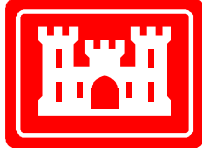


**FINAL ENVIRONMENTAL IMPACT STATEMENT
FOR A PROPOSED WATER TREATMENT RESIDUALS
MANAGEMENT PROCESS FOR THE WASHINGTON
AQUEDUCT, WASHINGTON, D.C.**



US Army Corps of Engineers
Baltimore District

**VOLUME 3D
COMMENTS AND RESPONSES**



Prepared by:

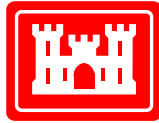
**U.S. Army Corps of Engineers, Baltimore District
Washington Aqueduct
5900 MacArthur Boulevard
Washington, D.C. 20016**

September 2005

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

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COMMENTS AND RESPONSES**

Prepared by:



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

and



In Cooperation with:



This Final Environmental Impact Statement (FEIS) describes a proposed project to alter the Washington Aqueduct's current practice of discharging water treatment residuals to the Potomac River to one of instead collecting, treating, then disposing of the residuals at an alternate location. Over 160 alternatives were considered and screened, and four of these, plus the no-action alternative were evaluated in detail to determine the potential for environmental, engineering, and economic impacts. A proposed action, the environmentally preferred alternative, is identified; It involves collection of the residuals at the Dalecarlia Water Treatment Plant and Georgetown Reservoir, treatment of residuals at an East Dalecarlia Processing Site on government property that is located north of Sibley Memorial Hospital in the District of Columbia, and then disposal of residuals by trucking on major streets to licensed land disposal sites likely located in Maryland or Virginia.

For further information, please contact:

Mr. Michael Peterson
at the address above or at
(202) 764-0025 or

Michael.C.Peterson@usace.army.mil

September 2005

Volume 3 of the EIS includes the response to comments information. All comments and questions received from the public through e-mails and public meeting transcripts prior to publishing the DEIS and during the DEIS public comment period are evaluated and answered within this document. The unique names of those who provided comments have been removed to protect their privacy. In this volume of the EIS, a legend for comment type, the responses to each comment type, and a customized copy of each source document is included.

There are 59 documents that constitute the content of Volumes 3A and 3B and 127 documents that constitute Volumes 3C and 3D. A customized copy of each document is provided after an enumerated tab. In each volume, the tabs are preceded by an index of all documents in volume 3 to assist the reader in finding the correct volume (3A, 3B, 3C or 3D) for a specific comment. This document index is followed by a comment-topic legend and Table 1, the Response to Comment Topic Table. Table 1 is comprehensive, covering responses for all of the comments included within Volume 3.

Every comment or question is given a unique three-level code identified by source document, sequential comment number, and comment topic. Every comment is identified in a text box on the left side of the source document. For example, the comment identified as "1-1-AA" is for document one, first comment, and comment topic AA (or cost, water user rates, etc.). Additionally, each comment is identified within the source document by a box drawn around the comment.

Each identified comment is evaluated, categorized by comment topic, and answered. The comment topic categorization allows the comments to be grouped into relevant categories. A legend defining the comment topics is provided. The responses to each comment topic are shown in Table 1. Table 1 provides the topic, a brief summary of the topic, the general response, and the specific section in the EIS where the reader can look for additional information on the topic.

Questions raised and answered during the four public meetings and one public hearing when formal transcripts were prepared are flagged with the unique three level comment code. However, as these questions were answered during the public forum and are available within the transcript, the answers to these questions have not been repeated in Table 1.

Washington Aqueduct EIS Comment Document Index

Document Number	Title/Description	Date & Time
1	Oral Statements and Questions from Interested Parties at St. Patrick's Episcopal Church Open House	1/28/04
2	Oral Statements and Questions from Interested Parties at Dalecarlia Water Treatment Facility Open House	9/7/2004
3	Email comment on Follow-up to Washington Aqueduct's September 7 Public Meeting	9/12/2002; 10:50 AM
4	Email comments	9/21/2004; 4:23 PM
5	Email comment on residuals	9/22/2004; 3:48 PM
6	Email comment on Proposed Water Treatment Residuals Management Process	9/25/2004; 1:45 PM
7	Email comment on Proposed Water Treatment Residuals Management Process	9/25/2004; 2:39 PM
8	Public Comment and Question/Answer Session and Technical Presentation on Alternatives Identification and Screening Process public meeting at Sibley Memorial Hospital	9/28/2004
9	Email comments on Dalecarlia 9/28 Meeting	09/29/2004; 4:30 PM
10	Email comments on Residuals project question	9/29/2004; 10:27 PM
11	Email comments on Suggested Alternative	09/30/2004; 10:40 AM
12	Email comment	10/2/2004; 8:55 AM
13	Cold call to Mike Peterson from Lehigh cement	<date of Email notifying contents of call: 10/12/2004; 1:42 PM>
14	Email comments on Washington Aqueduct Residuals Treatment Alternative	11/05/2004; 2:15 PM
15	Email comments on Proposed Water Treatment Residuals Management Process	11/9/2004; 11:37AM
16	Email comments on Proposed Water Treatment Residuals Management Process	7/13/2004; 8:23 PM
17	Comments on Proposed Water Treatment Residuals Management Process	11/10/2004; 12:21 AM
18	Email comments on Proposed Water Treatment Residuals Management Process	11/11/2004; 10:24 AM
19	Email comments regarding sludge treatment plant	11/11/2004; 12:05 AM
20	Email comments on Dalecarlia Sludge Alternative proposals	11/11/2004; 1:08 PM

Document Number	Title/Description	Date & Time
21	Email comments on Proposed Water Treatment Residuals Management Process	11/11/2004; 5:22 PM
22	Proposed Water Treatment Residuals Management Process, Request for Comments	11/12/2004
23	Email comments on Proposed Water Treatment Residuals Management Process	11/14/2004; 9:15 PM
24	Email comments on Proposed Water Treatment Residuals Management Process	11/15/2004; 12:08 AM
25	Email comments on Proposed Water Treatment Residuals Management Process-“Public Submission of Residuals Alternatives” Set of 72	11/15/04; 4:57 PM
26	Email comments on Proposed Water Treatment Residuals Management Process	11/15/2004; 5:25 PM
27	Email comments on Proposed Water Treatment Residuals Management Process	11/15/2004; 6:09 PM
28	Email comments on Proposed Water Treatment Residuals Management Process	11/15/04; 9:18 PM
29	Brookmont Community comments on and alternatives to the proposed Washington Aqueduct Water Treatment Residuals Management Process Facility to be located at the existing Dalecarlia Facility	11/15/2004
30	Public Comment and Question/Answer Session and Technical Presentation on Alternatives Identification and Screening Process public meeting at Sibley Memorial Hospital	11/16/2004
31	Email comments on Barge Option	11/19/2004; 2:08 PM
32	Email comments on EIS Wastewater	1/24/2005; 1:45 PM
33	Concerned Neighbors letter - Washington Aqueduct Residuals Management Project: Comments on Alternatives	2/14/2005; 4:45 PM
34	Sludge Stoppers letter - Washington Aqueduct Residuals and Dewatering Facility Additional 40 Alternatives	2/14/2005
35	ANC Meeting Comments, Questions from the Commissioners	3/2/2005
36	DOPAA Meeting Notes	5/26/2005
37	Concerned Neighbors letter - Washington Aqueduct Residuals Management Project: Comments on Alternatives	11/15/2004
38	Washington Aqueduct Residuals EIS	1/24/2005; 9:23 PM
39	Suggested Alternatives	9/30/2004; 10:40 AM
40	Waste Management Plan	2/10/2004; 3:58 PM
41	Comments on Proposed Water Treatment Residuals Management Process	2/10/2004; 4:24 PM

Document Number	Title/Description	Date & Time
42	Comments on Proposed Water Treatment Residuals Management Process	6/3/2004; 6:54 PM
43	Sediment Disposal Options	5/24/2004; 1:41 PM
44	EIS and Related Activities relating to Proposed Water Treatment Residuals Management Process	6/18/2004; 11:43 AM
45	Comments on Proposed Water Treatment Residuals Management Process	1/11/2004; 2:12 PM
46	Comments on Proposed Water Treatment Residuals Management Process	7/14/2004; 8:06 PM
47	Comments on Proposed Water Treatment Residuals Management Process	7/19/2004; 2:24 PM
48	Comment on Residuals Project	7/28/2004; 4:47 PM
49	Comments on Proposed Water Treatment Residuals Management Process	9/22/2004; 10:19 AM
50	Comments on Proposed Water Treatment Residuals Management Process	9/21/2004; 4:17 PM
51	Comments on Proposed Water Treatment Residuals Management Process	9/25/2004; 1:45 PM
52	Comments on Proposed Water Treatment Residuals Management Process	9/8/2004; 10:10 AM
53	SSN-ANC – Needed Analysis for Next Public Review	9/22/2004; 6:01 PM
54	Comments on Proposed Water Treatment Residuals Management Process	9/25/2004; 2:39 PM
55	Comments on Proposed Water Treatment Residuals Management Process	10/4/2004; 8:39 PM
56	Residuals Project Question	10/9/2004; 11:19 AM
57	Comments on Proposed Water Treatment Residuals Management Process	11/7/2004; 10:30 PM
58	Comments on Proposed Water Treatment Residuals Management Process	11/9/2004; 11:37 AM
59	Concerned Neighbors letter - Fatal Flaws in the Corps' NEPA Analysis of Alternatives to the Current Residuals Disposal Practices at the Washington Aqueduct	3/30/2005
60	Comment regarding residuals trucking plan	Wed 7/6/2005 10:22 AM
61	Email comments on DEIS	Wed 7/6/2005 2:22 PM
62	Email comments on DEIS	Wed 7/6/2005 2:59 PM
63	Email comments on DEIS	Wed 7/6/2005 3:08 PM
64	Objection to Washington Aqueduct Project	Wed 7/6/2005 3:45 PM
65	Email comments on DEIS	Wed 7/6/2005 4:31 PM
66	Dewatering plant	Wed 7/6/2005 6:45 PM

Document Number	Title/Description	Date & Time
67	Dalecarlia water residuals treatment and DEIS	Wed 7/6/2005 9:57 PM
68	Strong opposition to Brookmont Option B	Wed 7/6/2005 10:47 PM
69	Response to the DEIS for the Washington Aqueduct proposal to construct a thickening and dewatering facility - Strong opposition to Brookmont Option B	Wed 7/6/2005 11:18 PM
70	Letter in Opposition Tio The Dalecarlia Sludge Factory	Thu 7/7/2005 12:20 AM
71	Sludge Plan public comment	Fri 7/8/2005 11:58 PM
72	thickening/dewatering facility	Mon 4/25/2005 11:16 AM
73	Dalecarlia water treatment facility	4/26/2005 12:55 PM
74	Washington Aqueduct Draft Environmental Impact Statement	Tue 4/26/2005 4:27 PM
75	Bait and Switch	Wed 4/27/2005 1:01 PM
76	Dalecarlia Water Treatment Facility	Wed 4/27/2005 2:33 PM
77	Request for Extension of Comment Period for Draft DEIS on the Washington Aqueduct Project	Mon 5/2/2005 10:26 PM
78	Testimony	Tue 5/10/2005 8:32 AM
79	Letter from Concerned Neighbors	Tue 5/10/2005 10:55 AM
80	Testimony	Tue 5/10/2005 11:45 AM
81	Washington Aqueduct Draft Environmental Impact Statement & Hearing Request	Wed 5/11/2005 3:06 PM
82	Email question	Wed 5/11/2005 4:36 PM
83	Washington Aqueduct Construction Funding?	Wed 5/11/2005 6:38 PM
84	Washington Aqueduct Construction Funding	Thu 5/12/2005 5:35 PM
85	Delcarlia Waste Plan	Fri 5/13/2005 4:17 PM
86	Email comment	Sat 5/14/2005 10:43 AM
87	Dewatering facility	Thu 5/26/2005 2:32 PM
88	Sludge Facility	Fri 6/3/2005 3:15 PM
89	Opposed to current plan of action	Fri 6/3/2005 3:27 PM
90	Comments on Proposed Water Treatment Residuals Management Process	Fri 6/3/2005 5:48 PM
91	Comments on DEIS	Fri 6/3/2005 9:40 PM
92	Comments on DEIS	Fri 6/3/2005 11:52 PM
93	I Oppose any Vehicular Solution to sludge removal!	Mon 6/6/2005 11:56 PM
94	Comments on Proposed Water Treatment Residuals Management Process	Mon 6/6/2005 4:32 PM
95	Opposition to Brookmont Option	Sun 6/5/2005 10:47 PM

Document Number	Title/Description	Date & Time
96	Comments on Proposed Water Treatment Residuals Management Process	Sun 6/5/2005 10:28 PM
97	Dalecarlia proposed dewatering facility	Fri 7/1/2005 2:15 PM
98	Comments on Proposed Water Treatment Residuals Management Process	Fri 6/10/2005 12:46 AM
99	Comment to DEIS	
100	Trucking	
101	Request for extension of comment period for draft DEIS on the Washington Aqueduct Project	April 29, 2005
102	Request for extension of comment period for draft DEIS on the Washington Aqueduct Project	April 30, 2005
103	Request for extension of comment period for draft DEIS on the Washington Aqueduct Project	April 30, 2005
104	Request for extension of comment period for draft DEIS on the Washington Aqueduct Project	
105	Request for extension of comment period for draft DEIS on the Washington Aqueduct Project	May 2, 2005
106	Request for extension of comment period for draft DEIS on the Washington Aqueduct Project	May 2, 2005
107	Request for extension of comment period for draft DEIS on the Washington Aqueduct Project	May 5, 2005
108	Comment	May 26, 2005
109	Dalecarlia Sludge Disposal	May 30, 2005
110	Comments on DEIS	June 2, 2005
111	Comments on DEIS	June 17, 2005
112	Plans for Water Extraction Facility	June 20, 2005
113	Comments on DESI	June 20, 2005
114	Comments on DEIS	June 21, 2005
115	Comments on DEIS	
116	Comments on DEIS	
117	Comments on DEIS	May 20, 2005
118	United States Senate - Comments on DEIS	June 2, 2005
119	Council of the District of Columbia - Comments on DEIS	May 10, 2005
120	US EPA - Request for Modification of Federal Facility Compliance Agreement	June 28, 2005
121	Council of the District of Columbia - See DOC 111 for responses	
122	US Department of the Interior - Comments to DEIS	May 31, 2005

Document Number	Title/Description	Date & Time
123	Montgomery County Council – Washington Aqueduct Residuals Project - Comments to DEIS	June 23, 2005
124	Commonwealth of Virginia – Water Treatment Residuals Management Process for the Washington Aqueduct - Comments to DEIS	May 26, 2005
125	Maryland National Capital Park and Planning Commission – Montgomery County Planning Board - Comments on DEIS	June 1, 2005
126	Sludge processing plant	Fri 6/10/2005 4:51 PM
127	Maryland State Highway Administration - Washington Aqueduct DEIS comments	Mon 6/13/2005 7:29 AM
128	Washington Aqueduct DEIS comment period	Mon 6/13/2005 10:31 AM
129	opposition to Dalecarlia sludge plant	Tue 6/21/2005 2:02 PM
130	DEIS-I oppose your proposal	Thu 6/30/2005 8:38 PM
131	Attached please find a letter to Mr. Thomas Jacobus	Thu 6/30/2005 5:59 PM
132	Washington Aqueduct	Tue 7/5/2005 6:59 AM
133	Alternative E of their Draft Environmental Impact Statement ('DEIS')	Mon 7/4/2005 11:34 AM
134	Sibley dewatering facility proposal	Mon 7/4/2005 12:02 PM
135	U.S. Army Corps of Engineers Draft Environmental Impact Statement ('DEIS') Alternative E	Mon 7/4/2005 12:20 PM
136	Washington Aqueduct	Mon 7/4/2005 2:10 PM
137	proposed industrial sludge treatment facility near Sibley Hospital	Mon 7/4/2005 5:00 PM
138	Alternative E opposition	Mon 7/4/2005 7:09 PM
139	Dewatering facility	Mon 7/4/2005 9:47 PM
140	industrial facility	Mon 7/4/2005 10:17 AM
141	80-foot industrial dewatering facility proposed behind Sibley Hospital (Alternative E)	Mon 7/4/2005 8:40 AM
142	Comments on DEIS	Mon 7/4/2005 9:11 AM
143	Dewatering Facility Proposal	Mon 7/4/2005 10:01 AM
144	Comments on DEIS	Mon 7/4/2005 7:55 AM
145	Comments on Proposed Water Treatment Residuals Management Process	Fri 7/1/2005 7:07 PM
146	Comments on DEIS	Fri 7/1/2005 6:00 PM
147	Washington Aqueduct	Mon 7/4/2005 12:29 AM
148	Washington Aqueduct	Sun 7/3/2005 11:32 PM
149	Deadline for comment period on DEIS for proposed dewatering plant	Sun 7/3/2005 4:08 PM

Document Number	Title/Description	Date & Time
150	Dewatering facility	Tue 7/5/2005 9:09 AM
151	Construction of Industrial Dewatering Facility Near Sibley Hospital	Tue 7/5/2005 10:05 AM
152	residue facility	Tue 7/5/2005 11:08 AM
153	Need for another alternative to siting of proposed 8 story tall toxic waste dump site next to Sibley Hospital under current Corps proposal E	Tuesday, July 05, 2005 11:36 AM
154	Water Extraction Facility at the Dalecarlia Filtration Plant	Tue 7/5/2005 11:47 AM
155	OPPOSITION TO Alternative E re the new industrial dewatering facility near Sibley Hospital	Tue 7/5/2005 11:44 AM
156	Sibley Memorial Hospital Comments on DEIS	June 27, 2005
157	Government of the District of Columbia Department of Health - Draft Environmental Impact Statement for Proposed Residuals Management Process	July 5, 2005
158	Washington Aqueduct	Tue 7/5/2005 12:35 PM
159	Opposition to DEISN	Tue 7/5/2005 1:36 PM
160	Washington Aqueduct: Draft EIS for dewatering facility	Tue 7/5/2005 2:44 PM
161	industrial plant in my backyard	Tue 7/5/2005 3:11 PM
162	Washington Aqueduct DEIS Response	Tue 7/5/2005 4:22 PM
163	Comments to DEIS	Tue 7/5/2005 4:59 PM
164	Dewatering Facility	Tue 7/5/2005 5:03 PM
165	Washington Aqueduct -	Tue 7/5/2005 5:45 PM
166	Washington Aqueduct: Draft EIS for De-Watering facility	Tue 7/5/2005 10:16 PM
167	Washington Aqueduct-environmental hazard	Wed 7/6/2005 7:10 AM
168	Transcripts (Private)	
169	Transcripts (Public)	
170	Letter from Concerned Neighbors - Fatal Flaws in the Corps' Draft Environmental Impact Statement ("DEIS") and Reasons Why the NEPA Process Must be Restarted	July 5, 2005
171	Public Comments on Draft Environmental Impact Statement (DEIS)	July 6, 2005
172	Comments on DEIS	July 5, 2005
173	Comments on DEIS	July 4, 2005
174	Comments on DEIS	July 1, 2005
175	Comments on DEIS	July 5, 2005
176	Comments on DEIS	July 4, 2005
177	Comments on DEIS	June 30, 2005
178	Comments on DEIS	June 30, 2005

Document Number	Title/Description	Date & Time
179	Comments on DEIS	July 5, 2005
180	Comments on DEIS	July 5, 2005
181	Industrial Dewatering Plant	Mon 7/5/05 5:59 PM
182	US EPA - Draft Environmental Impact Statement for the Washington Aqueduct Residuals Project CEQ #20050154	June 27, 2005
183	Comments on DEIS	May 17, 2005
184	Testimony	May 17, 2005
185	Statement Regarding the Draft Environmental Impact Statement for a Proposed Water Treatment Residuals Management Process for the Washington Aqueduct	May 17, 2005
186	Sludge Stoppers – Alternatives regarding the proposed Army Corps of Engineers Washington Aqueduct “residuals and dewatering facility” aka Sludge Factory	November 15, 2004

Agency Reviewers:

	Document #
Council of the District of Columbia	119
United States Environmental Protection Agency	120, 182
United States Department of the Interior	122
The Maryland – National Capital Park and planning Commission	125
Government of the District of Columbia	157
Commonwealth of Virginia – Department of Historic Resources	124

City and County Agencies, and Elected Officials:

	Document #
United States Senate	118
Montgomery County Council	123

LEGEND

Comment topics received through public and agency correspondence

Topic		Sub-Topic	
A	Cost	AA	Cost, water user rates, etc.
		AB	Cost, supporting data
		AC	Opportunity cost of land
		AD	Washington Aqueduct Funding
B	Facility (residuals processing)	BA	Facility appearance
		BB	Facility location
		BC	Facility noise
		BD	Facility simulation
		BE	Facility access
		BF	Facility light
		BG	Facility smell
		BH	Facility impact on habitats
		BI	Facility impact on Sibley Hospital
		BJ	Facility impact on dirt/dust
		BK	Facility impact on health
		BL	Facility will impact property values
		BM	Disturbing site B soil
C	Monofill	CA	Monofill, preference
		CB	Monofill, chemical exposure
		CC	Monofill, height
		CD	Monofill, trees
D	Pipeline	DA	Pipeline, preference to Blue Plains
		DB	Pipe in a pipe
		DC	Active management of residual discharge
		DD	WSSC Potomac WFP
		DE	Carderock
		DF	FCWA Corbalis WTP
		DG	Potomac River
		DH	George Washington Parkway

LEGEND

Comment topics received through public and agency correspondence

Topic		Sub-Topic	
		DI	Pipeline size
		DJ	Regionalization
		DK	Rockville WTP
		DL	New processing site near the Beltway
		DM	COE hasn't adequately investigated other piping alternatives
E	Residuals	EA	Residuals disposal method
		EB	Residuals processing method and impacts
		EC	Residuals Quantities
F	Schedule	FA	Construction schedule
		FB	EIS schedule
		FC	Compliance performance
		FD	Temporary alternatives
		FE	Public comment period
		FF	DEIS review period time extension
		FG	EPA grants interim FFCA schedule milestone
G	Trucking	GA	Trucking, neighborhood impact
		GB	Trucking alternative
		GC	Trucking, noise
		GD	Trucking, routes
		GE	Trucking, frequency
		GF	Trucking, air pollution
		GG	Trucking, safety
		GH	Trucking, vibration
		GI	Trucking costs
		GJ	Existing Dalecarlia Parkway vehicle/truck volumes
		GK	Trucking hours
H	Barge	HA	Barge, preference
I	Comment	IA	Preference
		IB	Useful Life of Alternatives

LEGEND

Comment topics received through public and agency correspondence

Topic		Sub-Topic	
J	Residuals Discharge Resolutions	JA	River discharge
		JB	Discharge during spawning season
K	Human Health and Environment	KA	Impure water quality, raw water intake
		KB	Monitoring water quality and safety
		KC	Residuals quality
		KD	Health Impacts of Diesel Truck Traffic
L	Alternate Water Treatment Process	LA	Suggested Processes
M	Government	MA	EPA mandate
		MB	FOIA requests
		MC	Conflict of Interest
		MD	Agency Recommendations on DEIS
N	EIS Process	NA	Understanding
		NB	Screening criteria and meeting
		NC	Communication
		ND	NEPA Process
		NE	Limited number of alternatives evaluated in DEIS
		NF	Institutional constraints screening criteria
		NG	Restart NEPA process
		NH	Regional approach to NEPA
O	Alternate Coagulants	OA	Continued River Discharge
P	Residuals Handling in Other Metropolitan Areas	PA	Disposal
		PB	Residuals studies throughout the world
Q	Residuals Alternatives	QA	Public Residuals Alternatives
		QB	Environmental assessment
		QC	Northwest (alternate B) versus east (alternate E) residuals processing sites
		QD	Residuals processing site near Beltway versus Dalecarlia WTP site

A number of comments were received from the public and the various agencies involved with the project prior to and following the issuance of the DEIS. Many of the comments are focused on similar EIS topics. This table documents the topics addressed in the comments, summarized the general response for each topic, and refers the reader to the EIS section where more information is provided on the topic/subtopic.

TABLE 1
Comments and Responses by Topic

Topic / Sub-topic	Summary	Response	See EIS section
AA	Costs, water user rates, etc.	<p>Costs of alternatives are estimated and compared. Screening criteria for cost: a feasible alternative must be no more than 30 percent of the baseline budget of \$50 million, to avoid undue impact on user rates. Actual rate impacts are not estimated. The wholesale customers are responsible for estimating water rate impacts and adjusting water rates accordingly. Questions related to the effect of operations and capital improvements on retail rates should be directed to the appropriate wholesale customer. The effect of Washington Aqueduct project costs on the financial plans developed by individual wholesale customer varies from one customer to another. As a result, Washington Aqueduct is not able to describe the direct effect of our proposed project costs on retail rates. It is impossible to say at what cost users' rates will be "unduly" or "unreasonably" impacted, but it is likely that this project will have an impact on retail water rates. The 30% threshold is a number that the project engineers discussed at length early in the planning stage and consider to be a reasonable limit to use as screening. Note that there are no alternatives that are screened out based on cost alone.</p> <p>The residuals project will be paid for by the wholesale customers.</p> <p>See topic AD for a discussion of Washington Aqueduct project funding.</p>	<p>EIS Volume 1 - Section 2.3 Alternatives screening Process and Criteria</p> <p>EIS Volume 1 - Section 4.14 Cost</p>
AB	Cost, supporting data	<p>Capital and O&M costs and associated supporting data are provided in the Feasibility Study. Monofill operating costs were obtained from a neighboring wastewater treatment utility that operates a similar monofill facility.</p> <p>A question was raised concerning the difference between the pipeline construction costs included in Alternatives 5 versus Alternative 8, as summarized in the May 2004 Engineering Feasibility Study document. The pipeline cost included for Alternative 8 includes a \$10,000,000.00 allowance for land purchase that is not included in the Alternative 5 cost. The cost for the Alternative 5 pipeline was modified in Volume 4 of the EIS to reflect a change in construction technique (to directional drilling).</p>	<p>EIS Volume 4 - Engineering Feasibility Study Compendium</p> <p>EIS Volume 4 –Engineering Feasibility Study Compendium Sections 3.1.2 and Section 5.7.</p>

TABLE 1
Comments and Responses by Topic

Topic / Sub-topic	Summary	Response	See EIS section
		<p>This change significantly increased the cost of the Alternative 5 pipeline.</p> <p>Several public comments were received on the costs summarized in Table 5-2 of the EIS Volume 4 - Engineering Feasibility Study Compendium. The same trucking costs were used for Alternatives B, C, and E. The unit trucking cost is based on an assumed haul distance. It is assumed that the permitted residuals disposal site would be the same distance from the Blue Plains AWWTP or the Dalecarlia WTP. Costs of hauling residuals to the monofill are included in the category name - Other Monofill Specific Costs. Road deterioration costs are not included in the trucking alternatives because the Department of Transportation provides funds for the maintenance of public roads.</p>	<p>EIS Volume 4 – Engineering Feasibility Study Compendium, Table 5-2</p>
AC	Opportunity cost of land	<p>The land surrounding the Dalecarlia Reservoir is owned by the Federal Government. The Federal Government does not intend to sell this land because it provides valuable buffer and security functions to the Washington Aqueduct. There is no Washington Aqueduct property considered to be excess and even if there were, proceeds from the sale of the property would belong to the U.S. Treasury, not the Washington Aqueduct.</p>	<p>The sale price of the land surrounding the Dalecarlia Reservoir was not evaluated in the EIS because this action is not planned by the Washington Aqueduct.</p>
AD	Washington Aqueduct Funding	<p>Although owned and operated by the Army Corps of Engineers, Washington Aqueduct functions as a public water utility and is not part of the Corps' civil works program to be included in the Civil Works budget request.</p> <p>All funds for Washington Aqueduct operations and capital improvements, whether self-initiated or in response to regulation and permitting actions, come from the wholesale customers (i.e., District of Columbia Water and Sewer Authority, Arlington County, and the City of Falls Church). Each year, the Washington Aqueduct Wholesale Customer Board, which is comprised of the General Manager of the DC Water and Sewer Authority, the County Manager of Arlington County, and the City Manager of the City of Falls Church, meets to discuss and approve the upcoming fiscal year operating and capital improvement budgets for Washington Aqueduct. At that time, future projects are described in a multiyear capital plan. This gives the customers an idea of how they will need to plan for funding Washington Aqueduct. Each customer may have a different approach.</p> <p>Customer funding of Washington Aqueduct operations and capital improvements is tied to the proportional use of the water produced. Those shares are approximately 75 percent for the District of Columbia Water</p>	

TABLE 1
Comments and Responses by Topic

Topic / Sub-topic	Summary	Response	See EIS section
		<p>and Sewer Authority, 15 percent for Arlington County, and 10 percent for Falls Church. The costs associated with Washington Aqueduct operations are completely reimbursable. Washington Aqueduct has no retained earnings.</p> <p>A section of the 1996 Safe Drinking Water Act Amendments provided Washington Aqueduct with \$75 million of borrowing authority over fiscal years 1997, 1998 and 1999. The purpose of this authority was to allow the execution of an aggressive capital improvement program while the Army and the Washington Aqueduct customers considered alternative ownership and operations of Washington Aqueduct. This borrowing was added to the existing debt service that the customers pay as part of their cost of water service. This borrowing authority expired in fiscal year 1999 and was not renewed. All capital investments made by the customers in Washington Aqueduct infrastructure since then have been on a pay-as-you-go basis, in cash from their accounts.</p> <p>Although Washington Aqueduct annual operations and capital improvements are not funded through any Congressional appropriation, it is technically possible for Washington Aqueduct to receive a specific authorization and appropriation. The loans discussed earlier, are being repaid with interest, and those amounts are reflected in the water bills of the retail customers. Based on all discussions with officials throughout the development of the NPDES permit and the analysis of the nature of the project that would be required to comply with it, there has been no expression by any Congressional committee that an outright appropriation or authority for a new loan is under consideration. The timing of Washington Aqueduct's permit compliance under the Federal Facilities Compliance Agreement requires that the NEPA action be completed in accordance with the schedule in the FFCA and that the customers provide sufficient funds.</p>	

TABLE 1
Comments and Responses by Topic

Topic / Sub-topic	Summary	Response	See EIS section
BA	Facility appearance	<p>The visual impact of residuals facilities is evaluated in Section 4 of the EIS. Visual simulations have been developed to show the anticipated look of the proposed buildings and structures. These views will be refined during the design phase of the project.</p> <p>The photos of the existing site included in the EIS were taken during both summer and winter seasons to show the variation in natural screening provided by the existing trees.</p> <p>The feasibility of building the settling tanks and truck entrance/exit below grade is influenced by cost impacts and available site topography and space. Reduced facility heights will be considered for applicable alternatives.</p> <p>Berms and other architectural landscape devices are possible measures to mitigate or minimize visual impacts. These features will be incorporated into the selected alternative.</p> <p>The proposed thickening and dewatering building has three floor levels plus a basement thickened residuals pump area located on each side of the building. The description of the building has been changed from three-story building to three-floor building to address any potential confusion related to the height of the building. The floor to floor spacing used on the proposed building is greater than those typically used for a commercial office building to allow sufficient vertical space for residuals processing and storage equipment and vehicles. The floor to floor spacing and overall building height are shown on the building drawings included in Volume 4 of the EIS.</p> <p>The project will be submitted to the National Capital Planning Commission (NCPCC) and the Commission of Fine Arts (CFA) for full project review and approval. These agencies have authority for architectural review of Federal Projects in the Capital region.</p> <p>The architectural look of the proposed residuals processing facilities will continue to be developed as the project proceeds. The proposed facilities will be designed to provide a pleasant appearance in keeping with NCPCC regulations. The architecture and siting of the building will take the natural and built surroundings into consideration.</p>	<p>EIS Volume 1 - Section 4.12 Visual Aesthetics</p> <p>EIS Volume 1 - Figures 4-2 to 4-11</p> <p>EIS Volume 4 – Engineering Feasibility Study Compendium, Section 4.4</p>

TABLE 1
Comments and Responses by Topic

Topic / Sub-topic	Summary	Response	See EIS section
BB	Facility location	<p>Washington Aqueduct would contract haul and dispose of residuals for alternatives B, C and E. Multiple disposal sites are required to ensure disposal reliability. Disposal site selection will be the responsibility of the residuals disposal contractor.</p> <p>An evaluation of residuals land application sites based solely on existing permits and capacity of specific locations is unable to accommodate a variety of land disposal practices that may take place in a dynamic market place over the 20-year design life of the project. The EIS uses a programmatic approach to evaluate the ability of the residuals disposal marketplace to meet increasing demand within an approved regulatory environment.</p> <p>Multiple residuals processing sites have been evaluated in the Engineering Feasibility Study Compendium, including numerous sites located distant from the Dalecarlia WTP site. One such alternative involves constructing new residuals processing facilities at the Carderock facility near the beltway. Several alternatives involving Carderock were suggested by the public. These alternatives were evaluated in Volume 4 of the EIS – Engineering Feasibility Study Compendium, Section 3.2.2. These alternatives screened out because the Navy had determined that the construction of Washington Aqueduct residuals facilities is inconsistent with their long-term plan for the Carderock facility. See topic DE for further discussion of the “Carderock” and other offsite residuals processing alternatives.</p> <p>Relocation of the entire existing Dalecarlia WTP and Georgetown Reservoir complex to another site would be a massive undertaking. Such a project could not be completed within the FFCA schedule and would be cost prohibitive. It is anticipated that such a project would cost at least \$640,000,000.00, exclusive of land purchase and raw water conveyance cost impacts.</p> <p>The northwest Dalecarlia processing site was previously reviewed and approved by NCPC as part of a Master Plan update completed in 1980. The specific location of the proposed residuals thickening and dewatering facilities shown in Figure 4-22 of the Engineering Feasibility Study Compendium can be adjusted within the confines of the site area shown on this figure. Additional sites on the Dalecarlia WTP property are also evaluated in the EIS (such as the east site evaluated for Alternative E).</p>	<p>EIS Volume 1 - 4.16 Land Application of Water Treatment Residuals</p> <p>EIS Volume 4 - Engineering Feasibility Study Compendium Section 3 Screening of Alternatives</p> <p>EIS Volume 4 – Engineering Feasibility Study Compendium, Figure 4-22.</p> <p>EIS Volume 1, Section 6</p>

TABLE 1
Comments and Responses by Topic

Topic / Sub-topic	Summary	Response	See EIS section
		<p>Reference Section 6, Volume 1 of the EIS for a discussion of the reasons for recommending the East Dalecarlia Processing site.</p> <p>One of the public comments indicates that existing pine trees located along the west property line of the Northwest Processing Site, as shown on Figure 4-22 of the Engineering Feasibility Study Compendium, will be cut down if the proposed residuals facilities are constructed. This is not true of the case with Alternative B. In fact; it is likely that additional trees would be planted to provide a visual screen with this alternative.</p>	
BC	Facility noise	<p>The noise analysis summarized in the EIS is a conservative worst case approach to determining noise impacts based upon regulations. Sound attenuation attributable to distance from residential receptors is considered in this analysis. Construction measures, such as installation of berms, will be used as needed to mitigate noise impacts to “sensitive” receptors during construction and operation of the residuals facilities.</p> <p>The proposed residuals processing facility will not generate noise or vibrations that could travel through the ground or the groundwater.</p> <p>The various environmental impacts of the proposed residuals processing facility are summarized in the EIS.</p>	<p>EIS Volume 1, Section 4.3.3.2 Alternative B – Dewatering at Northwest Dalecarlia Processing Site and Disposal by Trucking</p> <p>EIS Volume 1, Section 4.3.3.5 Alternative E – Dewatering at East Dalecarlia Processing Site and Disposal by Trucking</p> <p>EIS Volume1, Section 4.</p>
BD	Facility simulation	<p>Visual simulations have been prepared for individual residuals facilities in lieu of an area-wide digital model.</p>	EIS Volume 1 – Section 4
BE	Facility access	<p>See transcript discussions labeled “BE” for responses.</p>	EIS Volume 4 – Engineering Feasibility Study Compendium
BF	Facility light	<p>Lighting surrounding or on the proposed thickening and dewatering facility will be designed to minimize impacts on area neighbors by directing light towards the ground. The lighting surrounding the residuals facilities will be designed to provide a safe environment for the public, vehicular traffic, and maintenance and emergency workers required to visit the facility during non daylight hours and serve as a deterrent to vandalism. The proposed lighting design will be reviewed by NCPC as part of their overall design review process.</p> <p>Lighting during construction will be restricted to levels required for safety and security. Light fixtures will be hooded and directed toward the work areas to minimize offsite impacts.</p>	<p>EIS Volume 4 – Engineering Feasibility Study Compendium</p> <p>EIS Volume 1- Section 4.12 Visual Aesthetics</p>

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Topic / Sub-topic	Summary	Response	See EIS section
		Also, see transcript discussions labeled "BF" for responses.	
BG	Facility smell	<p>The air pollution issues associated with each alternative are evaluated in the EIS. In general, the alternatives being considered are not anticipated to have a significant impact on area air pollutant levels.</p> <p>The water treatment residuals that would be processed at the proposed facility produce very little or no odor because they contain very low levels of biodegradable organic compounds. The majority of the residuals consist of river silt and alum residuals, both of which are biologically inert.</p> <p>The project team and a group of interested citizens, visited one or more similar facilities, the closest being WSSC's Potomac Water Filtration Plant. Observation confirms that there is no objectionable smell associated with this type of facility.</p>	EIS Volume 1 - Section 4.4 Air Quality
BH	Facility impact on habitats	Construction of the proposed residuals thickening and dewatering facilities on the East Dalecarlia Processing Site (Alternative E) and disposal by trucking would not adversely impact the river-based environmental indicators such as water quality, sediment quality, aquatic resources including the benthic community, fisheries, essential fish habitat, and submerged aquatic vegetation. The wildlife and bird habitats on site E are not expected to be negatively impacted as the area is already cleared and does not contain any habitat for wildlife or bird nesting.	<p>EIS Volume 1- Sections 4.5 Aquatic Resources and Section 4.6 Biological Resources (Terrestrial)</p> <p>EIS Volume 2-Appendix 2B: Biological Resources</p>
BI	Facility impact on Sibley Hospital	<p>Earlier this year, Sibley Hospital completed construction of a major infrastructure improvement (a new parking garage). This construction project did not have an adverse effect on Sibley Hospital daily operations. The construction of the proposed Washington Aqueduct residuals facilities is also not anticipated to have a negative impact on ongoing operations at Sibley Hospital or upcoming Sibley Hospital construction projects. The two construction projects will take place on adjacent, but unique sites. Site access and deliveries to the residuals construction site will be coordinated with Sibley Hospital to ensure that the hospital operations are not impacted.</p> <p>The project has been coordinated with Sibley Hospital. By letter dated June 27, 2005, the hospital administration indicated a desire to coordinate future hospital and Washington Aqueduct residuals project activities and</p>	

TABLE 1
Comments and Responses by Topic

Topic / Sub-topic	Summary	Response	See EIS section
		offered suggestions related to the proposed residuals processing site.	
BJ	Facility, Dirt/Dust	<p>The dust/dirt generated by construction and operation of the proposed residuals thickening and dewatering facilities on the East Dalecarlia Processing Site (Alternative E), the associated new residuals removal equipment at the Dalecarlia sedimentation basins, and operation of two new residuals dredges in the Georgetown Reservoir is less than the <i>de minimus</i> threshold levels for particulate matter (PM 10).</p> <p>The alum water treatment residuals for this facility are very moist and generally dewatered to 30% solids (70% water). This moist composition of the residuals physically minimizes the generation of dust and dirt.</p> <p>The nature of alum residuals is that they retain moisture and therefore are not expected to dry out on the haul route.</p> <p>The means of processing residuals would be through thickeners and centrifuges. These types of equipment operate in a wet/moist environment.</p> <p>In addition to the physical properties of the water treatment residuals, the amount of dust/dirt that becomes airborne during construction and operation of the facility will be further minimized by employing all appropriate dust control measures.</p> <p>During construction of the facility dust and dirt will be controlled by maintaining moist conditions using standard construction methods, such as wetting down the construction area periodically throughout the workday.</p>	<p>EIS Volume 1- Section 4.3 Air Quality</p> <p>EIS Volume 2A- Air Quality</p> <p>EIS Volume 4</p>
BK	Facility impact on health	There are no specific health effects associated with the proposed residuals processing facility. See EIS Volume 1, Section 4 for an evaluation of the impacts of the proposed facilities on the environment and surrounding neighborhood.	EIS Volume 1, Section 4
BL	Facility will impact property values	The water treatment operation currently performed at the Dalecarlia WTP and Georgetown Reservoir sites will not significantly change as a result of adding residuals processing facilities. All of the property required for the proposed residuals project is currently owned by Washington Aqueduct and currently used in the production of drinking water. The proposed residuals processing operation is not anticipated to negatively impact	

TABLE 1
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Topic / Sub-topic	Summary	Response	See EIS section
		<p>neighborhood property values because the construction and operation of the proposed residuals facilities will have no significant environmental impact on the neighborhood.</p> <p>Similar previous neighborhood concerns related to the potentially negative impact of the AUES FUDS environmental remediation activities on neighborhood property values were analyzed as part of the Spring Valley project. This analysis examined the potential impact of the AUES FUDS remediation work on property values, average number of days that homes remain on the market and the difference between list price and sale price during the period between 1995 and 2001. This study concluded that housing values rose steadily between 1995 and 2001 while the average days on the market dropped considerably indicating that the neighborhood remained a very desirable location throughout this period. Given that the environmental impact of the proposed residuals processing and disposal project will be considerably less than the ongoing AUES FUDS project, no impact on neighborhood property values is anticipated to be associated with the residuals project. The full text of the report can be found in the Administrative Record.</p>	Administrative Record
BM	Disturbing site B soil	The proposed action is to construct dewatering and thickening facilities at site E. As a result, no modifications are planned to site B (Brookmont site) where soil borings were conducted and an oily smell was observed in the existing fill material. The Washington Aqueduct reported the observed odor to Maryland Department of the Environment (MDE) and will work with MDE on any follow-up required.	EIS Volume 1 – Sections 3.7 and 4.8
CA	Monofill, preference	<p>Alternative A (Monofill) was initially found to be technically feasible, based upon the screening criteria. However, when the alternative was thoroughly evaluated in the EIS and then balanced against the purpose and need for the project, it presented impacts that precluded its selection as the preferred alternative.</p> <p>The Corps of Engineers plans to investigate the monofill site for the potential presence of buried munitions in 2008.</p> <p>The public suggested several alternate transport systems, such as a small rail system or a conveyor in a tunnel, to move dewatered residuals from the Dalecarlia WTP to the monofill. These options were considered but none were determined to be relevant once it was determined that the monofill could no longer be potentially recommended as the preferred</p>	<p>EIS Volume 1 - Section 6.2.1 Detailed Reasons for Not Selecting Alternative A: Dewatering and Disposal by Monofill</p> <p>EIS Volume 4 – Engineering Feasibility Study Compendium - Section 3.1.2</p>

TABLE 1
Comments and Responses by Topic

Topic / Sub-topic	Summary	Response	See EIS section
		<p>alternative.</p> <p>Environmental impacts associated with the Alternative A (monofill) are described in the EIS.</p> <p>Current District of Columbia monofill regulations do not prohibit the government from constructing a residuals monofill on their property. This was confirmed in a meeting with the Office of the Attorney General of the District of Columbia held on September 24, 2004.</p> <p>The anticipated life span of the monofill alternative is not as long as some of the other alternatives considered in the EIS. However, it would not be considered a temporary alternative given its 20-year life – a typical life for such a project.</p> <p>The monofill would be located on the east side of the Dalecarlia Reservoir in an area designated the Dalecarlia Woods.</p> <p>The monofill cannot be buried deeper in the ground because it must be constructed above the groundwater table to prevent the liner system, designed to separate the residuals from the groundwater, from floating.</p> <p>The costs for the monofill alternative are included in the Volume 4 of the EIS.</p>	<p>EIS Volume 1, Section 4</p> <p>EIS Administrative Record</p> <p>EIS Volume 1, Figure 2-1</p> <p>EIS Volume 1, Section 4.9.3</p> <p>EIS Volume 4- Engineering Feasibility Study Compendium, Section 5-7.</p>
CB	Monofill Chemical Exposure	<p>The monofill site would be fenced off to prevent access by the public. Although the residuals are not toxic, an impermeable liner would be installed on the bottom of the monofill to prevent the residuals from coming into contact with the groundwater. Once completed, the monofill would be capped (or sealed). Reference topic CA for a discussion of why this alternative can no longer be recommended as the preferred alternative.</p>	<p>EIS Volume 4 – Engineering Feasibility Study Compendium, Section 3.1.2 Alternative 2</p>
CC	Monofill height	<p>The height and footprint of the monofill is defined in the Engineering Feasibility Study Compendium. Reference topic CA for a discussion of why this alternative can no longer be recommended as the preferred alternative.</p>	<p>EIS Volume 4 – Engineering Feasibility Study Compendium Section 3.1.2, Alternative 2. Additional information concerning the size of the monofill is provided in Figure 4-5b of the EIS.</p>

