.9dB	60.9dB
Dose:	0.08%	0.02%	0.24%
Dose [8]:	0.13%	0.03%	0.38%
Dose [8:00]:	0.13%	0.03%	0.38%
SEL (E/R):	113.0dB	103.3dB	103.3dB
UL Time:	0:00:00	0:00:00	0:00:00
Overload:	0.0%		
Pa2Sec:			8.5

Event #1 Logging Parameters

Model Number:	Q-300
Firmware:	2.60
Serial Number:	QC3010143
Start Time:	7/1/04 10:29:56 AM
Stop Time:	7/1/04 10:44:57 AM
Logging Interval:	0:01:00
Meter Range:	70 - 140dB
Projected Period:	8:00

Parameters for Dosimeters 1 through 3

Weighting:	A	A	A
Threshold:	80dB	90dB	80dB
Exchange Rate:	5dB	5dB	3dB
Criterion:	90dB	90dB	85dB
Time Constant:	Slow	Slow	Slow
Upper Limit:	115dB	115dB	115dB
LDN:	Off		

Event #1 with 1 Sample per Division

Time	LAVG #1	LAVG #2	LEQ #3	Slow MAX	Fast MAX	LPEAK	Comment (double click to edit)
10:29:56 AM	0.0	0.0	0.0	69.9	69.9	98.3	
10:30:56 AM	0.0	0.0	0.0	70.2	72.0	97.7	
10:31:56 AM	0.0	0.0	0.0	74.0	79.0	100.7	
10:32:56 AM	0.0	0.0	0.0	69.9	69.9	94.3	
10:33:56 AM	0.0	0.0	0.0	73.2	78.7	99.7	
10:34:56 AM	0.0	0.0	0.0	70.4	73.3	97.6	
10:35:56 AM	0.0	0.0	0.0	73.4	79.2	98.4	
10:36:56 AM	0.0	0.0	0.0	76.1	82.9	99.9	
10:37:56 AM	0.0	0.0	0.0	77.2	84.9	102.1	
10:38:56 AM	30.5	0.0	50.2 ✓	80.0 ✓	89.0	114.8 ✓	
10:39:56 AM	0.0	0.0	0.0	69.9	69.9	94.1	
10:40:56 AM	0.0	0.0	0.0	69.9	69.9	94.0	
10:41:56 AM	0.0	0.0	0.0	73.1	80.1	106.7	
10:42:56 AM	0.0	0.0	0.0	71.0	76.3	100.5	
10:43:56 AM	0.0	0.0	0.0	69.9	69.9	94.2	

Event #1 Values

Run Time:	0:15:00		
Peak Level:	114.8dB	114.8dB	114.8dB
	7/1/04 10:39:07 AM	7/1/04 10:39:07 AM	7/1/04 10:39:07 AM
Max Level:	80.0dB (Slow)	80.0dB (Slow)	80.0dB (Slow)
	7/1/04 10:39:07 AM	7/1/04 10:39:07 AM	7/1/04 10:39:07 AM
Min Level:	69.9dB (Slow)	69.9dB (Slow)	69.9dB (Slow)
	7/1/04 10:29:56 AM	7/1/04 10:29:56 AM	7/1/04 10:29:56 AM
LAVG:	10.8dB	0.0dB	38.3dB
TWA:	0.0dB	0.0dB	23.3dB
TWA [8:00]:	10.8dB	0.0dB	38.3dB
Dose:	0.00%	0.00%	0.00%
Dose [8]:	0.00%	0.00%	0.00%
Dose [8:00]:	0.00%	0.00%	0.00%
SEL (E/R):	59.9dB	0.0dB	67.9dB
Overload:	0.0%		
Pa2Sec:			0.0

Event #1 Comments:
Residential Area - Dalecarlia Reservoir

10:31 Airplane
10:32 Airplane
10:36 Airplane
10:37 Airplane
10:39 Airplane
10:41 Airplane
10:43 Truck
10:44 Insects

Event #2 Logging Parameters

Model Number:	Q-300
Firmware:	2.60
Serial Number:	QC3010143
Start Time:	7/1/04 11:00:01 AM
Stop Time:	7/1/04 11:15:15 AM
Logging Interval:	0:01:00
Meter Range:	70 - 140dB
Projected Period:	8:00

Parameters for Dosimeters 1 through 3

Weighting:	A	A	A
Threshold:	80dB	90dB	80dB
Exchange Rate:	5dB	5dB	3dB
Criterion:	90dB	90dB	85dB
Time Constant:	Slow	Slow	Slow
Upper Limit:	115dB	115dB	115dB
LDN:	Off		

Event #2 with 1 Sample per Division

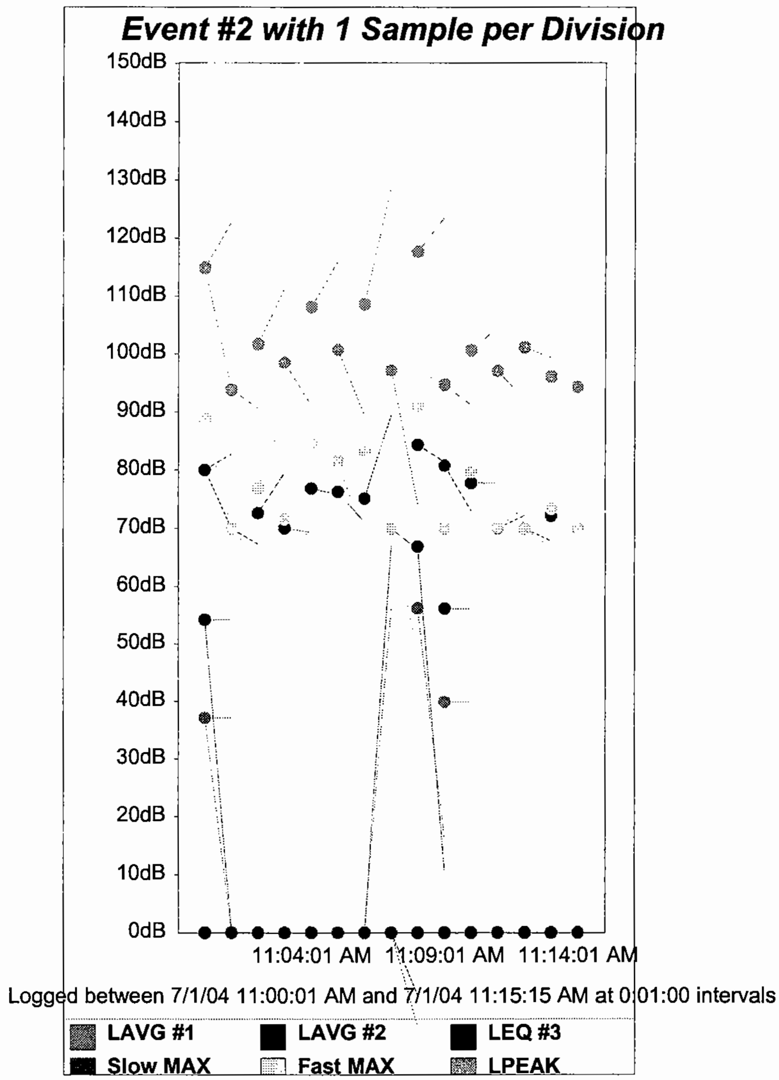
Time	LAVG #1	LAVG #2	LEQ #3	Slow MAX	Fast MAX	LPEAK	Comment (double click to edit)
11:00:01 AM	37.1	0.0	54.2	80.1	88.8	114.9	
11:01:01 AM	0.0	0.0	0.0	69.9	69.9	93.8	
11:02:01 AM	0.0	0.0	0.0	72.6	76.9	101.7	
11:03:01 AM	0.0	0.0	0.0	70.0	71.5	98.5	
11:04:01 AM	0.0	0.0	0.0	76.9	84.6	108.1	
11:05:01 AM	0.0	0.0	0.0	76.2	81.5	100.7	
11:06:01 AM	0.0	0.0	0.0	75.1	83.3	108.6	
11:07:01 AM	0.0	0.0	0.0	69.9	69.9	97.2	
11:08:01 AM	56.2	0.0	66.9	84.4 ✓	91.2	117.7 ✓	
11:09:01 AM	39.9	0.0	56.1	80.8	69.9	94.7	
11:10:01 AM	0.0	0.0	0.0	77.8	79.7	100.6	
11:11:01 AM	0.0	0.0	0.0	70.0	70.1	97.1	
11:12:01 AM	0.0	0.0	0.0	69.9	69.9	101.1	
11:13:01 AM	0.0	0.0	0.0	72.1	73.3	96.1	
11:14:01 AM	0.0	0.0	0.0	69.9	69.9	94.3	

Event #2 Values

Run Time:	0:15:13		
Peak Level:	117.7dB	117.7dB	117.7dB
	7/1/04 11:09:00 AM	7/1/04 11:09:00 AM	7/1/04 11:09:00 AM
Max Level:	84.4dB (Slow)	84.4dB (Slow)	84.4dB (Slow)
	7/1/04 11:09:00 AM	7/1/04 11:09:00 AM	7/1/04 11:09:00 AM
Min Level:	69.9dB (Slow)	69.9dB (Slow)	69.9dB (Slow)
	7/1/04 11:00:01 AM	7/1/04 11:00:01 AM	7/1/04 11:00:01 AM
LAVG:	37.7dB	0.0dB	55.6dB
TWA:	12.8dB	0.0dB	40.7dB
TWA [8:00]:	37.7dB	0.0dB	55.6dB
Dose:	0.00%	0.00%	0.00%
Dose [8]:	0.00%	0.00%	0.00%
Dose [8:00]:	0.00%	0.00%	0.00%
SEL (E/R):	86.9dB	0.0dB	85.2dB
Overload:	0.0%		
Pa2Sec:			0.1

Event #2 Comments:
Recreational Trail - Dalecarlia Reservoir

11:01 Airplane
11:05 Airplane
11:06 Airplane
11:08 Airplane
11:10 Airplane
11:11 Airplane
11:13 Airplane
11:14 Airplane



Event #2 with 1 Sample per Division
150dB
140dB
130dB
120dB
110dB
100dB
90dB
80dB
70dB
60dB
50dB
40dB
30dB
20dB
10dB
0dB
11:04:01 AM
11:09:01 AM
11:14:01 AM
Logged between 7/1/04 11:00:01 AM and 7/1/04 11:15:15 AM at 0:01:00 intervals
LAVG #1
LAVG #2
LEQ #3
Slow MAX
Fast MAX
LPEAK

Event #3 Logging Parameters

Model Number:	Q-300
Firmware:	2.60
Serial Number:	QC3010143
Start Time:	7/1/04 11:40:12 AM
Stop Time:	7/1/04 11:40:19 AM
Logging Interval:	0:01:00
Meter Range:	70 - 140dB
Projected Period:	8:00

Parameters for Dosimeters 1 through 3

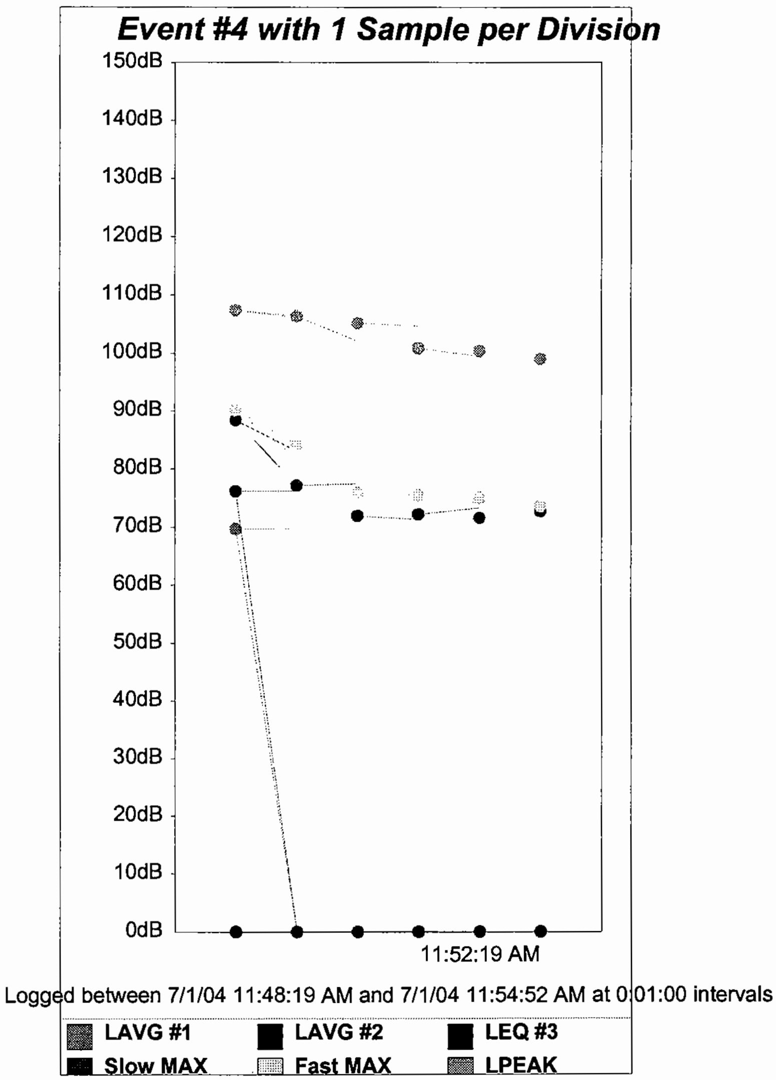
Weighting:	A	A	A
Threshold:	80dB	90dB	80dB
Exchange Rate:	5dB	5dB	3dB
Criterion:	90dB	90dB	85dB
Time Constant:	Slow	Slow	Slow
Upper Limit:	115dB	115dB	115dB
LDN:	Off		

Event #3 Values

Run Time:	0:00:06		
Peak Level:	105.8dB	105.8dB	105.8dB
	7/1/04 11:40:16 AM	7/1/04 11:40:16 AM	7/1/04 11:40:16 AM
Max Level:	78.9dB (Slow)	78.9dB (Slow)	78.9dB (Slow)
	7/1/04 11:40:15 AM	7/1/04 11:40:15 AM	7/1/04 11:40:15 AM
Min Level:	70.0dB (Slow)	70.0dB (Slow)	70.0dB (Slow)
	7/1/04 11:40:12 AM	7/1/04 11:40:12 AM	7/1/04 11:40:12 AM
LAVG:	0.0dB	0.0dB	0.0dB
TWA:	0.0dB	0.0dB	0.0dB
TWA [8:00]:	0.0dB	0.0dB	0.0dB
Dose:	0.00%	0.00%	0.00%
Dose [8]:	0.00%	0.00%	0.00%
Dose [8:00]:	0.00%	0.00%	0.00%
SEL (E/R):	0.0dB	0.0dB	0.0dB
Overload:	0.0%		
Pa2Sec:			0.0

Event #3 Comments:
Construction Zone - Little Falls Road

11:40 Truck (not loaded)


Event #4 with 1 Sample per Division
150dB
140dB
130dB
120dB
110dB
100dB
90dB
80dB
70dB
60dB
50dB
40dB
30dB
20dB
10dB
0dB
11:52:19 AM
Logged between 7/1/04 11:48:19 AM and 7/1/04 11:54:52 AM at 0:01:00 intervals
LAVG #1
LAVG #2
LEQ #3
Slow MAX
Fast MAX
LPEAK

Event #4 with 1 Sample per Division

Time	LAVG #1	LAVG #2	LEQ #3	Slow MAX	Fast MAX	LPEAK	Comment (double click to edit)
11:48:19 AM	69.7	0.0	76.2	88.4	90.2	107.4	
11:49:19 AM	0.0	0.0	0.0	77.2	84.2	106.4	
11:50:19 AM	0.0	0.0	0.0	71.9	76.0	105.2	
11:51:19 AM	0.0	0.0	0.0	72.2	75.5	100.9	
11:52:19 AM	0.0	0.0	0.0	71.6	75.0	100.4	
11:53:19 AM	0.0	0.0	0.0	72.7	73.6	99.0	

Event #4 Logging Parameters

Model Number:	Q-300
Firmware:	2.60
Serial Number:	QC3010143
Start Time:	7/1/04 11:48:19 AM
Stop Time:	7/1/04 11:54:52 AM
Logging Interval:	0:01:00
Meter Range:	70 - 140dB
Projected Period:	8:00

Parameters for Dosimeters 1 through 3

Weighting:	A	A	A
Threshold:	80dB	90dB	80dB
Exchange Rate:	5dB	5dB	3dB
Criterion:	90dB	90dB	85dB
Time Constant:	Slow	Slow	Slow
Upper Limit:	115dB	115dB	115dB
LDN:	Off		

Event #4 Values

Run Time:	0:06:32		
Peak Level:	107.4dB	107.4dB	107.4dB
	7/1/04 11:48:23 AM	7/1/04 11:48:23 AM	7/1/04 11:48:23 AM
Max Level:	88.4dB (Slow)	88.4dB (Slow)	88.4dB (Slow)
	7/1/04 11:48:23 AM	7/1/04 11:48:23 AM	7/1/04 11:48:23 AM
Min Level:	69.9dB (Slow)	69.9dB (Slow)	69.9dB (Slow)
	7/1/04 11:48:38 AM	7/1/04 11:48:38 AM	7/1/04 11:48:38 AM
LAVG:	56.3dB	0.0dB	68.1dB
TWA:	25.3dB	0.0dB	49.4dB
TWA [8:00]:	56.3dB	0.0dB	68.1dB
Dose:	0.01%	0.00%	0.03%
Dose [8]:	0.73%	0.00%	1.47%
Dose [8:00]:	0.73%	0.00%	1.47%
SEL (E/R):	99.4dB	0.0dB	94.0dB
Overload:	0.0%		
Pa2Sec:			1.0

Event #4 Comments:
Construction Zone - Little Falls Road

11:48 Excavator

Event #5 Logging Parameters

Model Number:	Q-300
Firmware:	2.60
Serial Number:	QC3010143
Start Time:	7/1/04 11:54:53 AM
Stop Time:	7/1/04 11:54:58 AM
Logging Interval:	0:01:00
Meter Range:	70 - 140dB
Projected Period:	8:00

Parameters for Dosimeters 1 through 3

Weighting:	A	A	A
Threshold:	80dB	90dB	80dB
Exchange Rate:	5dB	5dB	3dB
Criterion:	90dB	90dB	85dB
Time Constant:	Slow	Slow	Slow
Upper Limit:	115dB	115dB	115dB
LDN:	Off		

Event #5 Values

Run Time:	0:00:05		
Peak Level:	104.8dB 7/1/04 11:54:56 AM	104.8dB 7/1/04 11:54:56 AM	104.8dB 7/1/04 11:54:56 AM
Max Level:	83.7dB (Slow) 7/1/04 11:54:55 AM	83.7dB (Slow) 7/1/04 11:54:55 AM	83.7dB (Slow) 7/1/04 11:54:55 AM
Min Level:	76.3dB (Slow) 7/1/04 11:54:53 AM	76.3dB (Slow) 7/1/04 11:54:53 AM	76.3dB (Slow) 7/1/04 11:54:53 AM
LAVG:	79.5dB	0.0dB	80.8dB
TWA:	17.8dB	0.0dB	43.6dB
TWA [8:00]:	79.5dB	0.0dB	80.8dB
Dose:	0.00%	0.00%	0.01%
Dose [8]:	0.00%	0.00%	0.00%
Dose [8:00]:	0.00%	0.00%	0.00%
SEL (E/R):	91.9dB	0.0dB	88.2dB
Overload:	0.0%		
Pa2Sec:			0.3

Event #5 Comments:
Construction Zone - Little Falls Road

11:54 Truck

Event #6 Logging Parameters

Model Number:	Q-300
Firmware:	2.60
Serial Number:	QC3010143
Start Time:	7/1/04 11:58:27 AM
Stop Time:	7/1/04 11:58:38 AM
Logging Interval:	0:01:00
Meter Range:	70 - 140dB
Projected Period:	8:00