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Topic / Sub-topic	Summary	Response	See EIS section
CD	Monofill Trees	<p>The impacts associated with removing trees from the proposed monofill site are described in Section 4 of the EIS. Compliance with the Urban Forest Preservation Act of 2002 is acknowledged as one of the issues that would need to be addressed if this alternative were selected for implementation. Reference topic CA for a discussion of why this alternative can no longer be recommended as the preferred alternative.</p>	EIS Volume 1, Section 4.
DA	Pipeline preference to Blue Plains	<p>Alternative C (Pipeline to Blue Plains) was found feasible, based on screening criteria. However, when the alternative was thoroughly evaluated in the EIS and then balanced against the purpose and need for the project, it presents impacts that preclude selection as the preferred alternative. Some of the impacts could be mitigated to lesser levels, but the work is not possible within the schedule required by the Federal Facility Compliance Agreement (FFCA) issued by the U.S. EPA and it is more than double the cost of each of the other alternatives. In addition, DCWASA is not able to allocate space for residuals processing facilities at Blue Plains because the limited amount of available space is reserved for the District of Columbia Water and Sewer Authority's long-term plans for its Blue Plains AWWTP to meet future nutrient loading and CSO demands.</p> <p>The cost to construct the pipeline to Blue Plains alone is anticipated to be \$142,600,000 in 2004 dollars (or \$165,100,000 in July 2008 dollars).</p> <p>Alternate routings for residuals pipelines to Blue Plains, such as Metro Rights of Way or abandoned sewer lines were considered but none were determined to be relevant because WASA cannot accept the Washington Aqueduct residuals to be processed on the Blue Plains site.</p> <p>Potomac Interceptor Shut-off Valve:</p> <p>As discussed in Section 3.1.2 of the Engineering Feasibility Study Compendium, Alternative 4, Washington Aqueduct residuals combined with sewage in the Potomac Interceptor sewer and piped directly to Blue Plains cannot be processed at Blue Plains AWWTP because of the adverse impact on the existing treatment process at Blue Plains. The writer of one comment proposed a novel approach for the use of the Potomac Interceptor. According to this approach, valves would be installed in the Potomac Interceptor at strategic locations to allow the sewage flow to be trapped and stored for a long enough period of time to allow the water treatment residuals to be flushed into the interceptor so</p>	<p>EIS Volume 1 - Section 6.2.2 Detailed Reasons for Not Selecting Alternative C: Thickening and Piping to Blue Plains AWWTP</p> <p>EIS Volume 4 – Engineering Feasibility Study Compendium Section 3.2.1.</p> <p>EIS Volume 1 – Table 4-6.</p> <p>EIS Volume 1 – Section 3.1.2.</p> <p>EIS Volume 4 – Engineering Feasibility Study Compendium, Section 3.1.2</p>

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Topic / Sub-topic	Summary	Response	See EIS section
		<p>that they could flow towards Blue Plains. In principle, it would be possible to send the residuals to Blue Plains daily as a relatively intact "slug" if enough valves and instrumentation were provided. The residuals slug could then be captured at Blue Plains for processing, or for pumping further downstream to another processing location.</p> <p>This approach is somewhat analogous to the concept that is planned for the control of sanitary sewer overflows (SSOs) and combined sewer overflows (CSOs) in many areas of the country, including the District of Columbia. In the case of SSOs and CSOs, sewage flows that exceed the capacity of a collection system would be captured and stored in tunnels to prevent them from overflowing into adjacent rivers and streams. The volume of storage required and the logistics of finding locations for and building the storage tunnels have shown this approach to be very expensive.</p> <p>For the management of water treatment residual flows, this approach would require that storage be constructed at the Dalecarlia site for at least the maximum daily flow of water treatment residuals (8,000,000 gallons if unthickened and 2,000,000 gallons if thickened). A large pump station would also be required to meter the entire day's flow of residuals into the Potomac Interceptor during a short period of time. In addition, valves, diversion chambers, and storage facilities would be needed at virtually every confluence point and pump station in the system for the management of sewage flows to keep them separate from the residuals flows. The cost of this effort was not calculated, but can be assumed to be tremendous since the cost for conveyance facilities is generally greater than that for associated treatment facilities.</p> <p>Dry weather low flow in the Potomac Interceptor near the Washington Aqueduct site is approximately 32 mgd (222,222 gpm), and typically occurs between the hours of 6:00 and 9:00 AM. A minimum of 1.3 million gallons (MG) of storage would be required to hold this flow for one hour. More storage volume would be required during wet weather periods. It would not be feasible to store flow in the pipeline because it would fill the pipeline at the rate of about 60 feet per minute at this flow rate. Without storage, overflows would occur at manholes and overflow points upstream of the point where the shutoff valve is located.</p> <p>While this approach seems like a solution, it would simply be too difficult to implement in a practical manner due to the large volume of sewage and</p>	

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Topic / Sub-topic	Summary	Response	See EIS section
		<p>residuals flows that would have to be addressed and the logistics, difficulties, and costs of making major system changes in an urban area. Since it would add many diversion chambers and storage facilities and would not eliminate any residuals processing facilities, this approach would certainly cost more than the Alternative 25.</p>	
DB	Pipe in a pipe	<p>The installation of two dedicated water treatment residuals pipes within the existing Potomac Interceptor pipe/conduit would be complex, dangerous, time consuming, and costly. Two redundant residuals pipelines would be required to avoid discharging residuals into the Potomac Interceptor in the event of a pipe break. Such a discharge could overload the Blue Plains plant and prevent further discharge of residuals from the Dalecarlia residuals thickening facilities until repairs were made to the residuals pipeline installed within the Potomac Interceptor.</p> <p>Based on the long length of pipeline required, the frequency of rainfall events, and the physical configuration of the Potomac Interceptor, it is anticipated that new water treatment residuals pipelines would need to be installed by workers dressed in Class D waterproof hazardous environment suits equipped with portable air supplies. Since the Potomac Interceptor is a stand alone sewer without a parallel back-up sewer over much of its length, it is anticipated that the new residuals pipelines would need to be installed within the Potomac Interceptor while it is partially filled with sewage. Pipeline installation contractor staff would likely work from portable platforms that float on the sewage flow while they install pipe hangers in the crown of the interceptor. Work would need to be interrupted whenever rainfall increases sewage liquid levels above safe depths within the interceptor. The hazardous and intermittent nature of this work would make it very expensive to complete. In addition to the cost escalation factors associated with the hazardous and intermittent nature of such a project, conversations with DCWASA indicate that they would require stainless steel pipe to be installed along the entire length of the Potomac Interceptor to minimize future maintenance issues associated with the corrosive atmosphere inside the interceptor. This pipe material is significantly more costly (2 to 3 times) than the pipe materials assumed for other piping alternatives.</p> <p>Even if the new residuals pipelines could be cost effectively installed within the Potomac Interceptor, the transfer of residuals to the Blue Plains site still could not be recommended as the preferred alternative because</p>	EIS Volume 4 - Engineering Feasibility Study Compendium, Section 3.2.1

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Topic / Sub-topic	Summary	Response	See EIS section
		WASA has indicated that they need to reserve the available site space for future wastewater or CSO treatment facilities. As a result, no room exists to construct the residuals dewatering facilities required to process the Washington Aqueduct residuals.	
DC	Active management of residuals discharge	Discharging residuals to the Potomac Interceptor during dry weather conditions would require approximately 25 additional 105-foot diameter gravity thickeners to be constructed at the Dalecarlia WTP (above and beyond the 4 gravity thickeners anticipated for the current project). These thickeners would provide up to 30-days of residuals storage for rainy periods. The additional gravity thickener complex would occupy approximately 10 additional acres of area on the plant site. The additional thickeners would have a significant visual impact of the neighbors surrounding the plant site and increase the construction cost of the Blue Plains alternative significantly. Even if the additional gravity thickeners and associated thickened residuals pumping facilities could be constructed cost effectively (which is very unlikely), the dry-weather discharge of residuals to Blue Plains would still overload the existing Blue Plains treatment capacity. The total pounds of residuals delivered to Blue Plains would still be the same as suggested in Alternative 5. Based on these concerns, this option cannot be recommended as the preferred alternative.	EIS Volume 4 – Engineering Feasibility Study Supplement, Section 3.1.2, Alternative 5
DD	WSSC Potomac WTP	Alternative 7 was screened out based on economic and institutional concerns. The cost of the alternative did not comply with the cost screening criteria and WSSC is not willing to process residuals from the Washington Aqueduct at their facility.	EIS Volume 1, Section 3.1.2, Alternative 7 and Table 3-9. EIS Volume 2 – Appendices, Public Involvement and Agency Coordination Section.
DE	Carderock	<p>The Navy was contacted to determine if they would be willing to allow the Washington Aqueduct to construct residuals processing facilities on the Carderock site. They responded that this action would be inconsistent with their mission and future plans for the Carderock site and could not be considered.</p> <p>The many piping alternatives are dependent upon the ability and willingness of the receiving facility at the other end of the pipe, whether to process and dispose of the residuals, or to supply space for the Washington Aqueduct to do so. None of the organizations involved, whether it be the DC WASA, WSSC, Fairfax Water, the Central Intelligence Agency (CIA), the United States Navy, the City of Rockville,</p>	EIS Volume 4 - Engineering Feasibility Study Compendium, Section 3.

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Topic / Sub-topic	Summary	Response	See EIS section
		<p>or the Federal Highway Administration, are able or willing to provide processing capacity or facility space. Neither the United States Army Corps of Engineers, the United States Army, nor the Washington Aqueduct have any authority over any of the agencies. Like Washington Aqueduct, each of these facilities has mission requirements and short-term and long-term plans for meeting them.</p> <p>In addition, in many cases (for example, Carderock) even if there were space available for Washington Aqueduct facilities, it would not be a total solution. Many of the concerns being addressed at the Washington Aqueduct would just be transferred to another location.</p>	
DF	Fairfax Water - Corbalis WTP	<p>Fairfax Water was contacted to determine if they would be able to process Washington Aqueduct's residuals. They indicated that this was not feasible due to a lack of excess capacity. The processing of Washington Aqueduct residuals is also not within Fairfax Water's mission. In addition to issues related to the Fairfax Water's capacity and mission, implementation of a Fairfax Water residuals processing option would also require the construction of a dedicated residuals pipeline to convey the residuals from the Dalecarlia WTP site to the Corbalis Water Treatment Plan site. Such a pipeline would be difficult and costly to install, requiring permission from numerous agencies and private property owners. Based on our analysis of similar piping alternatives, the time required to obtain new easements and the costs associated with constructing the residuals pipeline would create additional obstacles to implementing such an option. Compliance with the FFCA residuals project schedule, as well as, cost screening criteria defined for the project are not feasible for this alternative.</p>	<p>EIS Volume 2A – Appendices</p> <p>EIS Volume 4 – Engineering Feasibility Study Compendium, Section 3</p>
DG	Potomac River	<p>It would be possible to use the existing residuals discharge pipes that connect the sedimentation basins to the Potomac River as carrier pipes to transport thickened residuals to the river. However, it is unlikely that the National Park Service would allow Washington Aqueduct to construct a barge loading station or residuals storage tanks on National Park land adjacent to the Potomac River. It is also likely that the approval to construct a residuals pipeline within the Potomac River bed to transport residuals to the Blue Plains AWWTP could be obtained and the pipeline constructed within the FFCA schedule milestones required by EPA. As a minimum, it is anticipated that a pipeline route study and archeological investigation of the route would be required to prove that there aren't any</p>	<p>EIS Volume 4 - Engineering Feasibility Study Compendium, Section 3.</p>

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Topic / Sub-topic	Summary	Response	See EIS section
		<p>other routes available for the pipeline that present fewer impacts on park land. As with the pipeline to Blue Plains explored for Alternative C, it is anticipated that many Federal and local agencies would become involved in the design, permitting, and approval of such a pipeline route. The timeframe required for such approvals would be considerable, certainly beyond the timeframes allowed in the FFCA schedule. In addition to the pipeline issues, the alternative would also be negatively impacted by WASA's need to reserve property at the Blue Plains AWWTP for planned future nutrient reduction and CSO treatment improvements. This position prevents Washington Aqueduct from constructing any water treatment residuals processing on the Blue Plains AWWTP site.</p>	
DH	George Washington Parkway	<p>This alternate pipeline route was evaluated in Volume 4 of the EIS.</p> <p>The George Washington Parkway is not considered a suitable residuals disposal route through Virginia because truck access is restricted on this road. The two residuals haul routes proposed through northern Virginia in the EIS are considered more appropriate options because they do not have similar truck restrictions and are capable of handling the number of residuals trucks proposed for the Washington Aqueduct residuals project.</p>	EIS Volume 4 – Engineering Feasibility Study Compendium, Table 3-7.
DI	Pipeline Size	<p>The two 12-inch pipelines proposed for the Blue Plains alternative provide 100-percent redundancy for the design flow rate.</p>	EIS Volume 4 – Engineering Feasibility Study Compendium, Section 3.1.2 Alternative 5 discussion
DJ	Regionalization	<p>Washington Aqueduct has a copy of the December 2000 report entitled "DC WASA Regionalization Study" prepared by staff from the Metropolitan Washington Council of Governments under contract to the District of Columbia Water and Sewer Authority in support of the DC WASA Regionalization Committee. Washington Aqueduct management has met with the consultant conducting the study and given them a full understanding of our current and future operations. The acknowledgements of this report have no reference to any involvement by Washington Aqueduct specifically or the Corps of Engineers in general.</p> <p>Washington Aqueduct is also aware that in March 2005, the DC WASA board acted on an agenda item selecting a regionalization study committee to fulfill the commitment to do a five years hence reevaluation of the work done in 2000. The general manager of Washington Aqueduct has recently met with a representative of the contractor doing the study for DC WASA. Washington Aqueduct explained its role as a wholesale</p>	EIS Volume 4 – Engineering Feasibility Study Compendium

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Comments and Responses by Topic

Topic / Sub-topic	Summary	Response	See EIS section
		<p>producer and described its business and operational relationships with its customers. It is Washington Aqueduct's view that the current operational and business arrangement is sound. At the interview, the question of residuals was discussed and it was pointed out that the issue of piping to WASA's Blue Plains facility for processing and removal at that location is a technical, engineering issue and is not related to governance.</p> <p>The 2000 report was clear that there are many possible models for what might constitute regionalization of the wastewater and drinking water systems. Centralized ownership and operation of all wastewater and drinking water plants in the District of Columbia, in Northern Virginia, and in the Maryland counties adjacent to the District of Columbia is one option that might be studied. Without commenting on the appropriateness or likelihood of this model being selected and implemented, the practical issue is that EPA Region 3 has issued an NPDES permit that has an accompanying compliance schedule that is not compatible with the establishment of an independent regional authority. Regardless of the management structure that might come from a decision to create an independent regional authority sometime in the future, the fact remains that the Dalecarlia and McMillan water treatment plants will continue to operate to produce potable water for the region because the surrounding water treatment utilities do not have sufficient excess treatment capacity to offset the existing Washington Aqueduct production rate and residuals from these plants would have to be managed.</p> <p>Washington Aqueduct has consulted with WSSC, Fairfax Water and the city of Rockville to determine if those entities are able to handle the solids produced by Washington Aqueduct. In all cases, their existing residuals processing capacity is insufficient to accommodate the Washington Aqueduct residuals. In addition, the cost and environmental impacts associated with transporting the Washington Aqueduct residuals to another facility are significant.</p>	
DK	Rockville WTP	<p>The City of Rockville, MD was contacted to determine if they would be able to process Washington Aqueduct's residuals. They indicated that this was not feasible for a variety of reasons (inadequate treatment plant and residuals processing capacity (5 mgd average water production rate for Rockville WTP versus 185 mgd for Washington Aqueduct), tight site conditions, etc.). The processing of Washington Aqueduct residuals is also not within the mission of the City of Rockville. In addition to issues related</p>	EIS Volume 2A – Appendices

TABLE 1
Comments and Responses by Topic

Topic / Sub-topic	Summary	Response	See EIS section
		<p>to the Rockville WTP site and mission, implementation of a Rockville residuals processing option would also require the construction of a dedicated residuals pipeline to convey the residuals from the Dalecarlia WTP site to the Rockville WTP site. Such a pipeline could be installed inside the existing Washington Aqueduct raw water conduit for some distance. However, a section of the pipeline to the Rockville WTP site would have to be direct buried and routed through either National Park Service or private property. New easements would be required for this portion of the route. Based on our analysis of other similar piping alternatives, the time required to obtain new easements and the costs associated with constructing the residuals pipeline would create additional obstacles to implementing such an option. Compliance with the FFCA residuals project schedule, as well as, cost screening criteria defined for the project is not feasible for this alternative.</p>	<p>EIS Volume 4 – Engineering Feasibility Study Compendium, Section 3</p>
DL	Processing site near Beltway	<p>As with Alternate 8 as evaluated in Volume 4 of the EIS (Engineering Feasibility Study Compendium), it is not feasible to locate and acquire a new site situated near the Beltway, design residuals transport and processing facilities, and construct said facilities within the requirements of the FFCA compliance schedule due to time requirements for siting, obtaining real estate at the new site, as well as, for obtaining a pipeline easement. The FFCA provides a legally mandated plan and time frame to achieve and maintain compliance with the NPDES permit. This suggested alternative cannot be achieved within the time frame constraints of the FFCA. Thus, this alternative is not consistent with the purpose and need of the project. Untimely or non-implementation of the FFCA would result in undesirable consequences impairing the Aqueduct’s ability to provide water to its customers and continuing the practice of returning residuals to the Potomac River.</p> <p>EPA granted the Aqueduct an extension to the FFCA milestone to develop and notify EPA of the engineering and best management practices to be implemented to achieve compliance with the NPDES permit and a schedule to implement those practices with the understanding that the Aqueduct would not request an extension to the implementation schedule. In the project meeting described in 5.2.8 of the EIS, EPA ruled out extensions to the FFCA implementation schedule.</p> <p>Although there is no tangible evidence such a site is available, assume, for discussion, that there is a tract of land available in some location</p>	<p>EIS Volume 4 – Engineering Feasibility Study Compendium, Section 3.1.2 Alternatives That Do Not Require Continuous Trucks from the Dalecarlia WTP Complex (see Alternative 8 write-up)</p>

TABLE 1
Comments and Responses by Topic

Topic / Sub-topic	Summary	Response	See EIS section
		<p>adjacent to the Beltway. If the Washington Aqueduct were to consider this tract for residuals processing it would first have to get a commitment that this land would be available for the intended use. In the case of private land this would mean that the land would have to be purchased. After securing the property the new alternative would need to be evaluated in the same manner as the alternatives considered to this point. This would involve everything from studying the engineering feasibility of getting the liquid residuals to the processing point to assessing all environmental impacts associated with the alternative. In any case, the cost would include most or all costs associated with the current alternative E plus the cost of securing land for the facilities and the right of way to get there and the time it would take to accomplish this would be many months to years.</p> <p>Many of the recent alternatives suggested by the public have involved transporting liquid residuals in a dedicated pipeline installed within the raw water conduit that connects the Great Falls Potomac River intake structure with the Dalecarlia Reservoir as a means to avoid the time and cost associated with acquiring a dedicated right-of-way for the liquid residuals pipeline to a processing site near the Beltway. The potential schedule and cost benefit afforded by using the existing raw water conduit as a “carrier” pipe for a residuals pipeline cannot be taken full advantage of unless a residuals processing site can be identified immediately adjacent to or near the existing raw water conduit. In order to provide a benefit from a residential neighborhood impact perspective, this site must also be located along a major trucking route (i.e., non-residential street) that connects to the Beltway without requiring trucks to drive on neighborhood streets. The Carderock alternative provided one of these two potential benefits – it is located adjacent to the raw water conduit. However, processing residuals on the Carderock site would have still required dewatered residuals to be hauled through residential neighborhoods serviced by 2-lane subdivision roads no more suitable for truck traffic than similar haul routes proposed for residuals Alternative E. This suggested alternative also included speculation that a direct Beltway interchange could be constructed. Creating a direct Beltway interchange is a remote, costly and time prohibitive possibility. It would require basic changes in legislation and policies of other federal and local agencies, such as the National Park Service, which would be likely to result in protracted debate and possible litigation of their own. In addition, a residuals processing site located near the Beltway would still have the</p>	

TABLE 1
Comments and Responses by Topic

Topic / Sub-topic	Summary	Response	See EIS section
		<p>round trip residuals haul distance of approximately 140 miles (versus the 150 miles assumed or the Dalecarlia WTP alternative.</p> <p>We are not aware of any site, nor has any site been suggested adjacent to the raw water conduit that is available for use and also serviced by roads that are any more suitable for residuals trucks than the routes proposed for Alternative E.</p>	
DM	COE hasn't adequately investigated other piping alternatives	<p>The Washington Aqueduct has investigated over 120 piping alternatives to a variety of potential residuals processing locations. In all cases, the owners of the potential processing locations have declined to allow Washington Aqueduct to site residuals processing facilities on their site. This renders all such alternatives infeasible.</p> <p>Any other possible piping alternatives not already addressed in the EIS and discussed in topic DL above would have common components that make them infeasible.</p>	EIS Volume 4 - Engineering Feasibility Study Compendium
EA	Residuals disposal method	<p>Marketing of residuals as a "soil conditioner" is evaluated in the EIS. It can be concluded that the market for the land disposal of water treatment residuals is viable. Water treatment residuals are generally not suitable to apply as a fertilizer or use in composting operations because their organic content is quite low. Alum-based water treatment residuals typically have some ability to bind phosphorus, such as present in runoff. However the phosphorous binding characteristics of water treatment residuals vary from site to site. The water treatment residuals disposal market is not currently focused on taking advantage of this characteristic of alum-based water treatment residuals. However, given the level of concern associated with excess phosphorous being discharged into the Chesapeake Bay, it seems likely that this could change in the future. Washington Aqueduct remains interested in exploring a beneficial reuse disposal option for their water treatment residuals if it can be implemented cost effectively and reliably.</p> <p>The application of water treatment residuals to agricultural land is different than discharging it to the Potomac River because the solids contained within the residuals do not return to the river. Land application rates are regulated by the States to prevent runoff from containing excess solids.</p> <p>One potential residuals disposal method under consideration by Washington Aqueduct is to allow a cement plant to use the residuals in</p>	EIS Volume 1 – Section 4.16 Land Application of Water Treatment Residuals

TABLE 1
Comments and Responses by Topic

Topic / Sub-topic	Summary	Response	See EIS section
		<p>the manufacturer of cement. A sample of residuals was provided to Lehigh Cement for their evaluation so that they can determine if this option is cost effective.</p> <p>The public comments received to date suggest disposing of dewatered residuals at multiple sites. Depending upon the contractors that are awarded disposal contracts, multiple sites may or may not be used.</p> <p>Using the dewatered residuals to create a residuals island in the Potomac River or the Chesapeake Bay cannot be recommended as the preferred alternative given EPA's opposition to continuing to discharge the residuals to the Potomac River. It is also unlikely that the permitting activities associated with such an endeavor, assuming that EPA would consider it, could be accomplished within the schedule imposed by the FFCA.</p> <p>The disposal of dewatered residuals in a landfill is considered a feasible alternative. Based on our discussion with various residuals disposal contractors, land application on agricultural land may be preferable to landfilling from a cost perspective.</p> <p>Specific residuals disposal locations have not been identified in the EIS because disposal locations vary by residuals disposal contractor. Specific land application sites are also expected to change over time, as regional development transforms agricultural land uses into suburban land uses.</p>	<p>EIS Volume 4 – Engineering Feasibility Study Compendium section 3.2 Alternative P84 discussion.</p> <p>EIS Volume 1 – Section 4.16</p>

TABLE 1
Comments and Responses by Topic

Topic / Sub-topic	Summary	Response	See EIS section
EB	Residuals processing method and impacts	<p>Plasma heat treatment of residuals is one of the alternatives (Alternative 26) that were considered and screened in May 2004 following the Scoping Meeting. Alternative 26 was found inconsistent with screening criteria, proven methods, reliability and redundancy and economic considerations and is therefore not carried forward for detailed evaluation in the EIS.</p> <p>Alternate temporary residuals storage locations, such as the Dalecarlia Reservoir, are evaluated in the Engineering Feasibility Study Compendium.</p> <p>Some public comments suggest alternate residuals processing methods to reduce the number of trucks per day required to haul residuals to a remote disposal site. The number of trucks required per day is directly related to the dryness of the residuals cake being hauled. Thirty-percent cake dryness is currently envisioned for the trucking alternatives. Grinding residuals into a finer material as suggested in one public comment would not have an impact on the density or dryness of the residuals and, as a result, would not reduce the number of trucks required to haul the residuals.</p> <p>Alternate residuals dewatering technologies, such as centrifuges and belt filter presses, will be evaluated further during the design phase of the project. Both technologies can fit into the proposed residuals dewatering building described in the EFS. Neither technology has an environmental impact advantage because they dewater the residuals to essentially the same dryness and generate similar noise levels outside of the dewatering building.</p> <p>Chapter 4 of Volume 1 of the EIS describes the environmental impacts of 4 alternatives plus the No Action alternative. This information allows the public to compare the relative impacts of various alternatives.</p>	<p>EIS Volume 4 - Engineering Feasibility Study Compendium Section 3.1 – May 2004 Alternatives Screening</p> <p>EIS Volume 4 – Engineering Feasibility Study Compendium Section 3.2.2 – Public Alternative P82 discussion</p> <p>EIS Volume 4 – Engineering Feasibility Study Compendium, Section 3.</p> <p>EIS Volume 1, Chapter 4</p>

TABLE 1
Comments and Responses by Topic

Topic / Sub-topic	Summary	Response	See EIS section
EC	Residuals Quantities	<p>The quantities of residuals that require disposal varies considerably from alternative to alternative because some alternatives anticipate pumping thickened residuals at 2-percent solids while others assume that dewatered residuals at 30-percent solids will be trucked offsite. Less concentrated residuals (such as thickened residuals) require a much larger volume of water to be pumped or hauled away to remove the same number of pounds of solids. This is why the number of trucks of dewatered residuals is not directly comparable to the number of gallons of thickened residuals without adjusting for the extra volume of water associated with the thickened residuals. An example residuals volume calculation has been added to the appendices of the Volume 4 of the EIS – Engineering Feasibility Study Compendium to help explain this conversion.</p> <p>The impacts associated with each residuals processing alternative are discussed in Section 4 of the EIS.</p>	<p>EIS Volume 4 – Engineering Feasibility Study Compendium, Appendices and Sections 2 and 3.</p> <p>EIS Volume 1, Section 4.</p>
FA	Construction Schedule	<p>See transcripts for responses.</p> <p>A bar chart schedule showing the estimated durations of the EIS preparation and review, design, and construction periods for the residuals project is provided in the Executive Summary section of the EIS. This schedule describes how the residuals project will be completed in conformance with the FFCA milestone deadlines defined by EPA.</p>	<p>EIS, Volume 1, Section 2.3</p> <p>EIS Volume 1, Executive Summary</p>
FB	EIS Schedule	<p>A discussion of the Washington Aqueduct’s NPDES permit and associated FFCA is provided in the Background and Project History section of the EIS Executive Summary.</p> <p>The EIS schedule is driven by the need to meet milestones associated with the overall compliance with the FFCA. The alternatives screening process also included compliance with this schedule as one of the criterion for determining whether an alternative was consistent with the purpose and need for the project. The objectives defining the purpose and need were listed in the Notice of Intent, which was published in the Federal Register on January 12, 2004.</p> <p>The final EIS contains an updated project schedule which reflects the extensions granted in the interest of public involvement during the EIS process. The schedule indicates that the project can still be completed within the FFCA schedule milestones without taking any extraordinary</p>	<p>EIS Volume 1, the Executive Summary lists the objectives defining the project’s purpose and need and provides a project schedule.</p> <p>EIS Volume 1, Section 2.3 describes the screening criteria, including the one to meet the FFCA schedule.</p> <p>EIS Volume 2, A copy of the FFCA schedule is included under the Regulatory Information tab.</p> <p>EIS Volume 4, Engineering Feasibility Studies Compendium provides a complete description of the screening evaluation and results.</p>

TABLE 1
Comments and Responses by Topic

Topic / Sub-topic	Summary	Response	See EIS section
		measures.	
FC	Compliance performance	<p>Alternatives that would otherwise be feasible but cannot be implemented within the timeframe stipulated within the FFCA schedule were eliminated from consideration as the recommended alternative because the FFCA schedule is a legally binding requirement. The FFCA provides a legally mandated plan and time frame to achieve and maintain compliance with the NPDES permit. Thus, these alternatives that are not compatible with the FFCA are not consistent with the purpose and need of the project. Untimely or non-implementation of the FFCA would result in undesirable consequences impairing the Aqueduct's ability to provide water to its customers and continuing the practice of returning residuals to the Potomac River. EPA granted the Aqueduct an extension to an internal milestone in the FFCA deadline to develop and notify EPA of the engineering and best management practices to be implemented to achieve compliance with the NPDES permit and a schedule to implement those practices with the understanding that the Aqueduct would be held to the final compliance deadlines in 2008 and 2009. In the project meeting described in 5.2.8 of the EIS, EPA ruled out extensions to the FFCA implementation schedule.</p>	EIS Volume 2 – Appendices, Regulatory Information Section
FD	Short-term or Temporary alternatives	<p>The 20-year life defined for the monofill is consistent with the planning period adopted for the EIS as a whole. It is also consistent with planning horizons used in engineering feasibility studies.</p> <p>The consideration of short and long-term alternatives within the Engineering Feasibility Study Compendium is limited to residuals options such as the use of alternate coagulants, etc. In general, two-phased residuals processing alternatives (i.e., truck for a short period of time followed by the Blue Plains alternative) are not recommended because they could result in residuals processing facilities that are required for the initial phase having to be abandoned in the second phase.</p> <p>Alternate two phase residuals processing suggestions offered by the public, such as hauling wetter residuals initially followed by “a better long term solution” in the future, would result in a significantly larger number of trucks being required to haul wetter residuals in the short term – worst case average in excess of 300 trucks per day to truck thickened residuals. Most residuals dewatering technologies are capable of producing a dewatered residuals cake with a solids concentration of 30-percent or greater (i.e., 70-percent water and 30-percent solids). Technologies that</p>	EIS Volume 4 – Engineering Feasibility Study Compendium Sections 3 and 4.

TABLE 1
Comments and Responses by Topic

Topic / Sub-topic	Summary	Response	See EIS section
		produce a wetter material, such as gravity thickening, tend to produce a liquid residual product. Gravity thickening is currently envisioned as the first step in the residuals handling process, followed by centrifuge dewatering. Gravity thickening is capable of reliably producing a 2-percent solid product. The trucking alternatives discussed in the EIS anticipated producing 6-8 trucks of water treatment residuals per day on average. Six trucks per day of dewatered residuals (at 30-percent solids) is equivalent to approximately 85-90 trucks per day of thickened liquid residuals (at 2-percent solids).	
FE	Public comment period	<p>Four public comment periods were provided prior to the issuance of the FEIS:</p> <ol style="list-style-type: none"> 1. The Scoping Period - January 11, 2004 through February 11, 2004) 2. The first extension of alternatives identification period (September 10, 2004 through November 15, 2004) 3. The second extension of the alternatives identification period (December 23, 2004 through February 14, 2005) 4. The DEIS comment period starting with the publication of the Notice of Availability of the DEIS in the Federal Register on April 22, 2005 and ending on July 6, 2005. This period includes a 30 day extension to the original 45 day DEIS comment period. 	EIS Volume 1 - Section 5 Public Involvement
FF	EIS review period time extension	The Notice of Availability for the DEIS was published in the Federal Register on April 22 2005, and the 45 day public comment period was initiated. The public comment period was extended to 75 days, or to July 6, 2005.	EIS Volume 1 - Section 5 Public Involvement EIS Volume 3 – Comments and Responses – Document 120
FG	EPA grants interim FFCA schedule milestone extension	In response to various requests for additional time to review the DEIS, Washington Aqueduct requested that EPA extend their intermediate milestone deadline for submission of the Record of Decision to November 2, 2005 (paragraph 22 of the FFCA). This request was granted by EPA in a letter dated June 27, 2005. Although additional time was granted by EPA for DEIS review by the public, the 2008 and 2009 deadlines defined in the FFCA for removing part or all of the residuals from the Potomac River remain unchanged.	EIS Volume 3 - Comments and Responses – Document 120

TABLE 1
Comments and Responses by Topic

Topic / Sub-topic	Summary	Response	See EIS section
GA	Trucking, neighborhood impact	<p>Unless the water treatment residuals are returned to the Potomac River or are stockpiled locally at Dalecarlia in a monofill, there will necessarily be trucking of the residuals from the dewatering facility whether newly constructed or at an existing location to an eventual land application site. Those trucks will transit public streets and highways.</p> <p>Alternatives B and E thoroughly evaluate impacts of trucking on nearby neighbors, from two different residuals processing locations (B- Northwest Dalecarlia Processing Site, E- East Dalecarlia Processing Site)</p> <p>For alternatives that rely on hauling residuals to a remote disposal site trucking operations will meet all requirements established for the use of trucking routes including weight limitations, if any, permitting, etc.</p> <p>Following the issuance of the DEIS, numerous comments were received from the public regarding the worst-case number of trucks per day predicted during extremely wet conditions (anticipated to occur for approximately a 2-week duration on a frequency of 2 out of 11 years). A 132-truck-per-day value is defined in the public comment correspondence, but this value is not correct. In the DEIS, Washington Aqueduct committed to a maximum of 33 trucks per day (inbound) and 33 trucks per day (outbound) under worst-case wet-weather conditions. The discussion below explains why these peak truck-per-day values have now been reduced to 25 trucks per day (inbound) and 25 trucks per day (outbound) for the final EIS.</p> <p>A complete listing of predicted residuals truck loads associated with a variety of river turbidity conditions are provided in the Engineering Feasibility Study Compendium. Truck load estimates have been prepared for two sets of conditions, loads associated with long term (11-year) average conditions and loads associated with wet year conditions. The highest river turbidity conditions are associated with wet year, design conditions and the lowest river turbidity conditions are associated with the long-term annual average conditions. A maximum of 33 truck loads per day (based on hauling peak residuals quantities 5 days per week) were predicted for worst case conditions that are expected to occur no more than approximately 14 days every 11 years. This number has been reduced to 25 truck loads per day for worst case conditions. See discussion below. A more typical maximum truck load value of 13 trips per day is predicted for up to 30 days each year. The average number of</p>	<p>EIS Volume 1 - Sections 3 and 4, throughout</p> <p>EIS Volume 4 – Engineering Feasibility Study Compendium, Table 3-6.</p> <p>EIS Volume 1 – Section 7 Cumulative Impacts and Mitigation</p>

TABLE 1
Comments and Responses by Topic

Topic / Sub-topic	Summary	Response	See EIS section
		<p>truck loads predicted over an annual period is 8 per day.</p> <p>Impact of residuals equalization on truckloads per day:</p> <p>Based on the public's concern about the peak number of residual trucks identified in the DEIS, Washington Aqueduct re-analyzed whether the peak number of truck loads could be further reduced within the current project budget. The peak residuals truck load values listed in the DEIS (i.e., 33 truck loads per day during the maximum design wet year) assumed that a portion of the water treatment residuals generated in the Georgetown Reservoir would be stored within the reservoir temporarily before pumping them to the residuals thickening and dewatering facility. This approach lessens the peak theoretical dewatered residuals truck loads per day predicted for this worse-case event.</p> <p>Due to the nature of the existing basins and the proposed residual removal equipment, liquid residuals cannot be similarly stored in the Dalecarlia sedimentation basins. However, the gravity thickeners located downstream of the sedimentation basins provide some opportunity to further equalize residuals flows. This capability was not taken into consideration in the DEIS analysis. Limited temporary storage of thickened residuals is possible in the gravity thickeners if they are deepened slightly (approximately 1 foot) and operated such that some thickener storage volume is reserved to store the peak residuals quantities associated with storm events. Consideration of this additional residuals flow equalization capability could allow the peak number of anticipated dewatered residuals truck loads per day to be lowered from 33 truck loads per day (maximum design year wet weather conditions) to a maximum design wet year rate of between 20 and 25 truck loads per day depending upon the demand for finished drinking water. Washington Aqueduct is committed to providing this additional thickener depth and operating the thickeners in such a manner so as to restrict the peak number of truck loads leaving the dewatering site to a maximum of 25 truck loads per day. The increased depth should be able to be designed so that it does not increase the overall height of the thickener structures.</p> <p>Start-up year versus design year truck trips per day:</p> <p>Practically speaking, the peak number of trucks listed above will be further reduced during the initial years of operation of the residuals thickening and dewatering facility. This is possible because the residuals truck loads</p>	<p>EIS Volume 4 – Engineering Feasibility Study Compendium – Appendices</p> <p>EIS Volume 1 – Section 7 Cumulative Impacts and Mitigation</p>

TABLE 1
Comments and Responses by Topic

Topic / Sub-topic	Summary	Response	See EIS section
		<p>listed in the DEIS are based upon water demands projected for the design year (i.e., the end of the 20-year EIS planning period). An average design year water demand of 220 mgd was used to estimate the residuals quantities listed in the DEIS. The historical average Washington Aqueduct water demands have been significantly lower than 220 mgd, ranging between 175 and 180 mgd, or approximately 80-percent of the design value used for the DEIS. The 11-years of historical data analyzed for the DEIS also indicates that the Washington Aqueduct average water demands have remained stable or declined slightly over the last 11 years, indicating that the water demand values used in the DEIS are quite conservative.</p> <p>When the current demand factors are applied to the 33 peak residuals truckloads predicted for the wet year, initial start-up peak truckload values of 26-27 truck loads per day are predicted (i.e., 33 truck loads/day X 0.8 = 26.4 truck loads per day at system start-up). Assuming that the gravity thickeners are used to temporarily store start-up peak residuals quantities as described above, the 26-27 peak truck loads per day predicted for initial start-up wet years would be further reduced to approximately 20 truck loads per day.</p> <p>In all cases described above, the use of the gravity thickeners as temporary storage vessels would reduce only the peak number of loads produced at the Washington Aqueduct residuals facility. The total volume of material requiring disposal (i.e., the total number of truck loads required) would remain unchanged. The stored residuals would be hauled as part of future activity when the volume of residuals requiring removal is reduced.</p> <p>Listing schools along truck routes:</p> <p>Although the EIS lists some of the schools along the proposed truck routes, the intent of the EIS was not to identify all schools along each route. Rather, the intent was to identify typical types of facilities along the truck routes. Additional schools, located along the proposed truck hauling routes, were added to the EIS text following the receipt of the DEIS comments.</p> <p>Truck accidents along proposed truck hauling routes:</p> <p>The number of truck accidents on proposed truck hauling routes is not</p>	<p>EIS Volume 4 – Engineering Feasibility Study Compendium – Appendices</p> <p>]</p> <p>EIS Volume 1 – Section 3.10</p>

TABLE 1
Comments and Responses by Topic

Topic / Sub-topic	Summary	Response	See EIS section
		<p>anticipated to increase as a result of adding an average of 8 truck loads per day to these roads. The accident rate along roads is only partially related to the volume of traffic. Other road and intersection design criteria are potentially more important than truck volumes given the relatively small truck volume increase proposed for the neighborhood roads with this project. The truck haul routes under consideration on this project generally have existing trucks counts ranging from approximately one hundred trucks per day to 2,000 trucks per day.</p> <p>The contract terms for the potential residuals haulers will require full disclosure of each haulers accident record. This information will be considered as one of the selection criteria for the haulers. Accident reporting as response procedures will also be required as part of the hauling contract to ensure that accidents are responded to quickly.</p> <p>Trucking mitigation measures requested by the public:</p> <p><u>Repave Dalecarlia Parkway with sound deadening asphalt:</u> Washington Aqueduct does not know the basis of the pavement design used by the District of Columbia for Dalecarlia Parkway that has resulted in the concrete surface. The current roadway will (as will all roadways on routes considered for trucking) properly support the loaded weight of the trucks. Washington Aqueduct will address the surface noise concern to the DC Department of Transportation, but must defer to the Department for their determination of the appropriate surface for this road.</p> <p><u>Reimbursement for truck related damage to Montgomery County roads:</u> The public roads exist for personal and commercial use. State and local jurisdictions are responsible for maintenance of roads. Each jurisdiction funds road maintenance and repair within its budget often through permitting, taxes, etc.</p> <p><u>Speed limit and warning signs:</u> All employees and contractors of Washington Aqueduct using the public roads in accordance with their duties at Washington Aqueduct are responsible to operate their vehicles in a safe and courteous manner. That operation will be commensurate with the speed and caution postings of the local jurisdictions. At the exit point from a residuals facility constructed on Washington Aqueduct property, a prominent sign will be erected reminding drivers to cover their loads, avoid tracking mud on to the roads, and to drive in accordance with law, regulation, and common courtesy.</p> <p><u>Additional speed monitoring and enforcement by the police:</u> Washington</p>	

TABLE 1
Comments and Responses by Topic

Topic / Sub-topic	Summary	Response	See EIS section
		<p>Aqueduct will cooperate with any speed-monitoring program initiated by police agencies. Any driver found to violate speed limits will be disciplined.</p> <p><u>Neighborhood reporting system for excess truck noise, speeding trucks, etc.</u> Washington Aqueduct management will periodically attend neighborhood meetings to receive general feedback on its operations in general and respond to any questions relating to trucks serving the needs of Washington Aqueduct. Management will also respond to any direct inquires.</p> <p><u>Sound barriers along truck routes:</u> Trucks hauling residuals from Washington Aqueduct do not change the service classification of the routes identified. The additional few trips per day on any of these roads do not warrant installation of sound barriers.</p> <p><u>Improved signaling at Dalecarlia Parkway/Little Falls Road intersection:</u> It is anticipated; in order to facilitate the proposed expansion at Sibley Hospital, that minor realignment of the intersection of Little Falls Road and Dalecarlia Parkway will take place. Washington Aqueduct will coordinate with Sibley Hospital on these improvements to their private road to ensure that they also meet residuals hauling truck needs.</p> <p>At this time there is nothing in the data that suggest that the addition of our routine traffic is significant. However, the Washington Aqueduct is very aware of the public concern over traffic and intends to pay very close attention to the operation of this part of the project.</p> <p>Residuals falling from the trucks:</p> <p>Residuals hauling trucks will be equipped with fabric covers to prevent residuals from blowing or falling off trucks and gasketed tailgates (to prevent dripping).</p> <p>Truck vibration impacts on neighborhood homes:</p> <p>The average number of additional residuals trucks proposed for this project represents a small fraction of the current number of trucks traveling many of the proposed haul routes. The routes were selected because they are designed to function as truck routes. Any current home foundation issues associated with existing traffic loads on the proposed routes are not anticipated to be worsened as a result of the additional</p>	<p>EIS Volume 1, Section 7.2</p> <p>EIS Volume 1 – Section 4.11</p>

TABLE 1
Comments and Responses by Topic

Topic / Sub-topic	Summary	Response	See EIS section
		<p>trucks proposed for this project.</p> <p>Truck impact on neighborhood ambience:</p> <p>No significant impact on neighborhood ambience is anticipated to be associated with the additional trucks proposed for this residuals handling project given the relatively large number of trucks and vehicles that currently make use of the proposed trucking routes.</p> <p>Trucking impact on traffic congestion in an already congested area:</p> <p>The analysis in the EIS shows that none of the feasible routes would have traffic flow or congestion impacts that reduce the level of service on the route due to the project's trucking operation, with the exception of route A. Trucking hours will be restricted on Route A to between 9:30 AM and 3:00 PM to reduce any potential impact on this route. Routes F and G are designated as emergency use only due to pedestrian traffic and security issues related to the use of Constitution Avenue. The use of these two routes, F&G, for this project would not change their level of service but will require a permit from the National Park Service.</p> <p>Incomplete response to Montgomery County Planning Board letter:</p> <p>Responses to the individual comments contained within the June 1, 2005 letter from the Montgomery County Planning Board (document 125) are discussed in the applicable topic categories summarized herein.</p>	
GB	Trucking alternative	<p>Under all of the feasible alternatives selected for evaluation in the EIS, pipelines would convey water treatment residuals from both the onsite sedimentation basins and the Georgetown Reservoir to the Dalecarlia thickening facility. Trucking from Georgetown to Dalecarlia is not under consideration for detailed evaluation in the EIS.</p> <p>Trucking at night was suggested by the public as an alternative to daytime trucking. While potentially favorable from a traffic standpoint, night trucking would likely result in more noise impacts on the surrounding neighborhoods due to lower ambient nighttime noise levels. Moreover, the residuals receiving facilities typically do not operate at night.</p> <p>Trucking dewatered residuals to offsite disposal is a common practice in the water and wastewater treatment industry, including the other two large water treatment facilities in the region (the Fairfax Water Corbalis WTP</p>	<p>EIS Volume 4 – Engineering Feasibility Study Compendium Section 3 – Screening of Alternatives</p> <p>EIS Volume 1 – Section 4.16</p>

TABLE 1
Comments and Responses by Topic

Topic / Sub-topic	Summary	Response	See EIS section
		<p>and the WSSC Potomac WFP). Other, more uncommon processing options, such as plasma treatment of residuals cannot be recommended as the preferred alternative because they are not considered proven and are not cost effective, although, even these technologies, typically result in a byproduct that is commonly trucked away to an offsite disposal site.</p> <p>Alum Recovery:</p> <p>Reference a memo discussing alum recovery included in the Appendices of the Engineering Feasibility Study Compendium.</p>	<p>EIS Volume 4 – Engineering Feasibility Study Compendium - Appendices</p>
GC	Trucking, noise	<p>Noise impacts from facility and trucks:</p> <p>Noise impacts associated with the proposed residuals thickening and dewatering facility are evaluated in the EIS. In general, the dewatering building is not anticipated to contribute noise to the surrounding neighborhood due to the distance from the facility to the neighbors and the use of sound absorbing building materials. Truck noise entering and exiting the dewatering facility will be minimized by prohibiting idling before loading, providing enclosed loading bays, and providing berms around the loading area that will function similar to sound walls along area interstates by directing noise away from neighbors. With this mitigation, noise impacts are determined to be not significant.</p> <p>Truck noise mitigation measures:</p> <p>Noise mitigation measures will include selecting building materials that absorb noise associated with the enclosed dewatering equipment, enclosing truck loading bays, constructing earthen berms around the dewatering building to deflect/absorb truck related noise, and providing storage hoppers on the intermediate floor to act as sound buffers that prevent noise associated with the dewatering centrifuges (located on the top floor of the building) from reaching the truck loading area. Noise mitigation along residuals trucking routes will be accomplished by reminding truck drivers to drive responsibly and to be considerate of the residential neighborhood impacts that their trucks could have by posting a sign at the exit from the site.</p>	<p>EIS Volume 1 – Section 4.3 Noise</p> <p>EIS Volume 1 – Section 7.2</p>
GD	Trucking routes	<p>One of the alternatives suggested by the public, which was found to be consistent with the screening criteria, involves a new site at the Dalecarlia Reservoir, located adjacent to Little Falls Road, for the residuals</p>	<p>EIS Volume 4 – Engineering Feasibility Study Compendium, Section 3.2.3- Description of Public Alternatives Consistent with Screening</p>

TABLE 1
Comments and Responses by Topic

Topic / Sub-topic	Summary	Response	See EIS section
		<p>thickening and dewatering facilities. This alternative is carried through for detailed evaluation in the EIS as Alternative E. It offers some advantages from a trucking perspective because it does not require trucks to travel loaded with residuals to travel uphill on Loughboro Road.</p> <p>One of the alternative truck routes considered, but subsequently eliminated, involves constructing a new access road from the Dalecarlia WTP site to the Clara Barton Parkway. This route was eliminated from consideration because the National Park Service does not allow truck traffic on the Clara Barton Parkway.</p> <p>Using smaller trucks to dispose of dewatered residuals offsite would not increase the number of available haul routes through the area surrounding the Dalecarlia WTP. The proposed routes were selected based upon their suitability for truck traffic. This criterion does not change if smaller trucks are proposed.</p> <p>Trucking route maps are included in the EIS.</p> <p>MacArthur Boulevard appropriate as a truck route?</p> <p>Some members of the public expressed concern about the appropriateness of using MacArthur Boulevard as a truck haul road, indicating that trucks are not allowed on this road. There are no special weight restrictions on MacArthur Boulevard in the District of Columbia. Weight restrictions exist in Maryland due to the raw water conduits under the roadway.</p> <p>Do trucks traveling to Westmoreland Circle immediately access Dalecarlia Parkway?</p> <p>Yes, truck access routes near the Dalecarlia plant are shown in Figure 4-1.</p> <p>Single truck route proposed in DEIS:</p> <p>In the Draft EIS we evaluated eight truck haul routes, not one or two routes as stated in the comments submitted by the public. All of the routes evaluated, except route C, can be used to haul residuals. A permit from the National Park Service would be required to haul residuals on routes F and G. All routes were selected because they followed high volume roads designated for truck traffic keeping with DC DOT's truck route policies and recommendations. Although five of the original eight routes studied can</p>	<p>Criteria</p> <p>EIS Volume 4 – Engineering Feasibility Study Compendium, Table 3-7 Alternative P79</p> <p>EIS Volume 1, Section 3.</p> <p>EIS Volume 1 – Figure 3-8</p> <p>EIS Volume 1 – Section 7.2</p>

TABLE 1
Comments and Responses by Topic

Topic / Sub-topic	Summary	Response	See EIS section
		<p>be used without restriction and without causing a significant impact, the Washington Aqueduct may choose to study and propose additional routes to replace the three that were found to have limitations or restrictions. In this case the Washington Aqueduct would provide appropriate supplemental documentation in the future.</p> <p>Quantify Impact of Trucks on Neighborhood Roads:</p> <p>The proposed number of residuals trucks is relatively small when compared with the daily truck volume on the proposed haul routes. As a result, truck impacts are expected to be relatively small and well within the range of impacts taken into account in the design of urban truck routes.</p> <p>The public roads exist for personal and commercial use. State and local jurisdictions are responsible for maintenance of roads. Each jurisdiction plans for and funds road maintenance and repair within its budget often through permitting, taxes, etc.</p> <p>Limit trucks through Montgomery County to those delivering to Maryland disposal sites:</p> <p>Because limitations could have the effect of higher contract costs, limitations will not be included. However, it is logical to expect that elevated fuel and maintenance costs associated with lengthy haul distances will encourage residuals haulers to follow the most direct haul route to their destination.</p> <p>Truck dispersal plan needed:</p> <p>Distributing residuals trucks on all feasible proposed routes is not cost effective. The total haul distance could be increased by up to 30-40 miles if trucks are evenly distributed on all routes. For example, some trucks destined for a disposal site in Maryland would have to travel southeast to the Beltway and then travel around the Beltway on the east side of the City. This practice would increase hauling costs and increase traffic congestion within the District of Columbia and on the Beltway in Maryland or Virginia. If a disposal contractor did have disposal sites available in several directions he would choose the best routes to get to those sites but to commit to evenly distributing routes would be impractical and would have undesirable consequences. In all cases studied, concentrating</p>	

TABLE 1
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Topic / Sub-topic	Summary	Response	See EIS section
		<p>trucks on one route would not decrease the level of service of that route.</p> <p>See topic GA for a discussion of schools along trucking routes.</p>	
GE	Trucking frequency	<p>See transcripts for responses and topic GA for additional information on 132 trucks per day. The number of truck loads required to haul dewatered residuals offsite is summarized in the Volume 4 of the EIS.</p> <p>Adverse impacts of 132 trucks per day through a residential area:</p> <p>With the proposed mitigation implemented (as described in topic GA), the maximum number of truck loads per day required to remove residuals from the Dalecarlia WTP under worst case wet year conditions is 25 truck loads per day based upon 20-ton trucks. The 132 truck per day value suggested in the public comments corresponds to a theoretical maximum number of times that a truck could pass by a given house if all trucks used the same route entering and exiting the site on the maximum residuals production day (expected to occur 2 weeks every 11 years) anticipated in the design year and if 10-ton trucks were used. The 132 truck per day number is not an accurate representation of the number of trucks that will typically be traveling through the neighborhoods surrounding the Dalecarlia WTP. It represents an extreme peak operating condition. It also does not consider:</p> <ul style="list-style-type: none"> - lower water production rates historically produced by the Washington Aqueduct - the planned use of 20-ton trucks versus 10 ton trucks to reduce operating costs - the potential for reducing peak truck loads per day by equalizing peak residual processing rates <p>In addition, it does not represent the number of trucks, but rather, one way truck trips.</p> <p>Trucking Schedule:</p> <p>See discussion under topic GK.</p>	<p>EIS Volume 4 – Engineering Feasibility Study Compendium, Tables 2-1 and 3-6</p> <p>EIS Volume 1 – Section 7.2</p> <p>EIS Volume 4 – Engineering Feasibility Study Compendium, Appendix E contains water treatment residuals calculations used to predict the anticipated number of residual truck loads per day.</p>
GF	Trucking Air Pollution	<p>The emissions associated with trucking residuals to a remote disposal location result in an emission increase that is less than <i>de minimis</i> levels</p>	EIS Volume 1 - Section 4.4.3.2

TABLE 1
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Topic / Sub-topic	Summary	Response	See EIS section
		<p>and, therefore, present no short or long term impact on air quality.</p> <p>Will trucks use alternate fuels?</p> <p>Washington Aqueduct will require their hauling contractors to use low-sulfur diesel fuels. The use of low sulfur fuel will reduce hazardous air pollutant emissions from diesel fuels. Alternate fuels, such as natural gas, although now being used in commuter buses in urban environments are not typically being used in vehicles as large as 20-ton trucks. As the market for alternate fuel trucks develops, their use will be considered in developing hauling contracts at that time.</p> <p>Will newer trucks be used to reduce emissions?</p> <p>Regardless of age, all trucks will be required to be maintained in a safe operating condition, consistent with the vehicle inspection and emission standards established for the State in which they are registered.</p> <p>Will trucks be retrofitted to reduce air quality impacts?</p> <p>Washington Aqueduct is committed to use low sulfur fuels as stated above. However, trucks similar to those anticipated to be used by residuals hauling contractors are not currently required by regulators to be retrofitted to reduce air quality impacts. The immediate implementation of vehicle modification requirements could increase hauling costs or restrict the number of haulers willing to bid on the hauling contract. In order to avoid this outcome, additional truck modifications, beyond the use of low sulfur fuels, will be considered as modified vehicles become more common in the marketplace.</p> <p>Monitor fuel used by trucks:</p> <p>Washington Aqueduct does not plan to monitor the individual fuel usage of each residual disposal contractor's truck. The competitive bid nature of the residuals disposal contract should provide sufficient incentive to minimize excess fuel consumption.</p> <p>How can 132 trucks per day not have an impact on the environment?</p> <p>The environmental impact of trucking is analyzed in Section 4 of Volume 1 of the EIS. As explained in topics GA and GE, 132 trucks is not an accurate characterization of the transportation impacts of this project.</p>	<p>EIS Volume 1 – Section 7.2.1</p> <p>EIS Volume 1 – Section 7.2.1</p>

TABLE 1
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Topic / Sub-topic	Summary	Response	See EIS section
		<p>You did not adequately consider the air impacts of the preferred alternative:</p> <p>The impacts of the proposed action (or environmentally preferred alternative) are presented and then analyzed in Sections 3 and 4, respectively, of the EIS. The air emission sources of the proposed action (Alternative E) are truck traffic, operation of residuals processing facility, and construction of the residuals facility.</p> <p>Construction emissions for the dewatering facilities are deemed to be less significant than the emissions associated with the operation of the facility. The impacts of the proposed action are negligible with respect to the <i>de minimis</i> threshold limits, and the construction emissions are less than that of operating the facility via any alternative, the construction emissions are negligible. Therefore, it is appropriate not to quantify emissions from construction activities associated with all alternatives. Needs work – also need to reference Section 4 EIS for additional information text regarding the relative number of diesel engine hour/miles during construction versus operation and the relative acres of earthwork disturbed with the proposed action versus the monofill option.</p> <p>Regional air quality and air pollution in the Metropolitan Washington Interstate Air Quality Planning Region is regulated by U.S. Environmental Protection Agency (USEPA) using two sets of criteria: National Ambient Air Quality Standards (NAAQS) and General Conformity. These two regulations are described in general below:</p> <p><u>National Ambient Air Quality Standards</u></p> <p>The Clean Air Act (CAA) and its associated 1977 and 1990 amendments established NAAQS for six criteria pollutants: lead, carbon monoxide (CO), nitrogen dioxide, sulfur dioxide, particulate matter (PM) and ozone. The NAAQS established primary standards at concentrations that protect human health and secondary standards that protect the public welfare—particularly vegetation, livestock, building materials, and other environmental elements. These standards are periodically reviewed and revised, if necessary, as is currently being done for particulate matter and ozone.</p> <p>The Washington, DC area is in attainment for lead, CO, nitrogen dioxide particulate matter (PM10) and sulfur dioxide and in non-attainment for</p>	<p>EIS Volume 1 – Sections 3.3 and 4.4</p> <p>EIS Volume 1 – Section 4.4</p>

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Topic / Sub-topic	Summary	Response	See EIS section
		<p>ozone and fine particulate matter (PM2.5). The 1990 amendments to the CAA categorized the nation's non-attainment ozone areas into five groups, based on increasing severity of exceedance of the standard: marginal, moderate, serious, severe, and extreme. The DC area is designated a severe nonattainment for the 1-hr ozone NAAQS and moderate nonattainment for the 8-hour ozone NAAQS.</p> <p>An interstate planning area was developed called the National Capital Interstate Air Quality Control Region (AQCR) to reduce ozone concentrations and bring the Washington, DC area into compliance. To bring the AQCR into compliance the states and district included in this area are tasked with developing a plan by November 17, 2005. The implementation plan must outline specific measures to be taken and a means of monitoring progress toward attainment. State Implementation Plans (SIPs) prepared by the State of Maryland, the Commonwealth of Virginia, and the District of Columbia include control strategies to reduce volatile organic compounds and nitrogen oxides that contribute to the formation of ozone.</p> <p>On April 5, 2005, designations under the NAAQS for fine particle pollution or PM2.5 became effective. Fine particles are those less than 2.5 micrometers in diameter which are unhealthy to breathe. The Washington, DC-MD-VA metropolitan area has been designated as non-attainment for fine particulate matter.</p> <p>States designated as PM2.5 nonattainment areas must submit plans that outline how they will meet the PM_{2.5} standards. These plans are due to EPA by April 5, 2008.</p> <p><u>General Conformity</u></p> <p>Section 176(c) of the 1990 CAA amendments requires that federal actions conform to applicable state implementation plans, ensuring that the actions do not interfere with strategies developed for NAAQS attainment. The USACE Washington Aqueduct management alternatives for water treatment plant residuals are considered a federal action. This action must not interfere with the National Capital Interstate AQCR's established plans to attain ozone ambient air quality standard compliance. If the total direct and indirect emissions calculated for each non-attainment area pollutant are below the <i>de minimis</i> threshold levels established in 40 CFR 93.153 of the State Implementation Plan (SIP), the project is presumed by EPA to conform to the regional implementation plans. As <i>de minimus</i> threshold</p>	

TABLE 1
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Topic / Sub-topic	Summary	Response	See EIS section
		<p>limits have not yet been established for PM2.5 non-attainment areas, EPA guides the action to compare calculated emissions to the PM10 <i>de minimus</i> threshold level established in 40 CFR 93.153.</p> <p>Conformity is a planning process used to determine if a federal action will prevent state from meeting air quality plan. The mobile sources, such as truck traffic, associated with an action are evaluated in a conformity analysis by calculating the average emissions for the worst case year. In the case of the USACE Washington Aqueduct management alternatives for water treatment residuals, a conservative average of 20 truck trips by a 10 ton truck is used to calculate annual emissions from mobile sources. The average number of water treatment residuals loads per a day is 8 trucks as stated in the EIS. The conservative estimate of average trucks used to calculate emissions from trucks for the conformity analysis can provide an allowance for average water treatment residuals and the few construction related vehicles and Forebay residuals (if included in the project).</p> <p><u>Emissions Inventory for Washington Aqueduct</u></p> <p>The most recent air emissions inventory for the Dalecarlia Reservoir and Little Falls Raw Water Pump Station as filed with the EPA (Table 3-2, Section 3 of the EIS) shows that the existing facilities are a minor source of air emissions, contributing less than 1 ton per year for all pollutants, with the exception of volatile organic compounds, which contribute less than 3 tons per year. Ozone is not listed in this table because it is not emitted, but rather forms in the atmosphere as a reaction between nitrogen oxides (NOx), volatile organic compounds (VOCs), and sunlight. Consequently, two of its primary precursors are measured: nitrogen oxides and volatile organic compounds.</p> <p>The <i>de minimis</i> threshold levels for the region's SIP, is listed in 40 CFR 93.153. If the total air emissions (the sum of all individual sources) of an alternative are less than the <i>de minimis</i> level, that alternative is presumed by EPA to be in conformance with the state implementation plans and will not adversely affect plans to bring the region into compliance with the NAAQS. A <i>de minimus</i> threshold for PM2.5 has not yet been established. Until such action occurs, EPA recommends application of the PM10 <i>de minimus</i> threshold to PM2.5 total air emission calculations.</p> <p>State Implementation Plans (SIPs) prepared by the State of Maryland, the Commonwealth of Virginia, and the District of Columbia include control</p>	

TABLE 1
Comments and Responses by Topic

Topic / Sub-topic	Summary	Response	See EIS section
		<p>strategies to reduce volatile organic compounds and nitrogen oxides that contribute to the formation of ozone.</p> <p><u>Air Quality Significance Criteria</u></p> <p>The project is presumed to conform to the regional implementation plans if the potential increase in emissions is less than the <i>de minimis</i> thresholds.</p> <p>By using these criteria, the following levels of impacts were identified:</p> <p><i>No Impact</i></p> <p>If implementation of the action causes an increase in air emissions that is less than the <i>de minimis</i> threshold levels, the alternative is considered to have no impact.</p> <p><i>No Significant Impact</i></p> <p>If implementation of the action causes an increase in air emissions that is greater than the <i>de minimis</i> threshold levels but has been accommodated with the existing regional implementation plan, the action has no significant impact.</p> <p><i>Significant Impact</i></p> <p>A significant impact occurs if the potential increase in emissions is above the <i>de minimis</i> thresholds and requires a demonstration of regional significance to determine whether an adverse air quality impact would result. Significant impacts may be reduced to no significant level by implementing appropriate mitigation measures.</p> <p>Impact Evaluation by Alternative and Option</p> <p>The Washington Aqueduct must determine if their proposed actions exceed <i>de minimis</i> thresholds listed in the regulations (40 CFR 93.153) and specific to the pollutant attainment status of the National Capital Interstate Air Quality Control Region (AQCR). If they do, they will have to take additional steps to demonstrate whether the proposed emissions are regionally significant in order to assure conformance with the region's</p>	

TABLE 1
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Topic / Sub-topic	Summary	Response	See EIS section
		<p>SIP.</p> <p>To make this comparison, a conservative air pollution scenario was developed to represent the largest emission factors from the components of the various alternatives. Two scenarios were developed: one for Alternative A, which includes a monofill, and one for Alternatives B, C and E, which all involve the construction of residuals thickening and dewatering facilities and rely upon trucking dewatered residuals to a remote dewatering site. The location of the dewatering site and the direction that the trucks take on the highways is somewhat different for Alternatives B and E versus Alternative C, however, the net impact on air pollution is similar. Stationary facilities and mobile sources (such as trucks) are included in these estimates. Alternative E represents the air quality emission estimates for the proposed action.</p> <p>The primary sources of air emissions include exhaust from trucks used to transport residuals to onsite or offsite disposal areas, use of natural gas for dewatering building heating, and fugitive dust from the onsite monofill. Not all of these activities are included in each of the action alternatives.</p> <p>The potential air emissions from this alternative are quantified in Table 4-2 of the EIS. The results are that VOC is at a maximum of 4.3 tons/year, Carbon Monoxide at a maximum of 21.4 tons/year, Nitrogen Oxides at a maximum of 20.5 tons/year, Particulate Matter from diesel fueled trucks at a 0.21 and 0.17 tons/year for PM10 and PM2.5 respectively, Particulate Matter from low-sulfur diesel fueled trucks at 0.18 and 0.14 tons/year for PM10 and PM2.5 respectively, and Sulfur Dioxides at a maximum of 0.41 tons/year. Constructing and operation of Alternatives E would increase air emissions to a degree less than the <i>de minimis</i> threshold levels and therefore present no short term, long-term, direct, or indirect adverse impacts to the affected resources.</p> <p>A full set of air quality emissions calculations and model output is provided in Appendix 2A. These calculations provide the basis for the air quality analysis for each proposed alternative as presented in Section 4 of the EIS. The analysis of the air emission impacts from each facility involved in the operations of the alternatives – Northwest or East Dalecarlia Processing Site, Trucking Routes, Georgetown Reservoir, Dalecarlia Sedimentation Basins, and Monofill.</p> <p>Supplemental analysis has been provided since the completion of the</p>	

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Topic / Sub-topic	Summary	Response	See EIS section
		<p>draft EIS to address the recent establishment of the Metro WA area as non-attainment for PM2.5. Currently there is no established threshold <i>de minimus</i> level for PM2.5 in the SIP. EPA has recommended that the <i>de minimus</i> level for PM10 in the SIP be applied to PM2.5 emission calculations for determination of compliance. The supplemental analysis conducted quantifies the emissions from mobile sources (i.e. trucks) for the criteria air pollutants. It also allows one to quantify the air emission effects of using different types of fuels for vehicle classes. The AP42 analysis presented in the draft EIS provided conservative estimates for all criteria pollutants, but was not designed to calculate particulate matter emissions from truck trips. This new analysis, MOBILE6.2 provides air emissions estimates for all criteria pollutants, and does not change the basic conclusion of the previous analysis (i.e., air emissions remain below <i>de minimus</i> threshold levels for all (attainment and non-attainment) areas and there is, therefore, no impact and the action is inconsequential.</p> <p>The results from the new analysis, MOBILE6.2 is provided in Section 4 along with the existing AP42 analysis.</p> <p>MOBILE 6.2 is a computer model approved by EPA for SIP development and transportation conformity analysis to estimate emissions of various air pollutants typically emitted from vehicle exhaust, brake and tire wear.</p> <p>Also see topic BJ for a discussion of dust and dirt control during the construction phase of the project.</p>	
GG	Trucking Safety	<p>The truck routes studied in the EIS generally conform to the proposed District of Columbia truck traffic management plan. The proposed number of residuals trucks does not negatively impact the level of service of the proposed routes.</p> <p>The selection criteria for residuals contract haulers would include their safety track record. Washington Aqueduct places high priority on operating a safe water treatment facility. This philosophy would extend to a residuals contract hauling operation.</p> <p>The non-toxicity of the water treatment residuals is discussed in the EIS. Based on the testing conducted in 1995, and again in 2004, the water treatment residuals are suitable to apply on agricultural land disposal sites. A similar practice is used by two other large regional water treatment utilities also using Potomac River water (Fairfax Water and</p>	<p>EIS Volume 1 - Section 4.11 – Transportation</p> <p>EIS Volume 1 – Table 4-11</p>

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Topic / Sub-topic	Summary	Response	See EIS section
		<p>WSSC). Safe operation of the residuals hauling trucks associated with some of the proposed alternatives would be addressed by considering the safety track record of each hauler during the contracting phase and monitoring their safety record throughout their contract period. Safe hauling of residuals would be a high priority to the Washington Aqueduct if a hauling alternative were selected.</p> <p>Minimal dust is typically associated with the dewatering and transport of alum residuals because the aluminum hydroxide present in the residuals limits the dryness of the dewatered cake to about 30-percent solids (or 70-percent water). Alum residuals also tend to retain their moisture more than topsoil or other types of residuals. As a result, they do not dry out quickly while being transported. Based on these factors, dust issues associated with the transport of alum residuals are anticipated to be minimal.</p> <p>Safety implications of 132 trucks per day through MD/DC residential neighborhoods:</p> <p>As explained in topics GA and GE, 132 trucks is not an accurate characterization of the transportation impacts of this project. Regardless the proposed residuals hauling activities are not expected to negatively impact neighborhood safety. Residuals will be hauled in a lawful, considerate manner. An average of 8 truck loads per day and a maximum of 25 truck loads per day of residuals are anticipated to be hauled on the routes designated in the EIS. This number of additional trucks is not anticipated to create a negative safety impact given that the proposed haul routes are designated haul routes that currently handle many more trucks per day than proposed by Washington Aqueduct.</p> <p>There are schools in the vicinity of each of the truck routes. Because each route is an established truck route, and the level of service will not be decreased as a result of the proposed residuals hauling operation, existing traffic controls and child safety measures currently in place would be no less effective than they are currently.</p> <p>Additional traffic accidents anticipated with more trucks on the road:</p> <p>The accident rates on the designated haul routes are not anticipated to increase as a result of the proposed residuals hauling activities. The accident rate for a given road or intersections typically influenced by</p>	

TABLE 1
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Topic / Sub-topic	Summary	Response	See EIS section
		<p>several factors, only one of which is the volume of vehicles. Other factors related to the design of the road or intersection frequently has equal or greater impact on accident rates. In addition, the relative increase in vehicles planned as a result of the residuals hauling project is quite small.</p>	
GH	Trucking Vibration	<p>The average number of additional residuals trucks proposed for this project represents a small fraction of the current number of trucks traveling many of the proposed haul routes. The routes were selected because they are designed to function as truck routes. Any current home foundation issues associated with existing traffic loads on the proposed routes are not anticipated to be worsened as a result of the additional trucks proposed for this project.</p>	EIS Volume 1 - Section 4.11 - Transportation
GI	Trucking Costs	<p>Residuals hauling costs were estimated based on hauling costs provided by neighboring water and wastewater treatment utilities of similar size. Non-cost issues, such as noise, light, and pollution were assessed based on their environmental impact rather than by assigning them a dollar value.</p> <p>Seriously mischaracterized the true cost of trucking:</p> <p>Concern was raised about whether the draft EIS contained all costs associated with the trucking alternative. A comparison was made to previous Washington Aqueduct residuals reports that estimated residuals hauling and disposal costs using different methods.</p> <p>The residuals hauling and disposal costs included in Table 4-7 of the draft EIS were based on similar residuals hauling bid costs received from neighboring utilities. Following receipt of the draft EIS comments, these costs were verified through discussions with residuals hauling contractors responsible for disposing of water treatment residuals in the Washington metropolitan area. The \$30.00 per wet ton hauling and disposal cost assumed for dewatered residuals in the DEIS was confirmed as appropriate.</p> <p>The present value of the residuals hauling and disposal cost was changed in the final EIS to add an additional measure of conservatism to the haul distance anticipated to be required by the end of the 20 year planning period and ensure consistency with the haul distance assumed in the air section of the EIS. A round trip residuals disposal haul distance of 150 miles has now been used as the basis of both the air emissions</p>	<p>EIS Volume 1- Section 4 throughout</p> <p>EIS Volume 1 – Tables 4-7 and 4-8</p>

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Topic / Sub-topic	Summary	Response	See EIS section
		<p>calculations (no change from the draft EIS) and the present value of the residuals hauling cost. This change increases the present value of residuals hauling alternatives B or E from \$76,200,000.00 to \$82,100,000.00. This change does not change the relative cost rankings of the dewater and monofill, dewater and truck from Dalecarlia WTP, or dewatering and truck from Blue Plains alternatives. All alternatives except the "No Action" include trucking costs. Alternatives B, C, and E would require similar hauling distances.</p> <p>Include the cost of trucking forever (versus 20 years):</p> <p>Some members of the public commented that truck hauling costs should be assumed to continue forever in the present value analysis. The approach taken in the EIS (i.e., to define capital and annual operating costs for the planning period and calculate associated present value costs for that period) is more typical for NEPA analyses and treats all alternatives in the same manner.</p> <p>Use Combined Trucking and Operating Costs to Screen Alternatives:</p> <p>One of the public comments suggested modifying the cost screening criteria from capital cost to the sum of 20 years of operating costs plus the capital cost of an alternative. This approach to cost evaluations is not typical and does not address the primary cost issue of concern to the wholesale customers (capital cost) Combined capital and operating costs were evaluated in the EIS by comparing the present value of each alternative. This method of comparing combined capital and operating costs is more traditional and does not unduly weight the operating portion of the cost. The two cost comparison methods used in the EIS confirm that dewatering and hauling residuals to a permitted offsite disposal site is a cost effective alternative when compared with the other alternatives.</p>	
GJ	Existing Dalecarlia Parkway vehicle/truck volumes	<p>What are the current vehicle/truck volumes on Dalecarlia Parkway?</p> <p>Vehicle and truck counts were conducted on Dalecarlia Parkway on June 16, 2004 and June 17, 2004. This data is summarized in the EIS Volume 2B – Appendices. A summary of the data is provided below:</p>	EIS Volume - 2B - Appendices, Transportation Section

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Comments and Responses by Topic

Topic / Sub-topic	Summary	Response	See EIS section									
		<table border="1"> <thead> <tr> <th>Date</th> <th>Total Vehicles per day</th> <th>Trucks per day (3 or more axles)</th> </tr> </thead> <tbody> <tr> <td>6/16/2004</td> <td>15,013</td> <td>70</td> </tr> <tr> <td>6/17/2004</td> <td>15,789</td> <td>99</td> </tr> </tbody> </table>	Date	Total Vehicles per day	Trucks per day (3 or more axles)	6/16/2004	15,013	70	6/17/2004	15,789	99	
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6/16/2004	15,013	70										
6/17/2004	15,789	99										
GK	Trucking Hours	<p>DEIS has conflicting information on trucking hours, MNCPPC letter recommends trucking between 9:30 AM and 4:00PM</p> <p>The EIS has been revised to reflect consistent information regarding trucking hours.</p> <p>Trucking operations will meet all requirements established for the use of trucking routes. Washington Aqueduct anticipates that the dewatering facility will typically be staffed between the hours of 7:00 AM and 7:00 PM. These are the hours during which trucks will typically be loaded.</p> <p>The analysis in the EIS shows that none of the feasible routes (B,D, E,F&G (with permit), and H) would have traffic flow or congestion impacts due to the action's trucking operation that would reduce the level of service with the exception of route A. Trucking will be allowed on Route A only between 9:30 AM and 3:00 PM.</p> <p>Because trucking restrictions could have the effect of increased contract costs, further restrictions will not be included, however, it is logical to expect that a trucking company would minimize costs by concentrating trucking during optimal periods. Considering the relatively small amount of residuals generated on a daily basis and the hours of operation, there is sufficient opportunity for a company to truck mainly during the off peak periods</p> <p>Also see response to topics GA and GD.</p>	EIS Volume 1 – Sections 4.11 and 7.2									

HA	Barge, preference	<p>Barging residuals via the Potomac River (not C&O Canal) to Blue Plains is one of the alternatives (Alternative 6) that was considered and screened in May 2004 following the Scoping Meeting.</p> <p>The C&O canal is a National Historic Landmark and is therefore not suitable for accepting barge traffic. Alternative 6 was found inconsistent with screening criteria, and is therefore not carried forward for detailed evaluation in the EIS.</p> <p>Constructing an above grade conveyor or buried pipeline to a Potomac River barge loading station located within land controlled by the National Park Service would create a significant impact on the park and would not receive approval from the park service.</p>	<p>EIS Volume 1 -TABLE 3-9: May 2004 Alternatives Screening Results Summary</p> <p>EIS Volume 4 - Engineering Feasibility Study Compendium Section 3.1.2- Alternative 6: Thicken Water Treatment Residuals at Dalecarlia WTP, Then Transport by Barge to Blue Plains AWWTP</p>
IA	Preference	Comment or preference noted.	EIS Volume 1 – Section 5, Public Involvement
IB	Useful Life of Alternatives	The 20-year life defined for the monofill is consistent with the planning period adopted for the EIS as a whole. It is also consistent with planning horizons used in engineering feasibility studies.	EIS Volume 4 – Engineering Feasibility Study, Section 3.
JA	River Discharge	The return of silt and water treatment residuals back to the river after they are removed is generally prohibited by the Clean Water Act. Given the long track record of EPA requiring water treatment utilities throughout the country to remove their residuals from the rivers, from which they withdraw water, it is unlikely that this regulation could be successfully challenged.	

JB	Discharge during spawning season	<p>The NPDES Permit was issued on March 14, 2003. The Federal Facilities Compliance Agreement was signed on June 12, 2003. The spawning season is defined in the NPDES permit as February 15 through June 30. There have been no discharges to the Potomac River during the spawning season since the issuance of the NPDES Permit in March 2003. Discharges were made on the following dates:</p> <p><u>From Dalecarlia</u> 7/1/03; 7/7/03; 7/14/03; 7/28/03; 10/10/03; 10/20/03; 10/21/03; 1/12/04; 1/16/04; 1/20/04; 2/8/04; 7/14/04; 7/24/04; 7/25/04; 8/2/04; 8/8/04; 10/27/04; 11/30/04; 1/26/05; 2/1/05; 2/7/05; 2/10/05; 7/4/2005; 7/10/2005; 7/12/2005; 7/18/2005</p> <p><u>From Georgetown</u> 7/20/04; 8/10/04; 8/19/04; 12/2/04; 2/2/05; 7/12/2005</p> <p>In accordance with the NPDES permit, before each discharge, Washington Aqueduct has made notifications to the agencies described in the permit. There is no general public notification because the discharge itself does not put the public in any personal danger and the exact timing is dependent on operational conditions at the treatment plants.</p>	
KA	Impure water quality, raw water intake	<p>Converting the existing surface intake on the Potomac River to a well-based intake was considered in the Engineering Feasibility Study Compendium and subsequently screened out from consideration. Options that involve reconfiguring the existing raw water intake structures are evaluated in the Engineering Feasibility Study Compendium. In general, these options are found to be inconsistent with the screening criteria for the project.</p>	EIS Volume 4 – Engineering Feasibility Study Compendium, Section 4.5 and Table 3-7
KB	Monitoring water quality and safety	<p>Residuals deposited in the Forebay portion of the Dalecarlia Reservoir and water treatment residuals produced in the sedimentation basin of the Dalecarlia WTP were tested to determine their potential to leach toxic substances if applied to land of landfilled. Residuals samples were also tested directly to quantify the concentration of key regulatory constituents. The results of this testing indicated that the residuals are non-toxic and suitable for land application on agricultural land or landfilling.</p>	EIS Volume 1 - Section 4-17: Public Health
KC	Residuals quality	<p>The water treatment residuals produced by the Washington Aqueduct are considered non-toxic by regulatory agencies responsible for overseeing their potential application to agricultural land of deposition in a landfill. Specific toxicity testing was performed on the Washington Aqueduct residuals as part of this DEIS effort. These tests confirmed that the residuals are non-toxic. These results agreed with similar previous testing conducted in the mid-1990's.</p>	EIS Volume 1 - Section 4-17: Public Health

KD	Health Impacts of Diesel Truck Traffic	<p>The 1990 Clean Air Act amendments require that federal actions conform to applicable State Implementation Plans (SIPs) to ensure that the action will not interfere with strategies developed for attainment of National Ambient Air Quality Standards (NAAQS). Federal actions conform to the SIPs if the action's emissions do not exceed the <i>de minimis</i> threshold for the criteria pollutants. These actions are termed "inconsequential" by the CAA regulations. The <i>de minimus</i> threshold for each criteria pollutant represents a small fraction of the state inventory of emission from all air sources in state. All alternatives evaluated in the EIS produce emission estimates below <i>de minimus</i> for all criteria pollutants. Therefore, these emissions will not cause or contribute to an exceedance of NAAQS. The NAAQS are developed and periodically reviewed based on human health and welfare criteria and include factors such as frequency of asthma cases, respiratory impairment, and health of children and elderly with adequate margin of safety.</p> <p>Our decision making as an agency will be based on the regulations that apply to the area in which our proposed action will take place. Our hauling operations will always comply with applicable air quality regulations.</p>	EIS Volume 1 – Sections 3.3 and 4.4
LA	Suggested processes	Alternate treatment processes that minimize or change the form of the residuals (such as MIEEX, ultrafiltration, etc.) were evaluated in the Engineering Feasibility Study Compendium. These alternatives were screened out based on concerns related to unproven technology, cost, and compliance with the FFCA schedule.	EIS Volume 4 – Engineering Feasibility Study Compendium Section 3.2.2 – review of Public Alternative P99.
MA	EPA mandate	EPA is not obligated to perform NEPA analysis for a permit enforcement action. The obligation to perform this analysis belongs with the Federal Agency being regulated by EPA, Washington Aqueduct in this case. In cases where the water treatment utility is not operated by a federal agency, a NEPA analysis is not required.	
MB	FOIA requests	See transcripts for responses. Washington Aqueduct has provided written responses to FOIA request letters. These responses are available in the administrative record.	Administrative record.
MC	Conflict of interest	CH2MHill filed a disclosure statement in accordance with 40 CFR Section 1506.5(c) which is included in the project's administrative record. The Baltimore District Corps of Engineers has no basis to believe that CH2MHill has a financial or other interest in the outcome of this project that would cause a conflict of interest. Any future procurement to implement this project will be in accordance with applicable statutory, regulatory and policy provisions regarding conflict of interest.	Administrative record.
MD	Agency Recommendations on DEIS	<p>Changes were made as requested by US Department of Interior (Document 122).</p> <p>Response to Montgomery County Council letter (Document contained in</p>	<p>EIS Volume 1 - Section 3.4.1 Dwarf Wedge Mussel</p> <p>EIS Volume 1 - Section 3.5.1 Terrestrial</p>

		<p>Appendix Volume 2A..</p> <p>Response to the individual comments contained within the June 2, 2005 letter from the United States Senate (document 118) are discussed in the applicable topics summarized herein.</p> <p>Responses to the individual comments contained within the May 10, 2005 letter from the Council of the District of Columbia (document 119) and the June 1, 2005 letter from the Montgomery County Planning Board (document 125) are discussed in the applicable topics summarized herein.</p> <p>Responses to the individual comments contained within the June 2, 2005 Commonwealth of Virginia letter (document 124) are discussed in the applicable topics summarized herein and below:</p> <ul style="list-style-type: none"> • Open Burning and Dust Control: The referenced requirements will be followed. • All impacts to historical structures and archeological resources will be considered as required. • George Washington Memorial Parkway: See topic DH. • The requested life cycle cost analysis will be performed as part of the residuals facility design. Residuals processing equipment will be tested as necessary during the design phase of the project to confirm performance. Consideration will also be given to previous testing performed on Dalecarlia WTP residuals. • Costs were verified as part of the final EIS preparation effort. Costs will continue to be evaluated throughout the design phase to ensure that ongoing fluctuations in materials and labor cost factors are properly considered. <p>Responses to the individual comments contained within the July 5, 2005 District of Columbia Department of Health letter (document 157) are discussed in the applicable topics summarized herein. A traffic study was completed for the EIS, the results of which are contained within EIS Sections 3.10 and 4.11 and Appendix Volume 2B. The air quality analysis conducted for the DEIS was expanded to include additional emissions information on truck traffic. The results of this analysis are presented in EIS Section 4.4. The model data from which this data was derived is provided in Appendix Volume 2A.</p> <p>Responses to the individual comments contained within the June 27, 2005 EPA letter (document 182) are discussed in the applicable topics summarized herein. In addition, several suggestions designed to enhance the clarity of the EIS were also made. These suggestions were implemented where practical.</p>	<p>Special Status</p> <p>EIS Volume 1 – Section 3.10 Transportation</p> <p>EIS Volume 1 - Section 4.5.3 Impact Evaluation by Alternative and Option</p> <p>EIS Volume 1 - Section 4.6.3.1 Hay’s Spring amphipod</p> <p>EIS Volume 1- Section 4.6.3.2 Alternative B</p> <p>EIS Volume 1- Section 4.6.3.3 Impact to Special Status Species</p> <p>EIS Volume 1- 4.6.3.4 Special Status Species</p> <p>EIS Volume 1- Section 4.11 Transportation</p>
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NA	NEPA Process Understanding	<p>The intent of the public meetings held in September and November 2004 was to inform the public of the status of the alternative evaluation process as it was proceeding, as well as, inform the public of how this information would be considered within the context of the NEPA process.</p>	EIS Volume 1 - Section 5.0 Public Involvement
NB	Screening criteria and Scoping Meeting	<p>The screening criteria were developed prior to the January 28, 2004 Scoping Meeting. Public input on the screening criteria was received during the Scoping Period, which ran from January 12, 2004 through February 11, 2004. The alternatives were screened by the Washington Aqueduct EIS project team.</p> <p>A summary of the initial alternative screening results was presented in the Engineering Feasibility Study dated May 2004. This document was placed on the Washington Aqueduct project website following its completion. The Engineering Feasibility Study was subsequently updated to include additional alternatives submitted by the public. This updated document is provided as Volume 4 of the EIS.</p> <p>The EIS evaluates a total of 4 alternatives plus the no action alternative. This number is not unusually low when compared with other EIS's and therefore, is not considered an indication that the screening criteria should be revised.</p> <p>The screening criteria include cost because the proposed action must be economically feasible to the wholesale customers.</p>	<p>EIS Volume 1 - Section 5.0 Public Involvement and EIS Volume 4 - Engineering Feasibility Study Compendium, Section 2.2 Development of Alternatives</p> <p>EIS Volume 4 - Engineering Feasibility Study (original and updated Engineering Feasibility Study Compendium – Volume 4 of the EIS)</p>
NC	Communication	<p>Prior to each public meeting related to the residual project, starting with the January 28, 2004 Scoping Meeting, the public was notified of meeting, date, time, and location. This was typically accomplished by placing display ads in the Washington Post and at least one local paper. A notice was also placed in the Federal Register prior to the Scoping Meeting. The alternative screening approach and alternative screening results were also presented during subsequent public meetings at the request of the public. The public meetings held between September and October 2004 included a progressive discussion of the environmental evaluation of new public and screened alternatives. Following the DOPAA public meeting held on May 26, 2004, three additional opportunities for public input were provided on September 7, 2004, September 28, 2004, and November 16, 2004. Two additional opportunities for the public to submit alternatives were also provided in September/October, 2004 and January/February, 2005.</p> <p>Numerous public comments were received regarding the shortcomings of the forum chosen for the September 7, 2004 project update meeting. The larger than anticipated number of attendees rendered the selected format ineffective. A different format was chosen for subsequent meetings to</p>	EIS Section 5.0 - Public Involvement.

		address this issue.	
ND	NEPA Process	<p>The NEPA process has been followed to the letter and the intent of the law. Additionally, several public meetings, not required by NEPA, have been held in order to address the high level of public interest in this project.</p> <p>See topic FC for a discussion of the FFCA schedule and its role in the screening process.</p> <p>In the mid-1970's and the mid-1990's, in response to EPA intentions to issue an NPDES permit that would have caused Washington Aqueduct to recover and dewater and dispose of the water treatment residuals in lieu of returning them to the Potomac River, Washington Aqueduct investigated methods of accomplishing that. In both of those instances, coordination with the government of the District of Columbia resulted in a declaration that the Washington Aqueduct water treatment residuals would not be permitted to be sent to the Blue Plains advanced waster water treatment plant. In both of those instances a concept to recover and dewater the residuals at Dalecarlia for trucking to an off-site location for disposal was developed. EPA in both occasions made decisions that did not require Washington Aqueduct to complete action on the residuals process at that time.</p> <p>In the mid-1990's Washington Aqueduct also was directed by EPA to dredge the Dalecarlia Reservoir. That process was a very high intensity but of limited duration. It did generate many loads of sediment that were removed by truck. To do it safely and with the minimum effect on the surrounding neighborhoods, Washington Aqueduct worked very closely with the neighborhood groups and local officials. It was from that experience that Washington Aqueduct became well aware of the sensitivity of trucking to the surrounding neighborhoods on the traffic routes. Therefore when the current NPDES permit and FFCA were issued in the first half of 2003, Washington Aqueduct decided to take a completely fresh look at alternatives that might be employed to comply with the permit and the FFCA.</p> <p>Washington Aqueduct had no preconceived notion of what alternative it preferred when it started the NEPA evaluation of residuals alternatives in late 2003.</p> <p>What came out of the screening process and the follow-on extended public comment periods were ideas that had never been analyzed in connection with the two previous studies. Specifically, the monofill option was presented as a means to alleviate trucking for at least a 20 year period. Other ideas to transfer the residuals in a liquid form to off site processing locations such as McMillan and other water treatment plants and sites where no current dewatering facility existed were also</p>	

		considered.	
NE	Limited number of alternatives evaluated in EIS	A total of 160 residuals alternatives plus eight treatment options were evaluated for this project. A total of 135 of these alternatives, plus eight options were submitted by the public during three public involvement opportunities. The alternatives were screened by a set of criteria developed to reflect the project's purpose and need, as described in the Notice of Intent published in the Federal Register on January 12, 2004. It is not anticipated that additional alternatives exist that could be implemented within the Aqueduct's FFCA compliance deadline and meet the remaining screening criteria.	Section 2.0 Selection of Proposed Action and Alternatives contains a summary of the process followed to identify and screen feasible alternatives. Volume 4 Engineering Feasibility Study Compendium contains the complete description of the screening process and results
NF	Institutional constraints screening criteria	<p>The many piping alternatives are dependent upon the willingness of the receiving facility at the other end of the pipe, whether to process and dispose of the residuals, or simply to supply space for the Washington Aqueduct to do so. None of the agencies involved, whether it be the DC WASA, WSSC, Fairfax Water, the Central Intelligence Agency (CIA), the United States Navy, the City of Rockville, or the Federal Highway Administration, are able or willing to provide processing capacity or facility space. Neither the United States Army Corps of Engineers, the United States Army, nor the Washington Aqueduct has any authority over any of the agencies.</p> <p>Trucking is still involved in some degree with each piping alternative. It is worth noting that the David Taylor facility at Carderock is surrounded by the Clara Barton Parkway and MacArthur Boulevard, both of which have truck weight limitations. Despite how close the Capital Beltway may appear to be, processing residuals on the Carderock site would have still required dewatered residuals to be hauled through residential neighborhoods serviced by 2-lane subdivision roads no more suitable for truck traffic than similar haul routes proposed for residuals Alternative E.</p> <p>This suggested alternative also included speculation that a direct Beltway interchange could be constructed. Creating a direct Beltway interchange is a remote, costly and time prohibitive possibility. It would require basic changes in legislation and policies of other federal and local agencies, such as the National Park Service, which would be likely to result in protracted debate and possible litigation of their own.</p> <p>Given the highly developed nature of the area, finding a new site at the discharge end of a residuals pipeline would involve years of acquisition time and without sufficient land for disposal on-site would still mean the same amount of trucking away from that site. Furthermore, our analysis for Alternative C, while specific to that particular route, illustrates generally</p>	EIS Volume 4 - Engineering Feasibility Study Compendium, Section 3.

		that pipelines are not without significant environmental and cost impacts.	
NG	Restart NEPA process	The NEPA process has been carefully and dutifully followed. The EIS process included six public meetings and at least 20 consultations or conversations with interested individuals, groups, or agencies. Through this process 160 alternatives and 8 options were identified; 135 of these alternatives and all options were identified by the public. These alternatives span a range of approaches for the management and conveyance or water treatment residuals. These were screened to determine feasible options by a set of criteria that reflect the project's purpose and need.	EIS Section 2.0 Selection of Proposed Action and Alternatives contains a summary of the process followed to identify and screen feasible alternatives. EIS Section 5.0 - Public Involvement. EIS Volume 4 - Engineering Feasibility Study Compendium, Section 3.
NH	Regional approach to NEPA	A regional approach has been taken for the evaluation and decision making process: the National Capital Planning Commission is a Cooperating Agency. NCPC provides overall planning guidance for federal land and buildings in the National Capital Region, which includes the District of Columbia; Prince George's and Montgomery Counties in Maryland; and Arlington, Fairfax, Loudoun and Prince William Counties in Virginia. Federal, state (VA and MD) and local agencies were all consulted during the development of the DEIS and the impact analysis is both regional and site specific, depending on the requirements of the particular subject area. Regionalization specific to water and wastewater is discussed in topic DJ.	EIS Sections 3.0 and 4.0 for descriptions of existing conditions and impact evaluation. EIS Section 5.0 for public involvement and Agency Consultation
OA	Alternate coagulants – continued river discharge	The current NPDES permit does not allow the Washington Aqueduct to switch to an alternate coagulant and continue to discharge residuals to the river. The intent of the NPDES permit is to remove essentially all residuals from the river. Washington Aqueduct is planning to evaluate the use of alternate coagulants, such as polyaluminum chloride, in the future. This coagulant has the potential to reduce the quantity of residuals requiring processing and disposal. However, additional testing is required to confirm that it does not reduce the quality of the drinking water in other areas, such as organics removal, lead corrosion, etc. EPA approval would also be required before an alternate coagulant could be used.	EIS Volume 4 - Engineering Feasibility Study Compendium, Section 4.3 for a discussion of alternate coagulants that could be used to reduce the volume of residuals that requires disposal.
PA	Residuals Handling in Other Metropolitan Areas	Other large cities dispose of their water treatment residuals using a variety of methods including land application, sewer disposal, landfilling, etc. Neighboring water treatment utilities, such as Fairfax Water and WSSC dispose of their residuals by land application, quarry disposal, and discharge to the sewer.	
PB	Residuals studies throughout the world	To make sure we were evaluating alternatives within the appropriate regulatory constraints and geographical issues, the Aqueduct's residuals management evaluation is based largely on the experience of water	EIS Volume 4 – Engineering Feasibility Study Compendium, Section 2.0 for a discussion of

		<p>providers in the domestic United States in general and in the National Capital Region in particular. Approaches that work in one part of the country (or world) are not necessarily applicable to the Aqueduct's situation. For example, sewers are used with some frequency throughout the country for residuals disposal, but that is not possible here for a variety of reasons detailed in the evaluation.</p> <p>Wherever in the world water treatment residuals are being generated, management approaches must all address the common questions of collection, processing, conveyance, and final disposal. The alternatives identified and evaluated in this project represented a range of different approaches for resolving each type of issue.</p>	the proposed action and alternatives.
QA	Public Residuals Alternatives	160 residuals alternatives and eight options are evaluated in the Engineering Feasibility Study Compendium. Approximately 135 of these alternatives were identified by the public.	EIS Volume 4 – Engineering Feasibility Study Compendium, Section 3.2 Alternatives P-1 through P-27
QB	Environmental assessment	<p>The analysis in the EIS includes detailed descriptions of the existing conditions for each of the five alternatives. This includes land use, noise, air quality, aquatic resources, biological (terrestrial) resources, cultural resources, hazardous, toxic and radioactive substances, soils, geology, and groundwater, infrastructure, transportation, visual aesthetics, socioeconomics including environmental justice. Note that these existing conditions include the natural as well as the human environment (pre-historical resources, historical resources, the built environment and demographics, employment and economic analysis.) The potential for each alternative to impact these existing conditions, both short term and long term was carefully evaluated and is described in the EIS. The impact of the proposed action in concert with one or more other past, present, or reasonably foreseeable future actions or projects was also evaluated.</p> <p>In EPA's detailed comments on the DEIS dated June 27, 2005, EPA disagrees with the conclusion in Section 4.5.3.4 that implementation of Alternative D, the No Action Alternative, would have no significant impact on Aquatic Resources. EPA asserts that implementation of the NPDES permit will "reduce pollutant loading to the Potomac River...". Based on previous studies, the Washington Aqueduct observes that its historical practice of returning residuals solids removed during the water treatment process to the Potomac River does not result in significant detrimental impact. However, elimination of this practice, in compliance with the NPDES permit, will meet the CWA requirement that water utilities use the best available technology.</p> <p>See topics GA, GD, GF and GI for additional information regarding trucking.</p>	EIS Volume 1 – Section 3 for a discussion of existing conditions, Section 4 for a discussion of potential impacts, Section 7 for a discussion of cumulative impacts and mitigation.