Parameters for Dosimeters 1 through 3

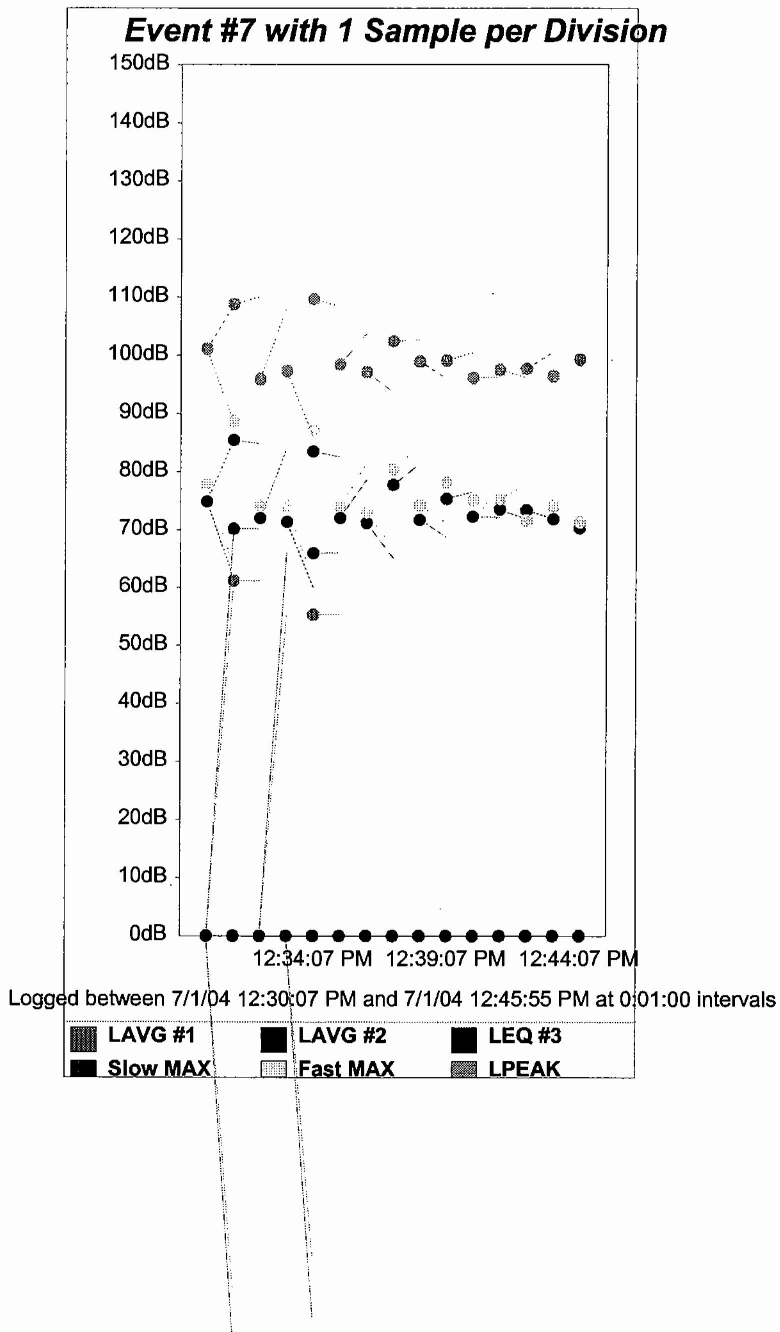
Weighting:	A	A	A
Threshold:	80dB	90dB	80dB
Exchange Rate:	5dB	5dB	3dB
Criterion:	90dB	90dB	85dB
Time Constant:	Slow	Slow	Slow
Upper Limit:	115dB	115dB	115dB
LDN:	Off		

Event #6 Values

Run Time:	0:00:11		
Peak Level:	107.7dB	107.7dB	107.7dB
	7/1/04 11:58:33 AM	7/1/04 11:58:33 AM	7/1/04 11:58:33 AM
Max Level:	87.1dB (Slow)	87.1dB (Slow)	87.1dB (Slow)
	7/1/04 11:58:33 AM	7/1/04 11:58:33 AM	7/1/04 11:58:33 AM
Min Level:	73.3dB (Slow)	73.3dB (Slow)	73.3dB (Slow)
	7/1/04 11:58:27 AM	7/1/04 11:58:27 AM	7/1/04 11:58:27 AM
LAVG:	81.0dB	0.0dB	82.5dB
TWA:	24.2dB	0.0dB	48.4dB
TWA [8:00]:	81.0dB	0.0dB	82.5dB
Dose:	0.01%	0.00%	0.02%
Dose [8]:	26.18%	0.00%	52.36%
Dose [8:00]:	26.18%	0.00%	52.36%
SEL (E/R):	98.3dB	0.0dB	93.0dB
Overload:	0.0%		
Pa2Sec:			0.8

Event #6 Comments:
Construction Zone - Little Falls Road

11:58 Garbage Truck



Event #7 with 1 Sample per Division
150dB
140dB
130dB
120dB
110dB
100dB
90dB
80dB
70dB
60dB
50dB
40dB
30dB
20dB
10dB
0dB
12:34:07 PM 12:39:07 PM 12:44:07 PM
Logged between 7/1/04 12:30:07 PM and 7/1/04 12:45:55 PM at 0:01:00 intervals
LAVG #1
LAVG #2
LEQ #3
Slow MAX
Fast MAX
LPEAK

Event #7 with 1 Sample per Division

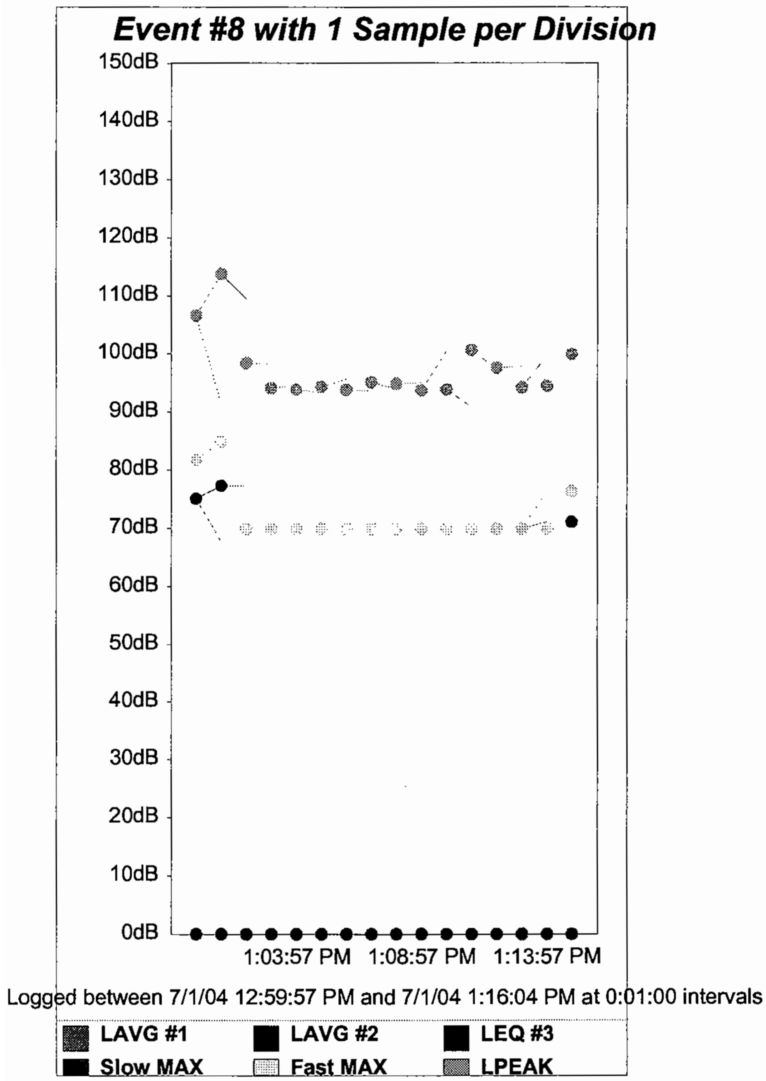
Time	LAVG #1	LAVG #2	LEQ #3	Slow MAX	Fast MAX	LPEAK	Comment (double click to edit)
12:30:07 PM	0.0	0.0	0.0	74.9	78.0	101.1	
12:31:07 PM	61.2	0.0	70.2	85.5 ✓	88.7	108.8	
12:32:07 PM	0.0	0.0	0.0	72.0	74.1	96.0	
12:33:07 PM	0.0	0.0	0.0	71.4	74.2	97.3	
12:34:07 PM	55.3	0.0	66.0	83.5	87.3	109.7 ✓	
12:35:07 PM	0.0	0.0	0.0	72.1	74.1	98.5	
12:36:07 PM	0.0	0.0	0.0	71.2	73.2	97.2	
12:37:07 PM	0.0	0.0	0.0	77.8	80.5	102.5	
12:38:07 PM	0.0	0.0	0.0	71.8	74.2	99.0	
12:39:07 PM	0.0	0.0	0.0	75.4	78.2	99.2	
12:40:07 PM	0.0	0.0	0.0	72.3	75.2	96.2	
12:41:07 PM	0.0	0.0	0.0	73.5	75.4	97.6	
12:42:07 PM	0.0	0.0	0.0	73.4	71.7	97.8	
12:43:07 PM	0.0	0.0	0.0	71.8	74.1	96.5	
12:44:07 PM	0.0	0.0	0.0	70.3	71.3	99.3	

Event #7 Values

Run Time:	0:15:47		
Peak Level:	109.7dB	109.7dB	109.7dB
	7/1/04 12:34:15 PM	7/1/04 12:34:15 PM	7/1/04 12:34:15 PM
Max Level:	85.5dB (Slow)	85.5dB (Slow)	85.5dB (Slow)
	7/1/04 12:31:26 PM	7/1/04 12:31:26 PM	7/1/04 12:31:26 PM
Min Level:	69.9dB (Slow)	69.9dB (Slow)	69.9dB (Slow)
	7/1/04 12:30:13 PM	7/1/04 12:30:13 PM	7/1/04 12:30:13 PM
LAVG:	43.9dB	0.0dB	59.6dB
TWA:	19.3dB	0.0dB	44.8dB
TWA [8:00]:	43.9dB	0.0dB	59.6dB
Dose:	0.01%	0.00%	0.01%
Dose [8]:	0.00%	0.00%	0.00%
Dose [8:00]:	0.00%	0.00%	0.00%
SEL (E/R):	93.4dB	0.0dB	89.4dB
Overload:	0.0%		
Pa2Sec:			0.3

Event #7 Comments:
Sibley Hospital - Dalecarlia Reservoir

12:30 Bus going down the hill
12:31 Bus going up
12:34 Passenger car / Truck going up
12:38 Small Truck & bike
12:39 Truck



Event #8 with 1 Sample per Division
150dB
140dB
130dB
120dB
110dB
100dB
90dB
80dB
70dB
60dB
50dB
40dB
30dB
20dB
10dB
0dB
1:03:57 PM
1:08:57 PM
1:13:57 PM
Logged between 7/1/04 12:59:57 PM and 7/1/04 1:16:04 PM at 0:01:00 intervals
LAVG #1
LAVG #2
LEQ #3
Slow MAX
Fast MAX
LPEAK

Event #8 with 1 Sample per Division

Time	LAVG #1	LAVG #2	LEQ #3	Slow MAX	Fast MAX	LPEAK	Comment (double click to edit)
12:59:57 PM	0.0	0.0	0.0	75.1	81.8	106.6	
1:00:57 PM	0.0	0.0	0.0	77.3	84.9	113.8	
1:01:57 PM	0.0	0.0	0.0	69.9	69.9	98.4	
1:02:57 PM	0.0	0.0	0.0	69.9	69.9	94.1	
1:03:57 PM	0.0	0.0	0.0	69.9	69.9	93.9	
1:04:57 PM	0.0	0.0	0.0	69.9	69.9	94.4	
1:05:57 PM	0.0	0.0	0.0	69.9	69.9	93.8	
1:06:57 PM	0.0	0.0	0.0	69.9	69.9	95.1	
1:07:57 PM	0.0	0.0	0.0	69.9	69.9	94.9	
1:08:57 PM	0.0	0.0	0.0	69.9	69.9	93.7	
1:09:57 PM	0.0	0.0	0.0	69.9	69.9	93.9	
1:10:57 PM	0.0	0.0	0.0	69.9	69.9	100.6	
1:11:57 PM	0.0	0.0	0.0	69.9	69.9	97.5	
1:12:57 PM	0.0	0.0	0.0	69.9	69.9	94.2	
1:13:57 PM	0.0	0.0	0.0	69.9	69.9	94.5	
1:14:57 PM	0.0	0.0	0.0	71.1	76.3	99.9	

Event #8 Logging Parameters

Model Number:	Q-300
Firmware:	2.60
Serial Number:	QC3010143
Start Time:	7/1/04 12:59:57 PM
Stop Time:	7/1/04 1:16:04 PM
Logging Interval:	0:01:00
Meter Range:	70 - 140dB
Projected Period:	8:00

Parameters for Dosimeters 1 through 3

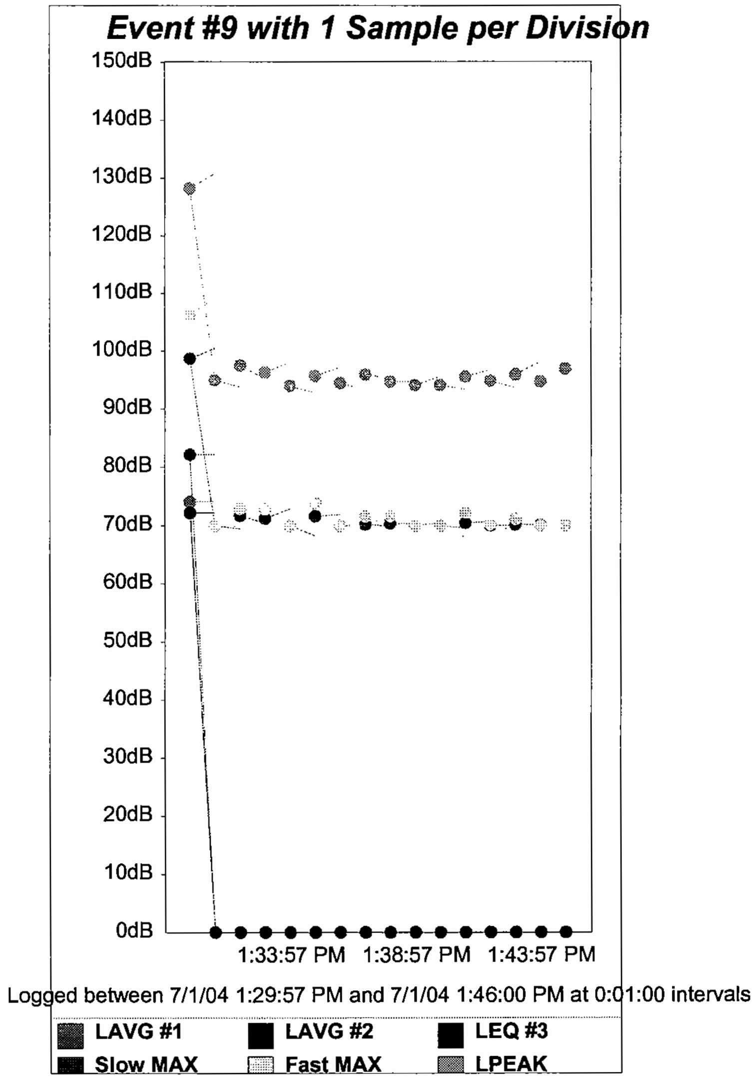
Weighting:	A	A	A
Threshold:	80dB	90dB	80dB
Exchange Rate:	5dB	5dB	3dB
Criterion:	90dB	90dB	85dB
Time Constant:	Slow	Slow	Slow
Upper Limit:	115dB	115dB	115dB
LDN:	Off		

Event #8 Values

Run Time:	0:16:07		
Peak Level:	113.8dB	113.8dB	113.8dB
	7/1/04 1:01:31 PM	7/1/04 1:01:31 PM	7/1/04 1:01:31 PM
Max Level:	77.3dB (Slow)	77.3dB (Slow)	77.3dB (Slow)
	7/1/04 1:01:26 PM	7/1/04 1:01:26 PM	7/1/04 1:01:26 PM
Min Level:	69.9dB (Slow)	69.9dB (Slow)	69.9dB (Slow)
	7/1/04 12:59:57 PM	7/1/04 12:59:57 PM	7/1/04 12:59:57 PM
LAVG:	0.0dB	0.0dB	0.0dB
TWA:	0.0dB	0.0dB	0.0dB
TWA [8:00]:	0.0dB	0.0dB	0.0dB
Dose:	0.00%	0.00%	0.00%
Dose [8]:	0.00%	0.00%	0.00%
Dose [8:00]:	0.00%	0.00%	0.00%
SEL (E/R):	0.0dB	0.0dB	0.0dB
Overload:	0.0%		
Pa2Sec:			0.0

Event #8 Comments:
Residential Area - Dalecarlia Reservoir

01:00 Airplane
01:04 Airplane
01:12 Airplane
01:14 Airplane



Event #9 with 1 Sample per Division
150dB
140dB
130dB
120dB
110dB
100dB
90dB
80dB
70dB
60dB
50dB
40dB
30dB
20dB
10dB
0dB
1:33:57 PM
1:38:57 PM
1:43:57 PM
Logged between 7/1/04 1:29:57 PM and 7/1/04 1:46:00 PM at 0:01:00 intervals
LAVG #1
LAVG #2
LEQ #3
Slow MAX
Fast MAX
LPEAK

Event #9 with 1 Sample per Division

Time	LAVG #1	LAVG #2	LEQ #3	Slow MAX	Fast MAX	LPEAK	Comment (double click to edit)
1:29:57 PM	74.1	72.2	82.2	98.7	106.3	128.2 X	mike hit w/ hand
1:30:57 PM	0.0	0.0	0.0	69.9	69.9	95.0	
1:31:57 PM	0.0	0.0	0.0	71.7	72.9	97.5	
1:32:57 PM	0.0	0.0	0.0	71.2	72.8	96.3	
1:33:57 PM	0.0	0.0	0.0	69.9	69.9	94.0	
1:34:57 PM	0.0	0.0	0.0	71.6	73.9	95.7	
1:35:57 PM	0.0	0.0	0.0	69.9	69.9	94.5	
1:36:57 PM	0.0	0.0	0.0	70.2	71.5	95.9	
1:37:57 PM	0.0	0.0	0.0	70.3	71.6	94.7	
1:38:57 PM	0.0	0.0	0.0	69.9	69.9	94.1	
1:39:57 PM	0.0	0.0	0.0	69.9	69.9	94.1	
1:40:57 PM	0.0	0.0	0.0	70.4	72.2	95.6	
1:41:57 PM	0.0	0.0	0.0	70.0	70.1	94.8	
1:42:57 PM	0.0	0.0	0.0	70.1	71.0	95.9	
1:43:57 PM	0.0	0.0	0.0	70.0	69.9	94.7	
1:44:57 PM	0.0	0.0	0.0	69.9	69.9	96.9	

Event #9 Logging Parameters

Model Number:	Q-300
Firmware:	2.60
Serial Number:	QC3010143
Start Time:	7/1/04 1:29:57 PM
Stop Time:	7/1/04 1:46:00 PM
Logging Interval:	0:01:00
Meter Range:	70 - 140dB
Projected Period:	8:00