QC	Northwest (alternate B) versus east (alternate E) residuals processing sites	The Aqueduct recognizes that each of the alternatives under evaluation necessitates developing infrastructure in an urban setting, characterized by natural and man-made resources. All alternatives to meet this federally mandated action will carry some degree of impact. Please see section 6 for a discussion of the Aqueduct's rationale for recommending Alternative E as the proposed action.	EIS Volume 1 – Section 6 for a description of the selection of the preferred alternative.
QD	Residuals processing site near Beltway versus Dalecarlia WTP site	See responses to topics DL, NE, and NF.	EIS Volume 4 – Engineering Feasibility Study Compendium, Section 3.

From: WWW [www@wfpub.usace.army.mil]

Sent: Friday, July 01, 2005 7:07 PM

To: Peterson, Michael C WAD

Cc:

Subject: Comments on Proposed Water Treatment Residuals Management Process

Specific
Comments

Since I have already submitted my concerns a number of times, I am writing only to clarify that my position still stands -- i.e., that we are vehemently opposed to Option B -- building on Brookmont property. I applaud your wisdom in announcing at the previous meeting that the proposed building will be at the Sibley Hospital -- although I would prefer that the building is not in either place, I am resigned to the fact that we need to choose the lesser of two evils as you so succinctly put it, and choose the Sibley site. After all, the Sibley Hospital announced absolutely no discomfort with this solution hence this would ensure much more harmony than the Brookmont site. As reiterated previously, the safety and environmental concerns of the Brookmont site compels us to reach the conclusion, as you have already, that it is not a viable option in comparison to the Sibley site. Thank you very much for the time taken to consider and incorporate our concerns in your planning and preparations for the proposed building. Sincerely

145-1-IA

Name

Agency

E-Mail
Address

Telephone
Number

Please
Contact

ContactRequested

From:
Sent: Friday, July 01, 2005 6:00 PM
To: Peterson, Michael C WAD
Cc: Nancy Floreen; Howard Denis
Subject: Comments on DEIS

Dear Mr. Peterson,

I am writing on behalf of the Sumner Village Community Association, which represents the 395 apartments with about 650 residents in Sumner Village, a condominium complex located off of MacArthur Boulevard in lower Bethesda.

146-1-IA

We are very concerned about the 80-foot industrial dewatering facility that the Army Corps of Engineers is proposing behind Sibley Hospital (Alternative E) and the impact it will have on our neighborhood. We favor finding a piping solution that will send the residuals to a non-residential area closer to the beltway. In addition, we are concerned that:

- The DEIS contains virtually no analysis of environmental impacts of the Corps' preferred option. 146-2-QB
- The environmental impacts of the Corps' preferred "trucking alternative" are profound in a region that is already suffering from severe non-attainment under Clean Air Act standards and serious traffic congestion. Diesel fuel emissions from the trucks will aggravate air pollution and likely increase asthma cases. 146-3-QB
- The Corps' DEIS seriously mischaracterizes the true cost of the "trucking alternative" by failing to include the cost of operating large diesel trucks indefinitely. 146-4-GI
- The entire process has been flawed, starting with the Corps' failure to involve the community when it started the scoping process for this project in January of 2004. The Corps pre-selected an outcome more than 10 years ago (trucking residuals through our neighborhoods) and crafted the NEPA process to fit their desired outcome. 146-5-ND
- The Corps has looked at a limited range of alternatives, raising concerns that the NEPA process was not properly followed. 146-6-NE

Sincerely,

Cc: The Honorable Chris Van Hollen, The Honorable Barbara Mikulski, The Honorable Paul Sarbanes
 Montgomery County Councilmembers Nancy Floreen and Howard Denis

From:**Sent:** Monday, July 04, 2005 12:29 AM**To:** Peterson, Michael C WAD**Subject:** Washington Aqueduct
July 4, 2005

Mr. Thomas P. Jacobus, General Manager - Washington Aqueduct
 c/o Mr. Michael C. Peterson, Environmental Manager
 U.S. Army Corps of Engineers, Baltimore District
 5900 MacArthur Blvd., N.W.
 Washington, D.C. 200016
 Dear Mr. Jacobus:

I am writing to express my concern about the 80-foot industrial dewatering facility you are proposing behind Sibley Hospital (Alternative E) and the impact it will have on my neighborhood. I favor finding a piping solution that will send the residuals to a non-residential area closer to the beltway. I ask you to carefully review and respond to Concerned Neighbors' concerns that:

147-1-IA

. The DEIS contains virtually no analysis of environmental impacts of the Corps' preferred option.

147-2-QB

. The environmental impacts of the Corps' preferred 'trucking alternative' are profound in a region that is already suffering from severe non-attainment under Clean Air Act standards and serious traffic congestion.

147-3-QB

. The Corps' DEIS seriously mischaracterizes the true cost of the 'trucking alternative' by failing to include the cost of operating large diesel trucks indefinitely.

147-4-GI

. The entire process has been flawed, starting with the Corps' failure to involve the community when it started the scoping process for this project in January of 2004. The Corps pre-selected an outcome more than 10 years ago (trucking residuals through our neighborhoods) and crafted the NEPA process to fit their desired outcome.

147-5-ND

. The Corps has looked at a limited range of alternatives, raising concerns that the NEPA process was not properly followed.

147-6-NE

In addition, I am personally concerned about air impact of trucking and potential increase in the number of asthma or cancer cases resulting from this volume of diesel emissions daily.

147-7-KD

Your favorable consideration of moving the industrial facility to a non-residential area near the beltway would be appreciated.

Very truly yours,

cc: The Honorable Chris Van Hollen
The Honorable Barbara Mikulski
The Honorable Paul Sarbanes
Councilmember Howard A. Denis
Councilmember Nancy Floreen

From:
Sent: Sunday, July 03, 2005 11:32 PM
To: Peterson, Michael C WAD
Subject: Washington Aqueduct

Dear Mr. Peterson:

I am writing to express my concern about the 80-foot industrial dewatering facility you are proposing behind Sibley Hospital (Alternative E) and the impact it will have on my neighborhood. I favor finding a piping solution that will send the residuals to a non-residential area closer to the beltway. I ask you to carefully review and respond to Concerned Neighbors' concerns that:

- The DEIS contains virtually no analysis of environmental impacts of the Corps' preferred option.
- The environmental impacts of the Corps' preferred 'trucking alternative' are profound in a region that is already suffering from severe non-attainment under Clean Air Act standards and serious traffic congestion.
- The Corps' DEIS seriously mischaracterizes the true cost of the 'trucking alternative' by failing to include the cost of operating large diesel trucks indefinitely.
- The entire process has been flawed, starting with the Corps' failure to involve the community when it started the scoping process for this project in January of 2004. The Corps pre-selected an outcome more than 10 years ago (trucking residuals through our neighborhoods) and crafted the NEPA process to fit their desired outcome.
- The Corps has looked at a limited range of alternatives, raising concerns that the NEPA process was not properly followed.

In addition, I am personally concerned about...
(customize the letter by writing about how one of these items will impact you)

- Environmental impact in region that is already classified as being in severe non-attainment under the Clean Air Act
- Air impact of trucking and potential increase in the number of asthma or cancer cases resulting from this volume of diesel emissions daily
- The safety implications of sending 132 trucks a day through Maryland and DC past at least 10 public and private schools
- Combined health and safety impacts of having trucks enter the dewatering facility at the same time Sibley Hospital is engaged in a major expansion of its facility

Sincerely,

148-1-IA

148-2-QB

148-3-QB

148-4-GI

148-5-ND

148-6-NE

148-7-GF

148-8-KD

148-9-GE

148-10-BI

From:
Sent: Sunday, July 03, 2005 4:08 PM
To: Peterson, Michael C WAD
Cc:
Subject: Deadline for comment period on DEIS for proposed dewatering plant

Mr. Thomas P. Jacobus
General Manager
Washington Aqueduct
U.S. Army Corps of Engineers, Baltimore District
5900 MacArthur Blvd., N.W.
Washington, D.C. 200016

by e-mail to environmental manager Michael.C.Peterson@usace.army.mil

Dear Mr. Jacobus:

I am writing to express my concern about the 80-foot industrial dewatering facility you are proposing near Brookmont (Alternative B) or behind Sibley Hospital (Alternative E) and the impact it will have on my neighborhood. I favor finding a piping solution that will send the residuals to a non-residential area closer to the beltway. I ask you to carefully review and respond to Concerned Neighbors' concerns that:

149-1-IA

? The DEIS contains virtually no analysis of environmental impacts of the Corps' preferred option.

149-2-QB

? The environmental impacts of the Corps' preferred "trucking alternative" are profound in a region that is already suffering from severe non-attainment under Clean Air Act standards and serious traffic congestion.

149-3-QB

? The Corps' DEIS seriously mischaracterizes the true cost of the "trucking alternative" by failing to include the cost of operating large diesel trucks indefinitely.

149-4-GI

? The entire process has been flawed, starting with the Corps' failure to involve the community when it started the scoping process for this project in January of 2004. The Corps pre-selected an outcome more than 10 years ago (trucking residuals through our neighborhoods) and crafted the NEPA process to fit their desired outcome.

149-5-ND

? The Corps has looked at a limited range of alternatives, raising concerns that the NEPA process was not properly followed.

149-6-NE

* The Corps has not adequately investigated a piping alternative

149-7-DA

In addition, I am personally concerned about?
(customize the letter by writing about how one of these items will impact you)

? Environmental impact in region that is already classified as being in severe non-attainment under the Clean Air Act

149-8-GF

? Air impact of trucking and potential increase in the number of asthma or cancer cases resulting from this volume of diesel emissions daily

149-9-KD

? The safety implications of sending 132 trucks a day through Maryland and DC past at least 10 public and private schools

149-10-GE

? Combined health and safety impacts of having trucks enter the dewatering facility at the same time Sibley Hospital is engaged in a major expansion of its facility

149-11-BI

Sincerely,

Copied to my congressional representatives:

The Honorable Chris Van Hollen
1419 Longworth House Office Building
Washington, DC 20515
<http://www.house.gov/writerep/>

The Honorable Barbara Mikulski
503 Hart Senate Office Building
Washington, DC 20510
<http://mikulski.senate.gov/contactme/mailform.html>

The Honorable Paul Sarbanes
503 Hart Senate Office Building
Washington, DC 20510
<http://sarbans.senate.gov/pages/email.html>

Councilmember Howard A. Denis
Montgomery County Council
100 Maryland Avenue
Rockville, MD 20850 Councilmember.Denis@montgomerycountymd.gov

Councilmember Nancy Floreen
100 Maryland Ave, 6th Floor
Rockville, MD 20850
Councilmember.Floreen@montgomerycountymd.gov

From:
Sent: Tuesday, July 05, 2005 9:09 AM
To: Peterson, Michael C WAD
Cc:

Subject: Dewatering facility

Mr. Thomas P. Jacobus

General Manager

Washington Aqueduct

U.S. Army Corps of Engineers, Baltimore District

5900 MacArthur Blvd., N.W.

Washington, D.C. 20016

Dear Mr. Jacobus:

We are writing to express our concern about the 80-foot industrial dewatering facility you are proposing behind Sibley Hospital (Alternative E) and the impact it will have on my neighborhood. We favor finding a piping solution that will send the residuals to a non-residential area closer to the beltway. I ask you to carefully review and respond to concerned neighbors' concerns that:

150-1-IA

• The DEIS contains virtually no analysis of environmental impacts of the Corps' preferred option.

150-2-QB

• The environmental impacts of the Corps' preferred 'trucking alternative' are profound in a region that is already suffering from severe non-attainment under Clean Air Act standards and serious traffic congestion.

150-3-QB

• The Corps' DEIS seriously mischaracterizes the true cost of the 'trucking alternative' by failing to include the cost of operating large diesel trucks indefinitely.

150-4-GI

• The entire process has been flawed, starting with the Corps' failure to involve the community when it started the scoping process for this project in January of 2004. The Corps pre-selected an outcome more than 10 years ago (trucking residuals through our neighborhoods) and crafted the NEPA process to fit their desired outcome.

150-5-ND

• The Corps has looked at a limited range of alternatives, raising concerns that the NEPA process was not properly followed.

150-6-NE

In addition, I am personally concerned about... (customize the letter by writing about how one of these items will impact you)

• Environmental impact in region that is already classified as being in severe non-attainment under the Clean Air Act

150-7-GF

• Air impact of trucking and potential increase in the number of asthma or cancer cases resulting from this volume of diesel emissions daily

150-8-KD

• The safety implications of sending 132 trucks a day through Maryland and DC past at least 10 public and private schools

150-9-BI

- Combined health and safety impacts of having trucks enter the dewatering facility at the same time Sibley Hospital is engaged in a major expansion of its facility.

150-10-BI

Sincerely yours,

cc: The Honorable Anthony Williams

The Honorable Eleanor Holmes Norton

The Honorable Chris Van Hollen

The Honorable Barbara Mikulski

The Honorable Paul Sarbanes

Councilmember Howard A. Denis

Councilmember Nancy Floreen

From:**Sent:** Tuesday, July 05, 2005 10:05 AM**To:** Peterson, Michael C WAD**Cc:** Councilmember.Denis@montgomerycountymd.gov;

Councilmember.Floreen@montgomerycountymd.gov

Subject: Construction of Industrial Dewatering Facility Near Sibley Hospital

Dear Mr. Peterson:

As a local Bethesda resident, I am writing to express my concern about the 80-foot industrial dewatering facility the Army Corps of Engineers is proposing behind Sibley Hospital (Alternative E) and the impact that it will have on my neighborhood. Rather than pursue this intrusive and environmentally unsound option, the Corps should adopt a piping solution that will send all residuals to a non-residential area closer to the beltway. I ask you to carefully review and respond to Concerned Neighbors' concerns that:

151-1-IA

- The DEIS contains virtually no analysis of environmental impacts of the Corps' preferred option. 151-2-QB
- The environmental impacts of the Corps' preferred 'trucking alternative' are profound in a region that is already suffering from severe non-attainment under Clean Air Act standards and serious traffic congestion. 151-3-QB
- The Corps' DEIS seriously mischaracterizes the true cost of the 'trucking alternative' by failing to include the cost of operating large diesel trucks indefinitely. 151-4-GI
- The process for considering the various alternatives has been seriously flawed, starting with the Corps' failure to involve the community when it began the scoping process for the project in January of 2004. The Corps pre-selected an outcome more than 10 years ago (trucking residuals through our neighborhoods) and crafted the NEPA process to fit that desired outcome. 151-5-ND
- The Corps has looked at a limited range of alternatives, strongly suggesting that the NEPA process was not properly followed. 151-6-NE

In addition, I am personally concerned about.

- The diminished air quality in our neighborhood that will result from excessive diesel truck traffic. I am particularly disturbed by this prospect because several members of my family suffer from asthma. 151-7-GF
- The safety implications of sending 132 trucks a day through Maryland and DC past at least 10 children's schools. 151-8-GE
- The potential adverse environmental impact that the facility will have the Crescent Trail, which thousands of local residents use on a daily basis and which runs adjacent to the proposed dewatering site. 151-9-BB

I hope that the Corps takes the Concerned Neighbors' position seriously and adopts a more reasonable approach to the dewatering process. It would be pointless to have to resolve this issue through litigation rather than an agreed-upon solution that accommodates the reasonable needs of all parties.

Sincerely,

From:

Sent: Tuesday, July 05, 2005 11:08 AM

To: Peterson, Michael C WAD

Subject: residue facility

Dear Mr. Jacobus:

As a resident of the Westmoreland Hills community, I wish to express my dismay at the possibility that the Corps of Engineers is considering building a major residue processing facility in what has been for the long past one of the few remaining open spaces in our overcrowded, congested neighborhoods.

152-1-IA

It is not clear to me, even though I attended the community meeting at the Methodist church on Nebraska Ave. a few weeks ago, why both the timing and the chosen method of handling the residue seem to be unreasonable and harmful to the neighborhood. It does not yet seem that a practical and neighborhood friendly solution has been discovered and that, at this point, some new thinking seems to be in order. Most importantly, how can such a facility be compatible with the protective area around the reservoir and the needs of Sibly Hospital?

152-2-BI

It is my impression that a good deal more thought needs to go into conceptualizing what to do with the residue while not harming the local communities.

Thank you for your attention,

From:**Sent:** Tuesday, July 05, 2005 11:36 AM**To:** Peterson, Michael C WAD**Cc:****Subject:** FW: Need for another alternative to siting of proposed 8 story tall toxic waste dump site next to Sibley Hospital under current Corps proposal E

Mr. Thomas P. Jacobus
 General Manager
 Washington Aqueduct
 U.S. Army Corps of Engineers, Baltimore District
 5900 MacArthur Blvd., N.W.
 Washington, D.C. 200016

Dear Mr. Jacobus:

I am extremely concerned both about the process that you have used to arrive at your current proposed siting of an 80-foot tall dump site for heavy mineral and toxic materials extracted by the proposed industrial dewatering facility you are proposing behind Sibley Hospital (Alternative E) and the impact of that site and also the transportation of those materials to other waste sites.

153-1-IA

I attended your first "public" meeting on the project the day after Labor Day and I find you have continued on your pre-chosen path without adequate consideration of the environmental impact of this particular alternative. You also have failed to properly cost out its various costs in environmental damage and dollars that will need to be spent in terms of the 132 tank trucks that you have proposed are to come through our neighborhood daily for what is acknowledged at best to be only a short-term solution to this problem.

153-2-GE

You need to terminate consideration of this alternative and proceed with one that will not impact either the D.C. and MD neighborhoods now affected or any residential areas in general. You should be providing a permanent solution for the cleaning of the water that you are required to perform. If you applied any logic to this situation, you would turn to a piping solution that will send the residuals from the cleaning process which I believe cannot help but contain various minerals, impurities, and therefore toxins taken from the Potomac waters, and place that piping through a non-residential routing closer to the nearby beltway and away from residential areas.

153-3-DA

Your DEIS contains virtually no analysis of environmental impacts of this Corps' preferred option. The environmental impacts of the Corps' preferred 'trucking alternative' are profound in a region that is already suffering from severe non-attainment under Clean Air Act standards and serious traffic congestion. If you are solving one problem, you are creating a worse one with your current proposal.

153-4-QB

Moreover, the Corps' DEIS seriously mischaracterizes the true financial cost of the 'trucking alternative' by failing to include the cost of operating large diesel trucks indefinitely.

153-5-GI

Further, I feel the entire process of consideration of alternatives and involvement of the community has been flawed, starting with the Corps' failure to involve the community when it started the scoping process for this project in January 2004. The Corps appears to have pre-selected an outcome more than 10 years ago (trucking residuals through our neighborhoods) and crafted the NEPA process to fit your desired outcome.

153-6-ND

In particular, I find it disingenuous that you hold meetings for community input right after national holidays, and then ask for comments on your proposal similarly, as in this case, within two days after the July 4th holiday, when many are on vacation. In commemoration of Independence Day, I am devoting time to oppose your restrictions on our freedoms. Your actions clearly indicate your desire to avoid citizen participation in this process and impose administrative dictates of your own.

From an environmental standpoint, I feel that you also have failed to adequately consider the environmental impact on region that is already classified as being in severe non-attainment under the Clean Air Act in your current proposal. There will be an unacceptable impact of trucking and potential increase in the number of asthma or cancer cases resulting from this volume of diesel emissions daily. Further there are both traffic and safety considerations in sending 132 trucks a day through Maryland and DC past a hospital and residential facilities for the elderly and at least 10 public and private schools in the affected area.

153-7-GE

153-8-GE

Since it is apparent that you are not giving proper consideration to health and other environmental considerations and are not handling this matter in a good faith fashion with those in the various communities that are impacted, I will be asking my Representatives in Congress and others with whom I deal on Capital Hill to hold up funding for the Corps on this project until you come up with a piping alternative following freeway routes rather than a trucking one, and will also request, so that you get the message, that your entire administrative budget be withheld until you do so, if you continue to proceed in this fashion and with this alternative.

From:

Sent: Tuesday, July 05, 2005 11:47 AM

To: Peterson, Michael C WAD

Subject: Water Extraction Facility at the Dalecarlia Filtration Plant

Dear Mr. Peterson,

I am writing to you to express **my objection** to the Corps Plan E and especially Plan B. There are many other alternatives to these proposed plans that make more sense logistically and would not impact the immediate neighborhoods along MacArthur, Western and Massachusetts Av. Four of these alternatives include:

154-1-IA

1 The Carderock/David Taylor Model Basin is a Federal facility right off the Capital Beltway that would provide a secure site with absolutely NO neighborhood intrusion.

154-2-DE

#2 WSSC has a plant on River Road a few miles beyond Great Falls that is already performing the exact same function and could provide the facilities needed for the extraction.

154-3-DD

3 The City of Rockville has its own water facility on the Potomac and could also provide space for the Corps' dewatering building.

154-4-DK

4 The Corps could purchase a small piece of ground with access to the Capital Beltway upstream near to the Potomac River and could locate all or part of the facility there.

154-5-DL

In all of these four cases, the raw river water would be piped to the Washington Aqueduct from Great Falls and treated at the Dalecarlia filtration plant, just as it is today. However, instead of dumping the leftover 'sludge' (the muck created when the river water is filtered) back into the river as they do now, it would be piped to one of these four off-site facilities to be 'dewatered' (dried) before being hauled away by trucks to dumping sites in Maryland and/or Virginia.

The key issue is that the trucks hauling the sludge away would be starting from a site closer to the Beltway and would not have to travel through densely populated urban communities for any of these four options. But the other major advantage of these alternatives is that the sludge pipe could be run INSIDE the already existing raw water conduit, eliminating the need to dig a long (and expensive and destructive) trench to the facility.

154-6-QD

Furthermore, as a resident of Montgomery County, this facility serves no purpose to our community as I believe that 100% of the water to be "de-sludged" will be purified at the Dalecarlia plant on MacArthur Blvd at D.C. line and will be sold to D.C. and to Fairfax, V.A.

If plans E or B are approved, Montgomery County residents are the ones who would be negatively affected by all the environmental costs and other negative effects such as traffic, road degradation and **an additional safety hazard to our children.**

Sincerely,

Cc. The Honorable Chris Van Hollen
The Honorable Barbara Mikulski
The Honorable Paul Sarbanes

From:

Sent: Tuesday, July 05, 2005 11:44 AM

To: Peterson, Michael C WAD

Cc: Councilmember.Denis@montgomerycountymd.gov;

Councilmember.Floreen@montgomerycountymd.gov

Subject: OPPOSITION TO Alternative E re the new industrial de-watering facility near Sibley Hospital

Attachments: army corps letter re sibley FINAL.pdf

July 5, 2005

Mr. Thomas P. Jacobus
General Manager
c/o Mr. Michael Peterson, Environmental Manager (via email)
Washington Aqueduct
U.S. Army Corps of Engineers, Baltimore District
5900 MacArthur Blvd., N.W.
Washington, D.C. 200016

Dear Mr. Jacobus:

I am writing to oppose Alternative E of the Army Corps of Engineers Draft Environmental Impact Statement ('DEIS') for a new industrial de-watering facility near Sibley Hospital on the border of Washington, DC and Maryland. I am deeply concerned both about the direct impact it would have on my neighborhood, and the broader environmental effects. I understand that the facility would be the height of an 8-story building and the length of a football field; this would be a major exception to zoning in the area and would considerably change the area. Furthermore, I understand that the facility would generate up to 132 trucks a day through our neighborhoods to haul-away water residuals.

As an alternative, I would favor a piping solution to send the residuals to a non-residential area closer to the beltway or moving the industrial facility to a non-residential area near the beltway.

I ask you to carefully review and respond to Concerned Neighbors'™ concerns that:

- Â· The DEIS contains virtually no analysis of environmental impacts of the Corps' preferred option.
- Â· The environmental impacts of the Corps' preferred 'trucking alternative' are profound in a region that is already suffering from severe non-attainment under Clean Air Act standards and serious traffic congestion.
- Â· The Corps' DEIS seriously mischaracterizes the true cost of the 'trucking alternative' by failing to include the cost of operating large diesel trucks indefinitely, especially in an era of rising oil prices and supply issues expected for the foreseeable future.
- Â· The entire process has been flawed, starting with the Corps' failure to involve the community when it started the scoping process for this project in January of 2004. Indeed, it appears that the Corps pre-selected its decision to truck residuals through our neighborhoods more than 10 years ago and crafted the NEPA process to fit their desired outcome.
- Â· The Corps has looked at a limited range of alternatives, further raising concerns that the NEPA process was not properly followed.

While I share the concerns raised by our citizens' association and the Concerned Neighbors effort, as the mother of a young son, I am personally concerned about the long-standing effects on the air quality that will inevitably result from a trucking operation of this magnitude, and potential increase in the number of asthma or cancer cases resulting from this volume of diesel emissions daily. The safety implications of sending 132 commercial trucks a day past at least 10 public and private schools poses serious risks to our children, and the family members who accompany them to school. We specifically bought our home in this neighborhood because of the ability to have our children walk to school.

Finally, given the well-documented problems caused by the Corps' work with American University with respect to the weapons testing and arsenic and other chemical deposits found rampant through Spring Valley, we are concerned that our neighborhood will be subject to some of the same difficulties in terms of accountability should efforts with this de-watering facility go awry.

I look forward to your response, and hope that you will stop plans to proceed with Alternative E and commit to an alternative proposal that will result in fewer community concerns and a better environmental outcome for all. Thank you.

Cordially,

/s/

CC: The Honorable Chris Van Hollen (via email)
1419 Longworth House Office Building
Washington, DC 20515

The Honorable Barbara Mikulski (via email)
503 Hart Senate Office Building
Washington, DC 20510

The Honorable Paul Sarbanes (via email)
503 Hart Senate Office Building
Washington, DC 20510

Councilmember Howard A. Denis (via email)
Montgomery County Council
100 Maryland Avenue
Rockville, MD 20850

Councilmember Nancy Floreen (via email)
100 Maryland Ave, 6th Floor
Rockville, MD 20850

July 5, 2005

Mr. Thomas P. Jacobus
General Manager
c/o Mr. Michael Peterson, Environmental Manager (via email)
Washington Aqueduct
U.S. Army Corps of Engineers, Baltimore District
5900 MacArthur Blvd., N.W.
Washington, D.C. 200016

Dear Mr. Jacobus:

I am writing to oppose Alternative E of the Army Corps of Engineers Draft Environmental Impact Statement ('DEIS') for a new industrial de-watering facility near Sibley Hospital on the border of Washington, DC and Maryland. I am deeply concerned both about the direct impact it would have on my neighborhood, and the broader environmental effects. I understand that the facility would be the height of an 8-story building and the length of a football field; this would be a major exception to zoning in the area and would considerably change the area. Furthermore, I understand that the facility would generate up to 132 trucks a day through our neighborhoods to haul-away water residuals.

155-1-IA

As an alternative, I would favor a piping solution to send the residuals to a non-residential area closer to the beltway or moving the industrial facility to a non-residential area near the beltway.

155-2-IA

I ask you to carefully review and respond to Concerned Neighbors' concerns that:

- The DEIS contains virtually no analysis of environmental impacts of the Corps' preferred option.
- The environmental impacts of the Corps' preferred 'trucking alternative' are profound in a region that is already suffering from severe non-attainment under Clean Air Act standards and serious traffic congestion.
- The Corps' DEIS seriously mischaracterizes the true cost of the 'trucking alternative' by failing to include the cost of operating large diesel trucks indefinitely, especially in an era of rising oil prices and supply issues expected for the foreseeable future.

155-3-QB

155-4-QB

155-5-GI

- The entire process has been flawed, starting with the Corps' failure to involve the community when it started the scoping process for this project in January of 2004. Indeed, it appears that the Corps pre-selected its decision to truck residuals through our neighborhoods more than 10 years ago and crafted the NEPA process to fit their desired outcome. 155-6-ND
- The Corps has looked at a limited range of alternatives, further raising concerns that the NEPA process was not properly followed. 155-7-NE

While I share the concerns raised by our citizens' association and the Concerned Neighbors effort, as the mother of a young son, I am personally concerned about the long-standing effects on the air quality that will inevitably result from a trucking operation of this magnitude, and potential increase in the number of asthma or cancer cases resulting from this volume of diesel emissions daily. The safety implications of sending 132 commercial trucks a day past at least 10 public and private schools poses serious risks to our children, and the family members who accompany them to school. We specifically bought our home in this neighborhood because of the ability to have our children walk to school. 155-8-KD 155-9-GE

Finally, given the well-documented problems caused by the Corps' work with American University with respect to the weapons testing and arsenic and other chemical deposits found rampant through Spring Valley, we are concerned that our neighborhood will be subject to some of the same difficulties in terms of accountability should efforts with this de-watering facility go awry.

I look forward to your response, and hope that you will stop plans to proceed with Alternative E and commit to an alternative proposal that will result in fewer community concerns and a better environmental outcome for all. Thank you.

Cordially,

/s/

CC: The Honorable Chris Van Hollen (via email)
1419 Longworth House Office Building
Washington, DC 20515

The Honorable Barbara Mikulski (via email)
503 Hart Senate Office Building
Washington, DC 20510

The Honorable Paul Sarbanes (via email)
503 Hart Senate Office Building
Washington, DC 20510

Councilmember Howard A. Denis (via email)
Montgomery County Council
100 Maryland Avenue
Rockville, MD 20850

Councilmember Nancy Floreen (via email)
100 Maryland Ave, 6th Floor
Rockville, MD 20850



Sibley

Sibley Memorial Hospital
Grand Oaks
The Sibley Renaissance

5255 Loughboro Road, SW
Washington, DC 20016-2691
Telephone: 202-537-4880

Robert L. Sloan
President and
Chief Executive Officer

June 27, 2005

Michael Peterson
Environmental Engineer
Washington Aqueduct
U. S. Army Corps of Engineers
5900 MacArthur Boulevard, N.W.
Washington, D.C. 20016-2514

Dear Mr. Peterson:

It is our understanding that the U.S. Army Corps of Engineers and, specifically, the staff of the Washington Aqueduct must take action to bring the Aqueduct into compliance with the Clean Water Act of the United States. In this regard, we have reviewed the draft Environmental Impact Statement for a Proposed Water Treatment Residuals Management Process for the Washington Aqueduct dated April 2005. The recent decision of Mr. Tom Jacobus, Chief, Washington Aqueduct, to extend the review period for interested parties is commendable.

156-1-IA

Further, we have discussed various public alternatives with Mr. Jacobus and we understand the desire of the Corps of Engineers to build the Residual Management Processing Plant on property owned by the Army Corps of Engineers, just north of Sibley Memorial Hospital. If this option is determined to be the best possible solution to legal requirements, then we urge the Corps of Engineers to locate this plant as far north as possible from the Hospital property and to limit the number of trucks entering and exiting Little Falls Road to as few as possible. We desire to coordinate future expansion plans of Sibley Memorial Hospital with any construction plans of the Corps of Engineers on property located adjacent to the Hospital.

Mr. Tom Jacobus has been cooperative with Sibley Memorial Hospital for many years and we look forward to working with him on this matter. Thank you for the opportunity to comment on your proposed plans.

Sincerely,

Robert L. Sloan
President and Chief Executive Officer

RLS:saj

GOVERNMENT OF THE DISTRICT OF COLUMBIA
Department of Health
Environmental Health Administration

Office of the Senior Deputy Director



July 5, 2005

Michael C. Peterson, Environmental Engineer
U.S. Army Corps of Engineers, Baltimore District
Washington Aqueduct
5900 MacArthur Boulevard, N.W.
Washington, D.C. 20016

Re: Draft Environmental Impact Statement for Proposed Residuals Management Process

Dear Mr. Peterson:

The Environmental Health Administration has reviewed the Draft Environmental Impact Statement for a Proposed Water Treatment Residuals Management Process for the Washington Aqueduct, D.C. (April 2005) (DEIS), and offers the following comments:

The alternatives evaluated in the DEIS, with the exception of Alternative D ("no action"), will considerably reduce sediment discharges to the Potomac River. This will result in significant improvement of the water quality and aquatic life of the river. Alternative A, dewatering at the northwest Dalecarlia processing site and disposal by monofill, would destroy 30 acres of forested habitat.

The DEIS discussion of the dewater/processing facility, reservoir pumping stations, and forebay upgrade revealed some groundwater issues that need to be addressed. These issues include (1) the northwest processing site, oily smell noted during soil borings (pages 3-36, 4-35); east processing site, remnants of demolished building and oily material below ground, currently undergoing investigation (page 4-38); and forebay modification, Georgetown Booster Pump, groundwater control / management (pages 4-43, 4-40). These issues can be addressed during the implementation of the selected alternative. The Water Quality Division will work with the Washington Aqueduct to resolve these issues, to mitigate any potential adverse impacts to the groundwater, surface water, and drinking water. In addition, the Washington Aqueduct should comply with the District's sediment control and storm water management regulations for proposed on-site construction activities involving land disturbance. Due to the close proximity of Dalecarlia to the Potomac River, we recommend that the Corps consider extra measures to address erosion and sediment control.

Washington Aqueduct Residuals Management DEIS

July 5, 2005

Page Two

With respect to air quality, a review of the five alternatives discussed in the DEIS indicates that all, except Alternative D (no action), would involve truck traffic and would likely add to vehicular congestion and exacerbate air pollution in the affected areas. Alternatives A, B, and E would affect the areas near the Dalecarlia, while Alternative C would affect Blue Plains, which is working to eliminate the trucking of sludge and which, in any event, is unable to handle the residuals due to space limitations. The transfer of truck traffic from Dalecarlia to Blue Plains is not a viable option. The Corps' recommended option, Alternative E, would involve off-site trucking. The impact of truck traffic on air quality could be mitigated if the contractors could be required to retrofit their diesel trucks. The feasibility of such action should be investigated. In addition, to delineate the extent of the impacts on air quality, the final environmental impact statement should evaluate the air quality impact through a traffic study and air quality analysis.

157-1-GD

157-2-GF

A number of options were evaluated that did not survive the ranking process; however, the Environmental Health Administration remains interested in the proposed option of piping the solids for processing to another industrial site, such as the Naval Surface Warfare Center at Carderock. This site contains adequate space to separate and buffer the residuals management process from any residential neighborhoods. It is also close to the Beltway, which would help to mitigate trucking impacts. We also believe that this alternative would provide an environmentally acceptable solution that is supported by the residents of the District of Columbia and Maryland, and would support further discussion between the two federal agencies to determine if this option or another piping option is viable.

157-3-DE

Sincerely,



MARIE SANSONE

Interim Senior Deputy Director

From:
Sent: Tuesday, July 05, 2005 12:35 PM
To: Peterson, Michael C WAD
Subject: Washington Aqueduct

Mr. Thomas P. Jacobus
General Manager
Washington Aqueduct
U.S. Army Corps of Engineers, Baltimore District
5900 MacArthur Blvd., N.W.
Washington, D.C. 200016

Dear Mr. Jacobus:

I am writing to express my concern about the 80-foot industrial dewatering facility you are proposing behind Sibley Hospital (Alternative E) and the impact it will have on my neighborhood. I favor finding a piping solution that will send the residuals to a non-residential area closer to the beltway. I ask you to carefully review and respond to Concerned Neighbors' concerns that:

158-1-IA

- The DEIS contains virtually no analysis of environmental impacts of the Corps' preferred option.
- The environmental impacts of the Corps' preferred 'trucking alternative' are profound in a region that is already suffering from severe non-attainment under Clean Air Act standards and serious traffic congestion.
- The Corps' DEIS seriously mischaracterizes the true cost of the 'trucking alternative' by failing to include the cost of operating large diesel trucks indefinitely.
- The entire process has been flawed, starting with the Corps' failure to involve the community when it started the scoping process for this project in January of 2004. The Corps pre-selected an outcome more than 10 years ago (trucking residuals through our neighborhoods) and crafted the NEPA process to fit their desired outcome.
- The Corps has looked at a limited range of alternatives, raising concerns that the NEPA process was not properly followed.

158-2-QB

158-3-QB

158-4-GI

158-5-ND

158-6-NE

In addition, I am personally concerned about the impact on our quality of life from sending up to 132 trucks through our neighborhoods daily. We moved to this quite, peaceful, green suburb of DC to escape the chaos and filth of Manhattan's financial district in the aftermath of the 9-11 tragedy. As it is, emerging from this neighborhood onto one of the main roads (Western, River) is very difficult, near impossible during rush hour. The anticipated noise, filth, and congestion of the added diesel trucks is truly disheartening. We stroll the streets for pleasure, walk to the Metro for work, and our children walk to school. Please consider the impact of this project on our health, safety, and daily calm.

158-7-GE

158-8-GA

Sincerely,

From:
Sent: Tuesday, July 05, 2005 1:36 PM
To: Peterson, Michael C WAD

Subject: Opposition to DEISN

Dear Mr. Peterson:

I am writing to express my concern about the 80-foot industrial dewatering facility you are proposing behind Sibley Hospital (Alternative E) and the impact it will have on my neighborhood. I favor finding a piping solution that will send the residuals to a non-residential area closer to the beltway. I ask you to carefully review and respond to Concerned Neighbors' concerns that:

- The DEIS contains virtually no analysis of environmental impacts of the Corps' preferred option. 159-1-IA
- The environmental impacts of the Corps' preferred 'trucking alternative' are profound in a region that is already suffering from severe non-attainment under Clean Air Act standards and serious traffic congestion. 159-2-QB
- The Corps' DEIS seriously mischaracterizes the true cost of the 'trucking alternative' by failing to include the cost of operating large diesel trucks indefinitely. 159-3-QB
- The entire process has been flawed, starting with the Corps' failure to involve the community when it started the scoping process for this project in January of 2004. The Corps pre-selected an outcome more than 10 years ago (trucking residuals through our neighborhoods) and crafted the NEPA process to fit their desired outcome. 159-4-GI
- The Corps has looked at a limited range of alternatives, raising concerns that the NEPA process was not properly followed. 159-5-ND

In addition, I am personally concerned about:

- The safety implications of sending 132 trucks a day through Maryland and DC past at least 10 public and private schools -- and many of those routes are crowded already!
- The combined health and safety impacts of having trucks enter the dewatering facility at the same time Sibley Hospital is engaged in a major expansion of its facility. Both my husband and I travel the Dalecarlia route regularly for work and carpooling children to and from school and activities. I can't imagine the rumbling traffic increase that both of these projects will have and the negative impact on the safety of neighbors who regularly travel those routes. 159-6-GE

In addition, anyone who travels urban Maryland roads today can attest to the relative UNSAFE driving practices of the large trucks through these dense areas.

There simply MUST be a better solution and we have so many able talented people on hand to try to work with you to craft one.

Sincerely,

From:
Sent: Tuesday, July 05, 2005 2:44 PM
To: Peterson, Michael C WAD
Subject: Washington Aqueduct: Draft EIS for dewatering facility

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

Re: Proposed Dewatering Facility

Dear Mr. Jacobus:

This communication is to express opposition to the draft EIS Alternative E, which I understand is receiving favorable attention.

First. The construction of such dewatering facility in a residential area is completely inconsistent with the character of the neighborhood. It directly impacts adversely on the environment, and is aesthetically objectionable.

160-1-IA,
BA

Second. One specific component warrants special attention--the "trucking alternative"--and warrants special comment. This alternative does not address the following objections:

160-2-GF,
GC, BI

A. Trucks are polluters in terms of emissions and noise.

B. The additional traffic from heavy motor vehicles poses an additional safety hazard to both pedestrian traffic, and motor vehicle traffic.

C. There are no extant enforcement mechanisms to control emission levels or noise levels, and the EIS does not specify how the Corps will

discharge its responsibilities to control such, or to assure that it adopts a proposal where such are controlled.

D. Assuming that ways are found, and specified, to effect such controls, the EIS does not contain any mitigation plan which would lessen the burden of the trucking option on specific properties, by, for example, spreading the truck traffic over multiple routes, etc.

160-3-GD

Third. The problems associated with just the "trucking component" is an example of what happens when one locates an industrial facility in a residential neighborhood. The road net was not designed to support such activities, and there is nothing that the Corps can do to change that. It can only, through locating the industrial facility there, create inappropriate adverse conditions.

160-4-BB

Fourth. Ironically, the net effects of the proposal are: (a) trading a reduction in water pollution (which can be achieved by employing other alternatives) for an increase in air and noise pollution and other risks; and, (b) shifting the direct costs of the project to property owners in the affected residential areas.

160-5-GB,
GC, GF

Fifth. The better approach--in terms of the impact on the environment and a responsible approach to cost allocation--would be locate the dewatering facility in more appropriate site, say outside the beltway, in an industrial area with access to an appropriate road net.

160-6-QD

Respectfully submitted,

From:
Sent: Tuesday, July 05, 2005 3:11 PM
To: Peterson, Michael C WAD
Cc: Councilmember.Denis@montgomerycountymd.gov;
Councilmember.Floreen@montgomerycountymd.gov
Subject: industrial plant in my backyard

Dear Mr. Jacobus:

You and many of my neighbors (Brookmont) have sat in the same rooms together over the last year, trying to hear one another's concerns and plans. I am writing (again) to state that you must not go forward without taking the appropriate steps and truly searching for the least impact solution--PIPING. We realize that you have invested a decade in this project, but you live in a neighborhood and would be outraged to find that you pay taxes and had ZERO input/information/warning on the placement of an industrial plant in your backyard.

161-1-IA

I am writing to express my concern about the 80-foot industrial dewatering facility you are proposing near Brookmont (Alternative B) or behind Sibley Hospital (Alternative E) and the impact it will have on my neighborhood. I favor finding a piping solution that will send the residuals to a loser to the beltway. I ask you to carefully review and respond to Concerned Neighbors' concerns that:

161-2-IA

- The DEIS contains virtually no analysis of environmental impacts of the Corps' preferred option.
- The environmental impacts of the Corps' preferred "trucking alternative" are profound in a region that is already suffering from severe non-attainment under Clean Air Act standards and serious traffic congestion.
- The Corps' DEIS seriously mischaracterizes the true cost of the "trucking alternative" by failing to include the cost of operating large diesel trucks indefinitely.
- The entire process has been flawed, starting with the Corps' failure to involve the community when it started the scoping process for this project in January of 2004. The Corps pre-selected an outcome more than 10 years ago (trucking residuals through our neighborhoods) and crafted the NEPA process to fit their desired outcome.
- The Corps has looked at a limited range of alternatives, raising concerns that the NEPA process was not properly followed.

161-3-QB

161-4-QB

161-5-GI

161-6-ND

161-7-NE

* The Corps has not adequately investigated a piping alternative

161-8-DM

Please show us that you have the environment and our well being in your plans. You must begin again and cut your losses. I believe that you are in a very difficult position, but you will be rewarded for reaching into the future and working with our suggestions to find a progressive and showcase solution.

161-9-NG

Sincerely,

Yahoo! Sports
Rekindle the Rivalries. Sign up for Fantasy Football
<http://football.fantasysports.yahoo.com>

From:

Sent: Tuesday, July 05, 2005 4:22 PM

To: Peterson, Michael C WAD

Cc: Councilmember.Floreen@montgomerycountymd.gov;
Councilmember.denis@montgomerycountymd.gov

Subject: Washington Aqueduct DEIS Response

Attachments: melrod response.pdf

Attached you will find my concerns regarding the Washington Aqueducts DRAFT EIS. I reside in Brookmont and am quite concerned regarding the preferred alternatives.

July 5, 2005

Thomas P. Jacobus
 General Manager
 Washington Aqueduct
 U.S. Army Corps of Engineers, Baltimore District
 5900 MacArthur Blvd., N.W.
 Washington, D.C. 200016

Dear Mr. Jacobus:

162-1-IA

I live in Brookmont and am an environmental scientist who has provided consulting support to numerous offices within EPA for the past twenty years. As a result of this experience, I recognize that the processes employed and outcomes presented are driven by many factors. Unfortunately, EPA has a single media approach to compliance (water) thus sometimes inadvertently causing pollution to be created, then transferred into another media — in this case air.

I have a number of concerns regarding the Draft Environmental Impact Statement prepared for evaluating the Washington Aqueducts proposed water treatment residuals alternatives.

- There is very limited analysis of environmental impacts of the preferred option. 162-2-QB
- In a severe non-attainment area what air quality modeling and analysis of impacts related to the preferred options occurred? How will those impacts be mitigated if the preferred option is selected? 162-3-QB
- Has a "realistic" cost analysis been completed from the cost of running the trucks? Has the price of fuel been realistically modeled based on the past few months price increases? 162-4-GI
- The piping alternative does not seem to have been fully investigated. Why not use piping in combination with a dewatering facility in another non-residential location? 162-5-ND
- Have the respiratory effects for the worst case scenario of trucking been studied regarding the sensitive subpopulations residing in the area, i.e., elderly, children, people with asthma? 162-6-KD

As a parent of two toddlers, one who suffers from asthma, and a resident of Brookmont I want to state that Alternative B – the facility near Brookmont is totally unacceptable to me. Mainly since it is the alternative that is in the closest proximity to resident's homes (who derive no benefit from the Washington Aqueduct), would be sited along the Capital Crescent Trail, and would place a dangerous burden on MacArthur Boulevard and Loughboro from the trucks. I favor finding a piping solution that will send the residuals to a non-residential area closer to the beltway. 162-7-KD

Sincerely,

cc: The Honorable Chris Van Hollen
 The Honorable Barbara Mikulski
 The Honorable Paul Sarbanes
 Councilmember Howard A. Denis
 Councilmember Nancy Floreen

From:

Sent: Tuesday, July 05, 2005 4:59 PM

To: Peterson, Michael C WAD

Cc: ; Councilmember.Denis@montgomerycountymd.gov;
Councilmember.Floreen@montgomerycountymd.gov

Mr. Thomas P. Jacobus
General Manager
Washington Aqueduct
U.S. Army Corps of Engineers, Baltimore District
5900 MacArthur Blvd., N.W.
Washington, D.C. 200016
Dear Mr. Jacobus:

We are writing to express my concern about the 80-foot industrial dewatering facility you are proposing behind Sibley Hospital (Alternative E) and the impact it will have on my neighborhood. We favor finding a piping solution that will send the residuals to a non-residential area closer to the beltway. We ask you to carefully review and respond to Concerned Neighbors' concerns that:

163-1-IA

1.The DEIS contains virtually no analysis of environmental impacts of the Corps' preferred option.

163-2-QB

2.The environmental impacts of the Corps' preferred 'trucking alternative' are profound in a region that is already suffering from severe non-attainment under Clean Air Act standards and serious traffic congestion.

163-3-QB

3.The Corps' DEIS seriously mischaracterizes the true cost of the 'trucking alternative' by failing to include the cost of operating large diesel trucks indefinitely.

163-4-GI

4. The entire process has been flawed, starting with the Corps' failure to involve the community when it started the scoping process for this project in January of 2004. It appears that the Corps pre-selected an outcome more than 10 years ago (trucking residuals through our neighborhoods) and crafted the NEPA process to fit their desired outcome.

163-5-ND

4. The Corps has looked at a limited range of alternatives, raising concerns that the NEPA process was not properly followed.

163-6-NE

In addition, we are personally concerned about the safety implications of sending 132 trucks a day through Maryland and DC past at least 10 public and private schools

163-7-GE

We are also concerned about the adverse impact on very popular and widely used parkland near the proposed waste facility. We object to the current proposal and strongly urge you to reconsider your plans.

163-8-BH

--

From:
Sent: Tuesday, July 05, 2005 5:03 PM
To: Peterson, Michael C WAD
Cc: Councilmember.Denis@montgomerycountymd.gov;
Councilmember.Floreen@montgomerycountymd.gov
Subject: Dewatering Facility

Dear Mr. Peterson:

I am writing to express my concern about the 80-foot industrial dewatering facility you are proposing near Brookmont (Alternative B) or behind Sibley Hospital (Alternative E) and the impact it will have on my neighborhood. I favor finding a piping solution that will send the residuals to a non-residential area closer to the beltway. I ask you to carefully review and respond to Concerned Neighbors' concerns that:

164-1-IA

- The DEIS contains virtually no analysis of environmental impacts of the Corps' preferred option.
- The environmental impacts of the Corps' preferred "trucking alternative" are profound in a region that is already suffering from severe

164-2-QB

164-3-QB

non-attainment under Clean Air Act standards and serious traffic congestion.

- The Corps' DEIS seriously mischaracterizes the true cost of the "trucking alternative" by failing to include the cost of operating large diesel trucks indefinitely.
 - The entire process has been flawed, starting with the Corps' failure to involve the community when it started the scoping process for this project in January of 2004. The Corps preselected an outcome more than 10 years ago (trucking residuals through our neighborhoods) and crafted the NEPA process to fit their desired outcome.
 - The Corps has looked at a limited range of alternatives, raising concerns that the NEPA process was not properly followed.
- * The Corps has not adequately investigated a piping alternative

164-4-GI

164-5-ND

164-6-NE

164-7-DM

Alternative B poses the worst problems. It is closest in proximity to residents' homes and sits directly alongside the Capital Crescent Trail. In addition, it would dramatically increase traffic on MacArthur Blvd and up and down the steep Loughboro hill in front of Sibley Hospital. Neither of these routes is appropriate or safe for heavy truck traffic.

164-8-QC

In addition, I am personally concerned about the air impact of trucking and potential increase in the number of asthma or cancer cases that would result from this volume of diesel emissions daily, as well as the ensuing environmental impact in a region that is already classified as being in severe non-attainment under the Clean Air Act. That, plus the safety implications of sending 132 trucks a day through Maryland and DC past at least 10 public and private schools, make this proposal ill-conceived and dangerous to residents.

164-9-BI

164-10-GF

164-11-GE

Thank you for thinking this through more thoroughly.

Sincerely,

cc: The Honorable Chris Van Hollen
The Honorable Barbara Mikulski
The Honorable Paul Sarbanes

From:
Sent: Tuesday, July 05, 2005 5:45 PM
To: Peterson, Michael C WAD
Cc: Denis@montgomerycountymd.gov; .Floreen@montgomerycountymd.gov
Subject: Washington Aqueduct -

Attachments: Washington Aqueduct - Letters Needed

In a message dated 7/3/2005 11:27:29 P.M. Eastern Daylight Time,
writes:

Dear Mr. Jacobus:

I am writing to express my concern about the 80-foot industrial dewatering facility you are proposing behind Sibley Hospital (Alternative E) and the impact it will have on my neighborhood. I favor finding a piping solution that will send the residuals to a non-residential area closer to the beltway. I ask you to carefully review and respond to Concerned Neighbors' concerns that:

165-1-IA

- The DEIS contains virtually no analysis of environmental impacts of the Corps' preferred option.
- The environmental impacts of the Corps' preferred 'trucking alternative' are profound in a region that is already suffering from severe non-attainment under Clean Air Act standards and serious traffic congestion.

165-2-QB

165-3-QB

- The Corps' DEIS seriously mischaracterizes the true cost of the 'trucking alternative' by failing to include the cost of operating large diesel trucks indefinitely.

165-4-GI

- The entire process has been flawed, starting with the Corps' failure to involve the community when it started the scoping process for this project in January of 2004. The Corps pre-selected an outcome more than 10 years ago (trucking residuals through our neighborhoods) and crafted the NEPA process to fit their desired outcome.

165-5-ND

- The Corps has looked at a limited range of alternatives, raising concerns that the NEPA process was not properly followed.

165-6-NE

In addition, I am personally concerned about...

(customize the letter by writing about how one of these items will impact you)

- Environmental impact in region that is already classified as being in severe non-attainment under the Clean Air Act
- Air impact of trucking and potential increase in the number of asthma or cancer cases resulting from this volume of diesel emissions daily
- The safety implications of sending 132 trucks a day through Maryland and DC past at least 10 public and private schools
- Combined health and safety impacts of having trucks enter the dewatering facility at the same time Sibley Hospital is engaged in a major expansion of its facility

165-7-GF

165-8-GF

165-9-GE

165-10-BI

Respectfully yours,

From:**Sent:** Tuesday, July 05, 2005 10:16 PM**To:** Peterson, Michael C WAD**Subject:** Washington Aqueduct: Draft EIS for De-Watering facility

Mr. Thomas P. Jacobus

General Manager

Washington Aqueduct

U.S. Army Corps of Engineers

Re: Proposed De-watering Facility

Dear Mr. Jacobus:

Please do not accept alternative E for the EIS.

Placing a de-watering facility at the neighborhood hospital does not make sense. The neighborhood and others regularly use the emergency room as well as other hospital facilities.

166-1-IA

Let me give you an example. Having an industrial facility with heavy truck traffic in a residential neighborhood is not a good idea. We have used the emergency room over the many years while our daughters were growing up. The one incident that comes to mind was when our daughter had a severe injure to the front of her head. There was so much blood, we were not sure if they could save her eye or whether she had a concussion. We made it to the hospital in less than five minutes. Fortunately, we were able to get through to the hospital and into the emergency room in no time at all. This was, of course, much faster and less frightening to our child than using an ambulance.

166-2-BI

If industrial trucks had delayed us, it is hard to say what would have been the outcome.

It would seem that using dump trucks to haul the sludge through residential roads, rather than sending it by pipe is shortsighted; penny wise and pound foolish. In the long haul, the neighbors must pay for the wear and tear on the roads. The neighbors must put up with the air pollution and noise. Children who cross Massachusetts Ave. to get to school will be at great risk.

166-3-DA,
GB

To save the Potomac from receiving more sludge, our neighborhood will have more air pollution and noise. Trucking companies have a poor reputation for maintenance and there are no regulations for inspections of truck in Maryland for air pollution or safety (except at the time of sale).

166-4-GF,
GC

Our house backs onto Massachusetts Avenue and when dump trucks go up or down the hill (next to the stop at Little Falls Parkway), we measure at least 90 decibels on our Digital Sound Level Meter. The truckers must enjoy squeezing their air brakes as they go downhill and gun their motors as they accelerate up the hill. All the trucks use carcinogenic diesel fuel and black particles land on our property. Furthermore, the vibrations from dump trucks rattle the house. Currently it may be a couple of times per day. With the Aquaduct trucks, our

166-5-GA

beautiful yard will be unusable. I will be unable to eat the vegetable from my garden. The cracks in the walls will open wide from the vibration.

It would not surprise me if our property values greatly declined. We have lived in our house 33 years and planned to age in place.

166-6-1A

Please reconsider your position to destroy our neighborhood.

Respectfully submitted,

From:
Sent: Wednesday, July 06, 2005 7:10 AM
To: Peterson, Michael C WAD
Cc: Councilmember.Denis@montgomerycountymd.gov;
Councilmember.Floreen@montgomerycountymd.gov
Subject: Washington Aqueduct-environmental hazard
PLEASE DELIVER TO MR. THOMAS P JACOBUS
Mr. Thomas P. Jacobus
General Manager
Washington Aqueduct
U.S. Army Corps of Engineers, Baltimore District
5900 MacArthur Blvd., N.W.
Washington, D.C. 200016
C/O Environmental manager: Michael.C.Peterson@usace.army.mil

Dear Mr. Jacobus:

I am a concerned and affected resident of Maryland, and am writing to express my concern about the 80-foot industrial dewatering facility you are proposing behind Sibley Hospital (Alternative E) and the impact it will have on my neighborhood. I favor finding a piping solution that will send the residuals to a non-residential area closer to the beltway. I ask you to carefully review and respond to Concerned Neighbors' concerns that:

167-1-IA

? The DEIS contains virtually no analysis of environmental impacts of the Corps' preferred option.

167-2-QB

? The environmental impacts of the Corps' preferred 'trucking alternative' are profound in a region that is already suffering from severe non-attainment under Clean Air Act standards and serious traffic congestion.

167-3-QB

? The Corps' DEIS seriously mischaracterizes the true cost of the 'trucking alternative' by failing to include the cost of operating large diesel trucks indefinitely.

167-4-GI

? The entire process has been flawed, starting with the Corps' failure to involve the community when it started the scoping process for this project in January of 2004. The Corps pre-selected an outcome more than 10 years ago (trucking residuals through our neighborhoods) and crafted the NEPA process to fit their desired outcome.

167-5-ND

? The Corps has looked at a limited range of alternatives, raising concerns that the NEPA process was not properly followed.

167-6-NE

In addition, I am personally concerned about air quality and noise pollution in a residential area which is already classified as being in severe non-attainment under the Clean Air Act. Other considerations of concern are the following:

167-7-GF

? The safety implications of sending 132 trucks a day through Maryland and DC past at least 10 public and private schools

167-8-GE

? Combined health and safety impacts of having trucks enter the dewatering facility at the same time Sibley Hospital is engaged in a major expansion of its facility

167-9-BI

Thank you very much for your consideration of the views of the communities affected by environmental hazards and environmental quality of life.
Sincerely,

Copy:

The Honorable Chris Van Hollen
1419 Longworth House Office Building
Washington, DC 20515
<http://www.house.gov/writerep/>

The Honorable Barbara Mikulski
503 Hart Senate Office Building
Washington, DC 20510
<http://mikulski.senate.gov/contactme/mailform.html>

The Honorable Paul Sarbanes
503 Hart Senate Office Building
Washington, DC 20510
<http://sarbanes.senate.gov/pages/email.html>

Councilmember Howard A. Denis
Montgomery County Council
100 Maryland Avenue
Rockville, MD 20850 Councilmember.Denis@montgomerycountymd.gov

Councilmember Nancy Floreen
100 Maryland Ave, 6th Floor
Rockville, MD 20850
Councilmember.Floreen@montgomerycountymd.gov

ORIGINAL

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DEPARTMENT OF THE ARMY
CORPS OF ENGINEERS

----- x
IN RE: WASHINGTON AQUEDUCT RESIDUALS PROJECT :
----- x

Tuesday, May 17, 2005
Washington, D.C.

A public hearing was held at the Metropolitan
Memorial United Methodist Church at 3401 Nebraska Avenue,
Northwest, Washington, D. C. 20016, 6:31 p.m. to 9:00
p.m.

VM05-075

PRIVATE TESTIMONY AS PART OF A PUBLIC HEARING

1
2 1. I am . I live on Windward
3 Place which backs up to -- I am sorry, Leeward Place,
4 which backs up to the existing Corps facility, and was
5 quite concerned about the location of the new building
6 there, because it approximated my house and to my home
7 office, and I am very excited to discover that there is a
8 new site proposed behind Sibley, the site, I think, E, I
9 am not sure that is the right letter, -- and I think it
10 is a great site.

11 It is the most distant from any
12 residential area. It has got the same trucking as any
13 other place, and I think everyone has concern about
14 trucking, but if it is going to happen, I think what we
15 should be doing is looking at those places that have the
16 least impact on residential neighborhoods, and that would
17 be removing it from the site that it was on before, and
18 putting it on site E.

19 I applaud the efforts of everyone
20 involved. Thank you.

21 2. My name is . I live at
22 in Bethesda, Maryland. My concern is
23 the Crescent Trail, the bike trail that goes through the

168-1-BB,
IA

168-2-BB,
BH

1 treatment plant, and my concern is that that not be
2 disrupted by the final plans on treating the sludge.

3 My other concern is with trucks using the
4 streets that have been designated to remove the debris
5 from the treatment plant, and I would suggest that it be

168-3-GD,
DA

6 pumped by pipe over to Virginia, and then treated and
7 loaded in trucks on the Virginia side, so that the trucks
8 aren't on our vehicle -- motor vehicle car streets.

9 You know the routing puts it on
10 neighborhood streets, and I find that we have enough
11 traffic as it is now. I understand why the need for
12 trucking the debris, but I would suggest that the debris
13 be pumped across the river, and then loaded on trucks to
14 be trucked out on major highways on the Virginia side.

15 3. My name is . I live in West
16 Moreland Hills on . I just had a few
17 brief comments.

168-4-NA

18 First of all, this facility would never be
19 allowed to be constructed under the normal permitting
20 process under county or state or any other regulations,
21 and I believe the Corps should be held -- the same kind
22 of process, should have to be held to the same
23 accountability.

1 Number two, my biggest concern with what
2 the Corps is doing here, the Washington Aqueduct, is the
3 rushed, hurried manner. There is no reason for this
4 process to be this rushed.

5 By the Corporations' own research, there
6 is virtually no environmental impact from the residuals
7 being dumped.

8 The hydroxides that the Corps is dumping
9 in the river have no toxicity based on their own
10 research, have no environmental impact, other than to one
11 kind of sturgeon, which the Corps is already refraining
12 from dumping during their spawning season.

13 There is no hurry, and it is my urgent
14 hope that you take the time to develop technology
15 processes, other methods for solving this problem, with
16 the involvement of the community. Please start the
17 process over, and do it properly. Thank you.

18 4. My name is . I live at
19 in Bethesda. I am in the Westhaven
20 neighborhood, which fronts Massachusetts Avenue just
21 north of Western, and the main impact on my neighborhood
22 would be possible additional truck traffic on
23 Massachusetts avenue.

168-5-FB

168-6-NG

168-7-GA,
GD

1 Given the alternatives I have seen so far,
2 as far as the alternatives that have been looked at for
3 adoption at this point, I would say that option E is the
4 best one I have seen so far, even though there are a lot
5 of flaws with it.

6 I particularly think that option E is
7 better than option D, in that it moves the large
8 dewatering building closer to Sibley Hospital, and I
9 think -- and all the different viewsheds in the area are
10 less impacted with that option E than the earlier options
11 of putting it closer to where the Crescent Trail and to
12 where the C and O Canal Tow Path would be.

13 If trucking is going to be considered as
14 one of the final options, I would recommend spreading the
15 trucks across the different routes that are being
16 considered, so that no one route is impacted with all of
17 the trucks or most of the trucks, so that if there are
18 eight different trucking routes, if the number of trucks
19 is split by those eight, then that reduces the impact to
20 any one neighborhood.

21 I would also recommend consideration of
22 Connecticut Avenue up to the Beltway as one of the
23 alternatives, and I did not see that one on the map as

168-8-IA

168-9-GD

168-10-GD

1 one of the alternatives currently listed.

2 I would also like to agree with the
3 concerns raised by a lot of my neighbors.

4 The current process -- the current NEPA
5 process as it is now, has shown that there were problems
6 with the process and substance of the federal facilities'
7 compliance, agreeing that that was concluded between the
8 EPA and the Corps of Engineers.

9 I think given what we know now, with the
10 current process, there is ample justification to, at this
11 point, remove the time limit from that agreement, and
12 reset that time limit later based on what comes out of
13 the ongoing NEPA process so that resetting the time limit
14 and reconfiguring this FFCA agreement should become part
15 and parcel of the current NEPA process, and that both the
16 EPA and the Corps of Engineers should combine the two
17 federal actions because it is really one total federal
18 action of how we are going to deal with the sediments
19 issue.

20 I think once the time limit is removed,
21 that allows the Corps of Engineers to then complete a
22 supplemental draft EIS that then takes another look at
23 the many alternatives that were originally discarded

168-11-ND,
FB, MA

168-12-NB,
MA

1 because they did not comply with the time limit, and see
2 which of those might be reasonable alternatives.

3 if some of them have a reasonable time
4 limit, and you know, maybe fifteen years is a reasonable
168-13-FA 5 construction time, then based on what the final preferred
6 alternative would turn out to be from that process, it
7 would help guide what a deadline on a redone FFCA
8 agreement might look like.

9 So I recommend looking at the additional
10 alternatives, most notably the ones that included piping
11 the sediments up to a dewatering and trucking site closer
168-14-DA, 12 to the Beltway both on the Maryland and Virginia sides to
QD 13 get it in an area away from the immediate neighborhoods
14 that would be impacted by the current alternatives in
15 front of us. Thank you.

16 5. . My first question is what
168-15-GK 17 will be the actual hours of operation of the facility,
18 and will the hours vary from dry to wet seasons?

19 Next question. It is our understanding
20 that the Corps intends to use belt filter presses rather
168-16-EB, 21 than centrifuges in the dewatering facility because they
AB 22 are cheaper. Are we correct in our understanding?

23 Next question. According to the 1995 and

1 1996 reports, special features will be needed in the
2 trucks if belt filter presses rather than centrifuges are
3 used in the dewatering facility in order to minimize
4 seepage from the trucks.

5 Do existing trucks already have this
6 special design feature? If not, what will be needed to
7 upgrade the trucks to minimize seepage of muck onto local
8 roadways? What will be the related cost? Has this cost
9 been included in the overall cost for the trucking
10 option?

11 Next question. Have down wind communities
12 been notified regarding the potential air quality issues?

13 Next question. What safety studies have
14 you done to assess the impact of this volume of truck
15 traffic upon our neighborhoods and nearby schools?
16 What traffic and safety studies have you done of the
17 impact of this volume of trucks upon traffic on the
18 Beltway?

19 Next question. What sites are being
20 considered as the ultimate disposal sites for the
21 residuals? How far away are these disposal sites?

22 Next question. From the studies completed
23 in 1995 and 1996, isn't it true that the costs of the

168-22-GI

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trucking alternative vary on the distance of the ultimate disposal location? How have you taken these costs into consideration in your analysis?

168-23-GI

Next question. Some school buses and other vehicles are required to be retrofitted to reduce diesel emissions. Will any of the proposed dump trucks need to be retrofitted? If so, has that cost been factored into the analysis.

168-24-MA,
IA

One more question. Has the EPA developed effluent guidelines limiting the amount of pollutants discharged by water treatment facilities? That's it.

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CERTIFICATE OF COURT REPORTER

I, VICTORIA M. MCLEOD, a Verbatim Court Reporter, do hereby certify that I took the notes of the foregoing hearing by voice writing and reduced the same to written format; that the foregoing is a true record of said hearing to the best of my knowledge and ability; that I am neither related to nor employed by any attorney or counsel employed by the parties thereto; nor financially or otherwise interested in the action.

Victoria M. McLeod
VICTORIA M. MCLEOD
Court Reporter

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DEPARTMENT OF THE ARMY
CORPS OF ENGINEERS

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IN RE: Washington Aqueduct Residuals Project :
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Tuesday, May 17, 2005
Washington, D.C.

A public hearing was held at the Metropolitan Memorial
United Methodist Church at 3401 Nebraska Avenue, N.W.,
Washington, D.C. 20016, 6:31 p.m. to 9:00 p.m.

LMK-124-05

P R O C E E D I N G S

1
2 MS. ORTIZ: Good evening, ladies and
3 gentlemen. We are about to begin. Please be seated.

4 (Pause.)

5 Good evening. We are about to begin
6 tonight's public hearing on the Washington Aqueduct
7 Residuals Project.

8 Let me just do a sound check. Is the
9 sound okay in the back? Thank you. Thank you.

10 My name is Jennifer Ortiz and I work for
11 the Federal Mediation and Conciliation Service. We are
12 an independent agency that has no interest in the outcome
13 of this project that you are about to give testimony on
14 and this evenings proceeding.

15 My agency was hired by the Washington
16 Aqueduct to provide independent moderator services for
17 this public meeting. I will be introducing the agency
18 presenters and calling public witnesses.

19 We will begin this evening's hearing with
20 a brief overview of this project by the Washington
21 Aqueduct. The regulatory aspects will be outlined by the
22 Environmental Protection Agency, Region III. The
23 planning review process will be described by the National

1 Capital Planning Commission.

2 These brief presentations are for your
3 information. We will not take any questions or comments
4 on these presentations here in this room.

5 Running concurrently with this hearing, a
6 workshop is being held downstairs. There, the Washington
7 Aqueduct staff are available with project information and
8 will be happy to respond to any questions.

9 The purpose of this hearing is to receive
10 public testimony for the record. If anyone wishes to
11 give testimony privately, you may proceed downstairs to
12 the Fireplace Room where there is a stenographer waiting.

13 I will review the ground rules for this
14 hearing upon completion of the overview remarks by the
15 three agencies here this evening. However, for anyone
16 who wishes to give testimony who has not yet registered,
17 please do so outside of these doors at the entrance upon
18 which you just walked in to. There is a desk outside and
19 you must register by 8:30 p.m. I will be calling
20 individuals in the order that they have registered, with
21 any public officials speaking first.

22 The first presenter will be Mr. Tom
23 Jacobus, General Manager for the Washington Aqueduct. He

1 will give a presentation on the purpose of this project,
2 the National Environmental Protection Agency -- oh,
3 excuse me, the National Environmental Protection Act's
4 provisions that apply to the environmental evaluation of
5 this project and will describe the alternatives studied
6 in the EIS and present the recommended alternative.

7 MR. JACOBUS: Thank you very much, Ms.
8 Ortiz.

9 And thank you all very much for coming.
10 Most of you know me from the previous meetings. I'm Tom
11 Jacobus, the General Manager. Thank you all for coming
12 this evening.

13 As just before, as we begin as a courtesy
14 to the church here, I want to thank Paige Magano
15 (phonetic) who made the arrangements for us to be here
16 this evening. And thank you very much.

17 What I would like to did is very briefly,
18 taking just about 10 minutes, I'll bring everybody up to
19 date, those of you who may not have been at the last few
20 meetings or want to know kind of a summary of the purpose
21 and need of this project, why we're doing, what it is
22 we're doing, how we got to the point where we are, and
23 where we're going from here. That's the nature of what I

1 want to do.

2 Just to briefly remind everyone, the
3 Washington Aqueduct is a water treatment utility that
4 collects water from the Potomac River at Great Falls and
5 at Little Falls and takes that water, either by gravity
6 and by pumping, and puts it into the Dalecarlia
7 Reservoir, which is the receiving reservoir for all of
8 the water.

9 And, from there, the water is processed in
10 one of two treatment plants, either at Dalecarlia or
11 McMillan. I'll go through the processes in just a
12 moment. But the relationship from Georgetown to McMillan
13 is that the Georgetown Reservoir are really the
14 sedimentation basins for the McMillan Water Treatment
15 Plant. The sedimentation basins that support the water
16 treatment activities at Dalecarlia are right adjacent to
17 the water treatment plant there.

18 So this project has to do with the
19 sediment that is collected in the sedimentation basins
20 either at Dalecarlia or at Georgetown. So the sediment
21 activities are on this side of town.

22 Next slide, please.

23 In our water treatment process -- and I'm

1 not here to teach you water treatment, but just to give
2 you the overview, we take the water from the river in
3 whatever form it comes to us, muddy, clear, whatever. It
4 goes through the Dalecarlia Reservoir, which has a
5 function of pre-sedimentation by gravity as the water
6 slows down as it goes through the reservoir, the sediment
7 in the water, some of it falls out. But no where near
8 enough of it falls out to be able to be filtered, so we
9 must chemically induce the remaining sedimentation
10 through a process called coagulation. At the basins at
11 Dalecarlia or by sending that coagulant down to the
12 Georgetown Reservoirs to induce that coagulation there.

13 From there the water is filtered,
14 disinfected, and then sent to the community that we
15 serve.

16 Next slide, please.

17 The end product of the sedimentation in
18 dry form are those solids in this lady's hands here. If
19 any of you have not seen the solids, we have a bowl of
20 them downstairs that were collected from the Washington
21 Suburban Sanitary Commission's Potomac Plant, so you get
22 an idea of the material that we're dealing with.

23 This material is river sediment, silt,

1 sand, whatever, and the aluminum sulphate, which is the
2 coagulant we use, added to it.

3 And right now that sediment is collected
4 in these basins and periodically discharged to the
5 Potomac River as a slurry.

6 Next slide.

7 We not in the future going to be able to
8 do that under a National Pollutant Discharge Elimination
9 System Permit, which we refer to as NPDES. Under this
10 NPDES permit issued by EPA Region III, which is our
11 regulator under both the Safe Drinking Water Act and the
12 Clean Water Act. This Clean Water Act permit requires us
13 to -- Well, it does not allow us to discharge to the
14 river sediment in any quantity, any concentration, that
15 will allow the continued discharge of the sediment
16 collected in the basins.

17 Therefore, the project we are undertaking
18 is to look at alternatives to collect that sediment from
19 the basins and dispose of it in ways other than returning
20 it to the river.

21 Because the Washington Aqueduct is a
22 federal entity -- it is not in receipt of federal funds.
23 It is completely funded by its water customers, D.C.

1 Water and Sewer Authority, Arlington County, Virginia,
2 and the City of Falls Church, Virginia, and its customers
3 in Vienna and Fairfax County. That's where all of the
4 revenue and all of the operating and capital expenses
5 come from.

6 Nevertheless, as a federal activity, for
7 an undertaking like this we're required to follow the
8 provisions of the National Environmental Protection Act,
9 NEPA. And what it does is requires us to do some kind of
10 an analysis in a multi-disciplinary form involving both
11 federal agencies -- other agencies, other public
12 agencies, not necessarily federal -- and to solicit the
13 input of the public. Hence, one of the reasons that
14 we're here tonight as a part of this public input
15 process.

16 I make this last point up here that even
17 through NEPA does not mandate that the undertaking that
18 is eventually selected is necessarily the environmentally
19 most friendly or has the fewest environmental
20 consequences, it certainly is our intent in this process
21 to find an outcome that meets the conditions of our
22 permit, the time line we have to operate under, and has
23 evaluated a series of alternatives so that we have

1 properly and completely represented the environmental
2 consequences so that when we arrive at a decision that
3 decision will have met the needs of our operational needs
4 and environmental needs to the best that we can possibly
5 do. That's our objective.

6 Next slide.

7 I am a water utility manager. My job is
8 to provide safe, reliable, and cost-effective drinking
9 water to our customers. In that order. That the water
10 is safe to drink at all times; that it is reliably
11 produced, because remember all the water in the fire
12 hydrants is the same water that's in your tap, the same
13 water that's in all of the commercial activities, all of
14 that water is treated the same.

15 In order to maintain the reliability of
16 that system, as we looked at alternatives that would
17 satisfy in an operation sense the needs of the permit, we
18 established a set of screening criteria.

19 The screening criteria listed here, some
20 of them are specifically designed to account for the fact
21 that we have a permit with certain limits, we have a
22 compliance agreement that requires us to achieve permit
23 compliance at a certain time, and we also have to produce

1 reliable and redundancy in the system to make sure we
2 don't fall short in our water production mission.

3 We need to look at known technology.
4 We're interested in cutting edge technology, but
5 technology has to be proven. And so we have accommodated
6 all of that.

7 In addition, we do have to consider the
8 economic effects of what we do. And then we -- at the
9 early phase, we cannot do something that would impose
10 unnecessarily on wetlands or Endangered Species Act or
11 other cultural issues. So that was the screening
12 criteria.

13 We initially looked at a couple of dozen
14 alternatives. We sought public input.

15 And, by the end of the process before we
16 issued the draft environmental impact statement in mid-
17 April, we had evaluated approximately 140 alternatives
18 that fell into this sort of series of shapes and sizes.

19 The project purpose and need, in other
20 words, to create an engineering outcome that would allow
21 the water treatment operation to continue and the solids
22 to be removed and disposed of in a method of going to the
23 river, out of that fell four alternatives that were taken

1 forward to the draft environmental statement. And it was
2 at that time those were analyzed in accordance with the
3 17 areas of concern. I've got 17. You know, air and
4 water and visual and economic and economic justice. And
5 all of those things were looked at under the terms of
6 NEPA as we went through the evaluation of the draft
7 environmental impact statement.

8 Now, for those of you who actually have
9 had a chance to review the document, you know that there
10 were five alternatives carried forward, not four. The
11 fifth alternative carried forward was a no action
12 alternative.

13 In this case, as I will describe in just a
14 minute, the no action alternative -- unlike some projects
15 where no action could be a perfectly good alternative,
16 the no action alternative would require us to continue to
17 discharge to the river and that is expressly prohibited
18 by the permit. So there really were only four
19 alternatives that went forward.

20 Next slide, please.

21 We called -- we numbered these -- or
22 lettered these A through E. D Turned out to be the no
23 action alternative. And so that is why we say that it's

1 not applicable.

2 We tried, as some of you know from our
3 previous discussions, to evaluate alternatives, the
4 develop alternatives that looked at the smallest possible
5 number of facilities at our treatment plants so that
6 maybe the majority of the function could be done
7 remotely.

8 We looked at trucking options. Or, to say
9 it a different way, since the product we have is dirt,
10 you know, that has to be sent somewhere, it can be sent
11 as a soil amendment or perhaps landfill, but more likely
12 tilled back into farm land somewhere. That's what WSSC
13 and Fairfax Water do with their sediments that they've
14 collected out of their basin process.

15 But we recognize that in the neighbors
16 trucking was an issue. So we tried to develop a couple
17 of alternatives that didn't involve trucks. We tried to
18 involve alternatives that had off-site processing.

19 So what went forward were these five
20 alternatives and I would like to quickly summarize those.
21 But keep in mind that for the purposes of the draft
22 environmental impact statement --

23 Go ahead, please.

1 -- we intentionally decided that we would
2 tell the public what we thought our recommended
3 alternative was to give you an idea of our thinking so
4 that in your response and your comments here this evening
5 and in any written comments you give us or any other
6 communications, we can take those comments and evaluate
7 them as we reach our final alternative -- final decision.

8 We have not made a final decision, but we
9 have indicated at this point what we believe the
10 preferred alternative is from our analysis.

11 The first alternative that was -- was not
12 recommended for the preferred alternative had to do with
13 the creation of a monofill, taking the solids, dewatering
14 them locally at Dalecarlia, taking a piece of woods here,
15 about 30 acres adjacent to the reservoir, and
16 establishing a monofill at that location.

17 The advantage of that is it would have
18 eliminated trucking, but the disadvantage is that it
19 would have had some environmental impacts, serious and
20 severe environmental impacts, on the loss of those trees.
21 But, nevertheless, we studied it.

22 But the reason it cannot be recommended is
23 because of the potential -- the need to explore this site

1 in conjunction with the remediation of the American
2 University Experiment Station, formerly used as defense
3 site. So the time line for the exploration of that area
4 is not consistent with the time line in this project and
5 for other environmental reasons this one was not
6 recommended.

7 So that alternative did not come out of
8 the EIS -- draft EIS as recommended.

9 Next.

10 Alternative B, for boy, is very much like
11 alternative E, for eagle. They both envision local
12 dewatering of the solids in a facility. That facility
13 might look something like this. That is not a designed
14 facility. It's simply a rendering of if you were to take
15 liquid solids and put them into a machine, a centrifuge
16 perhaps or a press of some kind, and then have that dried
17 material, of the kind you could see downstairs if you
18 care to look at that, then go into a hopper and then you
19 drive a hopper -- excuse me. You drive a truck under the
20 hopper. You take the advantage of gravity for easy and
21 efficient and reliable operations.

22 So, if you do it that way, you get a
23 building that might be that size for the quantity of

1 materials we're looking at.

2 This view, artist's view, would be taken
3 as if you were standing on the bridge of the Capital
4 Crescent Trail that passes through the treatment
5 facility.

6 So we looked at and that is not the
7 recommended alternative. I'll show you why that was in a
8 second.

9 But the advantage of this is it puts all
10 of the material, all of the process locally. It doesn't
11 have a monofill. It means that it does have some
12 trucking. One of the disadvantages is that this is a --
13 I know you can't really see this, but the alternative E
14 that I'll show you in a minute, the trucking can be moved
15 over to a slightly different area to relieve some of the
16 congestion at certain intersections. And so we think
17 that there may be some value in doing that. It's one of
18 the preferential reasons that we thought alternative E
19 would be the one we recommended.

20 So let's move to alternative C.
21 Alternative C is -- is a great idea, done at some water
22 treatment operations, where you take your solids, you
23 thicken them a little bit, inject them in a pipe and send

1 it off to the sewer plant and have them process with the
2 bio-solids at the sewer plant.

3 We wanted to look at this very carefully
4 and we did look at this very carefully. There is a
5 problem -- a challenge, an engineering challenge, to get
6 the -- to get a pipe from here to Blue Plains. You think
7 about the trek of that pipe along the National Mall and
8 the monument area, that would be very disruptive as that
9 cut and cover operation or directional drilling, whatever
10 you were going to do, went into play. Very expensive.
11 Very time-consuming.

12 But we did evaluate that. This
13 alternative is not recommended not for that reason,
14 although that is some serious problems with that, but
15 because the operations at Blue Plains, the District of
16 Columbia Water and Sewer Authority, acting as the
17 regional water -- wastewater plant, taking material from
18 Northern Virginia, Montgomery County, Prince George's
19 County, and all of that and putting it through Blue
20 Plains, they are improving the quality of the operations
21 down there. They're trying to reduce the volumes.

22 And our inert solids we could find no
23 engineering way to incorporate them with the bio-solids

1 there. And anything we did to influence what went on at
2 Blue Plains would turn them around from their long-term
3 capital planning. And we were not able from a technical
4 point of view to integrate ourselves at Blue Plains, so
5 we had to go forward and not recommend that alternative.

6 Alternative D, the next one, simply is the
7 no action alternative which I just described as it
8 doesn't comport with the permit and the compliance
9 schedule. So, while we studied and weighed out what that
10 kind of recounted the status quo, we could not recommend
11 that alternative.

12 Alternative E, eagle, the one we are
13 recommending at this point, moves the treatment facility
14 from the back of the water treatment plant at Dalecarlia
15 across the street and located on our property over by the
16 reservoir, which would be behind Sibley Hospital off of
17 Little Falls Road.

18 The advantage we see to that is some
19 traffic issues there. No tree cutting would be involved
20 in either B or E. But certainly none there.

21 By putting it here -- excuse me -- we can
22 avoid the current intersections on Loughboro and
23 MacArthur Boulevard. And it gives us good access to this

1 location.

2 Let me just give you a couple of graphics
3 of this so you can have that in mind.

4 Next slide, please.

5 From a visual point of view, if this is --
6 if we're standing back by an overlook looking toward
7 Sibley Hospital, this is Sibley Hospital behind that
8 winter tree line there. Right in here we have
9 graphically inserted what this building might look like
10 at that location. So it doesn't protrude on the skyline,
11 but it does provide another building certainly in view
12 and somewhat shielded in the wintertime and certainly
13 shielded in the summertime. But, nevertheless, it's a
14 building that would look something like this perhaps from
15 the Sibley parking lot.

16 All of these charts and all additional
17 information is available downstairs so you can get really
18 up close on it.

19 Next slide, please.

20 Let me just talk a moment about trucking.
21 We analyzed eight trucking routes. We're talking about
22 20-ton dump trucks, which are kind of the big trucks.
23 They're not the articulated trucks, but they're the

1 trucks, the dual rear wheels, a lot of them out on the
2 roads, as I'm sure you see from time to time in and
3 around projects.

4 Looked at the eight routes that went up
5 through Maryland, back out across Virginia, or back down
6 in the District. We're looking at about, on average we
7 believe, eight loads a day. Some of this is dependent on
8 the conditions in the river. But, nevertheless, on
9 average about eight loads a day, which means that this
10 facility, whatever kind we build, none of those truck
11 loads, when you add them into the level of service on any
12 of these roads changes the level of service on any of
13 these roads. But, clearly, it's a few more trucks on the
14 road. There is no question about that.

15 The next slide, please.

16 There is one other thing I want to tell
17 you. In order to collect the solids at Georgetown and to
18 collect them from the basin of Dalecarlia, we envision a
19 very small electric silo powered dredge that would drive
20 around these basins and then there would be an
21 underground facility here that would collect it and send
22 it back to Dalecarlia inside a conduit that is already in
23 the ground so there would be no disruption there.

1 And at Dalecarlia there would be
2 collection and no really visible facilities there. So
3 that's kind of a highlight and to give you a little bit
4 of a flavor of the five things we looked at and show you
5 what our preferred alternative is, our recommended
6 alternative.

7 Next slide.

8 I just wanted to remind you of the
9 process. We're sitting right here at the public comment
10 period and having sent and issued our draft environmental
11 impact statement. The public comment period will end on
12 June 6th. And we look forward to your comments here
13 tonight, either here or downstairs with the stenographer.

14 If you wish to write us or communicate
15 with us in any of the various ways we have, please do
16 that. We will then evaluate all of that, make any change
17 that are required, and publish the final environmental
18 impact statement sometime in September and expecting a
19 record of decision in October. So that's where we are.

20 Next, please.

21 Again, please visit us downstairs. We
22 look forward to that.

23 With that, thank you very much for your

1 attention.

2 MS. ORTIZ: The second presenter will be
3 John, Mr. Jon Capacasa, the Chief of the Water Protection
4 Division from U.S. EPA Region III. He will describe the
5 National Pollutant Discharge Elimination System Permit
6 issued to Washington Aqueduct and the accompanying
7 Federal Facilities Compliance Agreement.

8 MR. CAPACASA: Good evening and thanks for
9 taking your time this evening.

10 I am Jon Capacasa. I'm from the EPA
11 Region III office in Philadelphia. And we're in charge
12 of the mid-Atlantic region states, including the District
13 of Columbia, and particularly the water -- various water
14 programs.

15 So my job here tonight is to tell you a
16 little bit more about why this project has been
17 undertaken that Mr. Jacobus just outlined. It comes from
18 a Clean Water Act requirement, a water pollution control
19 permit that EPA issued.

20 And I wanted to just highlight for you the
21 process used, the basis, and what it requires of the
22 Aqueduct.

23 As I mentioned, the Aqueduct operates

1 under a Clean Water Act permit, section 402. And EPA
2 administers the permitting program, which is a federal
3 permitting program in the District of Columbia. In many
4 other states it's operated by the various state agencies.
5 In Maryland, for instance, the Maryland Department of
6 Environment operates the permitting program.

7 EPA issued a final permit to the Aqueduct
8 in March 2003 and it was amended and reissued in February
9 of 2004 based upon some comments and appeals to the
10 original permit. It replaces two earlier permits during
11 -- from the eighties and nineties. And it is a -- very
12 much a legal obligation on the Army Corps of Engineers,
13 who is the permit recipient and who must comply with that
14 permit.

15 The permit contains what we call discharge
16 limits, limits on water pollution that can be discharged
17 into the Potomac River. And, in this case, particularly
18 for total suspended solids, otherwise know as TSS, and it
19 provides technology-based limits.

20 In the Clean Water Act, you could either
21 get technology-based requirements or water quality-based
22 requirements, or both. Technology-based limits are no
23 more than providing a certain treatment level to the

1 pollutants.

2 And, in this case, this permit includes
3 limits on what can be discharged for solids, suspended
4 solids, and for aluminum. Aluminum is used in the
5 treatment process by the Aqueduct and there are limits to
6 protect aquatic life in the river.

7 The specific limit is to remove at least
8 85 percent of the income residual solids from Dalecarlia
9 and Georgetown sedimentation basins compared to what can
10 be discharged into the river. So it is a pretty
11 substantial reduction from the current operation, which
12 is, by and large, untreated.

13 And the Aqueduct has to use a combination
14 of best management practices or engineering solutions,
15 whatever means that -- the permit does not dictate the
16 solution. It does not dictate the alternative to be
17 used. It dictates the level of treatment that needs to
18 be required to meet the goals.

19 Just a little bit more on what the Clean
20 Water Act requires, just so you know the history here,
21 there are two or three sections of the Clean Water Act
22 that speak to the issue we're talking about here. The
23 Act requires that technology-based limits be specified by

1 EPA for what is know as best practicable control
2 technology current available. That's a long -- a long
3 title that basically means what is the best treatment
4 available -- cost effective treatment available. And the
5 Act required that in 1977 treatment levels need to be
6 applied.

7 There is also another requirement under
8 section 301 of the act that if you're discharging
9 conventional pollutants to the river, such as the solids
10 that we're mentioning here, you must implement the best
11 conventional pollutant control technology no later than
12 March of 1989.

13 So, in those two provisions of the Clean
14 Water Act, we're long overdue in doing what is necessary
15 to meet their requirements.

16 EPA has not published guidelines for water
17 treatment plants in terms of sediment control. We often
18 publish technology requirements for different industries
19 and facilities. We have not published nationwide
20 requirements for water treatment plants.

21 So, in this case, EPA had to calculate
22 what those discharge limits should be based upon the
23 guidance of the act and it's very much a permit by permit

1 decision based upon best professional judgement, best
2 engineering judgment. And that was applied in this case
3 to the Washington Aqueduct facility.