Parameters for Dosimeters 1 through 3

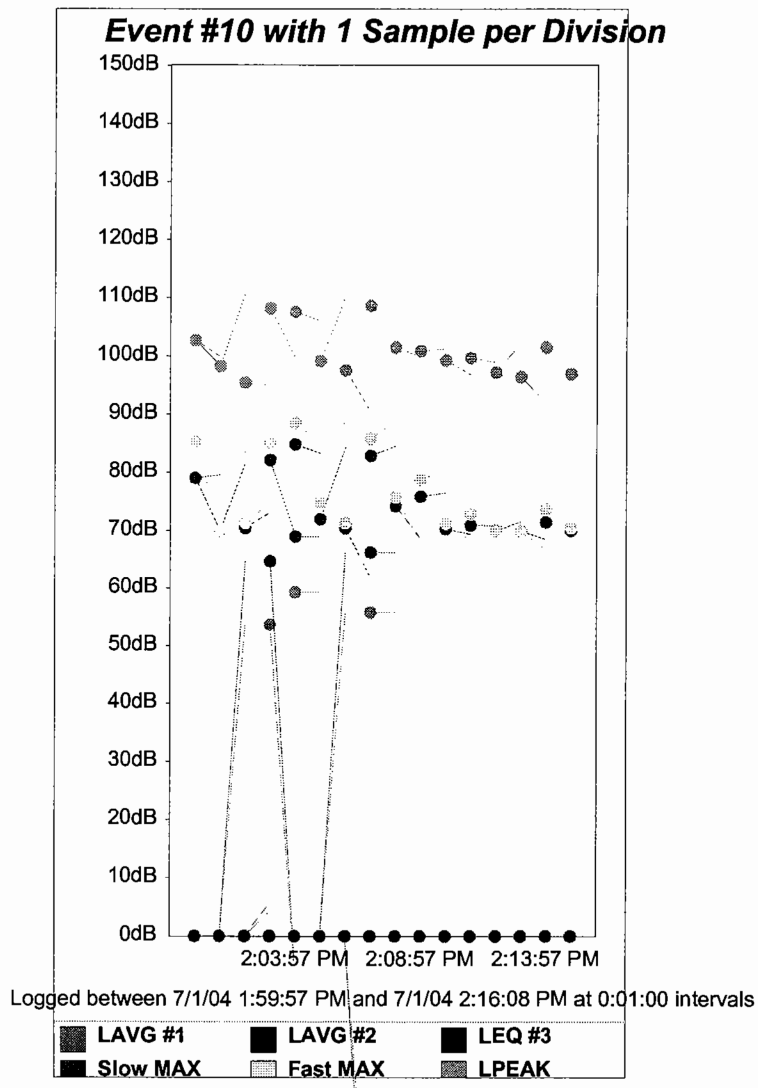
Weighting:	A	A	A
Threshold:	80dB	90dB	80dB
Exchange Rate:	5dB	5dB	3dB
Criterion:	90dB	90dB	85dB
Time Constant:	Slow	Slow	Slow
Upper Limit:	115dB	115dB	115dB
LDN:	Off		

Event #9 Values

Run Time:	0:16:02		
Peak Level:	128.2dB	128.2dB	128.2dB
	7/1/04 1:29:58 PM	7/1/04 1:29:58 PM	7/1/04 1:29:58 PM
Max Level:	98.7dB (Slow)	98.7dB (Slow)	98.7dB (Slow)
	7/1/04 1:29:58 PM	7/1/04 1:29:58 PM	7/1/04 1:29:58 PM
Min Level:	69.9dB (Slow)	69.9dB (Slow)	69.9dB (Slow)
	7/1/04 1:29:57 PM	7/1/04 1:29:57 PM	7/1/04 1:29:57 PM
LAVG:	54.1dB	52.2dB	70.1dB
TWA:	29.6dB	27.7dB	55.4dB
TWA [8:00]:	54.1dB	52.2dB	70.1dB
Dose:	0.02%	0.02%	0.11%
Dose [8]:	0.60%	0.30%	2.99%
Dose [8:00]:	0.60%	0.30%	2.99%
SEL (E/R):	103.7dB	101.8dB	100.0dB
Overload:	0.0%		
Pa2Sec:			4.0

Event #9 Comments:
Recreational Area - Dalecarlia Reservoir

01:30 The mike was accidentally hit by hand
01:32 Helicopter
01:33 Airplane
01:35 Airplane
01:38 Airplane
01:41 Airplane
01:42 Airplane


Event #10 with 1 Sample per Division
150dB
140dB
130dB
120dB
110dB
100dB
90dB
80dB
70dB
60dB
50dB
40dB
30dB
20dB
10dB
0dB
2:03:57 PM
2:08:57 PM
2:13:57 PM
Logged between 7/1/04 1:59:57 PM and 7/1/04 2:16:08 PM at 0:01:00 intervals
LAVG #1
LAVG #2
LEQ #3
Slow MAX
Fast MAX
LPEAK

Event #10 with 1 Sample per Division

Time	LAVG #1	LAVG #2	LEQ #3	Slow MAX	Fast MAX	LPEAK	Comment (double click to edit)
1:59:57 PM	0.0	0.0	0.0	79.1	85.2	102.7	
2:00:57 PM	0.0	0.0	0.0	69.9	69.9	98.3	
2:01:57 PM	0.0	0.0	0.0	70.4	71.3	95.5	
2:02:57 PM	53.7	0.0	64.7	82.1	85.1	108.1	
2:03:57 PM	59.3	0.0	68.9	84.8	88.5	107.6	
2:04:57 PM	0.0	0.0	0.0	71.9	74.9	99.2	
2:05:57 PM	0.0	0.0	0.0	70.4	71.3	97.6	
2:06:57 PM	55.8	0.0	66.2	82.9	85.8	108.6	
2:07:57 PM	0.0	0.0	0.0	74.2	75.8	101.5	
2:08:57 PM	0.0	0.0	0.0	75.9	78.8	100.9	
2:09:57 PM	0.0	0.0	0.0	70.3	71.2	99.3	
2:10:57 PM	0.0	0.0	0.0	70.9	72.8	99.7	
2:11:57 PM	0.0	0.0	0.0	70.0	69.9	97.2	
2:12:57 PM	0.0	0.0	0.0	69.9	69.9	96.4	
2:13:57 PM	0.0	0.0	0.0	71.4	73.7	101.5	
2:14:57 PM	0.0	0.0	0.0	70.0	70.4	96.9	

Event #10 Logging Parameters

Model Number:	Q-300
Firmware:	2.60
Serial Number:	QC3010143
Start Time:	7/1/04 1:59:57 PM
Stop Time:	7/1/04 2:16:08 PM
Logging Interval:	0:01:00
Meter Range:	70 - 140dB
Projected Period:	8:00

Parameters for Dosimeters 1 through 3

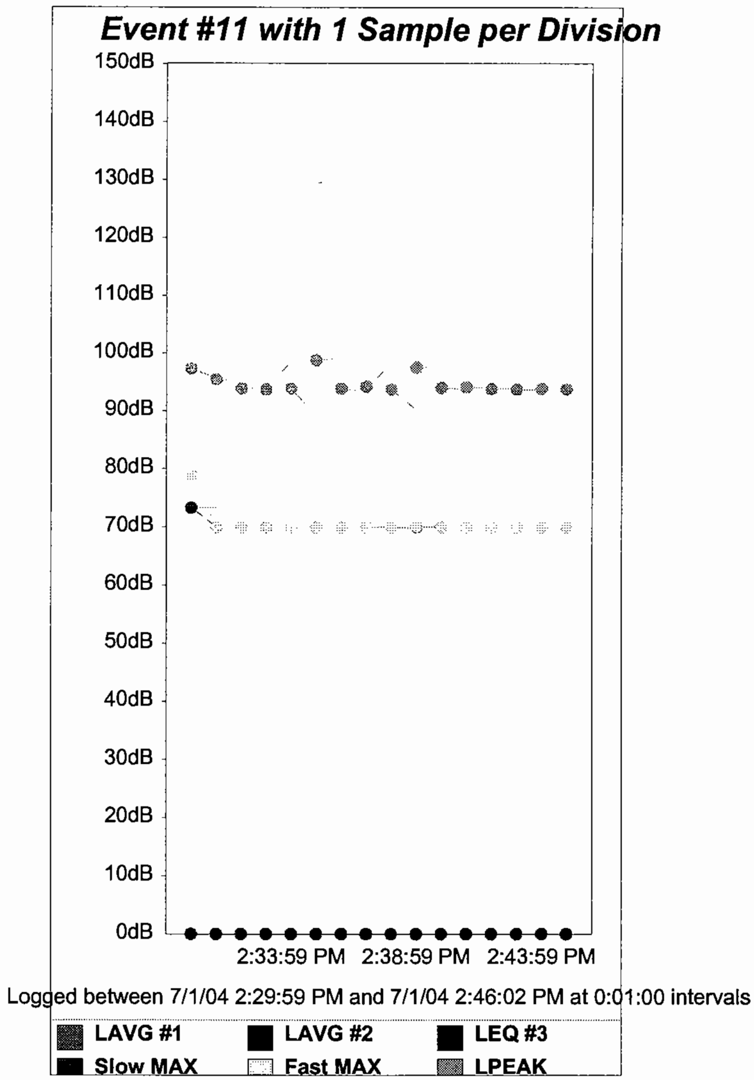
Weighting:	A	A	A
Threshold:	80dB	90dB	80dB
Exchange Rate:	5dB	5dB	3dB
Criterion:	90dB	90dB	85dB
Time Constant:	Slow	Slow	Slow
Upper Limit:	115dB	115dB	115dB
LDN:	Off		

Event #10 Values

Run Time:	0:16:11		
Peak Level:	108.6dB	108.6dB	108.6dB
	7/1/04 2:07:19 PM	7/1/04 2:07:19 PM	7/1/04 2:07:19 PM
Max Level:	84.8dB (Slow)	84.8dB (Slow)	84.8dB (Slow)
	7/1/04 2:04:45 PM	7/1/04 2:04:45 PM	7/1/04 2:04:45 PM
Min Level:	69.9dB (Slow)	69.9dB (Slow)	69.9dB (Slow)
	7/1/04 2:00:00 PM	7/1/04 2:00:00 PM	7/1/04 2:00:00 PM
LAVG:	44.5dB	0.0dB	59.6dB
TWA:	20.1dB	0.0dB	44.9dB
TWA [8:00]:	44.5dB	0.0dB	59.6dB
Dose:	0.01%	0.00%	0.01%
Dose [8]:	0.00%	0.00%	0.00%
Dose [8:00]:	0.00%	0.00%	0.00%
SEL (E/R):	94.1dB	0.0dB	89.5dB
Overload:	0.0%		
Pa2Sec:			0.4

Event #10 Comments:
Sibley Hospital - Dalecarlia Reservoir

02:00 Airplane
02:03 School Bus
02:03 Truck
02:04 Bus
02:07 Bus
02:08 FedEx small Truck
02:09 Car



Event #11 with 1 Sample per Division
150dB
140dB
130dB
120dB
110dB
100dB
90dB
80dB
70dB
60dB
50dB
40dB
30dB
20dB
10dB
0dB
2:33:59 PM
2:38:59 PM
2:43:59 PM
Logged between 7/1/04 2:29:59 PM and 7/1/04 2:46:02 PM at 0:01:00 intervals
LAVG #1
LAVG #2
LEQ #3
Slow MAX
Fast MAX
LPEAK

Event #11 with 1 Sample per Division

Time	LAVG #1	LAVG #2	LEQ #3	Slow MAX	Fast MAX	LPEAK	Comment (double click to edit)
2:29:59 PM	0.0	0.0	0.0	73.3	79.0	97.3	airplane
2:30:59 PM	0.0	0.0	0.0	69.9	69.9	95.4	
2:31:59 PM	0.0	0.0	0.0	69.9	69.9	93.9	
2:32:59 PM	0.0	0.0	0.0	69.9	69.9	93.7	
2:33:59 PM	0.0	0.0	0.0	69.9	69.9	93.9	
2:34:59 PM	0.0	0.0	0.0	69.9	69.9	98.8	airplane
2:35:59 PM	0.0	0.0	0.0	69.9	69.9	93.9	
2:36:59 PM	0.0	0.0	0.0	69.9	69.9	94.2	
2:37:59 PM	0.0	0.0	0.0	69.9	69.9	93.7	
2:38:59 PM	0.0	0.0	0.0	70.0	70.1	97.5	
2:39:59 PM	0.0	0.0	0.0	69.9	69.9	94.0	
2:40:59 PM	0.0	0.0	0.0	69.9	69.9	94.1	
2:41:59 PM	0.0	0.0	0.0	69.9	69.9	93.8	
2:42:59 PM	0.0	0.0	0.0	69.9	69.9	93.7	
2:43:59 PM	0.0	0.0	0.0	69.9	69.9	93.8	
2:44:59 PM	0.0	0.0	0.0	69.9	69.9	93.7	

Event #11 Logging Parameters

Model Number:	Q-300
Firmware:	2.60
Serial Number:	QC3010143
Start Time:	7/1/04 2:29:59 PM
Stop Time:	7/1/04 2:46:02 PM
Logging Interval:	0:01:00
Meter Range:	70 - 140dB
Projected Period:	8:00

Parameters for Dosimeters 1 through 3

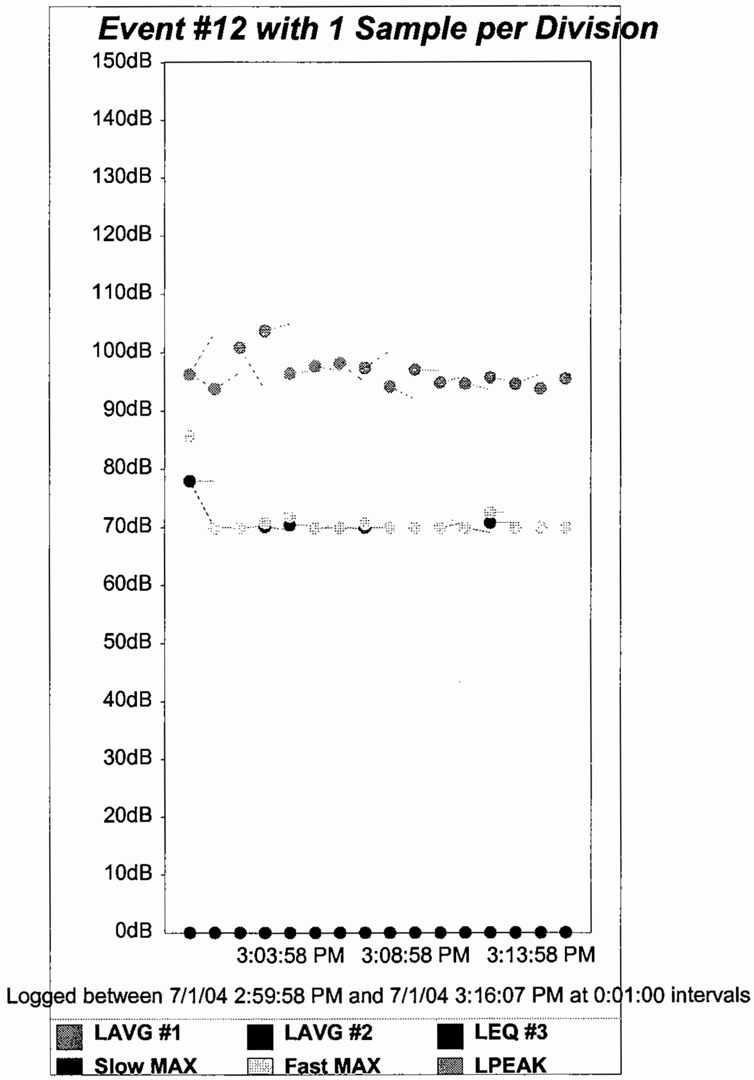
Weighting:	A	A	A
Threshold:	80dB	90dB	80dB
Exchange Rate:	5dB	5dB	3dB
Criterion:	90dB	90dB	85dB
Time Constant:	Slow	Slow	Slow
Upper Limit:	115dB	115dB	115dB
LDN:	Off		

Event #11 Values

Run Time:	0:16:03		
Peak Level:	98.8dB 7/1/04 2:35:39 PM	98.8dB 7/1/04 2:35:39 PM	98.8dB 7/1/04 2:35:39 PM
Max Level:	73.3dB (Slow) 7/1/04 2:30:06 PM	73.3dB (Slow) 7/1/04 2:30:06 PM	73.3dB (Slow) 7/1/04 2:30:06 PM
Min Level:	69.9dB (Slow) 7/1/04 2:29:59 PM	69.9dB (Slow) 7/1/04 2:29:59 PM	69.9dB (Slow) 7/1/04 2:29:59 PM
LAVG:	0.0dB	0.0dB	0.0dB
TWA:	0.0dB	0.0dB	0.0dB
TWA [8:00]:	0.0dB	0.0dB	0.0dB
Dose:	0.00%	0.00%	0.00%
Dose [8]:	0.00%	0.00%	0.00%
Dose [8:00]:	0.00%	0.00%	0.00%
SEL (E/R):	0.0dB	0.0dB	0.0dB
Overload:	0.0%		
Pa2Sec:			0.0

Event #11 Comments:
Residential Area - Dalecarlia Reservoir

02:31 Airplane
02:36 Airplane
02:41 Airplane



Event #12 with 1 Sample per Division
150dB
140dB
130dB
120dB
110dB
100dB
90dB
80dB
70dB
60dB
50dB
40dB
30dB
20dB
10dB
0dB
3:03:58 PM
3:08:58 PM
3:13:58 PM
Logged between 7/1/04 2:59:58 PM and 7/1/04 3:16:07 PM at 0:01:00 intervals
LAVG #1
LAVG #2
LEQ #3
Slow MAX
Fast MAX
LPEAK

Event #12 with 1 Sample per Division

Time	LAVG #1	LAVG #2	LEQ #3	Slow MAX	Fast MAX	LPEAK	Comment (double click to edit)
2:59:58 PM	0.0	0.0	0.0	78.0	85.7	96.3	
3:00:58 PM	0.0	0.0	0.0	69.9	69.9	93.8	
3:01:58 PM	0.0	0.0	0.0	69.9	69.9	100.9	
3:02:58 PM	0.0	0.0	0.0	70.1	70.8	103.7	Airplane
3:03:58 PM	0.0	0.0	0.0	70.4	71.9	96.5	
3:04:58 PM	0.0	0.0	0.0	69.9	69.9	97.7	
3:05:58 PM	0.0	0.0	0.0	69.9	69.9	98.2	
3:06:58 PM	0.0	0.0	0.0	70.0	70.6	97.4	
3:07:58 PM	0.0	0.0	0.0	69.9	69.9	94.2	
3:08:58 PM	0.0	0.0	0.0	69.9	69.9	97.1	
3:09:58 PM	0.0	0.0	0.0	69.9	69.9	94.9	
3:10:58 PM	0.0	0.0	0.0	69.9	69.9	94.7	
3:11:58 PM	0.0	0.0	0.0	70.8	72.5	95.7	
3:12:58 PM	0.0	0.0	0.0	69.9	69.9	94.6	
3:13:58 PM	0.0	0.0	0.0	69.9	69.9	93.8	
3:14:58 PM	0.0	0.0	0.0	69.9	69.9	95.5	

Event #12 Logging Parameters

Model Number:	Q-300
Firmware:	2.60
Serial Number:	QC3010143
Start Time:	7/1/04 2:59:58 PM
Stop Time:	7/1/04 3:16:07 PM
Logging Interval:	0:01:00
Meter Range:	70 - 140dB
Projected Period:	8:00

Parameters for Dosimeters 1 through 3

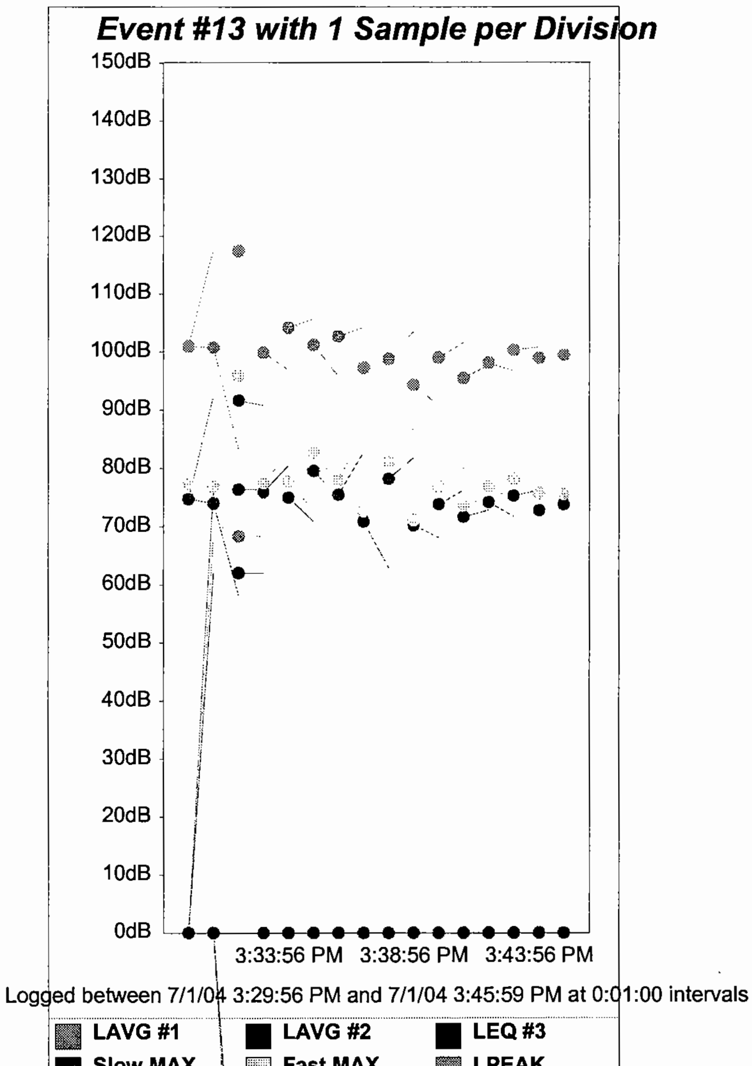
Weighting:	A	A	A
Threshold:	80dB	90dB	80dB
Exchange Rate:	5dB	5dB	3dB
Criterion:	90dB	90dB	85dB
Time Constant:	Slow	Slow	Slow
Upper Limit:	115dB	115dB	115dB
LDN:	Off		