4 How else did -- were the limits
5 determined? I just want to highlight for you some of the
6 research and evaluation that went into this permit, which
7 really took the better part of ten years or more to
8 finally publish. It was a very intensive research and
9 evaluation.

10 During the course of that research, EPA
11 looked at over 400 permits throughout the mid-Atlantic
12 region, states like Virginia and Pennsylvania, Maryland,
13 West Virginia. We looked at over 400 permits and
14 determined what the states were doing for similar
15 facilities. Water treatment is obviously a common --
16 common need.

17 And EPA determined that many of these
18 permits, in fact most of them, had limits on total
19 suspended solids similar to, if not more stringent, than
20 that currently required in the Aqueduct permit. So that
21 was one part of the research.

22 We also have a technology transfer
23 handbook that the agency has published -- or, I'm sorry,

1 the American Society of Civil Engineers has published
2 that specifies what is the proper engineering management
3 of residual solids. So we looked at what the industry
4 groups say is possible and doable for solids.

5 We looked at other -- other states'
6 requirements as I mentioned. Michigan and Illinois had
7 more stringent requirements than are being applied here
8 in this particular case.

9 Next, please.

10 And the final two points I mention here in
11 terms of how were the Aqueduct's discharge limits
12 determined by EPA. We looked at the Aqueduct's specific
13 information in terms of engineering -- prior engineering
14 studies and evaluations of what it would take to remove
15 the solids from the discharge, what would it cost, was it
16 -- was there feasible technology. And that led us to
17 conclude that technology was available and doable and
18 feasible.

19 And, finally, just up the river here in
20 Maryland we looked very hard at the Washington Suburban
21 Sanitary Commission Potomac River Filtration Plant's
22 permit issues by the State of Maryland which has limits
23 in it currently -- enforceable limits for what we call 30

1 milligrams per liter and 60 milligrams per liter
2 discharge limits on total suspended solids.

3 So a permit just up the river very similar
4 to this facility has these limits in it which we pretty
5 much mimicked into the -- in the Washington Aqueduct
6 permit.

7 Next, please.

8 Just to highlight quickly here the public
9 processed used. A Clean Water Act permit has to go
10 through a very similar process that we're going through
11 here tonight in terms of public notification and response
12 to comments. The Washington Aqueduct permit was the
13 subject of a public notice in The Washington Post and
14 Washington Times in March of 2002. EPA extended that
15 comment period for an additional 60 days.

16 We received a healthy amount of comments.
17 Fifty-two interested parties commented on the permit.
18 And many of those comments dealt with aquatic life
19 impacts, if you continue to discharge this amount of
20 sediment into the Potomac River, you're impacting
21 potentially endangered species, you're impacting aquatic
22 life in the Potomac and uses of the Potomac River. A lot
23 of the comments went to those aspects.

1 Based upon the number of comments, the EPA
2 issued another draft of that permit, amended -- amended
3 the draft permit and issued another draft and fact sheet
4 during December of 2002 and again had another 30-day
5 comment period, similar notice in The Washington Post and
6 Washington Times.

7 But we did conduct a public hearing right
8 up the street here at Sibley Hospital and although three
9 persons offered testimony, there were additional comments
10 received during the comment period. Thirteen parties
11 commented on the permit this time, including the State of
12 Maryland and the State of -- the Commonwealth of
13 Virginia.

14 So the -- one other feature of the Clean
15 Water Act was these limits were placed in the permit and
16 the Clean Water Act requires, because I mentioned the old
17 dates that these things were due to be done, they were
18 due to be done in '77 and '89, we could not include in
19 the permit a compliance schedule that would allow three
20 or five years or longer for this to be done.

21 The permit -- if you read the permit, it
22 requires that these limits take effect immediately. It
23 was not legal for us to include a compliance schedule in

1 the permit. And that's just a fact of life in the Clean
2 Water Act.

3 What we did to address the fact that you
4 can't ask the Aqueduct or the Corps to immediately gear
5 up a facility to deal with these limits, we issued a --
6 what is known as a Federal Facilities Compliance
7 Agreement. It's an agreement between two federal
8 agencies containing an enforceable compliance schedule.

9 So this compliance agreement is an
10 expression of EPA's enforcement discretion. The Clean
11 Water Act permit is very much a legal obligation, very
12 much enforceable under the Clean Water Act. But to
13 provide a reasonable schedule for implementation of
14 controls, we use this agreement to allow the Aqueduct
15 time to achieve the discharge limits.

16 In this case, we allowed no later than
17 March 1st, 2008, to get at least one of the sedimentation
18 basins on line with meeting the limits of the permit.
19 And we allowed up to until December 30th, 2009, to get
20 all of the sedimentation basins of the Aqueduct up to the
21 limits of the permit, which we admit are substantial
22 limits and requires substantial responses.

23 The schedule that we incorporated onto the

1 Federal Facility Compliance Agreement anticipated this
2 process that's going on tonight, the NEPA process. We
3 recognized that the Corps had to go through a sufficient
4 time to solicit public comment, et cetera. So it was
5 designed to accommodate the NEPA process.

6 And we had, in the past few months,
7 amended one of the interim deadlines to allow for greater
8 public participation in this process. That interim
9 deadline was moved from June 2005 to October 17th, 2005,
10 to allow the Corps to entertain more public participation
11 in the alternative selection and the EIS.

12 Just one final note, although we were not
13 required to do this, when we issued the permit in draft,
14 we also issued the Federal Facility Compliance Agreement
15 in draft to public comment. They were published at the
16 same time in the Post and the Times and on the website.
17 And we entertained a 30-day comment period on both of
18 those documents.

19 So, finally, I just emphasize the fact
20 that both the permit and the compliance agreement are in
21 full force in effect. They went through a pretty
22 rigorous public process and they are legal obligations of
23 the Corps of Engineers.

1 Thanks for taking the time to allow me to
2 give you some background on that and move on here. Thank
3 you.

4 MS. ORTIZ: Thank you. The last presenter
5 will be Mr. Gene Keller. He represents the National
6 Capital Planning Commission. He will describe the NCPC's
7 role in their review of the project with specific
8 emphasis on the architectural and physical aspects of the
9 facilities.

10 MR. KELLER: Thank you. And, again, I
11 appreciate everyone turning out tonight to hear the
12 latest background on this project.

13 My presentation will be the low tech
14 version, given that I'm just going to brief the --
15 describe the role the Commission will play in the
16 potential view of this project as it comes before the
17 Commission.

18 The Commission is a federal agency that
19 enforces and administers the National Capital Planning
20 Act of 1952. That's an Act that applies to the National
21 Capital Region, which includes the District of Columbia,
22 Virginia, and the State of Maryland; the Counties of
23 Loudoun and Fairfax, Prince William in Virginia and in

1 Maryland, Montgomery and Prince George's Counties.

2 In the District, it's a direct approval
3 role, which means that a project must be presented to the
4 Commission for its approval. That review is encompassed
5 through a comparison of the proposal to the comprehensive
6 plan which the Commission develops and is something
7 that's available to the public to review at our website,
8 which is available through the internet at www.ncpc.gov.
9 There are several components to that. The review process
10 that a project is submitted by a federal agency
11 encompasses several aspects of that plan.

12 More specifically, in terms of a
13 submission from a federal agency, it involves a
14 comparison of that proposal with the master plan of
15 record for the federal facility, as well as the
16 characteristics and requirements of the individual
17 proposal itself. And that will be reviewed in a process
18 that -- a submission is made to the Commission. It is
19 reviewed through the staff of the Commission for a 30 to
20 a 60-day process. And then it is reported to the
21 Commission at a formal Commission meeting. That meeting
22 is available to the public. All information provided to
23 the Commission is available to the public and can be

1 reviewed by the public once that submission does occur.

2 And then you can sign up to both hear and
3 present testimony at a public meeting of the Commission.
4 There is the normal process of one meeting a month. It's
5 usually the first Thursday of that month. And you can
6 find the information to sign up for any proposal on our
7 website, again, at that address that I earlier
8 identified.

9 The process essentially encompasses a
10 staff report review that is developed during that time
11 period that I eluded to. And then, again, it is reported
12 out formally to the Commission. Both the public can
13 comment, the proponent of the submission can present
14 additional information, which the public will hear at
15 that time, as well as the Commission. And then the
16 Commission votes on that proposal and then an action is
17 officially recorded at that time.

18 If it is an approval, that approval takes
19 effect at that meeting, at that point. If there are
20 issues to be further evaluated, that is noted in the
21 report and then that agency must come back addressing
22 those issues that are highlighted.

23 That's a brief synopsis of essentially the

1 process. Again, as some of the schedules you've seen
2 here tonight, we do not anticipate seeing this formally
3 submitted to us until some point in the fall. So there
4 is time for you to get familiar and review the
5 Commission's role, again, as I identified at the website,
6 as well as you can call the Commission office and speak
7 directly to the secretary of the Commission that can
8 outline issues that you perhaps may have a concern about.
9 Or you can talk to a project review officer. And that
10 essentially summarizes it.

11 MS. ORTIZ: Thank you.

12 Thank you all for your presentations.

13 Now, I would like to begin by reviewing
14 some of the ground rules with you. Registration is
15 required for public testimony. A speaker's list has been
16 developed on a first come, first served basis. If you
17 have not registered and would like to testify, please
18 remember that registration will close by 8:30 p.m.

19 Elected officials will be asked to speak
20 first. Following that, individuals will be called to
21 speak in the order in which they have signed up.

22 If you are not present or ready, your time
23 will be forfeited. You may only testify once.

1 In order to enable as many people as
2 possible to speak this evening, I will adhere strictly to
3 a time limit. I will expedite the public speaking
4 process by calling up four names at a time. Once your
5 name is called, please come up and sit in the front row
6 right before the podium.

7 A limit of five minutes for elected
8 officials will be given and three minutes for all others
9 will be in effect. Speakers may receive a single three-
10 minute block of additional time transferred from another
11 individual on the list for that hearing with a resulting
12 six-minute maximum for the designated speaker. Both
13 persons must be present at the time of the testimony. I
14 will ask for verbal acknowledgment from the person
15 yielding their time and a total of six minutes will be
16 allowed for testimony.

17 Persons who transfer their time give up
18 their opportunity to provide public testimony, but will
19 still be able to submit written or private testimony.

20 Speakers wishing to add to their public
21 testimony beyond the six-minute maximum may do so
22 privately with the stenographer who is located downstairs
23 near the Fireplace Room or you may do so through a

1 written statement.

2 To be fair to everyone, I will ensure that
3 everyone adheres to these time allocations.

4 Now, I would like to show you how the
5 timing system works. The bar at the bottom of the screen
6 will show how much time is remaining starting with the
7 green portion to the left. The bar changes to yellow at
8 one minute remaining and to orange at 30 seconds. When
9 your time is up, the screen will turn red.

10 Before starting your testimony, please
11 state your name, address, and any affiliation if so
12 desired. All testimony is expected to be offered in a
13 courteous or constructive manner and follow the accepted
14 rules and meeting decorum.

15 Inappropriate or rude written or verbal
16 testimony will not be tolerated and will not be included
17 in the public record.

18 At this time, we welcome elected officials
19 who wish to speak to please come up. I believe I have
20 three listed.

21 The names I have are a Ms. Rachel
22 Thompson, ANC-3D Commissioner; a Ms. Alma Gates, ANC-3D
23 Chairperson; and a Ms. Joan Kleinman for Congressman

1 Chris Van Hollen.

2 Please begin.

3 MS. KLEINMAN: My name is Joan Kleinman.
4 I'm the District Director for Congressman Chris Van
5 Hollen who represents Maryland's Eighth Congressional
6 District.

7 (Pause.)

8 MS. KLEINMAN: My name is Joan Kleinman.
9 I am the District Director for Congressman Chris Van
10 Hollen who represents Maryland's Eight Congressional
11 District.

12 Congressman Van Hollen was unable to
13 attend tonight's meeting, but he asked me to present the
14 following statement on his behalf.

15 For the past year I have expressed my
16 concerns over the process that the U.S. Army Corps of
17 Engineers has followed in developing its draft
18 environmental impact statement for the residuals
19 management project at the Washington Aqueduct.

20 My concerns with this process continue.
21 Many residents believe the process of developing this
22 draft EIS, including the requirements relating to public
23 involvement throughout the process, was fatally flawed

1 from the outset and are now urging that the DEIS be
2 withdrawn.

3 I share their concerns in many significant
4 respects and am requesting that adequate additional time
5 be given to consider more fully alternatives that do not
6 locate this industrial facility in the residential
7 neighborhood surrounding the premises of the Washington
8 Aqueduct.

9 Serious consideration must be given to
10 relocating the dewatering facility to a site that has a
11 lesser impact on the community.

12 On April 18th, 2005, I joined with U.S.
13 Senators Paul Sarbanes and Barbara Mikulski and
14 Congressman Eleanor Holmes Norton in requesting the Corps
15 to defer issuance of the DEIS so that additional
16 consideration could be given to alternatives that would
17 minimize the impact of the project on these local
18 communities.

19 I continue to believe that the
20 availability of better alternatives must be explored and
21 that the Corps should pursue resetting the deadlines in
22 the Federal Facilities Compliance Agreement as needed in
23 order to give serious consideration to such alternatives.

169-1-FF
BB

169-2-FF
NE

1 I pled my full support and assistance in
2 that process and will encourage my colleagues to do the
3 same.

4 Thank you.

5 MS. ORTIZ: Thank you.

6 MS. GATES: Good evening. My name is Alma
7 Gates. I am Chair with Advisory Neighborhood Commission
8 3-D and the head of its transportation committee.

9 The draft EIS and the 10 or 20-ton trucks
10 that will be used to haul dewatered residuals share a
11 common trait. They keep moving forward.

12 The federal process is premised on an
13 opportunity for public input throughout, ending with a
14 comment period. So the public has 45 days to comment on
15 the preferred alternative that the Army Corps has been
16 developing since January of 2004.

17 Mr. Capacasa, you need to extend the
18 comment period by a minimum of 45 days.

19 It should not come as a surprise to any of
20 you when I say there is too much traffic on our streets.

21 And there really is no way for dump trucks and

22 neighborhoods to harmoniously co-exist. Dump trucks
23 don't fit the concept of community safety or tranquility.

169-3-FF

169-4-GA,
GG

1 In 2004, the Ward 3 transportation
2 committee requested that DDOT undertake a truck study,
3 which was conducted by the U.S. Department of
4 Transportation's National Transportation System Center in
5 Cambridge, Massachusetts. While the study does not
6 address individual locations and specific problems in the
7 District, it's first listed goal is to reduce truck
8 traffic on residential streets.

9 The study notes with its current
10 development boom construction-related traffic has become
11 an increasing concern for city residents. Construction-
12 related vehicles frequently have to travel through
13 residential neighborhoods to get to and from construction
14 sites creating air and noise pollution and vibrations on
15 these streets disturbing their residents.

16 Also, the Federal Register announcement of
17 the intent to prepare a draft EIS lists as an objective
18 to minimize, if possible, impact on various local or
19 regional stakeholders and minimize the impact on the
20 environment, traffic, noise, pollutants, et cetera.

21 Turning now to preferred alternative E,
22 dewater at East Dalecarlia processing site and disposal
23 by trucking. This recent variation on alternative B

169-5-BI,
BB, GA,
GC, GD,
GF, GG

1 simply moves the traffic and environmental impacts from
2 behind the homes of Maryland residents on one side of
3 MacArthur Boulevard to an area behind an ever expanding
4 hospital where it is presumed public health needs are
5 being met.

6 Concerns about truck traffic on area
7 roads, pedestrian safety, and air and noise pollution
8 have been increased by moving the location of the
9 dewatering facility.

10 It is clear the faulty study goal and the
11 proposed alternative for the Washington Aqueduct are in
12 direct opposition, placing numbers of dump trucks on

13 residential streets 16 hours a day, five days a week,
14 will impact the quality of life of anyone who lives or
15 works along the chosen truck routes.

16 Diesel fuel is distinctive in odor and
17 causes air pollution. The decibel levels of empty dump
18 trucks rolling down residential streets will be
19 significant. But a loaded 10 or 20-ton dump truck will
20 be seismic. Under the summary of noise monitoring data
21 in the EIS, a garbage truck behind Sibley Hospital on
22 Little Falls Road registered 107.7 decibels at peak.

23 An independent opinion furnished by

Anita B. Glover & Associates, Ltd.
10521 West Drive
Fairfax, Virginia 22030
(703) 591-3004

169-6-GE,
GK

1 Powesconics (phonetic) found a pneumatic camera would
2 only register 100 decibels.

3 The Osborne-George traffic study in the
4 EIS dated December 4th, 2004, does not consider speed,
5 but does consider the disadvantage of a proposed new
6 driveway intersection at Little Falls Road and Dalecarlia
7 Parkway that would send traffic through Montgomery County
8 to the capital beltway.

9 A new curb cut and median break would be
10 required. The intersection would be signalized. The
11 improvements would be costly.

12 To sum up, the preferred EIS alternative
13 would contradict the goal of DDOTs study to reduce truck
14 traffic on residential streets, continuously impact
15 roadway surfaces, impact the environment, as noise and
16 air pollution would increase with the use of diesel
17 trucks 16 hours a day, five days a week, further
18 industrialize the federal property, and pass increased
19 costs onto rate payers for an indefinite period of time.

20 : Do you want me to start?

21 MS. ORTIZ: Yes, please.

22 : I'm not used to speak up on
23 a microphone in my church.

169-7-GD,
GI

1 MS. ORTIZ: Do you want --

2 MS. THOMPSON: I don't know. I can't -- I
3 cannot think you could hear me. I have to hold it?
4 Sorry. I can hold it. Can you hear me?

5 MS. ORTIZ: That's fine.

6 MS. THOMPSON: My name is
7 I live at and I'm a single -- Sorry.

8 I'm a single member -- single member
9 representative for ANC 3D-04, which includes both the
10 Aqueduct and Sibley Hospital.

11 I want to first say good evening and thank
12 you for the opportunity to testify. And I want to

13 emphasis right off the bat the Palisades community's
14 long-standing opposition to the use of trucking by the
15 Aqueduct and to the introduction of any so-called
16 environmental solution which will in practice result in
17 the increased industrialization of our neighborhood and
18 the neighborhoods of Spring Valley and Brookmont and
19 Westmoreland in Maryland.

20 Second, I want to focus on a significant
21 change on the background conditions for the study, which
22 I believe rendered both alternative E and alternative B
23 not only infeasible from a planning perspective, but

1 potentially hazardous in an eminent sense in the 2009
2 time frame which we're all considering.

3 I turn my testimony now to alternative E,
4 which couples trucking with the construction of an eight-
5 story facility behind Sibley Hospital on the north side
6 of Little Falls Road. However, everything I have to say
7 applies equally to alternative B, which takes the same
8 technical approach but locates the dewatering plant
9 behind the main Aqueduct building to the west of the
10 Crescent Trail.

11 Both alternative E and alternative B rely
12 heavily on the Corps use of Little Falls Road, a roughly
13 third-mile stretch of steep roadway which is currently
14 too lightly paved for the carriage of the city's Metro
15 buses -- for the back and forth transport of as many as
16 66 20-ton trucks a day full of residuals.

17 Those trucks would leave Little Falls Road
18 and exit onto Dalecarlia Parkway, a two-lane roller
19 coaster, or four-lane total -- roller coaster of a road
20 where cars routinely and gleefully exceed the 40 mile
21 speed limit and then come screeching to a halt when they
22 reach the stop sign at Loughboro Road.

23 Last fall two things happened. First a

1 Washington Business Journal article disclosed that Sibley
2 Hospital has plans for a major renovation and expansion
3 of its facilities in order to remain competitive in the
4 changing market for health care.

5 Sibley will unveil this fall detailed
6 plans for the first phase of a 15-year, quote, campus
7 plan which will eventually increase its patient
8 facilities from the current 230 beds to the hospital's
9 fully licensed capacity of 328 beds, a 43 percent
10 increase in patient capacity.

11 Right around the same time, in December,
12 the Aqueduct announced that it would be adding
13 alternative E to its roster, ostensibly because of the
14 reduced impact on the surrounding residential community.

15 My central question is this: How can
16 local elected officials and neighbors possibly be
17 expected to assess the impact of these two huge,
18 prospective, capital-intensive and environmentally-
19 intensive plans?

20 The Army Corps is looking at a 2009
21 horizon and the hospital is doing its detailed planning
22 on a two or three-year cycle and developing a larger plan
23 that could extend through 2020.

169-10-GI,
GA

1 Sibley executives have briefed a handful
2 of elected officials and neighbors. These briefings in
3 January and February included three or four concept
4 drawings which showed how the multi-year plan would
5 unfold stage by stage. However, briefees received no
6 paper copies of anything we were shown. I attended three
7 such briefings in an effort to understand for myself how
8 Sibley's concept for the future would unfold.

9 One of Sibley's specific goals, and one
10 which has been welcomed by neighbors who have jostled
11 with the hospital for years over issues of noise,
12 lighting, and visual camouflaging of the hospital's
13 growing facilities, is the explicit focus on removing a
14 majority of the new facilities to the rear-most or most
15 northern or most close to this facility proposed by the
16 Aqueduct location on the lot.

17 I am most deeply concerned about the
18 potential of any facility across Little Falls Road which
19 could, intentionally or not, in any way reduce the
20 hospital's flexibility with respect to its plans --
21 again, only conceptual at this stage -- to concentrate
22 its new facilities along the Little Falls side of its
23 property.

169-11-BB,
BH

1 Here is a little of what we know of their
2 plans.

3 The first step Sibley will take is to make
4 a crook in Little Falls Road right where it leaves
5 Dalecarlia so as to p lace the road along the back of the
6 hospital's property line with the Army Corps.

7 Construction of a three-story enclosed
8 parking facility south of new Little Falls Road.

9 Construction of a six to eight-story
10 office facility to the left of the covered garage.

11 While Little Falls Road will crook around
12 to the right behind both of those buildings, the hospital
13 entrance itself will continue straight ahead and create
14 an arc that ties into the existing driveway entrance from
15 Loughboro, which is to receive minimal use once the
16 Dalecarlia entrance is complete.

17 Construction of a bus terminal on the
18 hospital grounds roughly in front of the doctors' office
19 to gather all Metro buses into an assigned pick-up spot
20 and a request for a new stop light at the entrance of
21 Sibley Hospital on Dalecarlia.

22 In phase two, the hospital plan will tear
23 down the existing auditorium and administrative offices

1 and begin construction of new patient housing.

2 All of what I've described to you will
3 happen less than 100 yards from an 80-foot dewatering
4 facility with three truck bays, where at peak times we
5 can expect a truck either entering or leaving the road
6 roughly every seven minutes. Were one to read the draft
7 EIS alone one would have virtually no appreciation for
8 the complexities and fluid conditions surrounding the
9 site.

10 When I've asked Mr. Jacobus or Sibley
11 Operation Officer Jerry Price why we should not be
12 concerned, their answer is its fine, we have no problem
13 with it. I want to believe it, but as a single member
14 ANC Commissioner and the immediate neighbor of both
15 facilities, I cannot accept this claim. Instead, I must
16 insist that Sibley Hospital be compelled to participate
17 in this proceeding and disclose fully all plans and
18 studies that is conducted to date with respect to its
19 future campus plan.

20 Thank you.

21 MS. ORTIZ: Thank you.

22 We will now begin with the registered log.
23 Again, I will be calling up four names at a time. Please

1 come up and take a seat right before the podium. We will
2 begin with , ,
3 , with time yielded from , and a

4 .
5 This will also be the order that you are
6 speaking.

7 (Pause.)

8 MS. ORTIZ: If you have time being yielded
9 to you, once you begin your remarks and come up to the
10 podium, that's when I'll be asking for the member who
11 yielded that time to simply make a verbal acknowledgment.

12 And we begin with, is it, Mr. Coughlin.

13 : Give me just a second. I'm
14 going to turn this around so I can face my neighbors.

15 (Pause.)

16 : My name is . I
17 live at , Bethesda, Maryland. And I'm
18 here to discuss two developments since the last public
19 hearing, one good and one bad.

20 The good development is that the monofill
21 is no longer to take place. And I commend the Washington
22 Aqueduct for its decision not to clear 30 acres and
23 create an 80-foot mound of waste that would drain into

169-13-CA

1 the surrounding area all for a temporary facility that
2 would be completely used up within 20 years.

3 The other issue I have this evening is a
4 bad development. And this is actually the first time
5 that we've had a chance to speak on this development so I
6 want to register my objections to it and point out that I
7 would have raised objections previously at a previous
8 public hearing where I did speak had this been on the
9 table at that time. And that is not the proposed site of
10 this processing facility behind Sibley Hospital.

11 We've heard that it is approximately a
12 seven to eight-story structure. There is going to be
13 noise and there is a lot of heavy traffic. And in its
14 location right behind Sibley Hospital, it not only
15 affects just the hospital but it affects those who use
16 the hospital and the entire community.

17 Sibley Hospital, in my opinion, has been a
18 wonderful neighbor. They have cooperated. They have
19 worked with local citizens. And it is their tendency not
20 to raise objection.

21 But, as a user of that facility, and I
22 know all of my neighbors are as well, the idea of taking
23 a hospital site and creating a combination hospital and

169-14-BA,
BB, BC, BI

169-15-BI

1 industrial site with all of this heavy truck traffic and
2 noise and obstruction is objectionable.

3 I don't understand exactly why the
4 location from below MacArthur Avenue next to other
5 facilities the Washington Aqueduct has has now been
6 changed to be put next to a hospital that I think will
7 affect the entire community and everyone who uses it.

8 So I strenuously object and I ask the
9 Washington Aqueduct, as they listened before with respect
10 to the monofill, that they listen to our thoughts about
11 the processing plant and if there has to be one not to
12 put it adjacent to the hospital. Put it closer to the
13 other existing facilities that they have.

14 Thank you very much.

15 : I just want to make sure, is
16 my name and address part of the three minutes or do I
17 start after I give my name and address?

18 MS. ORTIZ: We're actually asking that
19 it's included as part of the three minutes.

20 : Okay. ;

21 , Northwest, Washington, D.C.; Major,
22 U.S. Army, attorney, Washington D.C. and Maryland.

23 Watch the clock up here, folks. It's going

169-16-BB

1 to move fast.

2 When I called the Aqueduct and said can we
3 ask some questions like we did at Sibley Hospital, the
4 answer was no, you will not be allowed to ask questions
5 unless you go back there and register.

6 I can't even think about responding to the
7 testimony of the people in front of me who have been
8 rushed through to include two ANC members.

9 My time has already diminished.

10 When I called the Aqueduct and said what
11 is going on here, this is the way a rule making period is
12 structured, where you do not have interface with the
13 audience, you do not respond as things develop, where you
14 isolate people down stairs, where you do not get the
15 dialogue as the evening progresses like they did over at
16 Sibley Hospital where in three meetings 250 people
17 effectively derailed the monofill. Not just because of
18 the environmental issues, because of the issues going on
19 with remediation with the cleanup over there of
20 munitions, it was derailed. Partially by Maryland public
21 pressure, but by brilliant gamesmanship (phonetic) on the
22 part of the audience. But they made sure that won't
23 happen.

169-17-FE,
NC

1 So I've got three minutes. I've used up
2 one.

3 When I called the Aqueduct, I said, once
4 again, this rule-making procedure, it's not democratic.
5 I was told, quote, this is not a democracy, there will
6 not be a vote at the end of this hearing.

7 Does anybody here want to ask me any
8 questions? I've worked for 3,000 hours on the
9 remediation. I came here tonight hoping for more than
10 three minutes. I neglected to read the fine print.

11 I've spent a lot of time working with the
12 Army Corps, the project manager, and Mr. Jacobus. I
13 support him wholeheartedly in the effort he is making to
14 do the right thing, but I don't see much chance to have a
15 balanced discussion here. You make a public
16 presentation. They'll put it in the record and then you
17 go home and you'll find out the answer later.

18 Like I say, does anybody have a question
19 here before I start talking about the things that many
20 people asked me to talk about in the little three minutes
21 that I have.

22 Yes, ma'am.

23 (Response from audience not a part of the

169-18-FE

1 public record.)

2 : I have no idea. I have heard
3 they're going to move the trailers, but I see my time is
4 being eaten up. Does anybody want to yield me 30 seconds
5 down the road? Could we barter here or is my time up?

6 You see, they've structured this with a
7 new facilitator. 2 Chem Hill was blown out of the water.
8 Now, it's structured. Now we don't have this dialogue.
9 I got 30 seconds. I could have picked up five seconds on
10 the last person, but I didn't ask for it.

11 The problem is, folks, it's moving too
12 fast. They've had a lot of problems with ground water,
13 with chlorine. They've got wells all over the place now
14 trying to find out if anything is infiltrating into the
15 water. They've been jammed out of Maryland by political
16 pressure.

17 Your D.C. leaders, I think there is one
18 here, Andy Gerst. Anybody else from D.C. stand up, any
19 D.C. leaders. Mayor's office? Eleanor Holmes? City
20 counsel? Just Andy Gerst.

21 Mr. Capacasa, I've called you after one of
22 those meetings. You never called me back. No big deal.

23 But all of the sudden, my time is up

1 folks. I won't be here too much longer in Washington,
2 but you're going to be stuck with a big facility in your
3 yard. Think about it. Put some pressure on these people
4 tonight to let you talk and have dialogue with people
5 like me --

6 MS. ORTIZ: Thank you, sir. Your time is
7 up.

8 : You see how they shut you off?
9 It's a fait accompli, folks.

10 MS. ORTIZ: Next we have
11 and we have time being yielded from . Can I
12 get a verbal acknowledgment from --

13 : It's okay.

14 MS. ORTIZ: Thank you, sir.

15 : Good evening. I'm Dr.

16 . I'm a Brookmont resident for the last 31 years.

17 And I'm part of a group called SludgeStoppers. We are

18 adamantly opposed to a treatment facility, which we call
19 a sludge factor, being in any residential neighborhood.

20 That has been our slogan all along and we felt that very
21 strongly.

22 Over 1,000 of us signed a petition against
23 the Brookmont facility, which was originally the main

169-20-BB

1 place that the proposal was. And, at election day, I sat
2 at a table talking to residents who were shocked and
3 horrified to find out that this facility was being
4 proposed. They never heard anything about it.

169-21-NC

5 And then many of us at SludgeStoppers went
6 to community meetings. We went to shopping centers, to
7 local groceries stores. Again, people were horrified.
8 They didn't know about this.

9 I want you to know that I feel very
10 strongly that the Brookmont site is totally unacceptable.
11 It's 200 feet from my home. I have lived there for 31
12 years. I live in paradise surrounded by water and trees.

169-22-BB

13 And the thought of having an eighty-foot building right
14 there polluting the air, with the sounds, with --
15 polluting the soil with the sites that I can see, it --
16 it would just be horrific.

169-23-BA,
BC

17 And it's not just for me and for my
18 neighbors, but for our children.

19 Oh, , I'm so glad you're here,
20 because loves to go behind my home. I've known him
21 for years before he even bought a home in Brookmont, and
22 walked along the trails, loving all of the nature, loving
23 all of the beautiful animals.

1 And here we are right along the Crescent
2 Trail. The Brookmont sludge factory is right along the
3 Crescent Trail. People who come for peace and harmony
4 from their busy days in Washington, coming there hoping
5 very much to have some nature that they can escape to.
6 No, not if that sludge factory is there.

7 We are opposed for any residential
8 neighborhood, but we are especially opposed to Brookmont.
9 We feel that it's not only too close to our homes and
10 more in a residential facility (sic), but also -- and
11 certainly would lower the property values.

12 My next door neighbors have just completed
13 the sale, I believe, of their house and the real estate
14 agent there told me that all of the neighbors were coming
15 in there and all they could talk about was the sludge
16 factory and how it was facing that and how it was taking
17 down the value of the property, but more so the peace and
18 the harmony and the air, the noise, and the sights, and
19 certainly the soil, as well.

20 Truck traffic has been spoken about by
21 many people. The option -- and I think this is why the
22 facility was changed from -- one of the reasons was
23 changed from Brookmont is that the trucks would go down

1 MacArthur Boulevard and then up Loughboro Road, whereas
2 with Sibley it would go behind Dalecarlia. Neither side
3 is a good one, but I feel like Brookmont is a worse site.
4 It's -- the Sibley option is less invasive a residential
5 neighborhood.

6 But I go to Sibley Hospital too and I
7 certainly hope it's not going to end up being there
8 either.

9 The environmental and health issues are
10 very serious. Those of us who have serious asthma are
11 really concerned. And more and more people in our area
12 are afflicted with asthma, and children as well.

13 Thousands of signatures, not only of the
14 Brookmont petition, but the SludgeStoppers petition, have
15 adamantly have said we do not want a sludge factory in
16 Brookmont. We do not want it in a residential
17 neighborhood.

18 I have more time left.

19 I do feel that -- and I agree totally with
20 Congressman Chris Van Hollen about the unfair process.
21 Most people didn't know about this. They've been
22 planning this thing for ten years. We haven't known
23 about it. If we had, we would have done something about

169-24-BI

169-25-BK

169-26-NC

169-27-NE,
DA, AD

1 it. And I agree that the process has been very unfair.
2 And there are a lot of alternatives that should be
3 reopened and really looked because there -- and we've
4 gone up to other sites that are north of the Beltway,
5 sites that are not in residential areas. And certainly
6 piping is much more acceptable than trucking. There are
7 ways to do it. Maybe they are a little bit cheaper now,
8 but in the long run they're going to be far more
9 expensive.

10 I guess that's -- that's all and -- and I
11 thank you all for being here. And let's hope that people
12 will listen to us and that there can be more democracy.

13 MS. ORTIZ: And I believe we have time
14 being yielded from . Is that correct?

15 : Yes.

16 MS. ORTIZ: Thank you.

17 : And can I have the rest of
18 time?

19 MS. ORTIZ: I don't believe so. It has
20 already been expired.

21 : It looked like there was 40
22 seconds left.

23 My name is ;

1 Drive, Bethesda.

2 169-28-ND

3 I am greatly disturbed that the Corps of
4 Engineers have engaged in a sham NEPA process and has
5 violated both the letter and the spirit of the law. One
6 of the most critical objectives of this statute is to
7 provide the citizens who will be most directly impacted
8 by a proposed major federal action, a meaningful
9 opportunity to comment on that action and on the
10 potential alternatives.

11 169-29-FE,
12 MB, NC

13 The Corps has failed to provide for
14 meaningful public participation in this matter since it
15 first announced in January of last year. The Corps has
16 failed to notify the communities that would be the most
17 directly impacted by the alternatives at each of the
18 relevant stages of the process, failures that cannot be
19 corrected retroactively, and has failed to provide the
20 affected communities with critical documents that are
21 relevant to evaluating these alternatives.

22 This meeting is nuts. The time for public
23 involvement was early last year when the Corps was making
24 all of the decisions we are confronting in the draft EIS.
25 A time when we were shut out.

26 The draft EIS describes a letter of

1 invitation that was sent to a scoping meeting in January
2 2004. It's not clear who received this letter and who
3 received the announcement that the meeting had already
4 occurred. In any event, the no meeting announcement was
5 placed in the Maryland paper and, more importantly, not
6 contiguous landowner or community leader on the Maryland
7 side received notification that the Corps was undertaking
8 this action.

9 The draft EIS suggested no evidence of
10 anyone, public or government agency, was consulted on the
11 development of the screening criteria. Direct testimony
12 from the public forums held in later 2004 expressed anger
13 and outrage at the Corps failure to involve the public in
14 these early and critical parts of the NEPA process.

15 A set of letters was sent out in May 2004
16 inviting people to an event where the state of the
17 project was to be described. By this time, the screening
18 criteria had been developed, 26 alternatives had been
19 decided upon, and 24 were already rejected and a lengthy
20 engineering study had been published, with no meaningful
21 public involvement by citizens or government agencies.

22 The draft EIS includes a list of people this letter was
23 sent to, which includes Senator Sarbanes, but not Senator

169-30-NB

1 Mikulski, only one member of the Montgomery County
2 Council and no contiguous landowners on the Maryland
3 side.

4 Why aren't the content of any of these
5 letters included in the draft EIS? We have repeatedly
6 asked for this information as part of our FOIA request,
7 but we can't even get copies of these letters.

8 It was only in August of 2004 that you
9 began to realize the serious error on your part, Mr.
10 Jacobus, Tom, and began to try to involve affected
11 government agencies. By then the EPA work was set -- I'm
12 sorry. By then the NEPA work was set in stone. The four
13 options you made in May of 2004 are the same four we're
14 trying -- you're trying to pass off on us now.

15 Why is the monofill still being talked
16 about? You know quite well that the existence of
17 munitions in the Dalecarlia Woods precludes this site.
18 If the screening criteria were fairly applied, even by
19 your standards, the monofill should have fallen out due
20 to the Federal Facilities Compliance Agreement. The
21 draft EIS states that this proposal conflicts with the
22 Compliance Agreement and other alternatives were rejected
23 based on timing, but for unknown reasons that criteria

1 doesn't apply when it comes to the monofill.

2 From the limited correspondence that is
3 included in the draft EIS, it appears that the Corps did
4 not begin to reach out to other interested agencies until
5 late 2004 or early 2005. I believe that this failure to
6 involve cooperating agencies, as required by NEPA, is a
7 breach of the strict procedural requirements of this law.
8 The law is designed to protect against the kind of shadow
9 decision making that the Corps is engaged in.

10 What cooperating federal, state, and local
11 agencies have you met with to discuss the air impacts?
12 Who have you met with the talk about road safety? What
13 about the noise concerns? Have you met with anyone in
14 federal, local, or state agencies to talk about that?
15 Why can't we know about these things?

16 When these questions are answered, I
17 believe the evidence will be even more compelling that
18 you need to restart this NEPA process in an open and
19 honest way. You need to embrace an option that will take
20 this large industrial facility, a facility almost as long
21 as a football field, out of a congested residential
22 neighborhood.

23 And with the rest of my time, in the

169-31-MD,
NC

169-32-NG

169-33-GD,
GE

1 interest of full disclosure, I think that you should be
2 honest about what you're talking about in terms of truck
3 numbers, because you talk about it in terms of loads.
4 But I can get hit by a truck coming and a truck going.
5 So a load is really two trucks. And in the little charts
6 that you included in the report, you say they are 20-ton
7 trucks. But it could be -- you could be using 10-ton
8 trucks, so we have to double that to 16.

9 Then, if you look at the same chart, it
10 says it could be as many as 33 trucks. So that's 66
11 loads, or 132 trucks on a given day moving in and out of
12 our residential neighborhoods. And we don't want it and
13 we shouldn't have to put up with it.

14 MS. ORTIZ: Thank you.

15 The next registrant I have for public
16 testimony, Ms. , ,

17 , and . I ask the four please come
18 up and take a seat before the podium. And we will begin
19 with .

20 Again, as a reminder, you are given three
21 minutes to provide testimony and we ask that you begin by
22 stating your name, address, and any affiliation if so
23 desired.

1 : Good evening. Good evening.
2 My name is and I live at
3 Street.

4 The Army Corps of Engineers has failed to
5 include a meaningful analysis of the no action
6 alternative in their draft EIS. The no action
7 alternative would mean continuing with the present course
8 of action; that is, returning residuals to the Potomac
9 River.

10 The White House Council on Environmental
11 Quality, or CEQ as it is known, directs that an EIS must
12 include an discussion of the alternative, including the
13 alternative of no action.

14 The CEQs regulations describe the
15 alternative section of the EIS as the heart of the
16 environmental impact statement. And the no action
17 alternative must be carefully weighed along side the
18 other proposed alternatives.

19 The CEQ also states that the analysis of
20 the no action alternative provides a benchmark enabling
21 decision makers to compare the magnitude of environmental
22 effects of the other alternatives.

23 In the draft EIS, the Corps dismisses the

169-34-NE

169-35-MA

1 no action alternative claiming its hands are tied by the
2 EPA and by its permit. However, the Aqueduct's permit
3 limits are not required by the statute and they can be
4 renegotiated. There are no provisions in the federal
5 statutes that prohibit the discharge of residuals into
6 the Potomac River.

7 Further, the EPA has not developed any
8 effluent guidelines limiting the amount of pollutants
9 discharged by water treatment facilities.

169-36-ND

10 In the publication titled The Forty Most
11 Asked Questions Concern CEQ's NEPA Regulations published
12 in the Federal Register, the CEQ states that the
13 environmental effect from taking no action should be
14 compared with the effects of permitting the proposed
15 activity to go forward. This means that the proposed
16 activity, that is trucking, should be compared with the
17 no action alternative of continuing to return residuals
18 to the Potomac.

19 The Corps' failure to analyze the
20 environmental impact of continuing to discharge into the
21 Potomac River is just one more example of the fatal flaw
22 in the manner in which the Corps has attempted to
23 implement the strict procedural requirements of NEPA.

169-37-GA,
KD, GF, GG

1 The Corps failed to compare the limited environmental
2 impact from continuing to return residuals to the river
3 with the numerous impacts trucking would have on
4 residents of the area, our air quality, our children's
5 safety, public safety, and our health if the Corps goes
6 forward with their plan to truck residuals through our
7 neighborhood.

8 Thank you for your time.

9 : I'm . I'm the
10 co-president of the Westmoreland Citizens Association. I
11 also represent concerned neighbors, a coalition of
12 neighbors in the neighborhood to include Palisades,
13 Spring Valley, Brookmont, Overlook, and Westmoreland
14 Hills.

169-38-BB,
BC, BF, BH,
GE, GG, GF

15 I'm here to tell you that my neighbors and
16 I are opposed to building an 80-foot high industrial
17 facility in a residential neighborhood. We are concerned
18 about the air, light, noise, and water pollution this
19 facility may bring. And we're opposed to the many trucks
20 that will travel our residential streets each day
21 bringing with them the potential for accidents and air
22 pollution.

23 But mostly we're opposed to the sham

1 process by which the Corps decided to put an industrial
2 facility in a residential neighborhood and truck these
3 residuals over our neighborhood streets. We believe it's
4 a sham process because the Corps developed a flawed
5 purpose and need and they developed unduly narrow
6 screening criteria to screen these options, so narrow, in
7 fact, that they screened out 23 of the original 26
8 options and all but 1 of the 100 plus options that were
9 developed by the public.

10 The process was so flawed that of the
11 three options that passed through the screening criteria,
12 two were not serious options. It appears that a 20-
13 minute phone call to the Blue Plains facility would have
14 ruled out the Blue Plains piping option. Another 20-foot
15 -- 20 minute phone call to the Corps of Engineers working
16 in Spring Valley would have told the Corps that they
17 already had plans for inspecting the proposed monofill
18 site, making it inviable. It's a flawed process.

19 So we're opposed to the 80-foot high
20 industrial tower. We're opposed to a million trucks on
21 our -- or to the many trucks on our residential streets.
22 And we're opposed to the Corps sham process.

23 You may be wondering, though, what are we

169-39-ND,
NB, NE

1 for. Well, I'll tell you. We're for the Potomac River
2 and continuing the practice of dumping excess residuals
3 and adequate stuff into the river. We're for finding a
4 responsible piping solution that would deliver residuals
5 to an industrial area near the beltway. And we're for
6 the EPA extending the deadline in the short term so that
7 a responsible solution can be developed for the long
8 term. Finally, we're for the Corps throwing out the
9 results of this flawed process and starting again to find
10 a long-term solution that will not degrade the
11 environment.

12 Thank you.

13 : Can you hear me? Okay.

14
15 Bethesda. Vice president, Brookmont Civil League and
16 member of the Concerned Neighbors Coalition.

17 In 1859 when the first water from the
18 Washington Aqueduct flowed into pipes in the District,
19 the Aqueduct was one of the great engineering feats of
20 its time. In ten years the Army Corps of Engineers
21 constructed a masonry damn across the Potomac, a
22 controlled gatehouse at Great Falls, a 12-mile conduit,
23 11 tunnels, 6 bridges, pump stations, miles of pipelines,

1 and two reservoirs.

2 Today, 145 years later, basically the same
3 system provides public water for the District and much of
4 Northern Virginia.

5 Despite the ingenuity and foresight of the
6 Aqueduct's builders, it had one major flaw from the
7 beginning. The reservoirs of Georgetown and Dalecarlia
8 could not settle the sediment rapidly enough to keep up
9 with the demand for clean water. Various solutions were
10 tried and ultimately found wanting over the years.

11 Today the Dalecarlia facility coagulates
12 sediment creating a residue that it dumps into the
13 Potomac. The EPA and the Corps have entered into a
14 compliance agreement that calls for ending this practice.
15 While the compliance agreement is a few years old, the
16 Corps realization that it would some day have to find
17 another means for disposing the sediment residues goes
18 back at least a decade and possibly much longer.

19 Over the same period during which the
20 nineteenth century Corps designed and constructed the
21 entire Washington Aqueduct using hand tools and horse-
22 drawn carts the modern Corps has studied the problem of
23 sediment disposal and constructed a plan. It would be

1 unfair to say, however, that it has taken the Corps ten
2 or more years to come up with this plan. In fact, the
3 Corps developed this plan in great detail at least a
4 decade ago and has bided its time, waiting it seems for
5 an impetus to propel the plan from the realm of the
6 drawing boards into that of urgent necessity.

7 The compliance agreement has provided that
8 impetus and is being used by the Corps as an instrument
9 by which a number of reasonable, imperferable
10 alternatives of a proposed plan are being brushed aside
11 after perfunctory examination.

12 The Corps has demonstrated an
13 unwillingness to follow the strict procedural
14 requirements of the National Environmental Policy Act,
15 except when compelled to do so by public and political
16 pressure. The Corps has failed to notify the communities
17 most affected at the relevant stages in the process.
18 Failures that cannot be corrected retroactively.

19 The Corps continues to deny access to
20 documents relative to evaluating how it conducted its
21 assessment of alternatives or whether there was ever any
22 serious consideration of alternatives.