Event #12 Values

Run Time:	0:16:08		
Peak Level:	103.7dB 7/1/04 3:03:42 PM	103.7dB 7/1/04 3:03:42 PM	103.7dB 7/1/04 3:03:42 PM
Max Level:	78.0dB (Slow) 7/1/04 2:59:58 PM	78.0dB (Slow) 7/1/04 2:59:58 PM	78.0dB (Slow) 7/1/04 2:59:58 PM
Min Level:	69.9dB (Slow) 7/1/04 3:00:04 PM	69.9dB (Slow) 7/1/04 3:00:04 PM	69.9dB (Slow) 7/1/04 3:00:04 PM
LAVG:	0.0dB	0.0dB	0.0dB
TWA:	0.0dB	0.0dB	0.0dB
TWA [8:00]:	0.0dB	0.0dB	0.0dB
Dose:	0.00%	0.00%	0.00%
Dose [8]:	0.00%	0.00%	0.00%
Dose [8:00]:	0.00%	0.00%	0.00%
SEL (E/R):	0.0dB	0.0dB	0.0dB
Overload:	0.0%		
Pa2Sec:			0.0

Event #12 Comments:
Recreational Trail - Dalecarlia Reservoir

03:04 Airplane
03:07 Airplane
03:12 Airplane


Event #13 with 1 Sample per Division
150dB
140dB
130dB
120dB
110dB
100dB
90dB
80dB
70dB
60dB
50dB
40dB
30dB
20dB
10dB
0dB
3:33:56 PM
3:38:56 PM
3:43:56 PM
Logged between 7/1/04 3:29:56 PM and 7/1/04 3:45:59 PM at 0:01:00 intervals
LAVG #1
LAVG #2
LEQ #3
Slow MAX
Fast MAX
LPEAK

Event #13 with 1 Sample per Division

Time	LAVG #1	LAVG #2	LEQ #3	Slow MAX	Fast MAX	LPEAK	Comment (double click to edit)
3:29:56 PM	0.0	0.0	0.0	74.7	77.3	101.0	
3:30:56 PM	0.0	0.0	0.0	74.0	76.8	100.8	Passenger Car & Truck
3:31:56 PM	68.3	62.0	76.4	91.7	96.0	117.4	Motor bike Passenger Car & Truck
3:32:56 PM	0.0	0.0	0.0	75.9	77.5	99.9	
3:33:56 PM	0.0	0.0	0.0	75.0	77.7	104.2	Passenger Car & bike
3:34:56 PM	0.0	0.0	0.0	79.6	82.8	101.2	
3:35:56 PM	0.0	0.0	0.0	75.5	78.0	102.7	
3:36:56 PM	0.0	0.0	0.0	70.9	72.7	97.3	
3:37:56 PM	0.0	0.0	0.0	78.2	81.1	98.8	
3:38:56 PM	0.0	0.0	0.0	70.2	71.1	94.3	
3:39:56 PM	0.0	0.0	0.0	73.8	76.8	99.0	
3:40:56 PM	0.0	0.0	0.0	71.7	73.6	95.5	
3:41:56 PM	0.0	0.0	0.0	74.1	76.8	98.1	
3:42:56 PM	0.0	0.0	0.0	75.2	78.1	100.3	
3:43:56 PM	0.0	0.0	0.0	72.8	75.7	98.9	
3:44:56 PM	0.0	0.0	0.0	73.8	75.5	99.4	

Event #13 Logging Parameters

Model Number:	Q-300
Firmware:	2.60
Serial Number:	QC3010143
Start Time:	7/1/04 3:29:56 PM
Stop Time:	7/1/04 3:45:59 PM
Logging Interval:	0:01:00
Meter Range:	70 - 140dB
Projected Period:	8:00

Parameters for Dosimeters 1 through 3

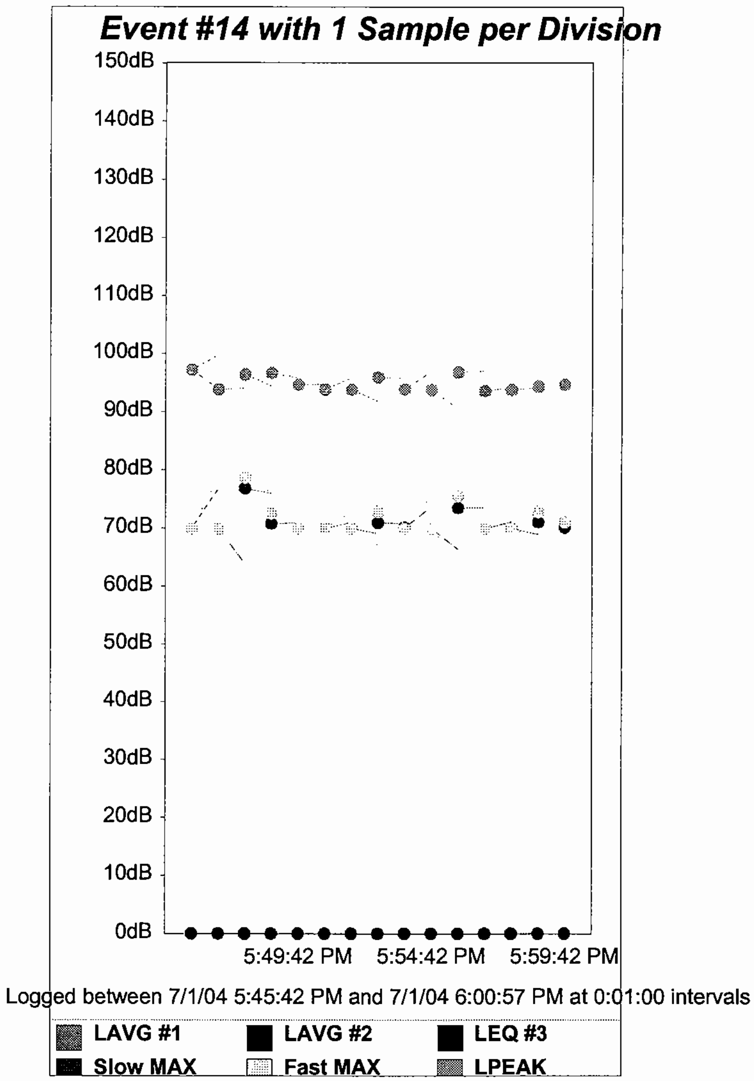
Weighting:	A	A	A
Threshold:	80dB	90dB	80dB
Exchange Rate:	5dB	5dB	3dB
Criterion:	90dB	90dB	85dB
Time Constant:	Slow	Slow	Slow
Upper Limit:	115dB	115dB	115dB
LDN:	Off		

Event #13 Values

Run Time:	0:16:02		
Peak Level:	117.4dB	117.4dB	117.4dB
	7/1/04 3:32:15 PM	7/1/04 3:32:15 PM	7/1/04 3:32:15 PM
Max Level:	91.7dB (Slow)	91.7dB (Slow)	91.7dB (Slow)
	7/1/04 3:32:14 PM	7/1/04 3:32:14 PM	7/1/04 3:32:14 PM
Min Level:	69.9dB (Slow)	69.9dB (Slow)	69.9dB (Slow)
	7/1/04 3:29:56 PM	7/1/04 3:29:56 PM	7/1/04 3:29:56 PM
LAVG:	48.3dB	42.0dB	64.4dB
TWA:	23.8dB	17.5dB	49.6dB
TWA [8:00]:	48.3dB	42.0dB	64.4dB
Dose:	0.01%	0.00%	0.03%
Dose [8]:	0.30%	0.00%	0.60%
Dose [8:00]:	0.30%	0.00%	0.60%
SEL (E/R):	97.8dB	91.5dB	94.2dB
Overload:	0.0%		
Pa2Sec:			1.0

Event #13 Comments:
Sibley Hospital - Dalecarlia Reservoir

03:31 Passenger car & Truck
03:32 Motor bike
03:34 Passenger car & Truck
03:35 Truck
03:38 Passenger car & Truck
03:47 Airplane



Event #14 with 1 Sample per Division
150dB
140dB
130dB
120dB
110dB
100dB
90dB
80dB
70dB
60dB
50dB
40dB
30dB
20dB
10dB
0dB
5:49:42 PM
5:54:42 PM
5:59:42 PM
Logged between 7/1/04 5:45:42 PM and 7/1/04 6:00:57 PM at 0:01:00 intervals
LAVG #1
LAVG #2
LEQ #3
Slow MAX
Fast MAX
LPEAK

Event #14 with 1 Sample per Division

Time	LAVG #1	LAVG #2	LEQ #3	Slow MAX	Fast MAX	LPEAK	Comment (double click to edit)
5:45:42 PM	0.0	0.0	0.0	69.9	69.9	97.2	
5:46:42 PM	0.0	0.0	0.0	69.9	69.9	93.8	
5:47:42 PM	0.0	0.0	0.0	76.8	78.7	96.4	Airplane
5:48:42 PM	0.0	0.0	0.0	70.8	72.5	96.7	
5:49:42 PM	0.0	0.0	0.0	69.9	69.9	94.7	
5:50:42 PM	0.0	0.0	0.0	70.0	70.0	93.8	
5:51:42 PM	0.0	0.0	0.0	69.9	69.9	93.8	
5:52:42 PM	0.0	0.0	0.0	70.9	72.8	95.9	
5:53:42 PM	0.0	0.0	0.0	70.1	69.9	93.9	
5:54:42 PM	0.0	0.0	0.0	69.9	69.9	93.7	
5:55:42 PM	0.0	0.0	0.0	73.5	75.5	96.8	Airplane
5:56:42 PM	0.0	0.0	0.0	69.9	69.9	93.6	
5:57:42 PM	0.0	0.0	0.0	69.9	69.9	93.8	
5:58:42 PM	0.0	0.0	0.0	71.1	72.8	94.4	
5:59:42 PM	0.0	0.0	0.0	70.1	71.0	94.7	Airplane

Event #14 Logging Parameters

Model Number:	Q-300
Firmware:	2.60
Serial Number:	QC3010143
Start Time:	7/1/04 5:45:42 PM
Stop Time:	7/1/04 6:00:57 PM
Logging Interval:	0:01:00
Meter Range:	70 - 140dB
Projected Period:	8:00

Parameters for Dosimeters 1 through 3

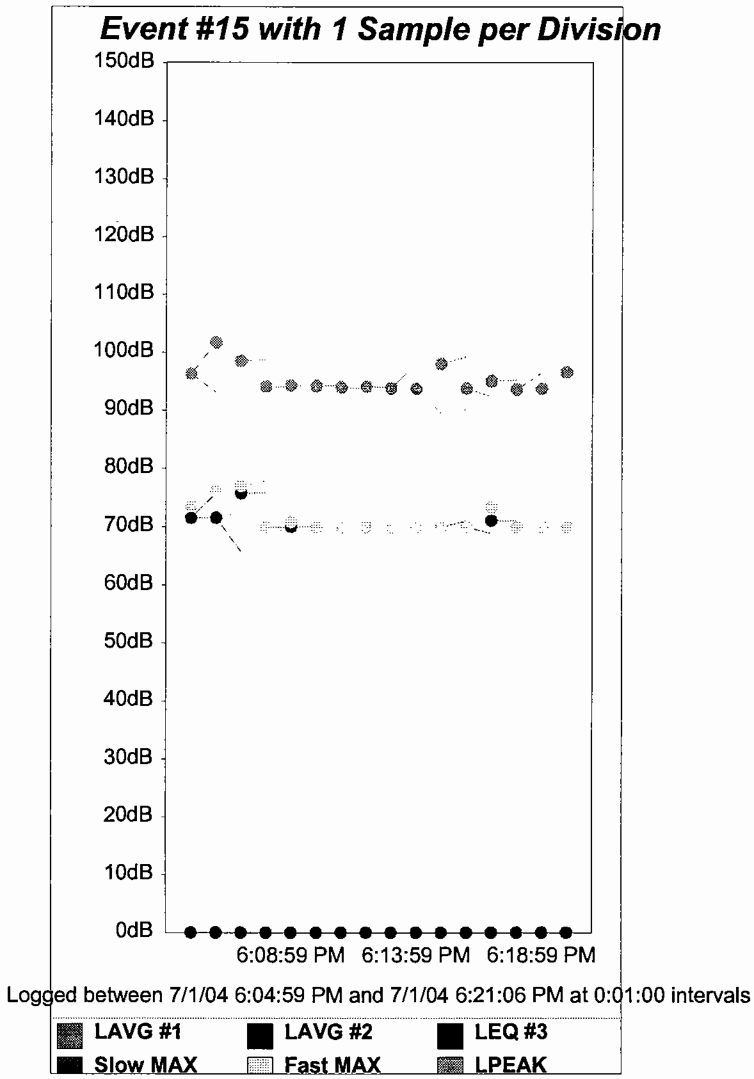
Weighting:	A	A	A
Threshold:	80dB	90dB	80dB
Exchange Rate:	5dB	5dB	3dB
Criterion:	90dB	90dB	85dB
Time Constant:	Slow	Slow	Slow
Upper Limit:	115dB	115dB	115dB
LDN:	Off		

Event #14 Values

Run Time:	0:15:14		
Peak Level:	97.2dB 7/1/04 5:45:43 PM	97.2dB 7/1/04 5:45:43 PM	97.2dB 7/1/04 5:45:43 PM
Max Level:	76.8dB (Slow) 7/1/04 5:48:16 PM	76.8dB (Slow) 7/1/04 5:48:16 PM	76.8dB (Slow) 7/1/04 5:48:16 PM
Min Level:	69.9dB (Slow) 7/1/04 5:45:42 PM	69.9dB (Slow) 7/1/04 5:45:42 PM	69.9dB (Slow) 7/1/04 5:45:42 PM
LAVG:	0.0dB	0.0dB	0.0dB
TWA:	0.0dB	0.0dB	0.0dB
TWA [8:00]:	0.0dB	0.0dB	0.0dB
Dose:	0.00%	0.00%	0.00%
Dose [8]:	0.00%	0.00%	0.00%
Dose [8:00]:	0.00%	0.00%	0.00%
SEL (E/R):	0.0dB	0.0dB	0.0dB
Overload:	0.0%		
Pa2Sec:			0.0

Event #14 Comments:
Georgetown Reservoir

05:48 Airplane
05:49 Helicopter
05:51 Airplane
05:56 Airplane
05:59 Airplane
06:00 Airplane


Event #15 with 1 Sample per Division
150dB
140dB
130dB
120dB
110dB
100dB
90dB
80dB
70dB
60dB
50dB
40dB
30dB
20dB
10dB
0dB
6:08:59 PM
6:13:59 PM
6:18:59 PM
Logged between 7/1/04 6:04:59 PM and 7/1/04 6:21:06 PM at 0:01:00 intervals
LAVG #1
LAVG #2
LEQ #3
Slow MAX
Fast MAX
LPEAK

Event #15 with 1 Sample per Division

Time	LAVG #1	LAVG #2	LEQ #3	Slow MAX	Fast MAX	LPEAK	Comment (double click to edit)
6:04:59 PM	0.0	0.0	0.0	71.5	73.6	96.3	
6:05:59 PM	0.0	0.0	0.0	71.5	76.1	101.7	
6:06:59 PM	0.0	0.0	0.0	75.8	77.0	98.5	Airplane
6:07:59 PM	0.0	0.0	0.0	69.9	69.9	94.1	
6:08:59 PM	0.0	0.0	0.0	70.0	70.8	94.3	
6:09:59 PM	0.0	0.0	0.0	69.9	69.9	94.2	
6:10:59 PM	0.0	0.0	0.0	69.9	69.9	94.0	
6:11:59 PM	0.0	0.0	0.0	69.9	69.9	94.1	
6:12:59 PM	0.0	0.0	0.0	69.9	69.9	93.8	
6:13:59 PM	0.0	0.0	0.0	69.9	69.9	93.7	
6:14:59 PM	0.0	0.0	0.0	69.9	69.9	98.0	
6:15:59 PM	0.0	0.0	0.0	69.9	69.9	93.8	
6:16:59 PM	0.0	0.0	0.0	71.0	73.3	95.1	
6:17:59 PM	0.0	0.0	0.0	69.9	69.9	93.6	
6:18:59 PM	0.0	0.0	0.0	69.9	69.9	93.7	
6:19:59 PM	0.0	0.0	0.0	69.9	69.9	96.6	

Event #15 Logging Parameters

Model Number:	Q-300
Firmware:	2.60
Serial Number:	QC3010143
Start Time:	7/1/04 6:04:59 PM
Stop Time:	7/1/04 6:21:06 PM
Logging Interval:	0:01:00
Meter Range:	70 - 140dB
Projected Period:	8:00

Parameters for Dosimeters 1 through 3

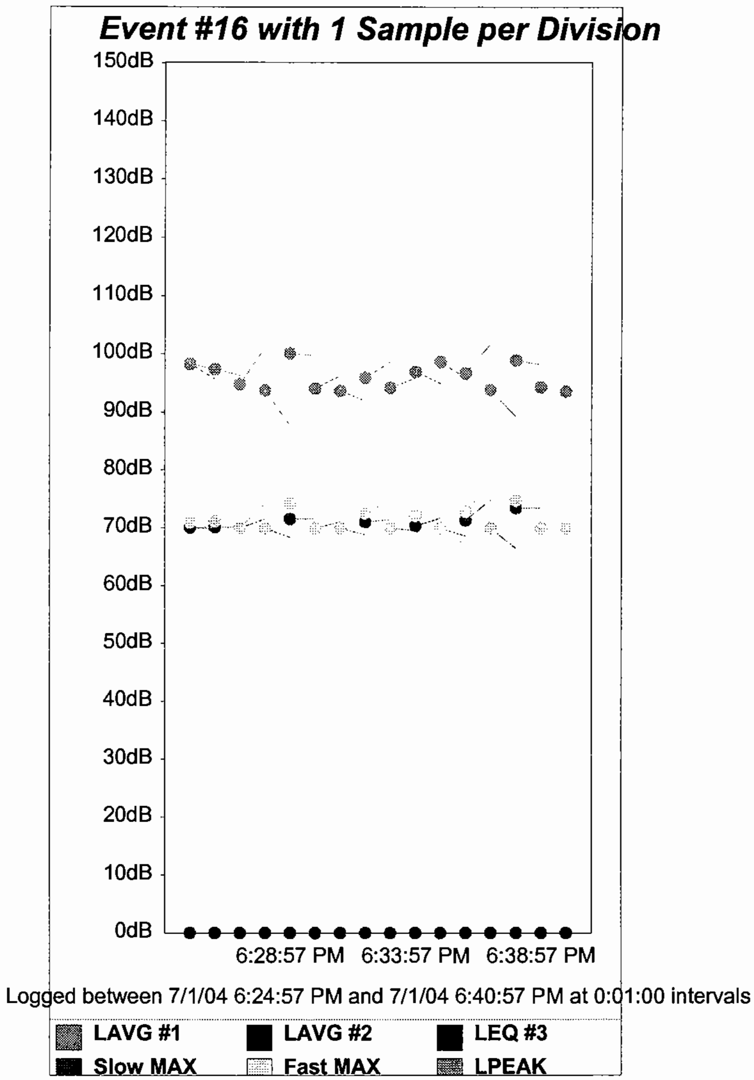
Weighting:	A	A	A
Threshold:	80dB	90dB	80dB
Exchange Rate:	5dB	5dB	3dB
Criterion:	90dB	90dB	85dB
Time Constant:	Slow	Slow	Slow
Upper Limit:	115dB	115dB	115dB
LDN:	Off		