23 The Corps maintains that it is constrained

169-42-ND,
NC

169-43-MB,
NB

169-44-FB

1 by a deadline it has voluntarily imposed on itself that
2 could be renegotiated and it is not required by the Clean
3 Water Act or any other law, but that is useful for
4 excluding many alternatives.

169-45-NB,
NE

5 The Corps excluded 23 of its own 26
6 alternatives prior to making them available for public
7 comment. Of the three alternatives offered for
8 consideration, the Corps dismissed one after a single
9 conversation with the manager of the Blue Plains facility
10 and another by suddenly becoming aware that there is a
11 buried munitions problem in the Dalecarlia Woods.

12 Other alternatives offered by the public
13 have been similarly dismissed.

169-46-ND

14 The entire process of NEPA compliance
15 surrounding this project has been fatally flawed. In the
16 executive summary of the DEIS deserves an epigraph that
17 reads these are the conclusions upon which we based our
18 assessment.

19 The Corps that built the Washington
20 Aqueduct can and should do better.

21 MS. ORTIZ:

22 : My name is .

23 I live at , Bethesda, Maryland.

1 When I was younger, however, I resided
2 briefly in a totalitarian country, whose leaders smiled
3 and claimed that their citizens enjoyed a democratically
4 elected government, meaning that the citizens were
5 allowed to vote for the one and only candidate running for
6 a particular office. This process reminds me of that
7 time in my life because from the outset there was only
8 choice.

9 The Corps' Washington Aqueduct has always
10 intended to solve its' sludge problem by building a
11 massive sludge processing plant and trucking the sludge
12 on our streets. It doesn't matter where the plan was
13 going to be built. It was going to be built nearby, be
14 it in Brookmont or next to Sibley Hospital.

15 We have never been offered a real choice
16 in this matter. All of the other alternatives are merely
17 straw men. I have never been more keenly aware that none
18 of you, meaning the Corps of Engineers and the Washington
19 Aqueduct, has been democratically elected or accountable
20 to us for, if you were, I have no doubt that you would be
21 voted out of office for both your preferred alternative
22 and the methods by which you have pursued it.

23 Now, I'm going to attempt to comment on

1 alternatives B and E, just the trucking aspects of it,
2 because colleagues of mine will talk about other aspects.

3 But I want you to see what the ten years
4 worth of work that the Corps has put in to publish on
5 April 22nd, and which we have had less than a month to
6 respond to, this argues for more time to be able to give
7 a considered and reasonable and helpful response to the
8 Corps' alternatives.

9 So, now I would like to address the
10 trucking alternatives in alternative B and alternative E.
11 The DEIS says that it would use eight trucks a day to
12 haul away dried sludge between the hours of seven a.m. to
13 seven p.m. five days a week. It further states that the
14 small volume of trucks has no significant impact on noise
15 levels, air quality, traffic conditions, adjacent
16 residential neighbors, or the health, safety, or welfare
17 of road users.

18 Well, I have to ask why do we keep talking
19 about the impact of only eight trucks? Isn't it true
20 that the eight-truck figure is -- refers to 20-ton trucks
21 going one way during the non-wet season? If you count
22 return trips, wouldn't it be more like talking about 16
23 truck trips a day using 20-ton trucks? Moreover,

169-48-FE,
FF

169-49-GE

1 inasmuch as it is more likely that the Corps will use 10-
2 ton trucks, aren't we now talking 32 truck trips a day on
3 the average during the dry season?

4 And, during the wet weather, the DEIS
5 states that the Corps would need 33 trucks. Now, it's
6 unclear at this point whether the 33 trucks are 10-ton
7 trucks or 20-ton trucks. And that's hard to say. At a
8 minimum, however, if we include return trips, the number
9 balloons to 66 truck trips which would occur during wet
10 weather. Moreover, if the original number of trucks
11 referred to were 20-ton trucks and we converted to 10-ton
12 trucks, then it is conceivable that we are looking at 132
13 truck trips a day during the wet season.

14 Why do you fail to include the
15 environmental impact of the trucks needing to return to
16 the dewatering plant? Why did you only include one-way
17 trips in your truck counts? Won't these trucks have an
18 environmental health safety impact --

19 MS. ORTIZ: , your time has
20 expired.

21 : Thank you very much for this
22 opportunity to speak.

23 MS. ORTIZ: Thank you.

1 Next, , ,
2 , and . Would you please come
3 up and take a seat by the podium.

4 Also, as a general reminder, you may give
5 testimony downstairs. If you have additional remarks to
6 make, you may also give that to the stenographer or
7 send in those public comments.

8 Okay. We have some time being ceded.
9 That's an additional spot open for . And we
10 will begin with .

11 (Pause.)

12 MS. ORTIZ: Thank you. So we have
13 followed by who is speaking on
14 behalf of , who is also having time ceded by
15 . And a Mr. .

16 (Discussion of the record.)

17 MS. ORTIZ: Okay. Thank you.

18 : My name is . I
19 live at .

20 My understanding of NEPA is that the whole
21 purpose of it is to get public input and public
22 consultation on the alternatives that you're considering.
23 Yet, as you're hearing from this entire community, we

169-51-ND,
NB

1 were not considered until you really had come down
2 already to three alternatives. And the unfortunate part
3 of that is you have limited yourself and prevented the
4 exploration of other alternatives, most particularly
5 other piping alternatives. The only one you seem to to
6 have considered was going to Blue Plains. There are a
7 number of other possible options going up river and we
8 really think that that should be something that should be
9 considered here.

169-52-NE

10 Also, we have submitted FOIA requests. We
11 have only gotten partial responses. It's impossible to
12 actually do -- have serious public input when you've been
13 working on this for 10, 15, 20 years and we aren't even
14 able to get those materials.

169-53-MB

15 Why this artificial push time wise? It
16 seems that everything is really being driven by the
17 Federal Facilities Compliance Agreement, a voluntary
18 agreement that you entered into with EPA, rather than by
19 actually whether or not -- what is the right -- the best
20 solution here for handling the residuals. And we wonder
21 why you have not renegotiated the deadlines in this
22 voluntary agreement, why haven't you asked Members of
23 Congress or the courts to help you if need be in getting

169-54-FB

1 an extension.

2 The real question, I guess, is what is the
3 true purpose and need here. Is it handling the residuals
4 in a proper way or is it actually just to comply with the
5 Federal Facilities Compliance Agreement? Everything

6 seems to have been driven by the FFCA, the unduly narrow
7 purpose and need for the process and the unduly narrow
8 screening purpose -- sorry, unduly narrow purpose and
9 need which together with the inconsistently applied
10 screening criteria have foreclosed consideration of a
11 number of very viable alternatives here.

12 It looks from the record as though the
13 Corps is really going through the motions of complying
14 with NEPA and have certainly recently been seeking public
15 input, but this is way, way down the line rather than
16 early on at the point where you really -- it would really
17 would have been valuable to get public input on a number
18 of the alternatives.

19 And my other understanding is that I
20 actually understand that a contract cannot limit NEPA,
21 because obviously then anybody could enter into a
22 contract and thereby avoid the requirements of NEPA. It
23 seems that that's exactly what's going on here, that the

169-55-NB,
NE

169-56-ND

1 Federal Facilities Compliance Agreement, a voluntary
2 contract, is being used to artificially limit the --
3 prevent you from complying with NEPA.

4 Thank you.

5 MS. ORTIZ: Thank you. We have
6 with time being yielded form . I need a verbal
7 acknowledgment, please.

8 (Acknowledgment received.)

9 MS. ORTIZ: Thank you.

10 : Can you all hear me?

11 Mr. Jacobus and colleagues, good evening.
12 My name is and I'm the president of the
13 Palisades Citizens Association.

169-57-IA,
BB, BA

14 I appear tonight to voice our
15 association's strong opposition to the Corps of
16 Engineer's proposal to construct an 80-foot tall
17 industrial dewatering facility in the heart of
18 residential communities in the District and in Maryland.

19 I am tonight here to express the PCA's
20 opposition to the process that has brought us here
21 tonight. A draft environmental impact statement, which
22 is both in your view procedurally and substantively
23 deficient. I am here tonight to suggest that the Corps

1 has given short shrift to other viable alternatives for
2 processing the residuals. But most importantly, I am
3 here tonight to protect my neighborhood.

4 I am here to protect my neighborhood from
5 a massive environmentally disastrous destruction of home
6 life, habitat, and neighborhood. This is not a situation
7 such as people moving next to an airport and then
8 complaining about planes flying over. This is an effort
9 to build an airport in a peaceful part of town where
10 people already live.

11 This is not a situation where one
12 association is trying to put something in another
13 association's territory. This is a unanimous confluence
14 of opinion which says you don't have to do this, there
15 are better ways to solve this problem.

16 This is not a situation where the Corps is
17 proposing a permanent solution. Twenty years from now
18 and 700,000 truck trips later, according to our numbers,
19 residents will be girding for the next 20 years of
20 trucks.

21 Tom, this is a non-solution solution. The
22 people gathered in this room tonight -- look at how many
23 are here -- support the Clean Water Act. We support the

1 clean up of the Chesapeake Bay. We support enforcement
2 of our environmental laws on both a federal and state
3 level. And we try to work cooperatively with our elected
4 officials and those in government.

5 So when we say to the Corps you've got
6 this one wrong, don't do it this way, there are better
7 ways to solve the problem, we also extend a helping hand.
8 We are united and we can help you. We can help explore
9 on a technical basis some of the rejected alternatives.
10 We can help explore on a political basis how some of
11 those alternatives which would be a real and permanent
12 solution might be both viable and financially feasible.

13 There is no need to create an
14 environmental and community nightmare. I ask you to
15 please ask yourselves this question. If I harness, along
16 with what I already have, the energy, resources, talent,
17 and willingness of a the united citizenry to roll up its
18 sleeves and work with me, won't I have more arrows in my
19 quiver than I have right now?

20 And, if the answer to this question is
21 yes, ask yourself, why not.

22 Thank you very much.

23 MS. ORTIZ: Thank you. Next is

1 , who, unfortunately, has to forfeit his name. I
2 have who is yielding his time at a later
3 -- to a later registrant. And then I have .
4 Is that correct? Thank you.

5 : Thank you. from
6 , N.W.

7 First of all, thank you for the time to --
8 and the opportunity to speak.

9 I would also like to say that the people
10 definitely value the services that are being provided by
11 the U.S. Army Corps of Engineers. The question that is
12 being raised is that process that has been used and
13 continuing --

14 The question that's being raised is the
15 process that is being used to continue providing those
16 services.

17 I would like to use my time primarily to
18 focus on some of the operational costs related to the
19 trucking options that are being recommended. Primarily,
20 the question is whether those costs have been very
21 clearly identified in the most recent report. And there
22 is a lot of question as to whether or not they have been
23 clearly identified.

169-60-GI

1 Those costs were itemized much more
2 clearly in the 1995 and the 1996 reports. And, in those
3 reports, the trucking alternatives, the costs of -- the
4 annual costs of those ranged from as low as \$500,000 a
5 year to as high as \$3 million a year. It's a very high
6 variance. And, furthermore, that was from ten years ago.
7 So those costs need to be updated and -- so that the
8 people actually know what those costs are.

9 For example, some of the factors that went
10 into those costs back in 1995 and 1996 included factors
11 such as the cost of fuel only being \$1.05 a gallon. Now,
12 we would all love to have fuel at that rate right now,
13 but that's not the reality. The cost of labor for the
14 drivers, mechanics, all of that, has also gone up over
15 the course of ten years. So, again, those costs need to
16 be updated and refigured so that people actually know
17 what the costs of this option are.

18 In addition, we have to ask where --
19 whether or not a site has actually been selected for the
20 residuals. Those costs, again, from the 1995 and 1996
21 reports vary considerably depending on the distance that
22 we're selecting. And that has a large part to do with
23 the variation of \$500,000 a year to 3 million. And,

169-61-PA

1 again, that's from ten years ago.

2 The other question that I would like to
3 raise is the estimates for the costs of trucking are
4 based on an 11-year cycle. So the question for that is,
5 is that because 11 years represents the useful life of a
6 truck and, if so, then that -- those costs estimates need
7 to be upgraded again to factor in the costs of constantly
8 purchasing new trucks to continue this option, which will
9 last indefinitely.

169-62-GI

10 And then, finally, I would also like to
11 say that with so many trucks involved -- and, again, as
12 some -- as many of the people have indicated, we're
13 talking at best estimates perhaps 32 trips a day, but as
14 high as 132 trips a day. If that's the case, with that
15 many trucks, where are we going to get the contractors to
16 do that? If you have multiple contractors operating
17 these trucks, then it's going to take a lot more
18 coordination and that's going to increase the costs as
19 well. And have those costs been factored in?

169-63-GI,
GE

20 So, again, I would like to just say that
21 there have been a number of issues that have been
22 identified as far as costs are concerned that are not
23 very clearly resolved in the report. And we would like

1 to see more about that.

2 And, again, that's the ultimate reason why
3 we would like to have more time to comment. Thank you.

4 MS. ORTIZ: The next four for public
5 testimony

6
7 Also, as a general reminder, the list is
8 still available until 8:30 to sign up, if you haven't
9 already done so, to give public testimony.

10 : My name is
11 and I live at (in Brookmont
12 and I'm the president of the Brookmont Civil League.

13 Brookmont is a neighborhood with 200
14 families located between MacArthur Boulevard and the
15 Clara Barton Parkway adjacent to the Washington
16 Aqueduct's Dalecarlia facility.

17 We are neighborhood of more than 85
18 children under the age of ten. We are home to a
19 preschool, Olympic kayakers and coaches, world-class
20 environmentalists, and all care deeply about the health
21 of the Potomac River.

22 We live in Brookmont because we want to be
23 close to nature. The C&O Canal, the Capital Crescent

1 Trail, Little Falls Creek, the Dalecarlia Woods, and the
2 river are part of what makes Brookmont such a wonderful
3 place to live and raise our families.

4 We are thrilled that the Corps is working
5 to improve the river by seeking an alternative to dumping
6 the residuals back into the Potomac. However, we are
7 concerned about the way the Corps has reached its plans
8 for residuals processing and the specifics of the plan
9 itself as outlined in the DEIS.

10 First, we are still frustrated that the
11 Corps has refused to take a real look at any piping
12 alternatives. From day one the Corps has stated that the
13 preferred option is to dewater at Dalecarlia and truck
14 the residuals. And, not surprisingly, that is what the
15 DEIS determined is the best option.

16 From the beginning affected communities
17 should have been involved in developing a solution.
18 Although the Corps, after pressure, opens the process up
19 to comment. At this point 23 of the 26 original
20 alternatives had already been dismissed. And reasonable
21 alternatives subsequently proposed after the comment
22 period was extended were dismissed without real analysis
23 citing institutional constraints or cost.

169-65-EB

169-66-DA

169-67-NF

1 In developing the best environmental
2 solution, NEPA does not allow those to be used as factors
3 for dismissing an idea that otherwise meets the projects
4 stated goals. We urge the Corps to restart the process
5 and take a real look at reasonable alternatives.

169-68-NG

6 Second, we are distressed by the Corps
7 insistence on putting an industrial facility in a
8 residential neighborhood. If the propose dewatering
9 plant is sited either in Brookmont or next to Sibley
10 Hospital it would create a significant hardship to the
11 neighborhoods. The proposed plant would be 80 feet tall,
12 significant taller than the surrounding homes and be
13 illuminated 24 hours a day for security reasons.

169-69-BA,
BB

14 If this facility is eventually built, we
15 urge the Corps to minimize the damage on neighborhoods by
16 building part of it underground or curtailing its hours
17 of operation.

18 Finally, truck a sediment through our
19 neighborhoods poses other potential safety and
20 environmental infrastructure problems. The narrow, in
21 some places two-lane, roads in which the trucks would
22 have to drive on their way to 495 are not equipped to
23 handle the proposed levels of traffic.

169-70-GD,
KD

1 We are concerned about increases in
2 emissions, safety to pedestrians, especially in school
3 zones, and traffic delays, especially around Sibley
4 Hospital.

5 We believe that these issues need to be
6 evaluated and that all of the communities along the
7 trucking routes need to be informed and brought into the
8 process. And our state representatives are behind us in
9 this, specifically Delegate Bill Bronrott is particularly
10 interested in the pedestrian safety issues.

11 We hope that you will restart the process
12 so that we can find a solution that best protects the
13 environment and our communities. Thank you.

14 MS. ORTIZ: Thank you.

15 Next we have who has time
16 being ceded by Is that correct? Can I
17 have her -- Thank you.

18 . Thank you.

19 My name is . I am a resident
20 at in Brookmont and a neighbor of the
21 Dalecarlia water treatment plant.

22 Despite being a neighbor, I first became
23 away of the proposed dewatering facility last fall.

169-71-GF,
BI

169-72-NC,
NG

1 Since that time I've been working with concerned
2 neighbors to learn more about the Corps proposal to
3 understand it and to help evaluate it. The process has
4 been frustrating and at odds with both the spirit and the
5 letter of NEPA requirements.

6 Although the Corps has been quietly
7 working on their proposal for years, no effort was made
8 to seriously consult with and engage with affected
9 neighbors until the fall of 2004. The Corps contends
10 that information about the project was posted in the
11 Federal Register. I don't know about other attendees,
12 but the Federal Register is not on my list of regular
13 reading.

14 More importantly, NEPA requires a more
15 serious effort to communicate with those affected by
16 proposed projects. Instead of openly sharing information
17 with concerned neighbors, the Corps forced us to use

18 Freedom of Information Act requests to obtain the
19 information we needed and, in fact, has resisted and
20 refused to comply with relevant and reasonable components
21 of that request. Now the Corps refuses to extend the
22 process for review and comment on the four volumes
23 comprising the draft environmental impact statement.

169-73-NC,
ND

169-74-MB,
FF

1 Despite having little time to respond to
2 the Corps' proposals, concerned neighbors have responded
3 with a number of alternatives that would more responsibly
4 address the issue of solid residuals or sludge disposal.

5 The most significant of these proposals involve piping
6 residuals to a more appropriately located dewatering
7 facility. The Corps rejected these alternatives out of
8 hand and did not seriously explore their technical or
9 economic feasibility as required both by the NEPA process
10 and by common sense.

11 Failure to communicate continues. The
12 Corps proposal calls for an extensive and permanent
13 process of trucking of waste through residential
14 neighborhoods. What efforts has the Corps made to notify
15 and consult with the residents of the neighborhoods to be
16 affected by this trucking?

17 The summary descriptions of the project
18 vastly understate the potential impact of trucking. The
19 Corps talks in terms of eight trucks daily. This is a
20 distortion on many levels. First, the eight-truck
21 estimate assumes the use of 20-ton dump trucks. In fact,
22 traveling on residential streets will mostly likely
23 require the use of 10-ton dump trucks. That raises the

1 number of truck trips to 16.

2 Secondly, the Corps estimate only
3 considered one-way trips and doesn't include the
4 necessity of getting to the plant, as well as the trips
5 away from it. Counting both trips raises the number of
6 trips to 32 truck trips per day.

7 Most importantly, the estimate is based on
8 an average. And the Corps well knows, on most days the
9 Potomac River runs clear with relatively little solid
10 matter being removed in the water treatment process. On
11 the relatively few days of high water, the river is
12 turbid, full of silt, and results in large amounts of
13 solids being removed. Days with high water and high
14 turbidity are estimated to require 132 trips per day, or
15 more than one truck every 15 minutes across a 24-hour
16 period.

17 The Corps' proposal fails to estimate or
18 underestimates the environmental impact as well as the
19 operational costs and the economic impact of the long-
20 term trucking of waste and has failed to engage with
21 effective neighbors to openly discuss these issues and
22 explore reasonable alternatives.

23 Thank you.

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169-78-NC,
GI, GA

1 MS. ORTIZ: Thank you. Next I have is
2 . Is that person here? She's not here? Okay.
3 Her time will be forfeited.

4 And then I have .
5 : Thank you. I'm from
6 Westmoreland Hills and my questions are related to the
7 proposed site location.

8 For the proposed site near Sibley
9 Hospital, how will the hours of operation, noise, light,
10 and odor impact patients and visitors?

11 The DEIS describes this site and its
12 proximity to Sibley as making this a commercial
13 industrial area. Aren't these two uses incompatible?
14 Does Sibley Hospital constitute an industrial site?

15 The DEIS also states that the Corps will
16 be using a cleared site at this location. When was this
17 site cleared? For what reason? Did the Corps have
18 permission to clear-cut the trees?

19 The report states that the administration
20 building handling the weapons clean up will be relocated
21 before construction of the dewatering facility can begin.
22 What happens to the weapons clean up then? Does the
23 Corps move that further into the woods, cutting more

169-79-BB,
BC, BF,
BG, BI

169-80-BB,
BH

169-81-FA

469-82-FB

1 trees and clearing more land? Don't these two projects
2 have incompatible uses? Doesn't this also put the site
3 outside the timetable in the compliance agreement and,
4 thus, require that it should have been screened out?

5 In volume one, the DEIS refers to
6 encountering an underground concrete building that
7 contains an oily material. Shouldn't the Corps know what
8 this building is, how long it is, and what the oily
9 substance is before deciding that this site, or something
10 near it, is the correct site?

169-83-BB

11 In case you revisit the other proposed
12 site which borders the Capital Crescent Trail, I would
13 note that this is one of the most heavily used
14 recreational trails in the metro area. What will be the
15 noise and odor impact on the trail.

169-84-NB

16 The DEIS report states that the dewatering
17 facility is not expected to alter or influence
18 neighboring land uses and, therefore, has no significant
19 long-term direct adverse impacts. Can an 80-foot high
20 building that is 258 feet long when the four gravity
21 thickeners are included be insignificant to the
22 neighborhood? This statement throws into question the
23 nature of the analysis in the DEIS.

1 This community has been forced to spend
2 over \$70,000 just to seek a true voice. This community
3 can also resolve this issue more creatively than what has
4 been offered if you will allow us to work with you on a
5 full disclosure basis. Thank you.

6 MS. ORTIZ: The next registrants that I
7 have are , , and

8
9 And, again, this is the final reminder
10 that at 8:30 the list will close for public comment.

11 has time being yielded by
12 . Are you present? Can I get a verbal
13 acknowledgment?

14 (Acknowledgment received.)

15 MS. ORTIZ: Thank you.

16 MS. ORTIZ: .

17 : Thank you, .

18 Others have -- oh.

19 I'm ; in the
20 Brookmont neighborhood of Bethesda.

21 Others have testified about deficiencies
22 in the process --

23 It must not -- it must not be working.

1 Is it working?

2 MS. ORTIZ: A little closer. Can you hold
3 it?

4 : Can you hear me now? Sorry
5 about that.

6 Can I start over?

7 MS. ORTIZ: Yes.

8 : Thank you very much.

9 Others have testified about deficiencies
10 in the process used by the Corps thus far. I'll focus my
11 remarks on deficiencies in the draft environmental impact
12 statement.

13 Like the engineering feasibility statement
14 that preceded it, the DEIS is deficient on many counts.
15 I'll provide examples.

16 As a program manager myself, I find it
17 remarkable that the Corps can accept and indeed make
18 public documents of such low quality and high, as you've
19 seen, pagination.

20 The DEIS fails to consider alternatives to
21 the chemical alum used to precipitate sediments from the
22 water supply. For example, low pressure, ultra
23 filtrations, membranes used in other water treatment

169-86-OA

1 districts.

2 It fails to consider the recoverability of
3 the alum and it's potential reuse. It fails to consider

4 -- compare the environmental impacts of the proposed
5 alternatives to the environmental impacts of simply
6 continuing to discharge the residuals into the river.

7 This is the no action alternative referred to earlier and
8 the EPA needs this comparison.

9 It fails to consider alternative
10 strategies for withdrawal from and residual discharge
11 into the river such as during times of high and low
12 turbidity thereby potentially lowering residuals volumes.

13 It fails to consider the potential value
14 of the residuals themselves, for example for their
15 industrial use and by doing so enforces a landfill
16 solution.

17 It fails to evaluate the lifetime
18 environmental cost of the proposed alternatives and
19 instead chooses to evaluate just a 20-year period or in
20 some cases just an 11-year period.

21 It fails to consider all toxic emissions
22 from dump trucks, including benzene, butadiene,
23 formaldehyde, acrolein, acrylaldehyde, and diesel

169-87-NE

169-88-LA,
JA

169-89-CA

169-90-AB

169-91-KD

1 particulates.

2 It fails to consider increased cancer
3 risks from air pollution. As you know, diesel exhaust is
4 a known carcinogen. This is not covered in the DEIS.

5 It fails to adequately treat the ozone
6 emission problem. And since we suffer, all of us, from
7 ozone pollution every year, let me be specific. Even
8 though Washington is in severe non-attainment for ozone,
9 the DEIS bases its ozone estimate on minimum average
10 trucking per day, that is five trucks per day, not even
11 the eight we mentioned earlier, and, get this, one mile
12 per trip. The last time I counted, there was more than a
13 mile from Sibley to Westmoreland Circle and I was sort of
14 doubting that they would dump the residuals there.

15 That aside, Washington is in severe non-
16 attainment for Ozone with respect to one and eight-hour
17 standards, not weekly averages. Will the trucks not run
18 when ozone is high? This is addressed in the DEIS which
19 instead minimizes the ozone calculations.

20 The DEIS fails to consider non-diesel
21 alternatives for trucking. Natural gas trucks exist and
22 they are already used in other metropolitan districts.

23 It fails to consider the asthma health

169-92-GF

169-93-GB

1 risks from trucking or, indeed, the health impact of all
2 trucking-related air toxics on the adjacent community,
3 not to mention the environmental and health hazards
4 during the three-year construction period.

5 The DEIS lists dust as a significant
6 impact of the proposed solution and offers typical
7 measures to reduce it at the facility. But the Corps
8 earlier reports indicate that if bell presses are used
9 for dewatering, as the Corps now proposes, the hauling
10 trucks will have to be specially outfitted to minimize
11 seepage. This is an admission of expected seepage and
12 thereby points out the inadequacy of the mitigation
13 strategy.

14 It also fails to propose the modeling of
15 either average or worse case air pollution. Modeling is
16 needed in order to substantiate the Corps estimates.

17 Beyond its failures, the DEIS is also
18 deceptive. It minimizes calculated values by assuming
19 that average values are representative of the
20 environmental impacts, for example by using average
21 turbidity.

22 For those pollutants where dose is an
23 important factor in determining the health effects if

169-94-KD

169-95-GF

1 actually the worse case that we are concerned about, the
2 case, for example, as you heard, more than 100 trucks a
3 day.

4 In stark contrast, the piping solutions
5 that have been proposed by the community minimize air
6 pollution. They minimize safety issues, minimize wear
7 and tear on her streets and, I believe, minimize the life
8 cycle, the long-term costs, both economic and
9 environmentally.

10 Moreover, the DEIS, Mr. Jacobus, does not
11 meet your own intent. You said your intents were to meet
12 your permit requirements and, if I may quote, to properly
13 and completely evaluate the environmental impacts. This
14 document needs to go back to the drawing table. You need
15 to produce an impact statement that fully addresses all
16 of the issues, address them comprehensively, and without
17 minimizing them.

18 Finally, when putting together a long
19 lifetime industrial facility in a residential
20 neighborhood, it's simply ethical to go beyond doing just
21 the minimum to satisfy the letter of the law. It may, in
22 fact, be necessary to spend a bit more to implement the
23 most environmentally sound solution, the safest solution,

169-96-DA

169-97-NG

1 the long-term solution. That is the solution that we
2 neighbors seek. It is not what we have been presented.

3 MS. ORTIZ: Thank you. Next on the
4 speaker's list I have . No? That time will
5 be forfeited.

6 Following, I believe, .
7 : My name is and I
8 live on in Westmoreland Hills.

9 I feel a little bit like Alice in
10 Wonderland today because everything seems upside down.
11 We all believe in clean water and we support the Clean

12 Water Act. But it sounds like it is being traded for
13 poor air quality. We're going to have diesel trucks that
14 are known carcinogens put on our streets. And this is
15 all in a non-attainment area. gave a very good
16 sound presentation about the air quality problems.

17 There are three things that we need for
18 good health and one is good water, good air, and the
19 third one is good food. And now they're talking about
20 dumping the toxic sludge into farm land which will
21 probably come back to us.

22 The important thing that I want to make
23 tonight is as far as the trucking, there is -- in

169-100-GG,
GF

1 Maryland there is no inspection required for trucks with
2 regard to air quality or safety. We drive automobiles.
3 They're inspected every two years. But trucks are not
4 inspected. And you only need to take a look to see that
5 they are not meeting the air quality standards. I don't
6 think we should be trading one factor and losing good air
7 quality and food quality.

8 Thank you.

9 MS. ORTIZ: Next we have .

10 : My name is .. I
11 live at in Bethesda.

12 One of the problems of coming almost last
13 is that everything has already been said. But I am here
14 to represent the Springfield Civic Association. The
15 association in the Springfield area has some 650 homes.
16 It borders on Massachusetts Avenue on the north, River
17 Road -- rather, on the south, River Road on the north,
18 West Bard Avenue on the east, and Cromwell Drive on the
19 west.

20 I am here to address the community's
21 concerns regarding the transportation aspects of the
22 project. The Springfield Civic Association opposes the
23 recommendations of the DEIS on the transportation of the

1 water treatment residuals.

2 We strongly oppose the use of all trucks
3 in this project in any direction, north, south, east, or
4 west. We favor alternative C, the thickening and piping
5 of the residuals to the Blue Plains AWWTP or some other
6 piping solution.

7 The DEIS recommends alternative E, the
8 dewatering at the processing facility and disposal by
9 trucking.

10 The Springfield neighborhood will be
11 directly affected by two routes, routes B and C --
12 directly affected by routes B and C of the proposed seven
13 routes and directly affected by route A. We oppose all
14 three of these northern routes.

15 Montgomery County taxpayers, including
16 Springfield residents, are not beneficiaries and should
17 not bear the cost or the impact of this project.

18 If it is decided that trucking will be
19 carried out, then multiple routes, both north and south,
20 should be used to minimize the impact on any single
21 route.

22 The DEIS estimates that there would be
23 eight trips a day and higher numbers of trips during peak

169-101-IA,
DC

169-102-GD

169-103-AD

169-104-GD

169-105-GE

1 productions periods from the facility for final disposal,
2 one-way trips. In fact, one must double these numbers to
3 reflect the fact that they are round trips. The DEIS
4 addresses the outbound trips, but not the inbound trips.

169-106-GD,
GC

5 The DEIS is virtually silent on the wear
6 and tear of truck traffic on the proposed routes. It
7 does not adequately address the noise and air pollution
8 aspects of the trucking envisioned in this project. It
9 does not recommend mitigative actions to deal with truck
10 noise.

169-107-GB,
GF

11 The DEIS recognizes the added impact
12 trucking will have on air pollution, suggests a remedy of
13 utilizing new trucks that run on alternative fuels, but
14 then dismisses that solution due to market factors.

169-108-DA

15 In conclusion, the Springfield Civic
16 Association urges the U.S. Army Corps of Engineers to
17 address these concerns of the community and to seek a
18 piping solution that will not impact our streets with
19 truck traffic.

20 Thank you.

21 MS. ORTIZ: Thank you.

22 The next four registrants that we have,

23 , , , and

1 . If you would come up, please, and have a seat
2 up here in the front in front of the podium.

3 Okay. We're also going to have
4 , please.

5 And we will begin with Thank
6 you.

7 : Good evening. I'm

8 . I live at in Brookmont. I'm an
9 Olympic canoeist and I spend a lot of time on the river,
10 so I'm a big believer in clean water.

11 I do get to experience the different kinds
12 of river flow, though, and we see a lot of mud coming
13 down the river. A lot of the time we see clear water
14 like we see right now quite a bit.

15 The Army Corps really can't predict what
16 is going to happen on any given day, month, or year. We
17 see these averages. But I doubt that they have much
18 storage capacity for their sludge and residuals. So
19 whatever happens down the river has to be taken away as
20 it comes in.

21 Whatever truck trips are necessary is
22 going to be -- and the numbers are being talked about
23 tonight, it could be even higher than 132. It's just not

169-109-GE

1 right.

2 I would like to see some alternatives for
3 settling the sediment somewhere between Great Falls and
4 the existing reservoir. There is a Naval ship testing
5 facility at Carder Rock which has quite a bit of land.
6 It appears to me to be available there. And over the
7 next 10 or 20 years I would think that might become a
8 possibility.

9 The water is taken in out of the river at
10 Great Falls. And the most elegant solution would be to
11 find a way to avoid taking the sediment along with the
12 water and pipe sediment-free water all the way to the
13 reservoir. It just strikes me, as said
14 earlier this evening, it's quite an inelegant solution
15 for an Army Corps that has devised such a wonderful
16 system for bringing the water to our nation's capital.
17 And I think we're capable of much better than what has
18 been proposed in the DEIS.

19 I think, you know, everything has been
20 expressed tonight. All of the concerns about pollution,
21 concerns about clean air. You know, even President Bush
22 recently has spoken in favor of alternative fuels. And,
23 if that kind of a shift can happen, then I think over the

169-110-QD

169-110a-KD

1 next 10 or 20 years there are going to be shifts that
2 occur where this kind of a plan will not be looked at as
3 particularly cutting edge.

4 We can do much better here. We urge the
5 Army Corps to go back and revisit this plan.

6 They have forced us into accepting this
7 with very little time to look it over.

8 MS. ORTIZ: Your time is up.

9 : Thank you for the opportunity
10 to speak this evening.

11 MS. ORTIZ: Next I have speaking
12 and I have time being yielded from

13
14 That's . He's after you.

15 Are you yielding time?

16 (Acknowledgment received.)

17 MS. ORTIZ: Thank you.

18 : My name is . I
19 live on in the Palisades.

20 Mr. Jacobus, please withdraw the draft
21 environmental impact statement and start again. Please
22 release all documents to the public that are related to
23 the proposal. And please reopen the entire NEPA process

1 and work with EPA to extend the deadline.

2 It is important for the community to be
3 more involved in the process and to be able to review the
4 documents that are -- that pertain to the project.

5 Reasonable alternatives are possible. Twenty-first
6 century alternatives that are more appropriate than
7 trucking. A better plan is possible, one that the

8 nation's capital will be proud of an one that will serve
9 as a model for other cities around the country.

10 The very talented engineers at Dalecarlia
11 working together with the concerned neighbors can find a
12 better way. Thank you very much.

13 MS. ORTIZ: We have the remaining two
14 minutes added to for a total of five
15 minutes.

16 : My name is .
17 I live in in Wesley Heights.

18 I believe I've attended most of, if not
19 all of, the public meetings on the proposed residual
20 treatment alternatives.

21 I was a little bit concerned because no
22 information was presented on the alternatives at the
23 first two public meetings.

169-113-GB

1 I the third meeting I learned that the
2 Washington Aqueduct proposed a monofill on the Dalecarlia
3 property bet the Dalecarlia Reservoir and Dalecarlia
4 Parkway. This was of particular interest to me as a
5 member of the Spring Valley Restoration Advisory Board.
6 This area happens to be the site of several potential
7 World War I chemical munitions burial places and several
8 impact areas onto which chemical munitions were fired.

9 In 1986, two Civil War relic hunters
10 removed approximately 100 75 millimeter shells from this
11 area. Some of these chemical munitions have not been
12 accounted for.

13 In 2003, EPA conducted limited groundwater
14 sampling and detected perchlorate in the groundwater near
15 the reservoir. Perchlorate was used in approximately a
16 dozen compounds tested at the American University
17 Experimental Station.

18 The head of the Washington Aqueduct has
19 reassured us several occasions that groundwater does not
20 enter the reservoir.

21 Last year at a Restoration Advisory Board
22 meeting I asked if they had any studies to back up this
23 claim. They did not.

1 At last weeks Restoration Advisory Board
2 meeting we learned that groundwater -- excuse me, the
3 groundwater elevations in monitoring wells adjacent to
4 the reservoir is higher than the elevation of the
5 reservoir, suggesting that is likely that groundwater
6 does, in fact, enter the reservoir potentially
7 contaminated groundwater.

8 I recently learned that the alternative
9 site A for the dewatering facility is a site of a new
10 area of interest. A third set of circular trenches that
11 may have been used for World War I chemical testing.

12 Have the alternative sites been thoroughly
13 researched by the Washington Aqueduct, the Army Corps of
14 Engineers, and Spring Valley Team? What are the
15 environmental and economic impacts of building on
16 contaminated sites?

17 At a public meeting at Sibley Hospital, I
18 asked what was the chemical composition of the residual
19 sediments. Except for an answer of approximately one-
20 third aluminum sulphate I never received a specific
21 answer.

22 At a RAB meeting last year I asked if any
23 AUES chemicals had been detected at the Washington

1 Aqueduct. Mr. Jacobus didn't appear to know what an AUES
2 chemical was.

3 Last week I learned that the AUES chemical
4 list includes approximately 800 chemical compounds. The
5 Army Corps of Engineers has never made this list public.

169-115-KA

6 Have any of these AUES chemicals been
7 detected at the Washington Aqueduct either in the raw
8 water, the treated water, the discharge, or the residual
9 sediments?

169-116-EB

10 Can these residuals be processed to remove
11 toxic or harmful compounds and create a useful product?

12 Without answers to these critical
13 questions, the Washington Aqueduct and the Army Corps of
14 Engineers lose their credibility.

15 There are better ways to solve this
16 problem. Thank you.

17 MS. ORTIZ: Thank you. Next we have :

18 .
19 : Good evening and thank you.

20 My name is . I am a resident of Washington,
21 D.C. I'm an environmental attorney here in D.C., but
22 more importantly I live on MacArthur Boulevard and that's
23 the context in which I would like to offer my comments.

1 First, I want to voice my objections to
2 the flawed public outreach associated with this process
3 so far. I have yet to see any public outreach on your
4 part that specifically addresses the trucking solution
5 that is being proposed, which for most of the folks in
6 the area will be the most significant physical and
7 environmental impact in terms of what the Corps is
8 proposing.

9 I have also yet to see a real explanation
10 of why we're trying to work under what appears to be an
11 artificial time line. There obviously has not been a
12 sincere effort by the Corps to go back to the EPA to say
13 we need a more artful solution than a rather low tech
14 solution such as trucking things through our
15 neighborhoods indefinitely.

16 Secondly, I think that the proposed
17 solution fails to take full account of the severe air
18 pollution problem facing the District and our
19 neighborhoods. That problem is not going to improve any
20 time soon and certainly the Corps approach to this seems
21 to ignore that aspect and that impact entirely.

22 I think others have commented on the
23 procedural and substantive challenges of what's currently

169-117-NC

169-118-FB,
NB

169-119-GF

1 on the table, but I just want to underscore some of the
2 personal impacts that I see arising from what is being
3 proposed.

4 I live on _____, like many
5 of you, love the neighborhood. And the thought of
6 whether it's 66, 132 -- maybe the population will
7 increase and we'll have to go up to 160, who knows, but
8 an indefinite number of 10 and 20-ton trucks driving past
9 my home. Many of us park on MacArthur Boulevard. The
10 distance between you and I is much greater than the
11 distance that will be passing between me and a 20-ton
12 truck should this project go forward. Those of us
13 walking our dogs, trying to cross the street, we've
14 already been battling, successfully I might add with the
15 help of the District, some of the traffic problems along
16 MacArthur Boulevard. This would be a huge step backward
17 in terms of the public safety, in terms of pollution.

18 Those of us along MacArthur Boulevard, we
19 don't talk about it much, but you occasionally have to
20 wash down the front of your house because of the
21 automotive pollution that will flow from MacArthur
22 Boulevard.

23 Those are physical impacts. Those are

169-120-GD,
GE, GF

169-121-KD,
GG, GK

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real public health and safety impacts. I won't even get into the noise of the trucks rumbling through at various hours. The hours have not been fully disclosed.

All of that is a long way of saying there are physical tangible impacts which have been registered as insignificant or not significant in the documentation so far. I would just like the record to reflect that they are physical. They are real. They manifest themselves on a daily basis. And, certainly, with what you're proposing the impacts would be much greater.

MS. ORTIZ: Thank you.

The next four registrants that I have are , with a notation that the time has been forfeited, , also with a notation that time has been forfeited. And the final registrant I have for this .

MS. ORTIZ: Are you ?

: No. I'm , but I understand is going to cede her time to me.

MS. ORTIZ: We're going to begin with and then you.

: Okay.

1 MS. ORTIZ: Thank you.
2 : Dr. . I live
3 at .

4 I have been listening to the testimony.
5 I'm so proud of my neighborhood. And I can't add
6 anything to it other than just to say how I feel. And
7 how I feel is I'm angry as hell at you people for coming
8 into my neighborhood and proposing this monstrosity.
9 This is our homes. You don't have to tolerate what we
10 have to tolerate. You're destroying our environment.
11 This is where we live.

12 That's all I've got to say.

13 MS. ORTIZ: Again, and
14 were both forfeited. Okay.

15 And, finally, I have who
16 is yielding her time to

17 : Correct. Thank you.

18 MS. ORTIZ: Thank you.

19 : I wanted to get back to the
20 trucking discussion and the revised numbers. When we
21 start looking at numbers like 66 --

22 MS. ORTIZ: Wait a minute, ma'am. I'm
23 sorry. Just so we can put the time up. Just three

1 minutes. Sorry about that.

2 : Okay.

3 When we start looking at numbers like 66
4 trucks or 132 trucks, we begin to call into question
5 other estimates that have been made about the noise
6 levels, the air quality, and the health and well being,
7 not to mention the traffic congestion on our roads.

8 Sixty-six and a hundred and thirty-two
9 trucks do add considerably more. And I have a question
10 as to whether or not when we look at those numbers on our
11 roads whether we still have no significant impact.

12 I would like to now talk a little bit
13 about the hauling routes. There eight routes and they
14 are labeled A, B, C, D, E, and F and G, H.

15 And I first want to talk about route C.
16 This is route that heads north on Massachusetts Avenue to
17 Little Falls Parkway. It fails to consider the volume of
18 pedestrian traffic from the many schools in that area,
19 including Westland, Westbrook, and Little Flower, and the
20 large population that uses buses both to and from that
21 area, and its proximity to Little Falls Library and the
22 fact that the intersection of Massachusetts Avenue and
23 Little Falls Parkway is also where pedestrians using the

169-123-GC,
GE, GF, KD

169-124-GD

1 Little Falls Creek trail cross the street. So I think
2 when you evaluate C you want to add that there is
3 considerable amount of pedestrian activity in that area.

4 Route B is the River Road route and it
5 requires taking Western Avenue to River Road and making a
6 left-hand turn. I don't know anyone who can get through
7 that intersection in less than two cycles of a traffic
8 light.

9 Route A is the Wisconsin Avenue route.
10 And, again, you know, given the amount of controversy
11 that arises over all of the building that's going on up
12 at Friendship Heights, it's inconceivable to me that this
13 would be a route for the trucks.

14 All of the routes heading south on
15 Massachusetts Avenue are major community routes that are
16 already inundated.

17 And I can't speak to the Georgetown Pike
18 or the -- what's the other -- Dolly Madison routes in

19 Virginia. But I doubt that there is anybody here from
20 Virginia who can, which gets us to the procedural issue
21 of whether or not people who are living and the school
22 communities along those different routes and the people
23 in Virginia have been informed of the impacts or been

169-125-NC

1 invited to at least become aware of the -- of these
2 proposals, to any of these hearings.

3 And I think that's all I wanted to say on
4 that. Yes, I think that there is a failure to really
5 reach out and inform all of the different constitutes who
6 would be affected by these trucking routes. It's an
7 untenable solution.

8 And I really wish that you would go back
9 and completely ditch this DEIS, go back to the beginning
10 and give some serious consideration to the many, many
11 piping alternatives that we put before you by the public.
12 Thank you.

13 MS. ORTIZ: Thank you.

14 Ladies and gentlemen, that concludes the
15 list of people who have registered to give public
16 testimony. You will have until June 6th to provide
17 written comments. Thank you for attending tonight's
18 hearing. We appreciate the interest you have shown in
19 this project. The hearing is now adjourned.

20 (Whereupon, at 9:00 p.m. the meeting was
21 concluded.)
22
23

169-126-NG,
DA

1 CERTIFICATE OF REPORTER

2 I, Linda M. Kia, the Stenomask Reporter
3 who was duly sworn to well and truly report the foregoing
4 proceedings, do hereby certify that they are true and
5 correct to the best of my knowledge and ability; and that
6 I have no interest in said proceedings, financial or
7 otherwise, nor through relationship with any of the
8 parties in interest or their counsel.

9 IN WITNESS WHEREOF, I have hereunto set my
10 hand this 2nd day of June, 2005.

11 Linda M. Kia

12 Linda M. Kia

13 Certified Verbatim Reporter
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**CONCERNED NEIGHBORS
Bethesda, MD
Washington, D.C.**

July 5, 2005

VIA FEDERAL EXPRESS

Mr. Thomas P. Jacobus
General Manager
Washington Aqueduct
U.S. Army Corps of Engineers, Baltimore District
5900 MacArthur Boulevard, N.W.
Washington, D.C. 20016-2514

Re: Fatal Flaws in the Corps' Draft Environmental Impact Statement ("DEIS") and Reasons Why the NEPA Process Must be Restarted

Dear Mr. Jacobus:

The Army Corps of Engineers' ("Corps") analysis of a limited range of alternatives to its current practice of disposing of water treatment residuals into the Potomac River pursuant to the National Environmental Policy Act ("NEPA") is fatally flawed and must be restarted. The Draft Environmental Impact Statement ("DEIS") that the Corps released on April 14, 2005 contains virtually no analysis of the environmental impacts of the Corps' preferred alternative – building an 80 foot dewatering facility on federal land near Sibley Hospital, and sending up to 132 trucks a day along one limited trucking route into Maryland.¹ The environmental impacts of this alternative are profound in a region that is already suffering severe non-attainment under current Clean Air Act ("CAA") standards and serious traffic congestion. The DEIS also seriously mischaracterizes the true cost of this "preferred" alternative by failing to include the costs of operating these trucks indefinitely. Had these costs been included, this option would have failed the Corps' own economic screening criteria, as this option would have cost far more than any of the other options under consideration. These failures, together with the failures pointed out in our prior comments submitted on October 5, 2004, November 15, 2004, February 14, 2005, and March 30, 2005 (copies of which are attached hereto as Exhibit 1), demonstrate why the Corps must restart the NEPA process on a clean slate and consider other reasonable alternatives, particularly piping of the residuals to alternative locations away from residential neighborhoods.