Event #15 Values

Run Time:	0:16:07		
Peak Level:	108.6dB	108.6dB	108.6dB
	7/1/04 6:21:03 PM	7/1/04 6:21:03 PM	7/1/04 6:21:03 PM
Max Level:	79.6dB (Slow)	79.6dB (Slow)	79.6dB (Slow)
	7/1/04 6:21:06 PM	7/1/04 6:21:06 PM	7/1/04 6:21:06 PM
Min Level:	69.9dB (Slow)	69.9dB (Slow)	69.9dB (Slow)
	7/1/04 6:05:08 PM	7/1/04 6:05:08 PM	7/1/04 6:05:08 PM
LAVG:	0.0dB	0.0dB	0.0dB
TWA:	0.0dB	0.0dB	0.0dB
TWA [8:00]:	0.0dB	0.0dB	0.0dB
Dose:	0.00%	0.00%	0.00%
Dose [8]:	0.00%	0.00%	0.00%
Dose [8:00]:	0.00%	0.00%	0.00%
SEL (E/R):	0.0dB	0.0dB	0.0dB
Overload:	0.0%		
Pa2Sec:			0.0

Event #15 Comments:
Georgetown Reservoir

06:05 Airplane
06:07 Airplane
06:09 Airplane
06:17 Airplane



Event #16 with 1 Sample per Division
150dB
140dB
130dB
120dB
110dB
100dB
90dB
80dB
70dB
60dB
50dB
40dB
30dB
20dB
10dB
0dB
6:28:57 PM
6:33:57 PM
6:38:57 PM
Logged between 7/1/04 6:24:57 PM and 7/1/04 6:40:57 PM at 0:01:00 intervals
LAVG #1
LAVG #2
LEQ #3
Slow MAX
Fast MAX
LPEAK

Event #16 with 1 Sample per Division

Time	LAVG #1	LAVG #2	LEQ #3	Slow MAX	Fast MAX	LPEAK	Comment (double click to edit)
6:24:57 PM	0.0	0.0	0.0	70.0	70.9	98.3	
6:25:57 PM	0.0	0.0	0.0	70.1	71.1	97.4	
6:26:57 PM	0.0	0.0	0.0	69.9	69.9	94.9	
6:27:57 PM	0.0	0.0	0.0	69.9	69.9	93.8	
6:28:57 PM	0.0	0.0	0.0	71.5	74.2	100.1	Airplane
6:29:57 PM	0.0	0.0	0.0	69.9	69.9	94.1	
6:30:57 PM	0.0	0.0	0.0	69.9	69.9	93.7	
6:31:57 PM	0.0	0.0	0.0	71.0	72.5	95.9	
6:32:57 PM	0.0	0.0	0.0	69.9	69.9	94.2	
6:33:57 PM	0.0	0.0	0.0	70.3	72.1	97.0	
6:34:57 PM	0.0	0.0	0.0	69.9	69.9	98.7	
6:35:57 PM	0.0	0.0	0.0	71.3	72.8	96.7	
6:36:57 PM	0.0	0.0	0.0	69.9	69.9	93.9	
6:37:57 PM	0.0	0.0	0.0	73.4	74.7	98.9	Airplane
6:38:57 PM	0.0	0.0	0.0	69.9	69.9	94.3	
6:39:57 PM	0.0	0.0	0.0	69.9	69.9	93.6	

Event #16 Logging Parameters

Model Number:	Q-300
Firmware:	2.60
Serial Number:	QC3010143
Start Time:	7/1/04 6:24:57 PM
Stop Time:	7/1/04 6:40:57 PM
Logging Interval:	0:01:00
Meter Range:	70 - 140dB
Projected Period:	8:00

Parameters for Dosimeters 1 through 3

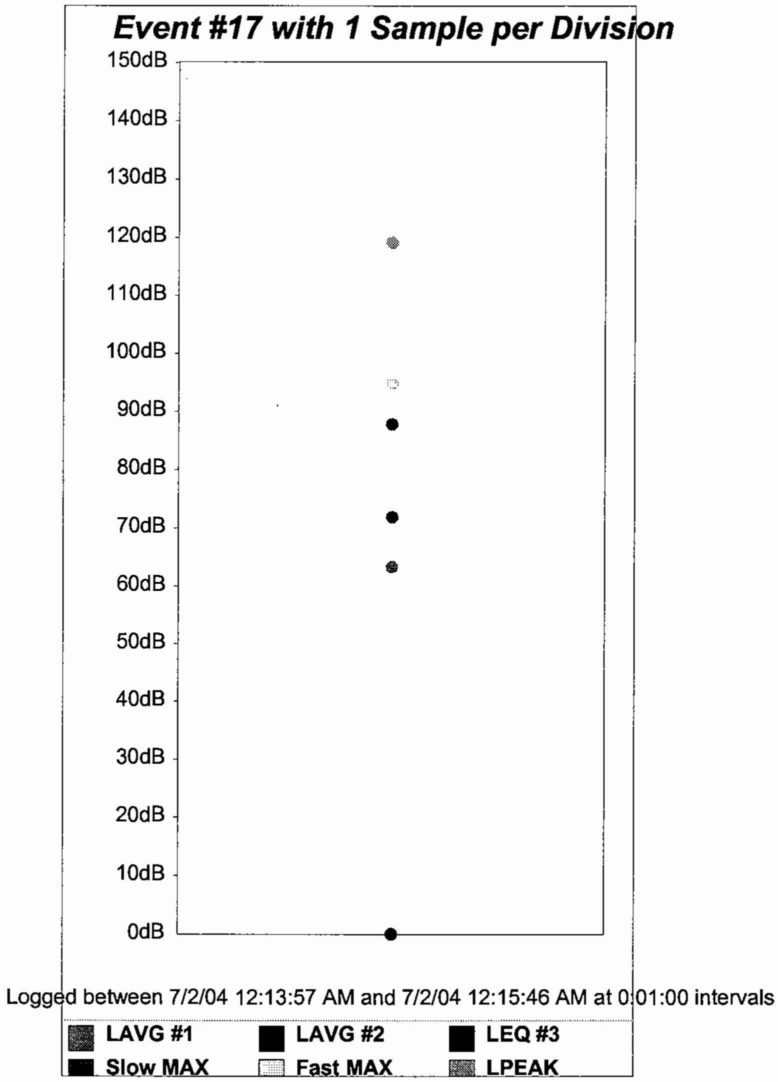
Weighting:	A	A	A
Threshold:	80dB	90dB	80dB
Exchange Rate:	5dB	5dB	3dB
Criterion:	90dB	90dB	85dB
Time Constant:	Slow	Slow	Slow
Upper Limit:	115dB	115dB	115dB
LDN:	Off		

Event #16 Values

Run Time:	0:16:00		
Peak Level:	100.1dB 7/1/04 6:29:16 PM	100.1dB 7/1/04 6:29:16 PM	100.1dB 7/1/04 6:29:16 PM
Max Level:	73.4dB (Slow) 7/1/04 6:38:06 PM	73.4dB (Slow) 7/1/04 6:38:06 PM	73.4dB (Slow) 7/1/04 6:38:06 PM
Min Level:	69.9dB (Slow) 7/1/04 6:24:57 PM	69.9dB (Slow) 7/1/04 6:24:57 PM	69.9dB (Slow) 7/1/04 6:24:57 PM
LAVG:	0.0dB	0.0dB	0.0dB
TWA:	0.0dB	0.0dB	0.0dB
TWA [8:00]:	0.0dB	0.0dB	0.0dB
Dose:	0.00%	0.00%	0.00%
Dose [8]:	0.00%	0.00%	0.00%
Dose [8:00]:	0.00%	0.00%	0.00%
SEL (E/R):	0.0dB	0.0dB	0.0dB
Overload:	0.0%		
Pa2Sec:			0.0

Event #16 Comments:
Goergetown Reservoir

06:26 Airplane
06:29 Airplane
06:32 Airplane
06:34 Airplane
06:36 Airplane
06:38 Airplane
06:39 Ambulance



Event #17 with 1 Sample per Division
150dB
140dB
130dB
120dB
110dB
100dB
90dB
80dB
70dB
60dB
50dB
40dB
30dB
20dB
10dB
0dB
Logged between 7/2/04 12:13:57 AM and 7/2/04 12:15:46 AM at 0:01:00 intervals
LAVG #1
LAVG #2
LEQ #3
Slow MAX
Fast MAX
LPEAK

Event #17 with 1 Sample per Division

Time	LAVG #1	LAVG #2	LEQ #3	Slow MAX	Fast MAX	LPEAK	Comment (double click to edit)
12:13:57 AM	63.3	0.0	71.9	87.8	94.8	119.1	

Event #17 Logging Parameters

Model Number:	Q-300
Firmware:	2.60
Serial Number:	QC3010143
Start Time:	7/2/04 12:13:57 AM
Stop Time:	7/2/04 12:15:46 AM
Logging Interval:	0:01:00
Meter Range:	70 - 140dB
Projected Period:	8:00

Parameters for Dosimeters 1 through 3

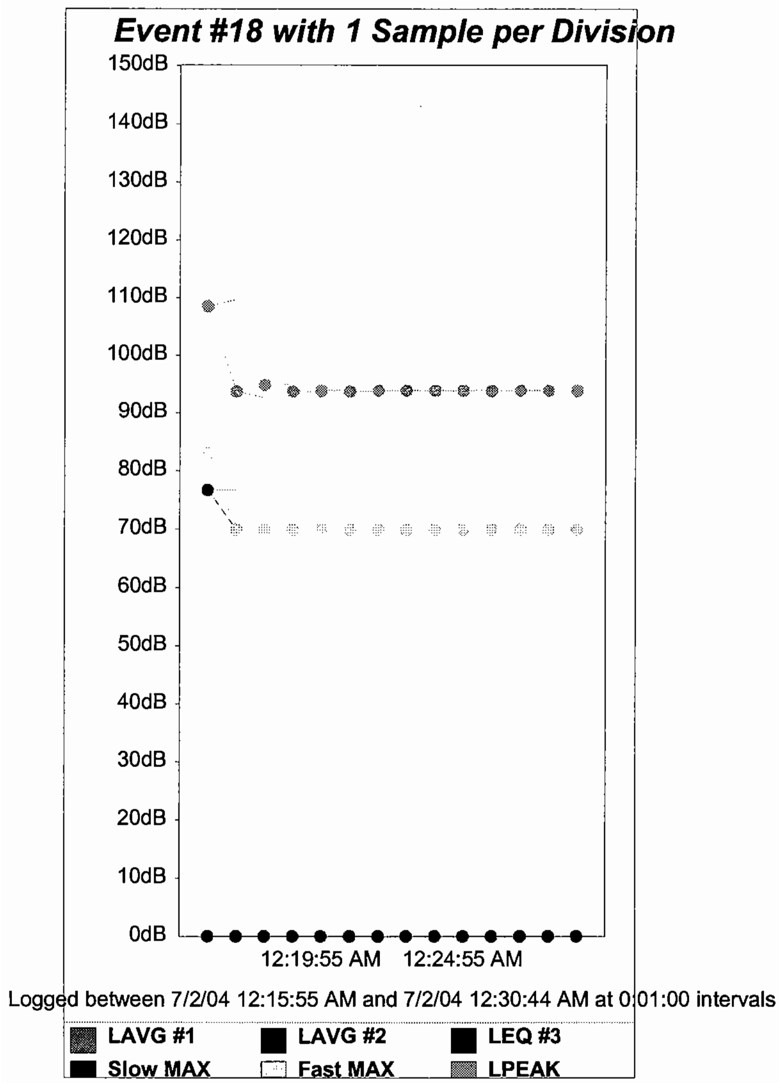
Weighting:	A	A	A
Threshold:	80dB	90dB	80dB
Exchange Rate:	5dB	5dB	3dB
Criterion:	90dB	90dB	85dB
Time Constant:	Slow	Slow	Slow
Upper Limit:	115dB	115dB	115dB
LDN:	Off		

Event #17 Values

Run Time:	0:01:48		
Peak Level:	119.1dB 7/2/04 12:14:08 AM	119.1dB 7/2/04 12:14:08 AM	119.1dB 7/2/04 12:14:08 AM
Max Level:	87.8dB (Slow) 7/2/04 12:14:07 AM	87.8dB (Slow) 7/2/04 12:14:07 AM	87.8dB (Slow) 7/2/04 12:14:07 AM
Min Level:	69.9dB (Slow) 7/2/04 12:13:57 AM	69.9dB (Slow) 7/2/04 12:13:57 AM	69.9dB (Slow) 7/2/04 12:13:57 AM
LAVG:	59.0dB	0.0dB	69.4dB
TWA:	18.7dB	0.0dB	45.1dB
TWA [8:00]:	59.0dB	0.0dB	69.4dB
Dose:	0.01%	0.00%	0.01%
Dose [8]:	0.00%	0.00%	2.67%
Dose [8:00]:	0.00%	0.00%	2.67%
SEL (E/R):	92.8dB	0.0dB	89.7dB
Overload:	0.0%		
Pa2Sec:			0.4

Event #17 Comments:
Residential Area - Dalecarlia Reservoir

12:13 This was a test Event !!!!!


Event #18 with 1 Sample per Division
150dB
140dB
130dB
120dB
110dB
100dB
90dB
80dB
70dB
60dB
50dB
40dB
30dB
20dB
10dB
0dB
12:19:55 AM
12:24:55 AM
Logged between 7/2/04 12:15:55 AM and 7/2/04 12:30:44 AM at 0:01:00 intervals
LAVG #1
LAVG #2
LEQ #3
Slow MAX
Fast MAX
LPEAK

Event #18 with 1 Sample per Division

Time	LAVG #1	LAVG #2	LEQ #3	Slow MAX	Fast MAX	LPEAK	Comment (double click to edit)
12:15:55 AM	0.0	0.0	0.0	76.7	83.0	108.5	Air Conditioning Sys
12:16:55 AM	0.0	0.0	0.0	69.9	69.9	93.7	
12:17:55 AM	0.0	0.0	0.0	69.9	69.9	94.8	
12:18:55 AM	0.0	0.0	0.0	69.9	69.9	93.7	
12:19:55 AM	0.0	0.0	0.0	69.9	69.9	93.8	
12:20:55 AM	0.0	0.0	0.0	69.9	69.9	93.7	
12:21:55 AM	0.0	0.0	0.0	69.9	69.9	93.9	
12:22:55 AM	0.0	0.0	0.0	69.9	69.9	93.9	
12:23:55 AM	0.0	0.0	0.0	69.9	69.9	93.9	
12:24:55 AM	0.0	0.0	0.0	69.9	69.9	93.9	
12:25:55 AM	0.0	0.0	0.0	69.9	69.9	93.8	
12:26:55 AM	0.0	0.0	0.0	69.9	69.9	93.9	
12:27:55 AM	0.0	0.0	0.0	69.9	69.9	93.9	
12:28:55 AM	0.0	0.0	0.0	69.9	69.9	93.9	

Event #18 Logging Parameters

Model Number:	Q-300
Firmware:	2.60
Serial Number:	QC3010143
Start Time:	7/2/04 12:15:55 AM
Stop Time:	7/2/04 12:30:44 AM
Logging Interval:	0:01:00
Meter Range:	70 - 140dB
Projected Period:	8:00

Parameters for Dosimeters 1 through 3

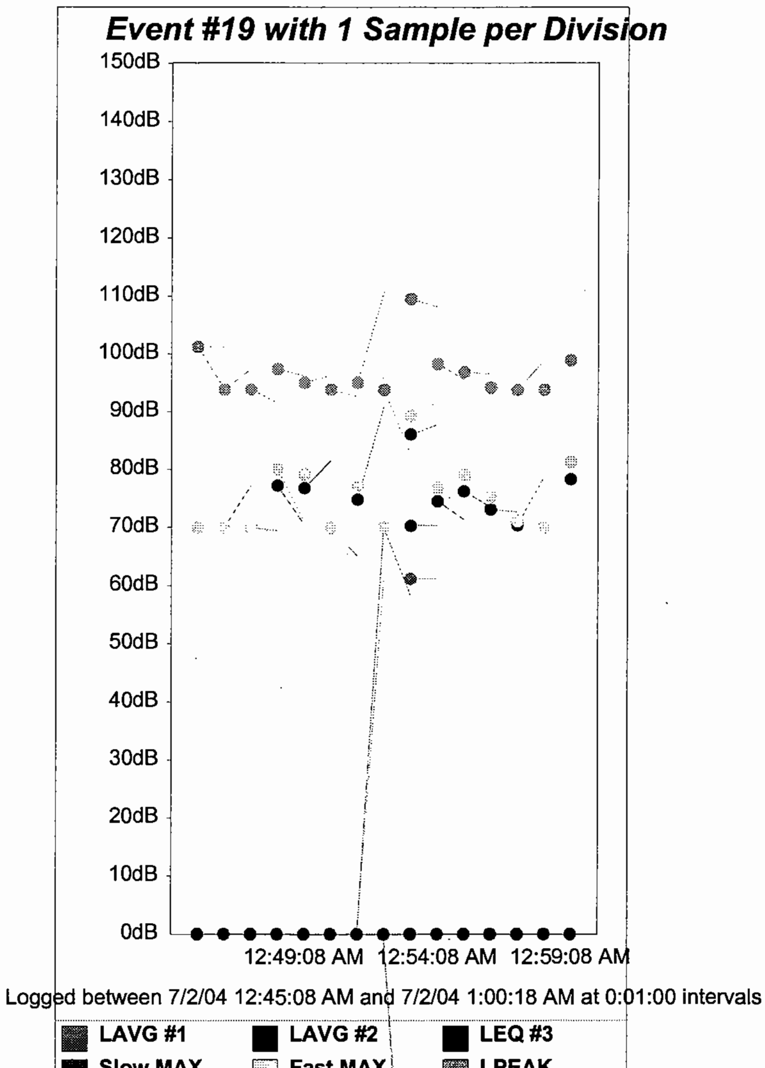
Weighting:	A	A	A
Threshold:	80dB	90dB	80dB
Exchange Rate:	5dB	5dB	3dB
Criterion:	90dB	90dB	85dB
Time Constant:	Slow	Slow	Slow
Upper Limit:	115dB	115dB	115dB
LDN:	Off		

Event #18 Values

Run Time:	0:14:48		
Peak Level:	108.5dB 7/2/04 12:16:06 AM	108.5dB 7/2/04 12:16:06 AM	108.5dB 7/2/04 12:16:06 AM
Max Level:	76.7dB (Slow) 7/2/04 12:16:05 AM	76.7dB (Slow) 7/2/04 12:16:05 AM	76.7dB (Slow) 7/2/04 12:16:05 AM
Min Level:	69.9dB (Slow) 7/2/04 12:15:55 AM	69.9dB (Slow) 7/2/04 12:15:55 AM	69.9dB (Slow) 7/2/04 12:15:55 AM
LAVG:	0.0dB	0.0dB	0.0dB
TWA:	0.0dB	0.0dB	0.0dB
TWA [8:00]:	0.0dB	0.0dB	0.0dB
Dose:	0.00%	0.00%	0.00%
Dose [8]:	0.00%	0.00%	0.00%
Dose [8:00]:	0.00%	0.00%	0.00%
SEL (E/R):	0.0dB	0.0dB	0.0dB
Overload:	0.0%		
Pa2Sec:			0.0

Event #18 Comments:
Residential Area - Dalecarlia Reservoir

12:16 Air conditioning system turned On
12:21 Air conditioning system turned Off
12:24 Air conditioning system turned On
12:29 Air conditioning system turned Off


Event #19 with 1 Sample per Division
150dB
140dB
130dB
120dB
110dB
100dB
90dB
80dB
70dB
60dB
50dB
40dB
30dB
20dB
10dB
0dB
12:49:08 AM
12:54:08 AM
12:59:08 AM
Logged between 7/2/04 12:45:08 AM and 7/2/04 1:00:18 AM at 0:01:00 intervals
LAVG #1
LAVG #2
LEQ #3
Slow MAX
Fast MAX
LPEAK

Event #19 with 1 Sample per Division

Time	LAVG #1	LAVG #2	LEQ #3	Slow MAX	Fast MAX	LPEAK	Comment (double click to edit)
12:45:08 AM	0.0	0.0	0.0	70.0	70.0	101.2	
12:46:08 AM	0.0	0.0	0.0	69.9	69.9	93.9	
12:47:08 AM	0.0	0.0	0.0	69.9	69.9	93.9	
12:48:08 AM	0.0	0.0	0.0	77.2	80.1	97.4	
12:49:08 AM	0.0	0.0	0.0	76.7	79.2	95.1	
12:50:08 AM	0.0	0.0	0.0	69.9	69.9	93.9	
12:51:08 AM	0.0	0.0	0.0	74.8	77.1	95.1	
12:52:08 AM	0.0	0.0	0.0	69.9	69.9	93.8	
12:53:08 AM	61.2	0.0	70.3	86.1	89.4	109.5	Bus going East (uphill)
12:54:08 AM	0.0	0.0	0.0	74.5	76.8	98.3	
12:55:08 AM	0.0	0.0	0.0	76.2	79.1	96.9	
12:56:08 AM	0.0	0.0	0.0	73.0	75.2	94.2	
12:57:08 AM	0.0	0.0	0.0	70.3	71.0	93.8	
12:58:08 AM	0.0	0.0	0.0	69.9	69.9	93.8	
12:59:08 AM	0.0	0.0	0.0	78.3	81.3	98.9	

Event #19 Logging Parameters

Model Number:	Q-300
Firmware:	2.60
Serial Number:	QC3010143
Start Time:	7/2/04 12:45:08 AM
Stop Time:	7/2/04 1:00:18 AM
Logging Interval:	0:01:00
Meter Range:	70 - 140dB
Projected Period:	8:00

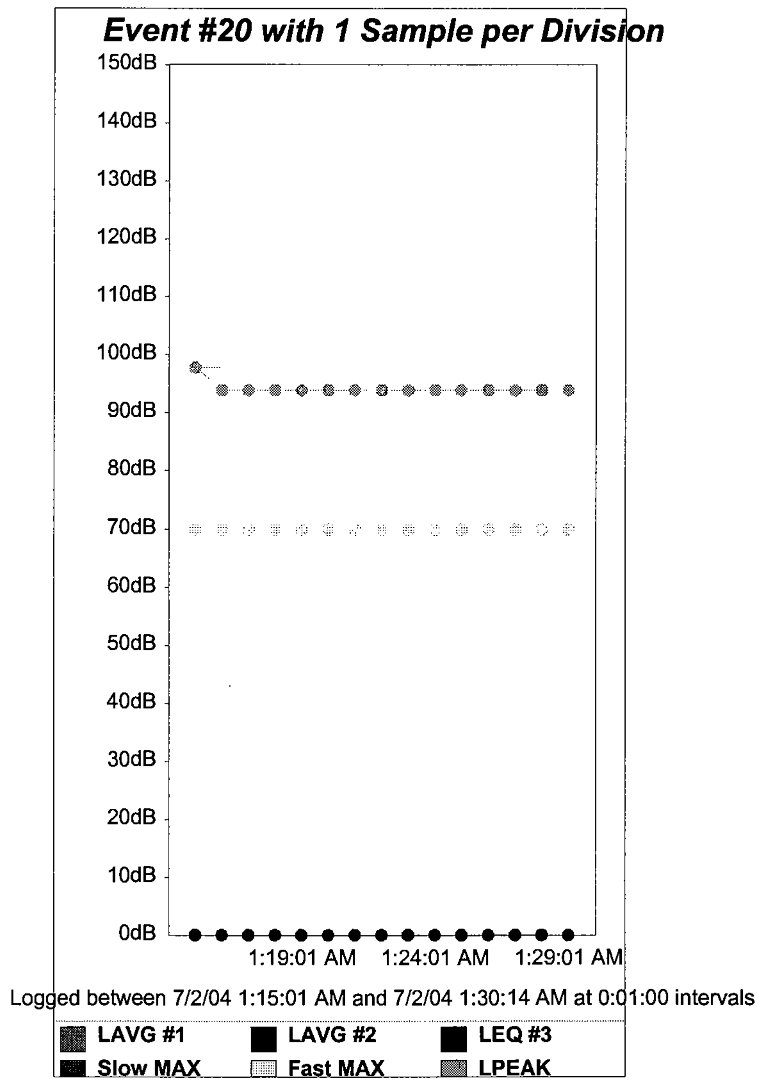
Parameters for Dosimeters 1 through 3

Weighting:	A	A	A
Threshold:	80dB	90dB	80dB
Exchange Rate:	5dB	5dB	3dB
Criterion:	90dB	90dB	85dB
Time Constant:	Slow	Slow	Slow
Upper Limit:	115dB	115dB	115dB
LDN:	Off		

Event #19 Values

Run Time:	0:15:09		
Peak Level:	109.5dB	109.5dB	109.5dB
	7/2/04 12:54:02 AM	7/2/04 12:54:02 AM	7/2/04 12:54:02 AM
Max Level:	86.1dB (Slow)	86.1dB (Slow)	86.1dB (Slow)
	7/2/04 12:54:01 AM	7/2/04 12:54:01 AM	7/2/04 12:54:01 AM
Min Level:	69.9dB (Slow)	69.9dB (Slow)	69.9dB (Slow)
	7/2/04 12:45:09 AM	7/2/04 12:45:09 AM	7/2/04 12:45:09 AM
LAVG:	41.6dB	0.0dB	58.5dB
TWA:	16.7dB	0.0dB	43.5dB
TWA [8:00]:	41.6dB	0.0dB	58.5dB
Dose:	0.00%	0.00%	0.01%
Dose [8]:	0.00%	0.00%	0.00%
Dose [8:00]:	0.00%	0.00%	0.00%
SEL (E/R):	90.7dB	0.0dB	88.1dB
Overload:	0.0%		
Pa2Sec:			0.3

Event #19 Comments:
Sibley Hospital
12:48 2 cars going East&West
12:49 Car going East
12:51 Car going East
12:52 Car going West
12:53 Bus going East
12:54 Car going East
12:55 2 cars going East
12:56 Car going West
12:57 2 cars going East&West
12:59 Car going East


Event #20 with 1 Sample per Division
150dB
140dB
130dB
120dB
110dB
100dB
90dB
80dB
70dB
60dB
50dB
40dB
30dB
20dB
10dB
0dB
1:19:01 AM
1:24:01 AM
1:29:01 AM
Logged between 7/2/04 1:15:01 AM and 7/2/04 1:30:14 AM at 0:01:00 intervals
LAVG #1
LAVG #2
LEQ #3
Slow MAX
Fast MAX
LPEAK

Event #20 with 1 Sample per Division

Time	LAVG #1	LAVG #2	LEQ #3	Slow MAX	Fast MAX	LPEAK	Comment (double click to edit)
1:15:01 AM	0.0	0.0	0.0	69.9	69.9	97.8	
1:16:01 AM	0.0	0.0	0.0	69.9	69.9	93.9	
1:17:01 AM	0.0	0.0	0.0	69.9	69.9	93.9	
1:18:01 AM	0.0	0.0	0.0	69.9	69.9	93.9	
1:19:01 AM	0.0	0.0	0.0	69.9	69.9	93.9	
1:20:01 AM	0.0	0.0	0.0	69.9	69.9	93.9	
1:21:01 AM	0.0	0.0	0.0	69.9	69.9	93.9	
1:22:01 AM	0.0	0.0	0.0	69.9	69.9	93.9	
1:23:01 AM	0.0	0.0	0.0	69.9	69.9	93.9	
1:24:01 AM	0.0	0.0	0.0	69.9	69.9	93.9	
1:25:01 AM	0.0	0.0	0.0	69.9	69.9	93.9	
1:26:01 AM	0.0	0.0	0.0	69.9	69.9	93.9	
1:27:01 AM	0.0	0.0	0.0	69.9	69.9	93.9	
1:28:01 AM	0.0	0.0	0.0	69.9	69.9	93.9	
1:29:01 AM	0.0	0.0	0.0	69.9	69.9	93.9	Air Conditioning Sys - ON

Event #20 Logging Parameters

Model Number:	Q-300
Firmware:	2.60
Serial Number:	QC3010143
Start Time:	7/2/04 1:15:01 AM
Stop Time:	7/2/04 1:30:14 AM
Logging Interval:	0:01:00
Meter Range:	70 - 140dB
Projected Period:	8:00

Parameters for Dosimeters 1 through 3

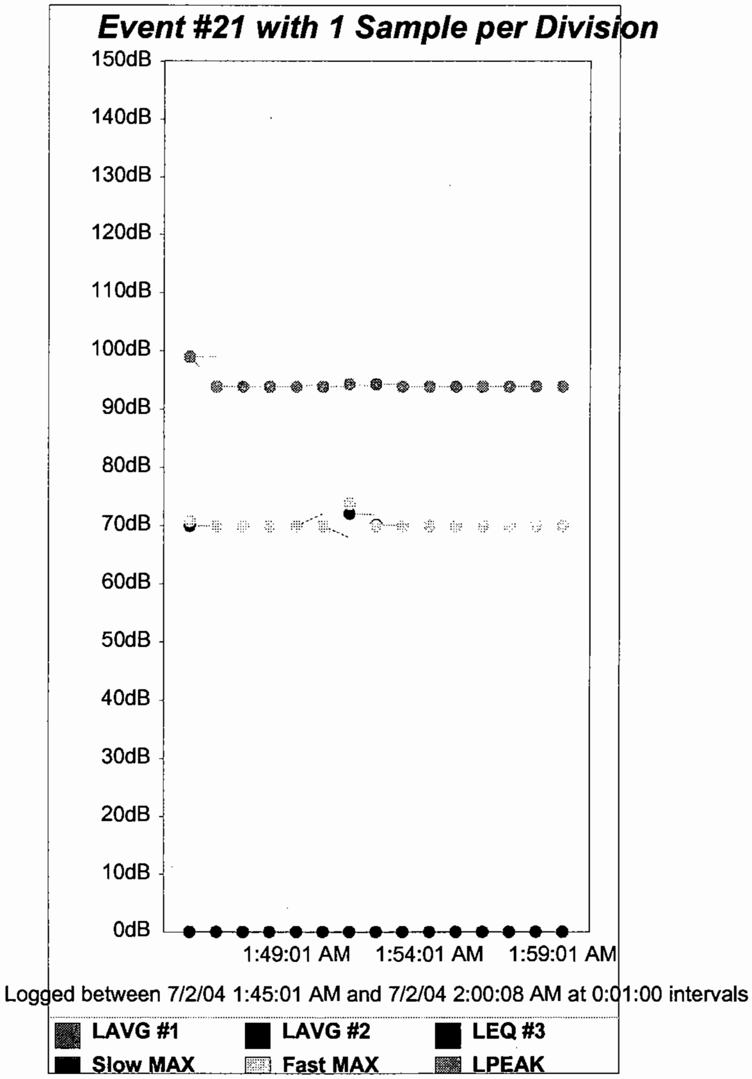
Weighting:	A	A	A
Threshold:	80dB	90dB	80dB
Exchange Rate:	5dB	5dB	3dB
Criterion:	90dB	90dB	85dB
Time Constant:	Slow	Slow	Slow
Upper Limit:	115dB	115dB	115dB
LDN:	Off		

Event #20 Values

Run Time:	0:15:13		
Peak Level:	97.8dB 7/2/04 1:15:02 AM	97.8dB 7/2/04 1:15:02 AM	97.8dB 7/2/04 1:15:02 AM
Max Level:	69.9dB (Slow) 7/2/04 1:15:01 AM	69.9dB (Slow) 7/2/04 1:15:01 AM	69.9dB (Slow) 7/2/04 1:15:01 AM
Min Level:	69.9dB (Slow) 7/2/04 1:15:01 AM	69.9dB (Slow) 7/2/04 1:15:01 AM	69.9dB (Slow) 7/2/04 1:15:01 AM
LAVG:	0.0dB	0.0dB	0.0dB
TWA:	0.0dB	0.0dB	0.0dB
TWA [8:00]:	0.0dB	0.0dB	0.0dB
Dose:	0.00%	0.00%	0.00%
Dose [8]:	0.00%	0.00%	0.00%
Dose [8:00]:	0.00%	0.00%	0.00%
SEL (E/R):	0.0dB	0.0dB	0.0dB
Overload:	0.0%		
Pa2Sec:			0.0

Event #20 Comments:
Residential Area - Dalecarlia Reservoir

01:30 Air conditioning system turned on


Event #21 with 1 Sample per Division
150dB
140dB
130dB
120dB
110dB
100dB
90dB
80dB
70dB
60dB
50dB
40dB
30dB
20dB
10dB
0dB
1:49:01 AM
1:54:01 AM
1:59:01 AM
Logged between 7/2/04 1:45:01 AM and 7/2/04 2:00:08 AM at 0:01:00 intervals
LAVG #1
LAVG #2
LEQ #3
Slow MAX
Fast MAX
LPEAK

Event #21 with 1 Sample per Division

Time	LAVG #1	LAVG #2	LEQ #3	Slow MAX	Fast MAX	LPEAK	Comment (double click to edit)
1:45:01 AM	0.0	0.0	0.0	70.0	70.8	99.0	
1:46:01 AM	0.0	0.0	0.0	69.9	69.9	93.9	
1:47:01 AM	0.0	0.0	0.0	69.9	69.9	93.9	
1:48:01 AM	0.0	0.0	0.0	69.9	69.9	93.9	
1:49:01 AM	0.0	0.0	0.0	69.9	69.9	93.9	
1:50:01 AM	0.0	0.0	0.0	69.9	69.9	93.9	
1:51:01 AM	0.0	0.0	0.0	72.1	73.8	94.3	
1:52:01 AM	0.0	0.0	0.0	70.1	69.9	94.3	
1:53:01 AM	0.0	0.0	0.0	69.9	69.9	93.9	
1:54:01 AM	0.0	0.0	0.0	69.9	69.9	93.9	
1:55:01 AM	0.0	0.0	0.0	69.9	69.9	93.9	
1:56:01 AM	0.0	0.0	0.0	69.9	69.9	93.9	
1:57:01 AM	0.0	0.0	0.0	69.9	69.9	93.9	
1:58:01 AM	0.0	0.0	0.0	69.9	69.9	93.9	
1:59:01 AM	0.0	0.0	0.0	69.9	69.9	93.9	

Event #21 Logging Parameters

Model Number:	Q-300
Firmware:	2.60
Serial Number:	QC3010143
Start Time:	7/2/04 1:45:01 AM
Stop Time:	7/2/04 2:00:08 AM
Logging Interval:	0:01:00
Meter Range:	70 - 140dB
Projected Period:	8:00

Parameters for Dosimeters 1 through 3

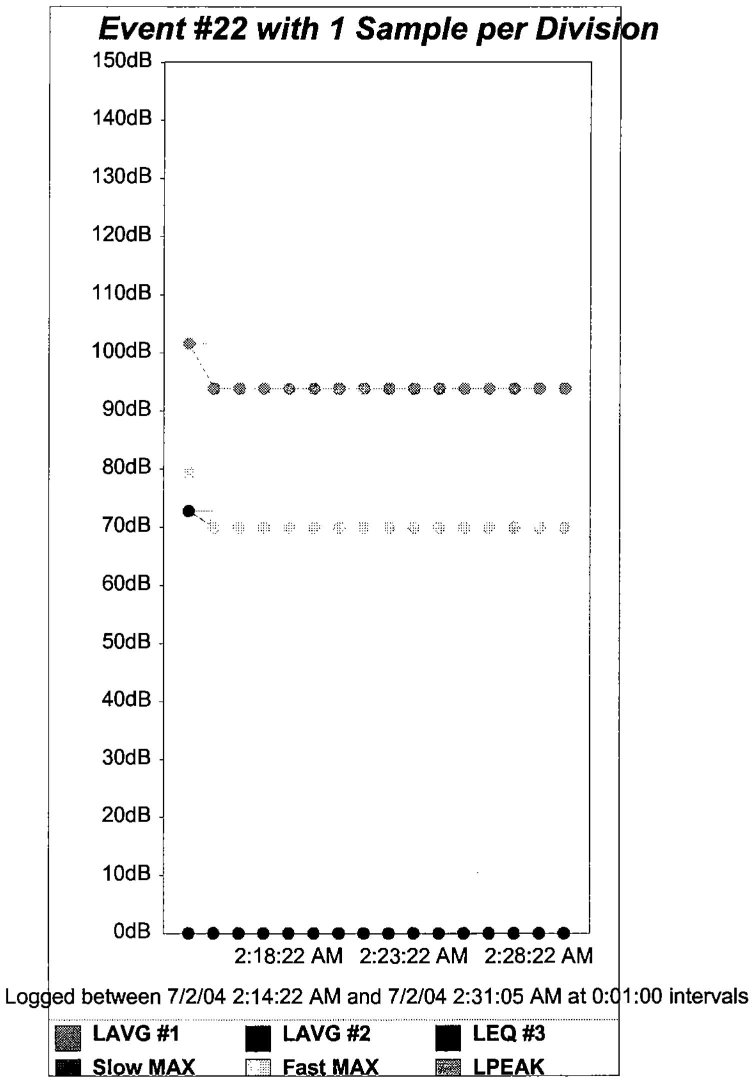
Weighting:	A	A	A
Threshold:	80dB	90dB	80dB
Exchange Rate:	5dB	5dB	3dB
Criterion:	90dB	90dB	85dB
Time Constant:	Slow	Slow	Slow
Upper Limit:	115dB	115dB	115dB
LDN:	Off		

Event #21 Values

Run Time:	0:15:06		
Peak Level:	99.0dB	99.0dB	99.0dB
	7/2/04 1:45:02 AM	7/2/04 1:45:02 AM	7/2/04 1:45:02 AM
Max Level:	72.1dB (Slow)	72.1dB (Slow)	72.1dB (Slow)
	7/2/04 1:51:57 AM	7/2/04 1:51:57 AM	7/2/04 1:51:57 AM
Min Level:	69.9dB (Slow)	69.9dB (Slow)	69.9dB (Slow)
	7/2/04 1:45:01 AM	7/2/04 1:45:01 AM	7/2/04 1:45:01 AM
LAVG:	0.0dB	0.0dB	0.0dB
TWA:	0.0dB	0.0dB	0.0dB
TWA [8:00]:	0.0dB	0.0dB	0.0dB
Dose:	0.00%	0.00%	0.00%
Dose [8]:	0.00%	0.00%	0.00%
Dose [8:00]:	0.00%	0.00%	0.00%
SEL (E/R):	0.0dB	0.0dB	0.0dB
Overload:	0.0%		
Pa2Sec:			0.0

Event #21 Comments:
Sibley Hospital - Dalecarlia Reservoir

01:51 Car going West
01:52 Car going West


Event #22 with 1 Sample per Division
150dB
140dB
130dB
120dB
110dB
100dB
90dB
80dB
70dB
60dB
50dB
40dB
30dB
20dB
10dB
0dB
2:18:22 AM
2:23:22 AM
2:28:22 AM
Logged between 7/2/04 2:14:22 AM and 7/2/04 2:31:05 AM at 0:01:00 intervals
LAVG #1
LAVG #2
LEQ #3
Slow MAX
Fast MAX
LPEAK

Event #22 with 1 Sample per Division

Time	LAVG #1	LAVG #2	LEQ #3	Slow MAX	Fast MAX	LPEAK	Comment (double click to edit)
2:14:22 AM	0.0	0.0	0.0	72.8	79.3	101.6	
2:15:22 AM	0.0	0.0	0.0	69.9	69.9	93.9	
2:16:22 AM	0.0	0.0	0.0	69.9	69.9	93.9	
2:17:22 AM	0.0	0.0	0.0	69.9	69.9	93.9	
2:18:22 AM	0.0	0.0	0.0	69.9	69.9	93.9	
2:19:22 AM	0.0	0.0	0.0	69.9	69.9	93.9	
2:20:22 AM	0.0	0.0	0.0	69.9	69.9	93.9	
2:21:22 AM	0.0	0.0	0.0	69.9	69.9	93.9	
2:22:22 AM	0.0	0.0	0.0	69.9	69.9	93.9	
2:23:22 AM	0.0	0.0	0.0	69.9	69.9	93.9	
2:24:22 AM	0.0	0.0	0.0	69.9	69.9	93.9	
2:25:22 AM	0.0	0.0	0.0	69.9	69.9	93.9	
2:26:22 AM	0.0	0.0	0.0	69.9	69.9	93.9	
2:27:22 AM	0.0	0.0	0.0	69.9	69.9	93.9	
2:28:22 AM	0.0	0.0	0.0	69.9	69.9	93.9	
2:29:22 AM	0.0	0.0	0.0	69.9	69.9	93.9	

Event #22 Logging Parameters

Model Number:	Q-300
Firmware:	2.60
Serial Number:	QC3010143
Start Time:	7/2/04 2:14:22 AM
Stop Time:	7/2/04 2:31:05 AM
Logging Interval:	0:01:00
Meter Range:	70 - 140dB
Projected Period:	8:00

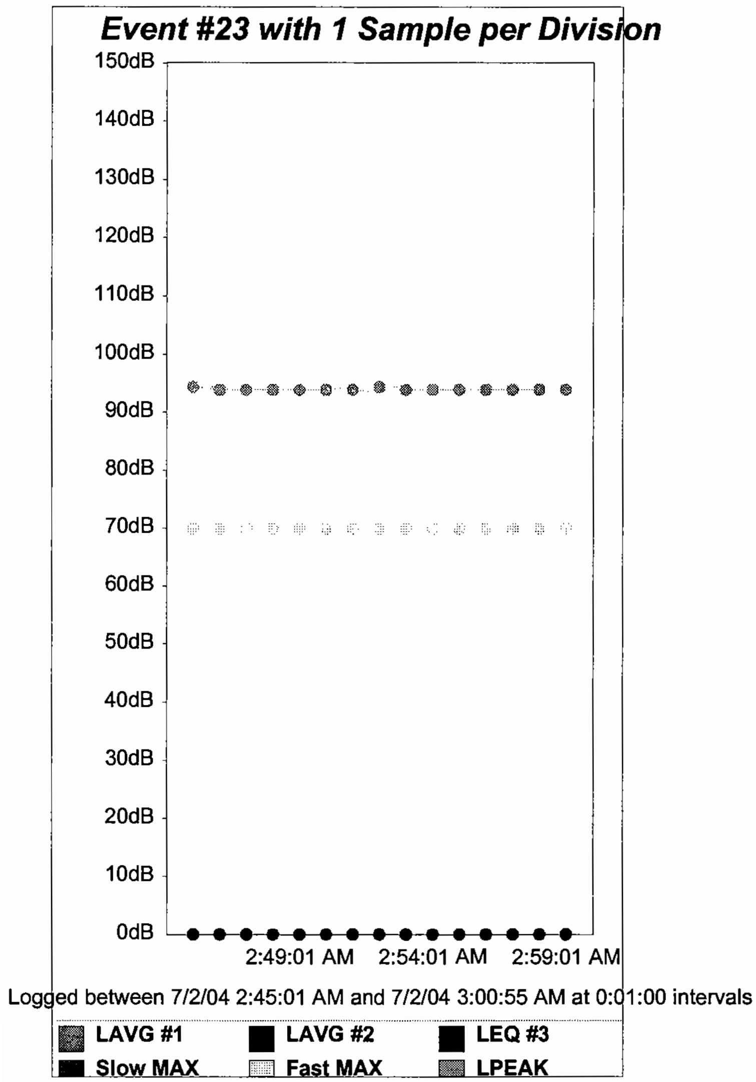
Parameters for Dosimeters 1 through 3

Weighting:	A	A	A
Threshold:	80dB	90dB	80dB
Exchange Rate:	5dB	5dB	3dB
Criterion:	90dB	90dB	85dB
Time Constant:	Slow	Slow	Slow
Upper Limit:	115dB	115dB	115dB
LDN:	Off		

Event #22 Values

Run Time:	0:16:42		
Peak Level:	101.6dB	101.6dB	101.6dB
	7/2/04 2:14:23 AM	7/2/04 2:14:23 AM	7/2/04 2:14:23 AM
Max Level:	72.8dB (Slow)	72.8dB (Slow)	72.8dB (Slow)
	7/2/04 2:14:22 AM	7/2/04 2:14:22 AM	7/2/04 2:14:22 AM
Min Level:	69.9dB (Slow)	69.9dB (Slow)	69.9dB (Slow)
	7/2/04 2:14:22 AM	7/2/04 2:14:22 AM	7/2/04 2:14:22 AM
LAVG:	0.0dB	0.0dB	0.0dB
TWA:	0.0dB	0.0dB	0.0dB
TWA [8:00]:	0.0dB	0.0dB	0.0dB
Dose:	0.00%	0.00%	0.00%
Dose [8]:	0.00%	0.00%	0.00%
Dose [8:00]:	0.00%	0.00%	0.00%
SEL (E/R):	0.0dB	0.0dB	0.0dB
Overload:	0.0%		
Pa2Sec:			0.0

Event #22 Comments:
Georgetown Reservoir


Event #23 with 1 Sample per Division
150dB
140dB
130dB
120dB
110dB
100dB
90dB
80dB
70dB
60dB
50dB
40dB
30dB
20dB
10dB
0dB
2:49:01 AM
2:54:01 AM
2:59:01 AM
Logged between 7/2/04 2:45:01 AM and 7/2/04 3:00:55 AM at 0:01:00 intervals
LAVG #1
LAVG #2
LEQ #3
Slow MAX
Fast MAX
LPEAK

Event #23 with 1 Sample per Division

Time	LAVG #1	LAVG #2	LEQ #3	Slow MAX	Fast MAX	LPEAK	Comment (double click to edit)
2:45:01 AM	0.0	0.0	0.0	69.9	69.9	94.4	
2:46:01 AM	0.0	0.0	0.0	69.9	69.9	93.9	
2:47:01 AM	0.0	0.0	0.0	69.9	69.9	93.9	
2:48:01 AM	0.0	0.0	0.0	69.9	69.9	93.9	
2:49:01 AM	0.0	0.0	0.0	69.9	69.9	93.9	
2:50:01 AM	0.0	0.0	0.0	69.9	69.9	93.9	
2:51:01 AM	0.0	0.0	0.0	69.9	69.9	93.9	
2:52:01 AM	0.0	0.0	0.0	69.9	69.9	94.4	
2:53:01 AM	0.0	0.0	0.0	69.9	69.9	93.9	
2:54:01 AM	0.0	0.0	0.0	69.9	69.9	93.9	
2:55:01 AM	0.0	0.0	0.0	69.9	69.9	93.9	
2:56:01 AM	0.0	0.0	0.0	69.9	69.9	93.9	
2:57:01 AM	0.0	0.0	0.0	69.9	69.9	93.9	
2:58:01 AM	0.0	0.0	0.0	69.9	69.9	93.9	
2:59:01 AM	0.0	0.0	0.0	69.9	69.9	93.9	

Event #23 Logging Parameters

Model Number:	Q-300
Firmware:	2.60
Serial Number:	QC3010143
Start Time:	7/2/04 2:45:01 AM
Stop Time:	7/2/04 3:00:55 AM
Logging Interval:	0:01:00
Meter Range:	70 - 140dB
Projected Period:	8:00

Parameters for Dosimeters 1 through 3

Weighting:	A	A	A
Threshold:	80dB	90dB	80dB
Exchange Rate:	5dB	5dB	3dB
Criterion:	90dB	90dB	85dB
Time Constant:	Slow	Slow	Slow
Upper Limit:	115dB	115dB	115dB
LDN:	Off		

Event #23 Values

Run Time:	0:15:54		
Peak Level:	94.4dB 7/2/04 2:45:02 AM	94.4dB 7/2/04 2:45:02 AM	94.4dB 7/2/04 2:45:02 AM
Max Level:	69.9dB (Slow) 7/2/04 2:45:01 AM	69.9dB (Slow) 7/2/04 2:45:01 AM	69.9dB (Slow) 7/2/04 2:45:01 AM
Min Level:	69.9dB (Slow) 7/2/04 2:45:01 AM	69.9dB (Slow) 7/2/04 2:45:01 AM	69.9dB (Slow) 7/2/04 2:45:01 AM
LAVG:	0.0dB	0.0dB	0.0dB
TWA:	0.0dB	0.0dB	0.0dB
TWA [8:00]:	0.0dB	0.0dB	0.0dB
Dose:	0.00%	0.00%	0.00%
Dose [8]:	0.00%	0.00%	0.00%
Dose [8:00]:	0.00%	0.00%	0.00%
SEL (E/R):	0.0dB	0.0dB	0.0dB
Overload:	0.0%		
Pa2Sec:			0.0

Event #23 Comments:
Goergetown Reservoir

02:52 Passenger car

Washington Aqueduct
Residual Management EIS
Noise Impacts
10/17/2004

	Average Background Noise Level (dBA)	Location	Distance Source to Receptor (ft)	Noise Level at 5 ft from Source (dBA)	Noise Level at Receptor (dBA)	Combined Impact at Receptor (dBA)	Noise Level Increase Over Background (dBA)
Dewatering Equipment	38.3	Windward Pl.	200	79.8	47.8	48.3	10
	55.6	Bike Path	50	80	60.0	61.3	5.7
Trucking	64.4	Loghboro Rd.	50	88	68.0	69.6	5.2
Construction	38.3	Windward Pl.	100	73.8	47.8	48.3	10
	40	Hutchins Pl.	70	72.4	49.5	50	10

Record of Non-Applicability (RONA)
Concerning the General Conformity Rule (40 CFR Part 51)

The Washington Aqueduct operates the Dalecarlia and McMillan Water Treatment Plants (WTPs) in Washington, D.C., from which over 1 million persons in the D.C. and Northern Virginia area are served with potable water. The treatment process removes solid particles (e.g., river silt) from the Potomac River supply water, treats and disinfects it, and distributes the finished water to the metropolitan service area. The solids removed during the treatment process have historically been returned to the Potomac River, but a recently issued National Pollution Discharge Elimination System (NPDES) permit (Permit No. DC 0000019) has severely curtailed discharge of water treatment solids, or residuals, to the river.

Consequently, the Washington Aqueduct is in the process of evaluating water treatment residuals management options that minimize or eliminate the discharge of residuals to the river. The residuals management option that is ultimately selected has a potential to affect the human environment, and thus development of the residuals management plan must comply with the National Environmental Policy Act (NEPA).

Conformity under the Clean Air Act, Section 176, has been evaluated for the proposed action in accordance with 40 CFR Part 51. The requirements of this rule are not applicable to this action because the total direct and indirect emissions of nonattainment area pollutants (volatile organic compounds [VOCS] and nitrogen oxides [NOx]) associated with the proposed action would be below the *de minimis* threshold. Estimated direct and indirect emissions would be 4.3 tons of VOCS and 20.5 tons of NOx. All emissions would fall below the *de minimis* threshold established at 40 CFR 51.853(b) of 25 tons per year of VOCs and 25 tons per year of NOx.

____

<NAME>
<TITLE>
Washington Aqueduct

____

Date

Washington Aqueduct
Residual Management EIS
Air Quality
02/17/2005

	Assumptions			HC/VOC	CO	NOx	PM10	SO2
	# of Trips	Days/week	Miles/trip	(tpy)	(tpy)	(tpy)	(tpy)	(tpy)
Truck Trips	20	6	150	4.3	21.3	16.8	0	0.3
				From Table 7.1.1 Nontampered Exhaust Emission Rates for Low Altitude Heavy Duty Diesel Powered Vehicles - Model years 1991 or later				
	Heat Input BTU/yr	NG Heat Content Btu/scf						
Bldg Heating	3.30E+09	1020		0	0.065	0.152	0	0
	Area (acres)							
Monofill	30	k =	0.35	0	0	0	0.36	0
	Solids	U =	12					
	Applied	M =	10					
	(tons/day)							
	6310							
			TOTALS =>	4.3	21.4	16.9	0.36	0.3

Given: Emission Factors for Heavy Duty Diesel Powered Vehicles (AP-42, H-258, Table 7.1.1)

Model Years 1991 – 1997

Hydrocarbons (HC) = 2.1 grams / mile

Carbon Monoxide (CO) = 10.34 grams/mile

Nitrogen Oxides (NO_x) = 8.13 grams/mile

Assumptions:

No. of truck trips = 20 ~~round~~ trips/day

No. of Days/week = 6 days

Miles Traveled = 150 miles/ ~~round~~ trip

Example Calculation:

$$\left[\frac{10.34 \text{ gms CO}}{\cancel{\text{mile}}}\right]\left[\frac{150 \text{ miles}}{\text{trip}}\right]\left[\frac{20 \text{ trips}}{\text{day}}\right]\left[\frac{6 \text{ days}}{\text{week}}\right]\left[\frac{52 \text{ weeks}}{\text{year}}\right]\left[\frac{1 \text{ pound}}{453.6 \text{ gms}}\right]\left[\frac{1 \text{ ton}}{2000 \text{ lbs}}\right]\left[\frac{2 \text{ trips}}{\text{round trip}}\right]$$

$$= 21.3 \text{ tons/year CO}$$

$\frac{8.13 \text{ gms } NO_x}{\text{mile}} \Rightarrow$ 16.8 tons/year NO_x

$\frac{2.1 \text{ gms HC}}{\text{mile}} \Rightarrow$ 4.3 tons/year HC

Sulfur Emissions based on:

Fuel efficiency = 30 miles/gallon

sulfur content of fuel = 0.02 %

Mobile Source Emissions - Past, Present, and Future
MOBILE Model (on-road vehicles)
NONROAD Model (nonroad engines, equipment, and vehicles)
MOVES (Motor Vehicle Emission Simulator)
Fuels Models

AP-42: Compilation of Air Pollutant Emission Factors

[Introduction] [Highway] [Nonroad]

Key Topics: Transportation and Air Quality
Overview: Pollutants and Programs
Consumer Information
On-road Vehicles and Engines
Nonroad Engines, Equipment, and Vehicles
Fuels and Fuel Additives
Voluntary Programs
Transportation and Air Quality Planning
Modeling, Testing, and Research

Historically, EPA has produced the report "Compilation of Air Pollutant Emission Factors." "Volume I: Stationary Point and Area Sources" is available from EPA's Office of Air Quality Planning And Standards. This document includes emission factors for "fugitive dust" on roadways. AP-42 section 13.2.1 contains emission factors for paved roads; unpaved road emission factors are in section 13.2.2.

"Volume II: Mobile Sources" (commonly referred to as "AP-42") is no longer maintained. More current mobile source emission factors are available using the Office of Transportation and Air Quality (OTAQ) mobile source models.

However, for reference purposes, we continue to post parts of the most recent mobile sources AP-42 on this web page. In particular, Appendix H is still useful in documenting the emission factors produced by MOBILE5, and in some cases carried over into MOBILE6 without additional documentation.

Contact: ASD Information, phone (734) 214-4636 or email: asdinfo@epa.gov for further information and documents and other information contained on this web page.

In its first edition (1978), Volume II of AP-42 contained all available information about mobile source emission factors, including the source code listing of the MOBILE1 highway vehicle emission factor model. As the underlying data sets on in-use emission levels were expanded, EPA's understanding of the many parameters influencing in-use vehicle emission levels increased, and the MOBILE program steadily grew in complexity and sophistication, both to account for these parameters and to provide more user-controlled options. Thus in later updates to AP-42 Vol. II, it was no longer feasible to provide complete listings of all emission factors. The structure of the last complete update to AP-42 Volume II (4th Edition, 1989; Supplement A, 1991) included in Section I extensive background information and documentation about the highway vehicle emission factor model (at that time, MOBILE5), and included hundreds of tables presenting of both values used in the model and "look-up tables" of emission factors produced by the model for various conditions.

Section II provided emission factor information, in the form of look-up tables, for a wide range of off-road mobile sources (including agricultural equipment, construction equipment, lawn and garden equipment, aircraft and aircraft engines, locomotives, marine vessels, and miscellaneous types of equipment). Much of the information presented in Section II had not been updated since it was first compiled in the 1970s, and so did not reflect changes in technology that took place even in the absence of emission standards and other regulatory requirements.

About Portable Document Format Files

Highway Vehicles

In the early 1990s, OTAQ began to develop a 5th edition of AP-42 Volume II, based on the MOBILE5 highway vehicle emission factor model. The following sections of the planned 5th edition of AP-42 Vol. II were completed and posted on the web:

- Appendix G: Sample Calculation of Motor Vehicle Emissions
- Appendix H: Highway Mobile Source Emission Factor Tables
- Appendix I: Emission Sensitivity Tables -- All Vehicles Combined
- Appendix J: Emission Sensitivity Tables -- By Vehicle Type
- Appendix K: Emission Sensitivity Tables -- Air Conditioning and Extra Loads

Appendix G: Sample Calculation of Motor Vehicle Emissions
115K PDF

Appendix H: Highway Mobile Source Emission Factor Tables

- List of Tables in Appendix H 6K TXT or 7K PDF
- Individual Text Tables
- Light-Duty Gasoline Vehicles 119K PDF
- Light-Duty Gasoline Trucks-1 117K PDF
- Light-Duty Gasoline Trucks-2 109K PDF
- Heavy-Duty Gasoline Trucks 87K PDF
- Light-Duty Diesel Vehicles 43K PDF
- Light-Duty Diesel Trucks 41K PDF
- Heavy-duty Diesel Trucks 42K PDF
- Motorcycles 63K PDF
- All Vehicles 200K ZIP WPD

Appendix I: Emission Sensitivity Tables -- All Vehicles Combined
Full Document, introduction and tables 155K PDF or Directory of Individual Tables

Appendix J: Emission Sensitivity Tables -- By Vehicle Type
Full Document, introduction and tables 155K PDF or Directory of Individual Tables

Appendix K: Emission Sensitivity Tables -- Air Conditioning and Extra Loads
Full Document, introduction and tables 37K PDF or Directory of Individual Tables

Appendix G describes the major steps used in MOBILE5 to calculate average in-use emissions for the specific case of exhaust hydrocarbons (HC) from light-duty gas vehicles. Appendix H consists of several hundred tables that document many of the

U.S. EPA
AP-42

TABLE 7.1.1
NONTAMPERED EXHAUST EMISSION RATES FOR
LOW ALTITUDE
HEAVY DUTY DIESEL POWERED VEHICLES
* BER = ZML + (DR * M)

Pol	Model Years	Zero Mile Emission Level	Deterioration Rate	50,000 Mile Emission Level	100,000 Mile Emission Level
HC	Pre-1967	3.540	0.060	3.840	4.140
	1967-1968	3.660	0.060	3.960	4.260
	1969	3.780	0.060	4.080	4.380
	1970	3.810	0.060	4.110	4.410
	1971-1973	3.910	0.060	4.210	4.510
	1974-1976	3.910	0.060	4.210	4.510
	1977	3.990	0.060	4.290	4.590
	1978	3.920	0.060	4.220	4.520
	1979	3.510	0.000	3.510	3.510
	1980-1981	3.170	0.000	3.170	3.170
	1982	2.780	0.000	2.780	2.780
	1983	2.660	0.000	2.660	2.660
	1984	2.820	0.000	2.820	2.820
	1985	2.590	0.000	2.590	2.590
	1986	2.280	0.000	2.280	2.280
	1987	2.230	0.000	2.230	2.230
	1988-1989	2.180	0.000	2.180	2.180
	1990	2.130	0.000	2.130	2.130
	1991-1997	2.100	0.000	2.100	2.100
	1998-2000	2.100	0.000	2.100	2.100
	2001+	2.100	0.000	2.100	2.100
CO	Pre-1967	10.320	0.140	11.020	11.720
	1967-1968	10.690	0.150	11.440	12.190
	1969	11.040	0.150	11.790	12.540
	1970	11.130	0.150	11.880	12.630
	1971-1973	11.420	0.160	12.220	13.020
	1974-1976	11.420	0.160	12.220	13.020
	1977	11.650	0.160	12.450	13.250
	1978	11.440	0.160	12.240	13.040
	1979	14.040	0.120	14.640	15.240
	1980-1981	12.670	0.110	13.220	13.770
	1982	11.120	0.100	11.620	12.120
	1983	10.660	0.090	11.110	11.560
	1984	11.260	0.100	11.760	12.260
	1985	10.350	0.090	10.800	11.250
	1986	10.360	0.090	10.810	11.260
	1987	10.140	0.090	10.590	11.040
	1988-1989	9.900	0.080	10.300	10.700
	1990	9.670	0.080	10.070	10.470
	1991-1997	9.540	0.080	9.940	10.340
	1998-2000	9.530	0.080	9.930	10.330
	2001+	9.520	0.080	9.920	10.320
NOx	Pre-1967	22.990	0.170	23.840	24.690
	1967-1968	23.830	0.180	24.730	25.630
	1969	24.590	0.180	25.490	26.390
	1970	24.800	0.190	25.750	26.700
	1971-1973	25.460	0.190	26.410	27.360
	1974-1976	25.440	0.190	26.390	27.340
	1977	25.970	0.190	26.920	27.870
	1978	25.500	0.190	26.450	27.400
	1979	23.780	0.000	23.780	23.780
	1980-1981	21.470	0.000	21.470	21.470
	1982	18.840	0.000	18.840	18.840
	1983	18.060	0.000	18.060	18.060
	1984	19.080	0.000	19.080	19.080
	1985	17.530	0.000	17.530	17.530
	1986	17.560	0.000	17.560	17.560
	1987	17.180	0.000	17.180	17.180
	1988-1989	16.770	0.000	16.770	16.770
	1990	9.870	0.000	9.870	9.870
	1991-1997	8.130	0.000	8.130	8.130
	1998-2000	6.490	0.000	6.490	6.490
	2001+	6.490	0.000	6.490	6.490

* WHERE : BER = Nontampered basic exhaust emission rates in grams/mile,
ZML = Zero mile level in grams/mile,
DR = Deterioration rate in grams/mile/10K miles,
M = Cumulative mileage / 10,000 miles.

DATE : JUNE 30, 1995

Given: Emission factors for the Combustion of Natural Gas (AP-42, Chapter 1, Table 1.4-1)

Residential Furnaces (< 0.3 mm Btu/hr heat input)

Nitrogen Oxides (NO_x) = 94 lbs/ 10^6 scf

Carbon Monoxide (CO) = 40 lbs/ 10^6 scf

scf = standard cubic feet of natural gas

Assumptions:

Annual fuel use = 3.3×10^9 Btu/year

Heat Content of Natural Gas = 1020 Btu/scf

Example Calculation

$$\left[\frac{94 \text{ lbs } NO_x}{10^6 \text{ scf}}\right]\left[\frac{3{,}300 \times 10^6 \text{ Btu}}{\text{year}}\right]\left[\frac{\text{scf}}{1020 \text{ Btu}}\right]\left[\frac{\text{ton}}{2000 \text{ lbs}}\right]$$

$$= \underline{0.152 \text{ tons/year } NOx}$$

$$\frac{40 \text{ lbs CO}}{10^6 \text{ scf}} \Rightarrow \underline{0.065 \text{ tons/year CO}}$$

CHIEF Home

EFPAC Home

Basic Information

Recent Additions

Emissions Factors / AP 42

Emissions Factors Software and Tools

CHIEF Archives

Upcoming Events

Frequent Questions

Contact Us

Emissions Factors & AP 42

An **emissions factor** is a representative value that attempts to relate the quantity of a pollutant released to the atmosphere with an activity associated with the release of that pollutant. These factors are usually expressed as the weight of pollutant divided by a unit weight, volume, distance, or duration of the activity emitting the pollutant (e.g., kilograms of particulate emitted per megagram of coal burned). Such factors facilitate estimation of emissions from various sources of air pollution. In most cases, these factors are simply averages of all available data of acceptable quality, and are generally assumed to be representative of long-term averages for all facilities in the source category (i.e., a population average).

The general equation for emissions estimation is:

$$E = A \times EF \times (1\text{-}ER/100)$$

where:

- E = emissions;
- A = activity rate;
- EF = emission factor, and
- ER =overall emission reduction efficiency, %

For information about emissions factors from highway vehicles and nonroad mobile sources, visit the ***Office of Transportation and Air Quality*** web site.

AP 42, Fifth Edition
Compilation of Air Pollutant Emission Factors, Volume 1: Stationary Point and Area Sources

For current information on AP 42 updates and the activities of the Emissions Factors and Policy Applications Group, you can subscribe to the CHIEF Listserv.

AP 42 FAQs	Answers to frequently asked questions about AP 42
Drafts	Draft Sections Under Review
Supplements	AP 42 historical listing of supplements
Older Editions of AP-42, Volume 1	**This information is available for historical purposes only**. For the most recent emissions factors, supported by the EPA, please see the table of contents below.
Procedures	*Procedures for Preparing Emission Factor Documents* -- Describes procedures for developing and reporting emission factors in EPA publications -- November 1997 (PDF 477K)
Contents	Detailed Table of Contents, Publications in Series, Insertion Instructions, and Key Word Index -- May 1998 (PDF 128K). This is current through Fifth Edition,

Supplement C of AP 42. For sections and chapters added after November 1997, see the chapter web pages below.

AP 42, Volume I, Fifth Edition

Draft Sections Under Review

Chapter & Section	Description	Comments Requested by:

CHIEF Home

EFPAC Home
Basic Information
Recent Additions
Emissions Factors / AP 42
Emissions Factors Software and Tools
CHIEF Archives
Upcoming Events
Frequent Questions
Contact Us

AP 42, Fifth Edition, Volume I
Chapter 1: External Combustion Sources

U.S. EPA
AP-42

Table 1.4-1. EMISSION FACTORS FOR NITROGEN OXIDES (NO_x) AND CARBON MONOXIDE (CO) FROM NATURAL GAS COMBUSTION[a]

Combustor Type (MMBtu/hr Heat Input) [SCC]	NO_x[b]		CO	
	Emission Factor (lb/10^6 scf)	Emission Factor Rating	Emission Factor (lb/10^6 scf)	Emission Factor Rating
Large Wall-Fired Boilers (>100) [1-01-006-01, 1-02-006-01, 1-03-006-01]				
Uncontrolled (Pre-NSPS)[c]	280	A	84	B
Uncontrolled (Post-NSPS)[c]	190	A	84	B
Controlled - Low NO_x burners	140	A	84	B
Controlled - Flue gas recirculation	100	D	84	B
Small Boilers (<100) [1-01-006-02, 1-02-006-02, 1-03-006-02, 1-03-006-03]				
Uncontrolled	100	B	84	B
Controlled - Low NO_x burners	50	D	84	B
Controlled - Low NO_x burners/Flue gas recirculation	32	C	84	B
Tangential-Fired Boilers (All Sizes) [1-01-006-04]				
Uncontrolled	170	A	24	C
Controlled - Flue gas recirculation	76	D	98	D
Residential Furnaces (<0.3) [No SCC]				
Uncontrolled	94	B	40	B

[a] Reference 11. Units are in pounds of pollutant per million standard cubic feet of natural gas fired. To convert from lb/10^6 scf to kg/10^6 m^3, multiply by 16. Emission factors are based on an average natural gas higher heating value of 1,020 Btu/scf. To convert from lb/10^6 scf to lb/MMBtu, divide by 1,020. The emission factors in this table may be converted to other natural gas heating values by multiplying the given emission factor by the ratio of the specified heating value to this average heating value. SCC = Source Classification Code. ND = no data. NA = not applicable.

[b] Expressed as NO_2. For large and small wall fired boilers with SNCR control, apply a 24 percent reduction to the appropriate NO_x emission factor. For tangential-fired boilers with SNCR control, apply a 13 percent reduction to the appropriate NO_x emission factor.

[c] NSPS=New Source Performance Standard as defined in 40 CFR 60 Subparts D and Db. Post-NSPS units are boilers with greater than 250 MMBtu/hr of heat input that commenced construction modification, or reconstruction after August 17, 1971, and units with heat input capacities between 100 and 250 MMBtu/hr that commenced construction modification, or reconstruction after June 19, 1984.

Given: Emission factors for Aggregate Handling and Storage Piles (AP-42, Chpt 13)

$$E = K(0.0032)\frac{(U/5)^{1.3}}{(M/2)^{1.4}}$$

where: E = emission factor (lbs PM_{10} / ton DS)

K = particle size multiplier

U = mean wind speed (mph)

M = material moisture content (%)

Assumptions

Total Acres = 30

Total Solids Applied = 6,310 tons/day

K = 0.35 PM less than 10 microns
U = 12 miles per hour
M = 10 percent moisture

$$E = (0.35)(0.0032)\frac{\left[12/5\right]^{1.3}}{\left[10/2\right]^{1.4}}$$

$$E = 0.000367 \text{ lbs } PM_{10} / \text{Ton DS}$$

$$Q = \left[\frac{6310 \text{ tons}}{\text{day}}\right]\left[\frac{6 \text{ day}}{\text{wk}}\right]\left[\frac{52 \text{ wks}}{\text{yr}}\right] = \frac{1.97 \times 10^6 \text{ ton DS}}{\text{year}}$$

$$E \times Q = \left[\frac{0.000367 \text{ lbs } PM_{10}}{\text{Ton } \cancel{DS}}\right]\left[\frac{1.97 \times 10^6 \text{ ton } \cancel{DS}}{\text{year}}\right]\left[\frac{\text{ton } PM_{10}}{2000 \text{ lbs}}\right]$$

$$= 0.36 \frac{\text{tons } PM_{10}}{\text{year}}$$

AP 42, Fifth Edition, Volume I
Chapter 13: Miscellaneous Sources

Explanation of File Formats

NOTE: Many AP 42 files contain equation fonts that may not be readable on some computers. If you encounter problems with viewing AP 42 documents contact the Info CHIEF Help Desk, (919) 541-1000.

13.4 Wet Cooling Towers

- Final Section - January 1995 (PDF 114K)

13.5 Industrial Flares

- Final Section - September 1991 (PDF 46K)

Last updated on Monday, January 31st, 2005
URL: http://www.epa.gov/ttn/chief/ap42/ch13/index.html

13.2.4 Aggregate Handling And Storage Piles

13.2.4.1 General

Inherent in operations that use minerals in aggregate form is the maintenance of outdoor storage piles. Storage piles are usually left uncovered, partially because of the need for frequent material transfer into or out of storage.

Dust emissions occur at several points in the storage cycle, such as material loading onto the pile, disturbances by strong wind currents, and loadout from the pile. The movement of trucks and loading equipment in the storage pile area is also a substantial source of dust.

13.2.4.2 Emissions And Correction Parameters

The quantity of dust emissions from aggregate storage operations varies with the volume of aggregate passing through the storage cycle. Emissions also depend on 3 parameters of the condition of a particular storage pile: age of the pile, moisture content, and proportion of aggregate fines.

When freshly processed aggregate is loaded onto a storage pile, the potential for dust emissions is at a maximum. Fines are easily disaggregated and released to the atmosphere upon exposure to air currents, either from aggregate transfer itself or from high winds. As the aggregate pile weathers, however, potential for dust emissions is greatly reduced. Moisture causes aggregation and cementation of fines to the surfaces of larger particles. Any significant rainfall soaks the interior of the pile, and then the drying process is very slow.

Silt (particles equal to or less than 75 micrometers [μm] in diameter) content is determined by measuring the portion of dry aggregate material that passes through a 200-mesh screen, using ASTM-C-136 method.[1] Table 13.2.4-1 summarizes measured silt and moisture values for industrial aggregate materials.

13.2.4.3 Predictive Emission Factor Equations

Total dust emissions from aggregate storage piles result from several distinct source activities within the storage cycle:

1. Loading of aggregate onto storage piles (batch or continuous drop operations).
2. Equipment traffic in storage area.
3. Wind erosion of pile surfaces and ground areas around piles.
4. Loadout of aggregate for shipment or for return to the process stream (batch or continuous drop operations).

Either adding aggregate material to a storage pile or removing it usually involves dropping the material onto a receiving surface. Truck dumping on the pile or loading out from the pile to a truck with a front-end loader are examples of batch drop operations. Adding material to the pile by a conveyor stacker is an example of a continuous drop operation.

Table 13.2.4-1. TYPICAL SILT AND MOISTURE CONTENTS OF MATERIALS AT VARIOUS INDUSTRIES[a]

Industry	No. Of Facilities	Material	Silt Content (%)			Moisture Content (%)		
			No. Of Samples	Range	Mean	No. Of Samples	Range	Mean
Iron and steel production	9	Pellet ore	13	1.3 - 13	4.3	11	0.64 - 4.0	2.2
		Lump ore	9	2.8 - 19	9.5	6	1.6 - 8.0	5.4
		Coal	12	2.0 - 7.7	4.6	11	2.8 - 11	4.8
		Slag	3	3.0 - 7.3	5.3	3	0.25 - 2.0	0.92
		Flue dust	3	2.7 - 23	13	1	—	7
		Coke breeze	2	4.4 - 5.4	4.9	2	6.4 - 9.2	7.8
		Blended ore	1	—	15	1	—	6.6
		Sinter	1	—	0.7	0	—	—
		Limestone	3	0.4 - 2.3	1.0	2	ND	0.2
Stone quarrying and processing	2	Crushed limestone	2	1.3 - 1.9	1.6	2	0.3 - 1.1	0.7
		Various limestone products	8	0.8 - 14	3.9	8	0.46 - 5.0	2.1
Taconite mining and processing	1	Pellets	9	2.2 - 5.4	3.4	7	0.05 - 2.0	0.9
		Tailings	2	ND	11	1	—	0.4
Western surface coal mining	4	Coal	15	3.4 - 16	6.2	7	2.8 - 20	6.9
		Overburden	15	3.8 - 15	7.5	0	—	—
		Exposed ground	3	5.1 - 21	15	3	0.8 - 6.4	3.4
Coal-fired power plant	1	Coal (as received)	60	0.6 - 4.8	2.2	59	2.7 - 7.4	4.5
Municipal solid waste landfills	4	Sand	1	—	2.6	1	—	7.4
		Slag	2	3.0 - 4.7	3.8	2	2.3 - 4.9	3.6
		Cover	5	5.0 - 16	9.0	5	8.9 - 16	12
		Clay/dirt mix	1	—	9.2	1	—	14
		Clay	2	4.5 - 7.4	6.0	2	8.9 - 11	10
		Fly ash	4	78 - 81	80	4	26 - 29	27
		Misc. fill materials	1	—	12	1	—	11

[a] References 1-10. ND = no data.

The quantity of particulate emissions generated by either type of drop operation, per kilogram (kg) (ton) of material transferred, may be estimated, with a rating of A, using the following empirical expression:[11]

$$E = k(0.0016)\ \frac{\left(\frac{U}{2.2}\right)^{1.3}}{\left(\frac{M}{2}\right)^{1.4}}\ \text{(kg/megagram [Mg])}$$

$$E = k(0.0032)\ \frac{\left(\frac{U}{5}\right)^{1.3}}{\left(\frac{M}{2}\right)^{1.4}}\ \text{(pound [lb]/ton)} \qquad (1)$$

where:

E = emission factor
k = particle size multiplier (dimensionless)
U = mean wind speed, meters per second (m/s) (miles per hour [mph])
M = material moisture content (%)

The particle size multiplier in the equation, k, varies with aerodynamic particle size range, as follows:

Aerodynamic Particle Size Multiplier (k) For Equation 1				
< 30 µm	< 15 µm	< 10 µm	< 5 µm	< 2.5 µm
0.74	0.48	0.35	0.20	0.11

The equation retains the assigned quality rating if applied within the ranges of source conditions that were tested in developing the equation, as follows. Note that silt content is included, even though silt content does not appear as a correction parameter in the equation. While it is reasonable to expect that silt content and emission factors are interrelated, no significant correlation between the 2 was found during the derivation of the equation, probably because most tests with high silt contents were conducted under lower winds, and vice versa. It is recommended that estimates from the equation be reduced 1 quality rating level if the silt content used in a particular application falls outside the range given:

Ranges Of Source Conditions For Equation 1			
Silt Content (%)	Moisture Content (%)	Wind Speed	
		m/s	mph
0.44 - 19	0.25 - 4.8	0.6 - 6.7	1.3 - 15

To retain the quality rating of the equation when it is applied to a specific facility, reliable correction parameters must be determined for specific sources of interest. The field and laboratory procedures for aggregate sampling are given in Reference 3. In the event that site-specific values for correction parameters cannot be obtained, the appropriate mean from Table 13.2.4-1 may be used, but the quality rating of the equation is reduced by 1 letter.

For emissions from equipment traffic (trucks, front-end loaders, dozers, etc.) traveling between or on piles, it is recommended that the equations for vehicle traffic on unpaved surfaces be used (see Section 13.2.2). For vehicle travel between storage piles, the silt value(s) for the areas among the piles (which may differ from the silt values for the stored materials) should be used.

Worst-case emissions from storage pile areas occur under dry, windy conditions. Worst-case emissions from materials-handling operations may be calculated by substituting into the equation appropriate values for aggregate material moisture content and for anticipated wind speeds during the worst case averaging period, usually 24 hours. The treatment of dry conditions for Section 13.2.2, vehicle traffic, "Unpaved Roads", follows the methodology described in that section centering on parameter p. A separate set of nonclimatic correction parameters and source extent values corresponding to higher than normal storage pile activity also may be justified for the worst-case averaging period.

13.2.4.4 Controls[12-13]

Watering and the use of chemical wetting agents are the principal means for control of aggregate storage pile emissions. Enclosure or covering of inactive piles to reduce wind erosion can also reduce emissions. Watering is useful mainly to reduce emissions from vehicle traffic in the storage pile area. Watering of the storage piles themselves typically has only a very temporary slight effect on total emissions. A much more effective technique is to apply chemical agents (such as surfactants) that permit more extensive wetting. Continuous chemical treating of material loaded onto piles, coupled with watering or treatment of roadways, can reduce total particulate emissions from aggregate storage operations by up to 90 percent.[12]

References For Section 13.2.4

1. C. Cowherd, Jr., *et al.*, *Development Of Emission Factors For Fugitive Dust Sources*, EPA-450/3-74-037, U. S. Environmental Protection Agency, Research Triangle Park, NC, June 1974.

2. R. Bohn, *et al.*, *Fugitive Emissions From Integrated Iron And Steel Plants*, EPA-600/2-78-050, U. S. Environmental Protection Agency, Cincinnati, OH, March 1978.

3. C. Cowherd, Jr., *et al.*, *Iron And Steel Plant Open Dust Source Fugitive Emission Evaluation*, EPA-600/2-79-103, U. S. Environmental Protection Agency, Cincinnati, OH, May 1979.

4. *Evaluation Of Open Dust Sources In The Vicinity Of Buffalo, New York*, EPA Contract No. 68-02-2545, Midwest Research Institute, Kansas City, MO, March 1979.

5. C. Cowherd, Jr., and T. Cuscino, Jr., *Fugitive Emissions Evaluation*, MRI-4343-L, Midwest Research Institute, Kansas City, MO, February 1977.

6. T. Cuscino, Jr., *et al., Taconite Mining Fugitive Emissions Study*, Minnesota Pollution Control Agency, Roseville, MN, June 1979.

7. *Improved Emission Factors For Fugitive Dust From Western Surface Coal Mining Sources,* 2 Volumes, EPA Contract No. 68-03-2924, PEDCo Environmental, Kansas City, MO, and Midwest Research Institute, Kansas City, MO, July 1981.

8. *Determination Of Fugitive Coal Dust Emissions From Rotary Railcar Dumping,* TRC, Hartford, CT, May 1984.

9. *PM-10 Emission Inventory Of Landfills In the Lake Calumet Area*, EPA Contract No. 68-02-3891, Midwest Research Institute, Kansas City, MO, September 1987.

10. *Chicago Area Particulate Matter Emission Inventory — Sampling And Analysis*, EPA Contract No. 68-02-4395, Midwest Research Institute, Kansas City, MO, May 1988.

11. *Update Of Fugitive Dust Emission Factors In AP-42 Section 11.2*, EPA Contract No. 68-02-3891, Midwest Research Institute, Kansas City, MO, July 1987.

12. G. A. Jutze, *et al., Investigation Of Fugitive Dust Sources Emissions And Control*, EPA-450/3-74-036a, U. S. Environmental Protection Agency, Research Triangle Park, NC, June 1974.

13. C. Cowherd, Jr., *et al., Control Of Open Fugitive Dust Sources*, EPA-450/3-88-008, U. S. Environmental Protection Agency, Research Triangle Park, NC, September 1988.