170-1-NG

170-2-GF

170-3-GI

170-4-NG

170-5-BB,
DA

¹ The DEIS evaluates two alternatives involving dewatering and trucking in residential areas. U.S. Army Corps of Engineers, Baltimore District, *Draft Environmental Impact Statement (DEIS) for a Proposed Water Treatment Residuals Management Process for the Washington Aqueduct*, Volume 1, at ES-4 and ES-5 (Apr. 2005). The first alternative, which was selected as the "preferred" alternative, sites the dewatering plant next to Sibley Hospital. The second alternative sited the plant near the Brookmont Neighborhood. Although these comments focus on the "preferred" alternative, Concerned Neighbors opposes the construction of a dewatering plant in either location.

These comments are being submitted on behalf of Concerned Neighbors, a coalition of citizen groups committed to a sensible and sustainable solution for sludge disposal by the Corps. It is our mission to assure that any changes to the present water treatment facilities will provide a permanent solution while not degrading the existing environment or impinging on the established residential character of the surrounding neighborhoods. Concerned Neighbors is also supported by over 30 other citizen groups and town governments in the Montgomery County/Northwest Washington community.²

The entire NEPA process has been flawed, starting with the Corps' failure to involve the affected communities when it started the scoping process for this project in January of 2004, its establishment of an unduly narrow "purpose and need" for the project,³ and its application of unduly narrow screening criteria⁴ during its evaluation of "reasonable alternatives". The Corps pre-selected an outcome more than 10 years ago and crafted the current NEPA process to fit that outcome. In this regard, the NEPA process has been a complete sham. The Corps has only pretended to look at a limited range of alternatives, knowing that the identified "alternatives" were not feasible. Instead, all of the Corps' efforts have been directed at justifying a decision that it first reached over 10 years ago⁵ -- constructing an industrial dewatering facility in a residential neighborhood and trucking the water treatment residuals through the surrounding neighborhoods. In its zeal to justify this pre-determined conclusion, the Corps has failed to consider the true environmental impacts and costs of its "preferred" alternative.

170-6-ND

The DEIS contains no detailed analysis of the environmental impacts of the Corps' "preferred" alternative. In fact, the likely environmental impact of the Corps' preferred alternative is buried in the fine print of this lengthy report. A close reading of the hundreds of pages of the DEIS shows that the Corps would be sending *up to 132 trucks a day along one preferred trucking*

170-7-QB

² With the help of the Greater Bethesda-Chevy Chase Coalition, a non-profit coalition dedicated to the preservation and protection of existing parkland and open spaces, groups including Cabin John Citizens Association, Chevy Chase Hills Civic Association, Chevy Chase Valley Civic Association, Coalition for the Capital Crescent Trail, East Bethesda Citizens Association, Forest Glen Civic Association, Forest Heights Village, The Hamlet Civic Association, Cameron House Civic Association, Hamlet Place Owners, Kenwood Citizens Associations, Kenwood Condominium, Kenwood Forest Condominium Association, Kenwood House, Park Sutton Condominium Association, Riviera Condominium, Rollingwood Citizens Association, Springfield Civic Association, Sumner Citizens Association, Town of Chevy Chase, Town of Somerset, Westbard Mews Condominium, Westwood Mews Association, Elm Street, Oakridge, and Lynn Civic Association, support our efforts.

³ The true "purpose and need" for the project is to find alternative disposal options to the current practice of disposing water treatment residuals into the Potomac River, *not* to comply with its National Pollutant Discharge Elimination System ("NPDES") permit or the Federal Facilities Compliance Agreement ("FFCA").

⁴ The screening criteria used by the Corps include meeting the schedule contained in the FFCA; preserving the reliability and redundancy of the system; using proven technologies; complying with the NPDES permit; considering economic effects upon ratepayers; avoiding undue impairment of jurisdictional wetlands; conforming with the Endangered Species Act; avoiding alteration of important cultural resources; and complying with existing plans and institutional considerations. 1 DEIS 2-2 to 2-3.

⁵ See Department of the Army Baltimore District, Corps of Engineers, Washington Aqueduct, *Dalecarlia Water Treatment Plant and Georgetown Reservoir Residuals Disposal Facilities Residuals Disposal Study* (Sept. 1995).

route to dispose of the water treatment residuals.⁶ The Corps has consistently misrepresented the likely impact of the preferred alternative by claiming that only 8 trucks "on average" would be needed. However, these numbers fail to consider the fact that (i) smaller trucks may be used, and (ii) the trucks will need to return to the dewatering plant. The DEIS improperly relies on "average" conditions and fails to consider the substantially increased impacts that occur during "wet weather". In addition, the Corps seriously underestimates the cost of operating this volume of trucks in its assessment of the "cost" of the trucking option. The annual operating costs of the trucks are woefully understated in the DEIS, as demonstrated by the Corps' own outdated analysis from 10 years ago.⁷

170-8-GI

How can the Corps conceivably claim that 132 trucks a day will have *no environmental impact* on a region that is already classified as being in *severe non-attainment* under the CAA? What analysis has the Corps done of the increase in the number of asthma or cancer cases resulting from this volume of diesel fuel emissions daily? What analysis has the Corps done of the safety implications of sending 132 trucks a day along one major route surrounded by at least 10 public and private schools? What analysis has the Corps done of the noise that will be generated by 132 trucks going up the steep hills next to Sibley Hospital? What analysis has the Corps done of the combined health and safety impacts of having trucks enter the dewatering facility at the same time that Sibley Hospital is engaged in a major expansion of its facility? *The answer is none.*

170-9-GE,
GF, GG,
BI, GC,
GA, KD

For all of these reasons, the Corps must restart the NEPA process and engage in a meaningful discussion with the community and local regulators about *reasonable* alternatives to its current practice of disposing the residuals into the Potomac River. The Corps must take a "hard look" at other alternatives, particularly the piping options that have been proposed by the community.

170-10-NG

⁶ See Table 3-6, buried in Volume 4 of the DEIS. The numbers in this table are based upon larger trucks going one way only. In wet weather, it is clear that up to 132 trucks per day (33 x 2 (assuming the Corps will generally use smaller 11 cubic yards/trucks) x 2 (to account for the fact that the trucks will need to return to the plant) = 132 trucks/day). In fact, based upon the Corps' sample calculations, contained in Appendix E to the DEIS, the "worst case" number is likely to be even higher, because the maximum wet year alum dose is 65 mg/l, rather than the annual average alum dose of 45 mg/l. It is also clear from the discussion in Section 3.10.5, Proposed Residuals Haul Routes (1 DEIS 3-48 to 3-55) that the Corps has ruled out any routes other than Dalecarlia to Western to River Road or Massachusetts Avenue, thereby placing the entire burden of trucking upon at best one or two limited routes in Maryland. The Montgomery County Planning Council has already pointed out that trucks cannot use Little Falls Parkway to travel from Massachusetts Avenue onto River Road, thereby placing the entire burden of the trucks on one concentrated route. Recognizing what a burden this would place on its roads, Montgomery County has requested that the Corps reconsider piping of the residuals to an industrial location, develop a formal traffic dispersal plan, and establish a plan for recovering the cost of the increased wear and tear on Montgomery County roads. See letter from Montgomery County Council Chairman Derick P. Berlage to Thomas P. Jacobus dated June 23, 2005 and attached hereto as Exhibit 2.

⁷ In 1995, the Corps estimated the annual trucking cost to be anywhere between \$460,011 and \$3,060,258 per year depending on the distance to the final disposal site. See *1995 Residuals Disposal Study* at B-11 and B-18. Due to the inflationary nature of the cost of items such as driver and mechanics salaries, fuel, oil, repairs and insurance, these estimates are sorely outdated.

I. The Corps' "Preferred" Alternative Fails the Corps' Own Screening Criteria from an Environmental Impact and Cost Perspective

A. The Corps Failed to Consider the True Environmental, Health and Safety Impacts of its Preferred Alternative 170-11-QB

Section 102(C) of NEPA provides that "...all [federal] agencies shall...include in every recommendation or report on proposals for legislation and other major Federal actions significantly affecting the quality of the human environment, a detailed statement by the responsible official on – (i) the environmental impact of the proposed action, [and] (ii) any adverse environmental effects which cannot be avoided should the proposal be implemented...."⁸ The DEIS lacks a detailed analysis of the likely environmental, health and safety impacts of its preferred alternative – trucking. Among other things, the DEIS fails to address the likely direct and cumulative effects of the trucking option and fails to calculate the true cost of the trucking option.

1. The Corps Failed to Properly Analyze the "Direct" Effects or Impacts of its Preferred Alternative 170-12-QB

The CEQ regulations describe the types of effects or impacts that agencies are required to analyze in order to comply with NEPA. The CEQ regulations require the NEPA analysis to consider direct, indirect, and cumulative impacts or effects.⁹ Direct effects are caused by the action and occur at the same time and place.¹⁰

The Corps failed to consider and analyze the direct health, environmental, safety, and aesthetic impacts of the trucking alternative in the DEIS. The Corps' first error was its failure to analyze the "worst case" impacts of using so many trucks. A careful reading of the DEIS demonstrates that the Corps expects to need *up to 132 eleven-cubic-yard truck trips per day* during the wet season.¹¹ This amounts to over 13 trucks per hour on the primary trucking route given the intended hours of operation.¹² The DEIS fails to explain that the Washington, D.C. metropolitan area is currently in non-attainment under the CAA and that trucks are major sources of diesel emissions contributing to this non-attainment status. As demonstrated by the comments being filed simultaneously today by Environ on our behalf and attached hereto as Exhibit 3, diesel emissions are a known carcinogen and will have an impact on the number of local cancer and

170-13-QB,
GE, GF,
KD, GA

⁸ 42 U.S.C. § 4332(C)(i) and (ii).

⁹ "Effects include ecological, aesthetic, historical, cultural, economic, social, or health, whether direct, indirect, or cumulative." 40 C.F.R. § 1508.8.

¹⁰ 40 C.F.R. § 1508.8(a).

¹¹ See 4 DEIS 3-44 (tab. 3-6).

¹² The Corps' proposed haulage operations would occur generally between 6:00 a.m. and 4 p.m. 1 DEIS 3-48.

asthma cases.¹³ This volume of trucks on local roads will have a major direct adverse impact on regional air quality and the region's ability to come into attainment with current CAA standards.

The Corps has implied that the impacts from these trucks would be dispersed over several routes, but a careful reading of the DEIS demonstrates that this is not true. Instead, of the eight trucking routes analyzed in the DEIS, only two apparently survived the Corps' screening criteria.¹⁴ Of the two "surviving" routes -- Dalecarlia to Western to River, vs. Dalecarlia to Western to Massachusetts to Little Falls Parkway to River Road -- only the first remains as a viable option because trucks are not allowed on Little Falls Parkway. *In other words, the full impact of the trucking option would fall on a single trucking route and the neighborhoods adjoining that route.* The impact would not be dispersed, as the Corps has suggested in its September 28, 2004 presentation. The Corps has not analyzed the environmental impact of concentrating up to 132 trucks a day along a single trucking route, and for this reason alone, the DEIS should be rejected.¹⁵

170-14-GD

Of the eight hauling routes identified in the DEIS, the Corps eliminated two routes due to new security measures post September 11th; one for major high-volume intersections; two for operational constraints due to gradients and curves; and, one for "sensitive" land uses (*i.e.* streets near the U.S. Capitol).¹⁶ Similarly, the Corps deemed two routes using Arizona to Chain Bridge "not viable" in the *1995 Residuals Disposal Study* in its effort to find the single preferred route.¹⁷ The *1995 Residuals Disposal Study* also indicated that different routes posed problems such as tight turns for different types of trucks. In 1996, the Corps selected two different "most preferred" routes¹⁸ in an effort to eliminate all but one route. The Corps sought to use only one route because using all seven would be "more expensive and involve city traffic."¹⁹ Even the 15 attendees at the January 28, 2004 meeting recognized and commented on the need to "take into

¹³ See Exhibit 3 attached hereto.

¹⁴ The exact reason why the Corps has eliminated some of these routes, particularly those in Virginia, is unclear; the DEIS simply mentions "community opposition." If this were an adequate basis for eliminating trucking routes, all of the Maryland routes would be eliminated as well.

¹⁵ See Presentation from May 26, 2004 meeting at 28. The Corps has only recently provided any detailed information about how this daily average was determined. See June 26, 2005 memorandum from Glenn Palen, CH2MHill, to Tom Jacobus, Patty Gamby, and Mike Peterson (Exhibit 4 attached hereto). The *1995 Residuals Disposal Study* examined a range from 10 to 16 daily truck loads up to peak capacity requiring 19 to 32 truck loads (at 2-12).

¹⁶ See 1 DEIS 3-48 to 3-55.

¹⁷ See *1995 Residuals Disposal Study* § 2.3.

¹⁸ See Memorandum from William Colley to Victoria Binetti at 2 (June 10, 1996) (Attach. 14 to Comments Letter from Concerned Citizens to Corps (Mar. 30, 2005)).

¹⁹ See *id.*

consideration the environmental impact that trucking would have on the communities involved, their near neighbors."²⁰ This comment appears to have fallen on deaf ears.

The community has raised other serious issues associated with trucking, such as safety, damage to residential property, wear and tear on roads, odors, noise, hours of operation and visual impact,²¹ however, the Corps has either downplayed or completely ignored these concerns. For example, the Corps noted the existence of only one school along the preferred trucking route.²² In fact, there are at least 10 public and private schools along or near the preferred trucking route (Dalecarlia Parkway to Western and River Roads): Westmoreland Children's Center, River Road Children's Center (River Road Unitarian Church), Washington Episcopal, Westbrook Elementary, Wood Acres Elementary, Pyle Middle School, Walt Whitman High School, Landon, Burning Tree Elementary School, The Primary Day School, Holton Arms, and numerous pre-schools. Many school buses and car pools travel this "preferred" trucking route daily, but the safety implications of sending so many trucks along this route has been completely ignored in the DEIS.

170-15-GA,
GC, GG, GK

Moreover, although the Corps recognized that a trucking scheme "would have serious consequences in the residential neighborhoods,"²³ it summarily dismissed significant safety concerns in order to keep the trucking option on the table. The Corps failed to consider the effect of adding so many large trucks,²⁴ notorious for being involved in fatal accidents, to our local roads and highways. On average, someone in the U.S. is injured or killed in a large truck-related accident every five minutes.²⁵ In 2002, approximately 434,000 large trucks were involved in accidents in the United States.²⁶ A total of 4,897 people died in 4,542 fatal crashes, while 130,000 people were injured in large truck accidents overall.²⁷ While large trucks only made up 3% of all registered vehicles in 2001, they drove 7% of all vehicle miles and were involved in 12% of all fatal crashes.²⁸ In those fatal crashes, only about 14% of those killed and 23% of those injured were occupants of large trucks.²⁹ In essence, despite comprising a relatively low

170-16-GG

²⁰ Comments from Jan. 28, 2004 meeting at 2.

²¹ See e.g., Oral Statements from Sept. 7, 2004 public meeting, 5:13-23, 9:14-23, 10:3-8, 20:14-20.

²² See 1 DEIS 3-51 describing Route B – River Road (MD 190).

²³ See Jacobus Decl. ¶ 23 (Attach. 1 to Comments Letter from Concerned Citizens to Corps (Mar. 30, 2005)).

²⁴ "Large trucks" are vehicles with a gross weight rating greater than 10,000 pounds (or 5 tons). The Corps plans to use 10 and 20 ton trucks (transporting 11 and 22 cubic yards/truck) to haul residuals.

²⁵ The Crash Found., Citizens for Reliable and Safe Highways (CRASH), *Facts and Figures*, available at <http://www.trucksafety.org>.

²⁶ See *id.*

²⁷ See *id.*

²⁸ See *id.*

²⁹ See *id.*

percentage of total vehicles, large trucks are on the road more often and are involved in a disproportionately large number of accidents, particularly crashes in which people die. Of those killed or injured in trucking accidents, relatively few are the occupants of the large trucks themselves.

The Corps also did not contemplate the impacts of its preferred alternative on Sibley Hospital even though the preferred location for the dewatering facility is located immediately adjacent to the hospital. Sibley Hospital is on the verge of embarking on its own significant expansion plan. It is not clear what, if any, coordination the Corps has had with Sibley regarding the two separate construction plans. Additionally, it appears the Corps has not anticipated the predicament of ambulances and residual hauling trucks sharing the same intersection for ingress and egress – this is an accident waiting to happen. The DEIS also did not analyze potential impacts to Sibley, including how the hours of operation, noise, light, and odor will affect patients, hospital staff and visitors.

170-17-BI

2. The Corps Failed to Properly Analyze the "Cumulative" Effects or Impacts of its Preferred Alternative

170-18-QB

Cumulative impact is the impact on the environment resulting from the incremental impact of the action when added to other past, present and reasonably foreseeable other actions.³⁰ Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time.³¹ The Corps failed to analyze in the DEIS the cumulative effects of the preferred alternative on the area's air quality and transportation infrastructure.

a. The Corps Failed to Properly Analyze the "Cumulative" Effects of its Preferred Alternative on Air Quality

170-19-GF

(i) Non-Attainment for Fine Particulate Matter (PM2.5)

In April 2005, the EPA designated the Washington, D.C. area as being in non-attainment under the CAA for fine particulate matter ("PM2.5").³² At a time when the Council of Governments Metropolitan Washington Air Committee will be tasked with preparing an air quality plan to reduce fine particulate matter, it is inconceivable that the Corps' DEIS does not mention air quality designations and classifications for PM2.5.³³ The trucks to be utilized under the Corps' preferred alternative are diesel fueled vehicles; diesel vehicles make up an astounding 72% of the

³⁰ See Council on Env'tl. Quality, Executive Office of the President, *Considering Cumulative Effects Under the National Environmental Policy Act* at 8 (Jan. 1997).

³¹ 40 C.F.R. § 1508.7.

³² See *Air Quality Designations and Classifications for the Fine Particle (PM2.5) National Ambient Air Quality Standards*, 70 Fed. Reg. 943-1019 (Jan. 5, 2005) (to be codified at 40 C.F.R. pt. 81).

³³ See *id.*

*on-road mobile sources for PM_{2.5}.*³⁴ Not only is Washington, D.C. in non-attainment for its current levels of PM_{2.5}, the EPA Clean Air Advisory Review Panel recently released a draft report recommending even tighter air quality standards for fine particulate matter. In particular, the panel recommended two scenarios for tightening the air quality standard for fine particles (those less than 2.5 microns in diameter) and establishing a new standard that addresses particles between 2.5 microns and 10 microns in diameter.³⁵ Regardless of which proposal is ultimately chosen by the EPA Administrator, the stiffer standards will take effect in September 2006.³⁶

170-20-GF

Health studies have shown significant associations between exposure to PM_{2.5} in diesel exhaust and premature death from heart or lung disease.³⁷ Fine particles are also linked to effects such as cardiovascular symptoms, cardiac arrhythmias, heart attacks, respiratory symptoms, asthma attacks, and bronchitis.³⁸ EPA's draft *National-Scale Assessment of Air Toxics* estimated that cancer risks from diesel emissions are about *ten times higher* than cancer risks from all other hazardous air pollutants combined.³⁹ For the U.S. as a whole, the average cancer risk associated with diesel emissions is 580 per million or 80% of the total estimated cancer risk from all hazardous air pollutants (740 per million).

170-20-GF,
KD

Another study, the Multiple Air Toxics Exposure Study (MATES-II), is a landmark urban toxic monitoring and evaluation study conducted for California's South Coast Air Quality Management District ("SCAQMD").⁴⁰ Using a detailed emissions inventory, SCAQMD found that mobile sources (*e.g.*, diesel trucks) represent the greatest contributor to estimated cancer risks.⁴¹ About 70% of all risk is attributed to diesel particulate emissions and about 20% to other toxics (including benzene, butadiene, and formaldehyde) associated with mobile sources.

³⁴ U.S. EPA, *Mobile Source Emissions – Past, Present, and Future, Particulate Matter*, available at <http://www.epa.gov/otaq/inventory/overview/pollutants/pm.htm>.

³⁵ See Clean Air Scientific Advisory Comm. Particulate Matter Review Panel draft peer review document, available at http://www.epa.gov/sab/pdf/casac_pmrp_mtg_april_6-7_2005_2nd_draft_pm_staff_paper-ra_draft_report_v2.pdf.

³⁶ See Juliet Eilperin, *Proposals Stiffen Standards on Air-EPA Weighs Lowering Soot Limit*, Wash. Post, July 2, 2005, at A04.

³⁷ See *Health Effects of Diesel Exhaust*, a fact sheet by Cal. EPA's Office of Env'tl. Health Hazard Assessment and Am. Lung Ass'n of Cal. See also EPA's *Mobile Source Emissions*, *supra* note 31.

³⁸ See U.S. EPA, Nat'l Ctr. for Env'tl. Assessment, Office of Research and Dev., *Health Assessment Document for Diesel Engine Exhaust 1-3*, (May 2002).

³⁹ See U.S. EPA, draft *National-Scale Air Toxics Assessment* (Jan. 2001) available at <http://www.epa.gov/ttn/atw/sab/natareport.pdf>.

⁴⁰ South Coast Air Quality Mgmt. Dist. (SCAQMD), *Multiple Air Toxics Exposure Study in South Coast Air Basin (MATES-II)* (Mar. 2000).

⁴¹ See *id.*

The State and Territorial Air Pollution Program Administrators ("STAPPA") and the Association of Local Air Pollution Control Officers ("ALAPCO") conducted a screening-level health risk assessment of diesel emissions in its report "Cancer Risk from Diesel Particulate: National and Metropolitan Area Estimates for the United States."⁴² The association concluded that diesel emissions may be responsible for 125,000 cancer cases in the United States.⁴³

In sum, the Corps failed to acknowledge the Washington, D.C. area's current non-attainment status for PM2.5 and the impact of adding 132 ten ton, diesel fueled trucks per day on that status. Given the well-published health effects associated with fine particulates in urban areas, truck emissions in a residential area that contains sensitive populations (e.g., a hospital and many schools) will have a significant adverse environmental impact which must be thoroughly evaluated in the DEIS.

(ii) Severe Non-attainment for Ground-Level Ozone

170-22-GF

Both Washington, D.C. and Montgomery County are in severe non-attainment of the National Ambient Air Quality Standard ("NAAQS") for ground-level ozone.⁴⁴ Diesel combustion is a major source of nitrogen oxide ("NOx"), a precursor to ozone formation. In fact, more than 40% of the NOx released by on-road mobile sources is released by diesel vehicles.⁴⁵

There are significant health effects from ground-level ozone. When inhaled, even at low levels, ozone can cause acute respiratory problems; aggravate asthma; cause significant decreases in lung capacity in some healthy adults; cause inflammation of lung tissue; lead to hospital admissions and emergency room visits;⁴⁶ and, impair the body's immune system defenses, making people more prone to respiratory illnesses.⁴⁷

170-23-KD

Ground-level ozone has significant impacts on the environment, as well. NOx contributes to fish kills and algae blooms in the Chesapeake Bay, a sensitive regional waterway.⁴⁸ Ozone interferes

⁴² STAPPA and ALAPCO, *Diesel Particulate: National and Metropolitan Area Estimates for the United States* (Mar. 15, 2000).

⁴³ *See id.*

⁴⁴ *See Determination of Nonattainment as of November 15, 1999, and Reclassification of the Metropolitan Washington, DC Ozone Nonattainment Area; District of Columbia, Maryland, Virginia*, 68 Fed. Reg 3410-3426 (Jan. 24, 2003)(codified at 40 C.F.R. pt. 81).

⁴⁵ U.S. EPA, *Mobile Source Emissions – Past, Present, and Future, Particulate Matter*, available at <http://www.epa.gov/otaq/inventory/overview/pollutants/pm.htm>.

⁴⁶ 10 to 20 percent of all summertime respiratory-related hospital visits in the northeastern U.S. are associated with ozone pollution. U.S. EPA, Office of Air & Radiation, Office of Air Quality Planning & Standards, *Health and Environmental Effects of Ground-Level Ozone Fact Sheet* (July 17, 1997) available at <http://www.epa.gov/tnn/oparpg/naaqsfm/o3health.html>.

⁴⁷ *Id.*

⁴⁸ *See id.*

with plants' ability to produce and store food, so that plant growth, reproduction and overall health are compromised.⁴⁹ By weakening sensitive vegetation, ozone makes plants more susceptible to disease, pests and environmental stresses. Ground-level ozone has been shown to reduce agricultural yields for important crops such as wheat and cotton. Whole forests and ecosystems can be affected when ozone adversely impacts ecological function such as water movement, mineral nutrient cycling, and habitats for various animal and plant species. The natural beauty of an area can be affected when ozone causes damaged plant and tree leaves, including spotting and browning.⁵⁰

170-24-KD

The Corps' DEIS included a rudimentary estimate of trucking emissions;⁵¹ however, the basis for the trucking numbers listed in the table is unclear. The Corps' estimate of truck emissions projects a total of 20.5 tons/year,⁵² which is very close to the major source threshold for NOx. The Corps' calculation for air emissions is estimated based on a mere 20 truck trips a day, 5 days a week, and 150 miles per trip. The Corps' estimate does not account for the potential need for up to 132 truck trips per day during the wet season,⁵³ nor does it account for truck idling time during loading and unloading or traffic delays, nor the fact that the ultimate destination for the residuals has yet to be determined.

170-25-GF

Given the numerous documented studies about the adverse environmental and health impacts of ozone, it is incredible that the Corps claimed, on the basis of two single sheets of handwritten calculations in the back of Volume 2A Appendices of the DEIS, that the annual emissions from the proposed action would be below the *de minimis* threshold defined in the Air Quality Conformity Rule. Without any effort to demonstrate compliance with the relevant State Implementation Plans,⁵⁴ the Corps lightly dismissed the substantial impact of the trucking option by summarily concluding that the proposed action would not result in cumulative impacts. NEPA requires far more.

170-26-GF

b. The Corps Failed to Properly Analyze the "Cumulative" Effects of its Preferred Alternative on the Area's Transportation Infrastructure

The Corps failed to analyze the effect of putting up to 132 trucks a day on the area's overburdened transportation infrastructure. With the current transportation issues plaguing this region, how can the Corps consider adding up to 132 trucks a day to the area's overburdened transportation routes? It is widely known that the Washington, D.C. Metro Area has terrible

170-27-GE,
GA

⁴⁹ See *id.*

⁵⁰ See *id.*

⁵¹ 1 DEIS 4-14 (tab. 4.2).

⁵² *Id.*

⁵³ See *supra* note 4 and accompanying text.

⁵⁴ 1 DEIS 7-4.

traffic congestion. In fact, the Washington area had the third-worst traffic congestion in the United States for a fifth year in a row.⁵⁵ According to a study completed by the Texas Transportation Institute and based on 2003 statistics, local motorists spent an additional three hours a year in tie-ups, and sat in traffic for 145.5 million hours. In Washington, tie-ups cost drivers an estimated \$2.46 billion, or \$577 per commuter; and rush hour lasts for a third of the day. Despite all of the recent press about the area's traffic woes,⁵⁶ the Corps claims that "truck traffic generated by the proposed action will have...no significant cumulative impact on transportation conditions in the area,"⁵⁷ without conducting the proper analysis required under NEPA.

170-28-QB

B. The Corps Failed to Consider the Full Cost of the Trucking Alternative in the DEIS

The DEIS vastly understates the full cost of both constructing the dewatering facility and operating up to 34,000 eleven cubic yards/trucks per year, indefinitely, and then failed to compare that total cost against the cost of other alternatives. It is not clear where the limited "operating cost" data in the DEIS came from.⁵⁸ However, the Corps' own studies from more than a decade ago demonstrate that there will be significant operating costs associated with the trucking alternative. Even on the basis of these old reports, in which the pricing information is now seriously outdated,⁵⁹ it is clear that the annual operating costs for the trucking alternative will be substantial. According to the Corps' own studies from a decade ago, when you could buy gas for \$1.05 a gallon, these costs could be as much as \$2.3 million per year. Assuming that these trucks will be operating for at least the next twenty years, and even without the benefit of updated prices, this could represent up to \$34.2 million⁶⁰ that would need to be included in the "cost" of the trucking option. *If these costs are included with the cost for constructing the dewatering facility outlined in the DEIS,⁶¹ the total cost for the trucking option,⁶² even using*

170-29-GI

⁵⁵ Texas Transp. Inst. (Texas A&M University System), *The 2005 Urban Mobility Report*, available at http://tti.tamu.edu/documents/mobility_report_2005.pdf.

⁵⁶ See e.g., Steven Ginsberg and Timothy Dwyer, *D.C. Traffic Creeps Toward Nation's Worst*, Wash. Post, May 10, 2005, at A01.

⁵⁷ 1 DEIS 7-3.

⁵⁸ Cost tables that include contract hauling appear on pages 4-82 and 4-83 of Volume 1 of the DEIS (Tables 4-6 and 4-7); the DEIS is silent on how the Corps arrived at the contract hauling estimates.

⁵⁹ For instance, the cost basis used for a 10-wheel dump truck in the *1995 Residual Disposal Study* lists fuel costs at \$1.05/gallon. Cost Basis for Hauling, *1995 Residuals Disposal Study* at B-8. However, the average cost of diesel fuel the week of June 27, 2005 in the Mid-Atlantic region was \$2.46/gallon. Energy Info. Admin., *Weekly Retail on Highway Diesel Prices*, available at <http://tonto.eia.doe.gov/oog/info/wohdp/diesel.asp>.

⁶⁰ \$34.2 million represents the net present value of the total annual operating costs (\$2.3 million) for the trucks based on 20 years and a 3% discount rate.

⁶¹ According to the DEIS, the construction cost for Alternative B or E (Dewatering at Dalecarlia or Northwest and Disposal by Trucking) escalated to mid-point of construction (July 2008) is \$55,100,000. 1 DEIS 4-81.

outdated information for the next 20 years only, could be as much as \$89 million. These costs are a critical component of the cost of the trucking option that will be borne by the Corps -- and more importantly, by the ratepayers of the Washington Aqueduct -- indefinitely. Only when these costs have been incorporated into the DEIS can the true cost of this option be assessed. When the true costs of trucking is factored beyond twenty years, trucking can no longer be considered a "feasible" alternative.

The operating costs associated with the trucking alternative depend on the ultimate disposal site for the residuals. ~~The DEIS is strangely silent on the issue of where these residuals will ultimately be dumped.~~ The DEIS obviously cannot adequately compare the cost of the trucking option with the other alternatives, with so many variables that are still unknown, including the likely distance to the ultimate disposal location(s), average fuel costs, driver and mechanics' salaries, increased wear and tear on the roads, just to name a few. The Corps must fully address the costs,⁶³ wear and tear on the roads, noise, traffic, safety and environmental impacts of each of the prospective truck routes as well as each potential combination of routes, using only one to all seven of the routes proposed thus far. The Corps cannot base its decision on a hypothetical trucking solution based on unrealistic assumptions.

170-30-EA

C. The Brookmont Alternative Was Correctly Eliminated in the DEIS

Although the Corps correctly declined to endorse the Brookmont alternative, its analysis of that alternative is also seriously flawed. In addition to the problems identified above, the DEIS dramatically underestimates the impact of siting a dewatering facility in extreme proximity to homes and a playground in Brookmont. For example, the "Visual Aesthetics" section inexplicably concludes that visibility of the processing plant from the Brookmont homes would be "very limited," even in the winter months, based on the assumption that the trees would block the views.⁶⁴ The document does not provide any details supporting the untenable suggestion that branches and tree trunks would provide sufficient cover for an 80 foot industrial plant that would be perched high on a hill shadowing over a number of homes.⁶⁵ Also, the "Transportation" section fails to discuss the difficulties of trucks accessing and traveling MacArthur Boulevard, and the DEIS completely ignores the impacts of noise, exhaust fumes, and other impacts that would result from requiring the trucks to climb the steep hill on Loughboro Road.⁶⁶

170-31-BB

⁶² According to the DEIS, the net present value for Alternatives B and E (Dewatering at Dalecarlia or Northwest and Disposal by Trucking) including capital and annual O&M costs equals \$76,200,000. 1 DEIS 4-82 (tab. 4-7).

⁶³ The 1995 *Residuals Disposal Study* indicates that costs increase as the distance to the disposal site increases (page 2-13). The Corps should consider that costs will increase in the future as local landfills reach their capacity, forcing the Corps to ship residuals to more remote locations as it indicated in its presentation from the Sept. 7, 2004 public meeting at 7.

⁶⁴ See 1 DEIS 3-59, 3-60 and 4-59.

⁶⁵ See *id.*

⁶⁶ See 1 DEIS section 3.10 Transportation at 3-44 to 3-48 and section 4.11 Transportation at 4-47 to 4-48.

II. The Corps Has Engaged in a Sham Process by Failing to Follow the Strict Procedural Requirements of NEPA and Failing to Consider a Range of Reasonable Alternatives

A. The Corps Has Engaged in a Sham Process

The Corps has inappropriately allowed the deadlines and other conditions set forth in the Federal Facilities Compliance Agreement ("FFCA") that it voluntarily entered into with EPA to dictate the adequacy of its NEPA process. In its haste to select an alternative that will satisfy the short time frames and other conditions set forth in the FFCA, it appears that the Corps has been going through the motions of pretending to comply with NEPA, but that it has already decided which alternative would ultimately be considered "preferred". The Corps eliminated three of the four "alternatives" as early as May of 2004.⁶⁷ That left only one alternative on the table for detailed evaluation during the DEIS process.

170-32-FC

1. The Corps' Proposed Alternative Involving Dewatering and Trucking From Dalecarlia Has Been the Corps' Preferred Alternative Since at Least 1995

The Corps exhibited its preference for dewatering solids at the Dalecarlia site and removing those solids over land by truck at least a decade ago.⁶⁸ See, for example, the *1996 Design Memorandum*.⁶⁹ Little has changed in the ensuing ten years. When approached at the September 7, 2004 public meeting, the Corps stated that the "technology [the Corps] anticipate[s] having at the end of 20 years is the trucking option."⁷⁰ At the September 28, 2004 public meeting, the Corps revealed its predetermined preference for trucking from Dalecarlia when it stated that the trucking alternative had "fewer known impacts than the other two alternatives."⁷¹ The Corps' presentation at the November 16, 2004 public meeting highlighted the "significant impacts" of both the Dump and the Blue Plains options, knowing full well that neither of these alternatives could be chosen, and discussing the "negligible impacts" of trucking from Dalecarlia.⁷² Similarly, on May 20, 2004, the District of Columbia Water and Sewer Authority ("WASA") noted that there were "no new issues to present relating to the Washington Aqueduct

170-33-ND

⁶⁷ See Washington Aqueduct Baltimore District, U.S. Army Corps of Engineers, *Proposed Water Treatment Residuals Management Process, Project Introduction and Description of Proposed Action and Alternatives* (May 2004).

⁶⁸ *1996 Design Memorandum* at ES-3.

⁶⁹ *1996 Design Memorandum* at ES-3 and 4-1 (emphasis added).

⁷⁰ See Oral Statements from Sept. 7, 2004 public meeting at 14:1-6.

⁷¹ *Emerging Issues* presentation from Sept. 28, 2004 meeting at 7.

⁷² See Appendix for discussion of problems of trucking recognized by the Corps.

permit" and that "the [Corps was] looking at on-site dewatering and trucking for disposal of sludge as the primary alternative."⁷³ Ironically, this announcement occurred *six days prior to the "first public forum" held by the Corps.*⁷⁴ More recently, at an ANC 3D meeting on May 25, 2005, when asked whether WASA had included the cost of the water treatment residuals project in a projected rate increase, WASA responded that the rate increase included the \$66 million cost for the project (*i.e.*, the cost of the trucking option contained in the DEIS). The Corps has repeatedly demonstrated that its predetermined trucking option would be the preferred alternative before it ever held a "public forum to discuss the alternatives that would be evaluated in detail in the DEIS."⁷⁵

170-34-ND

It is clear that the Corps pre-selected trucking from Dalecarlia as the preferred alternative⁷⁶ and only included the Blue Plains and the Dump options as "alternatives" in the EIS process to maintain an appearance of considering other alternatives. The Corps first eliminated both Blue Plains and the Dump as alternatives from further consideration *in 1995.*⁷⁷ Not much has changed in the interim. The record indicates that the Corps has known about the lack of room at Blue Plains for building a dewatering plant *since at least 1996.* The lack of capacity at Blue Plains has not changed in the last 10 years, yet the Corps has pretended that Blue Plains is a "reasonable" alternative to keep this option on the table. In October 2004, the Corps reported to WASA that "WAD [Washington Aqueduct District] no longer considers option B [Blue Plains] to be feasible."⁷⁸ During the November 16, 2004 public meeting, the Corps confirmed that space is *not available* at Blue Plains, yet this alternative mysteriously remained "feasible" over other more reasonable alternatives. This simply does not make sense.

2. The Corps Must Revise Its Screening Criteria and Reexamine the Piping Alternatives in a Consistent Manner To Determine the Full Range of Reasonable Alternatives

170-35-QD,
NE

The Corps must examine alternatives involving piping of the residuals to other locations. To date, the Corps has only examined *one* piping alternative, namely, piping of the residuals to the

⁷³ Meeting Minutes of DC Water and Sewer Auth. Bd. of Dirs., Env'tl. Quality and Operations Comm. Meeting at 1 (May 20, 2004) (Attach. 8 to Comments Letter from Concerned Citizens to Corps (Mar. 30, 2005)).

⁷⁴ See Dec. 2004 Report at 4-2.

⁷⁵ See *id.*

⁷⁶ See *1995 Residuals Disposal Study* at B-1 (indicating that trucking to the disposal site was an assumption); *Responses to Questions from Ms. Debra Graham*, attached to Letter from Robert Davis to Honorable Paul S. Sarbanes, question 5 (Sept. 1, 2004) (Attach. 9 to Comments Letter from Concerned Citizens to Corps (Mar. 30, 2005)) (stating that the monofill will be evaluated "as an alternative to trucking").

⁷⁷ *1995 Residuals Disposal Study* at 7-26; see Bill Bulman, *Outline Review of the Residuals Disposal Study* at 3-5 (Aug. 7, 1996) (Attach. 3 to Comments Letter from Concerned Citizens to Corps (Mar. 30, 2005)).

⁷⁸ Meeting Minutes, DC Water and Sewer Auth. Bd. of Dirs., Env'tl. Quality and Operations Comm. Meeting (Oct. 29, 2004) (Attach. 10 to Comments Letter from Concerned Citizens to Corps (Mar. 30, 2005)).

Blue Plains Facility, *despite* the fact that it has had at least ten years to study alternative disposal locations, and *despite* the fact that it has known since at least 1994 that there was insufficient capacity to construct the necessary dewatering facilities at Blue Plains.⁷⁹ The Corps' failure to consider other piping options is particularly unreasonable given the ongoing discussions about a regional approach to water management.

170-36-DM

By focusing on piping residuals *only* to Blue Plains, the Corps has essentially set the piping alternative up as a "non-starter" in order to promote trucking. The Corps has shown its bias against piping by refusing to consider other facilities. In comparison, the Corps has not limited trucking from Dalecarlia to only one route, but has suggested that it will consider multiple routes, even if it later determines that only one route can be used. Piping residuals to other locations such as the David Taylor facility at Carderock, Rockville, Fairfax County Water Authority, Washington Suburban Sanitary Commission, or other possible locations provides reasonable alternatives that the Corps should rigorously examine.

The December 2004 Report acknowledged receipt of 94 public alternatives and eight options.⁸⁰ The Corps rejected 85 of these newly identified alternatives out of hand, stating that they were inconsistent with its unduly narrow screening criteria;⁸¹ retained two as potentially being consistent with its screening criteria; and was still evaluating the remaining seven. In the DEIS, the Corps found only two similar public alternatives⁸² consistent with its narrow screening criteria and then evaluated those two alternatives as a single alternative. Ironically, the single public alternative that survived the Corps' screening process requires disposal by contract hauling⁸³ – an alternative that the local residents and Concerned Citizens⁸⁴ adamantly oppose. The Corps eliminated dozens of reasonable alternatives based on its faulty screening criteria, as discussed below.

170-37-NB

3. The Corps Needs to Seriously Consider Alternatives that Would Move the Dewatering Facility to an Alternative Location

The Corps needs to seriously consider reasonable alternatives that will move the proposed water treatment facilities out of a congested, densely populated, residential neighborhood into a more suitable location. The proposed industrial facility, which may typically operate from 7:00 a.m. to

170-38-BB

⁷⁹ See Letter from Betty Hager Francis, Dir. of Public Works, to Richard Capka, Corps (May 2, 1994) (Ex. 4-3 from 1995 *Residuals Disposal Study*); Jacobus Decl. ¶ 17 (Attach. 1 to Comments Letter from Concerned Citizens to Corps (Mar. 30, 2005)).

⁸⁰ Dec. 2004 Report at 2-20.

⁸¹ See *supra* note 3.

⁸² Public Alternatives P71 and P80 (alternate site for residuals processing facility on Dalecarlia campus and disposal by contract hauling). 4 DEIS 5-2 to 5-3.

⁸³ See 4 DEIS 5-2.

⁸⁴ See *supra* note 1.

7:00 p.m.,⁸⁵ is not consistent with a residential neighborhood. Neither an eight story Dump, nor a similarly sized dewatering facility, nor an army of trucks, belong in a residential neighborhood. The Corps itself has recognized that "the proposed facilities . . . may negatively affect property values."⁸⁶

170-39-BL

Members of the community have previously proposed a number of alternatives to pipe the residuals to a dewatering facility located elsewhere, including piping the residuals to the David Taylor facility at Carderock, to WSSC's facility located upstream on the Potomac, or to Rockville, among other options. An aerial photograph of the David Taylor facility with the dewatering facilities superimposed thereon demonstrates how the proposed facilities would fit well in an industrial area that is along a major highway.⁸⁷ The Corps cannot use its unduly narrow screening criteria to eliminate these alternatives.

170-40-NE,
NF

Vehicle emissions, odors, excessive light, noise, and destruction of habitat are just some of the potential impacts of an on-site dewatering facility and trucking of the residuals from Dalecarlia upon the surrounding neighborhoods. None of these impacts can be completely mitigated, no matter how creatively the facilities are designed. It would be more appropriate to move the needed facilities to a location that is more industrial in nature.

170-41-BB

B. The Corps Impermissibly Established an Unduly Narrow Purpose and Need Statement for this Project

170-42-NB

The Corps improperly established an unduly narrow "purpose and need" statement for this project with only one possible outcome, constructing an on-site dewatering facility and trucking the residuals from Dalecarlia through residential neighborhoods. This unduly narrow purpose and need statement, and narrow objectives, foreclosed any serious consideration of truly reasonable alternatives. The lack of reasonable alternatives proves that the Corps has been merely going through the motions of the NEPA process in order to promote the Corps' preferred alternative. The Corps should not continue this charade but should instead begin a rigorous examination of other alternatives, such as piping the residuals to locations other than Blue Plains.

A "hard look" at the multiple, realistic variants of the general piping alternative is likely to reveal a preferred alternative with less environmental impact than trucking from Dalecarlia. Furthermore, the DEIS is devoid of evidence that the rejected piping alternatives will have a more severe overall environmental impact than that of the preferred alternative.⁸⁸ The piping alternative should not be cursorily eliminated from consideration merely because institutional constraints might preclude piping residuals to the Blue Plains facility.

170-43-DM

⁸⁵ 1 1996 *Design Memorandum* at 7-34.

⁸⁶ Wash. Aqueduct Residuals FAQs, question 18, from Wash. Aqueduct website.

⁸⁷ See Aerial Photograph (Attach.15 to Comments Letter from Concerned Citizens to Corps (Mar. 30, 2005)).

⁸⁸ *North Buckhead Civic Ass'n v. Skinner*, 903 F.2d 1533, 1542 (11th Cir. 1990).

C. The Corps Has Applied Its Own Screening Criteria Inconsistently, Thereby Allowing Blue Plains and the Dump to Remain on the Table, While Eliminating Other Reasonable Alternatives from Further Consideration

170-44-ND

The Corps has inconsistently applied its own unduly narrow screening criteria. The Corps essentially determined 10 years ago that trucking from Dalecarlia was the preferred alternative that it would implement. The Corps then established narrow screening criteria that would eliminate all but a few alternatives. However, the Corps inconsistently applied the screening criteria which allowed the Dump and the Blue Plains alternatives to remain under consideration in order to maintain an appearance of compliance with NEPA.⁸⁹ Ironically, the application of the Corps' own criteria would eliminate all alternatives.

The record demonstrates that the Blue Plains option was deemed "unacceptable" 10 years ago.⁹⁰ The Corps has already determined that Blue Plains makes "little economic sense". In addition, the Corps has publicly acknowledged at WASA meetings in the past few months that there is inadequate construction space at Blue Plains.⁹¹ The Corps has not explained what has changed in the interim to make the Blue Plains option "reasonable" and "feasible" for purposes of the DEIS, particularly in light of its comments at public WASA meetings. Blue Plains should have been screened out as a viable alternative under the Corps' own unduly narrow screening criteria. It is incredible that this alternative remained on the table while the Corps prematurely eliminated many other alternatives on economic and institutional grounds. For example, the two reasons why the Corps eliminated thickening at Dalecarlia and pumping via pipeline to an alternate dewatering location were the FFCA and Economic.⁹² Absent the arbitrary deadlines established in the FFCA, economics would be the only reason why the Corps eliminated piping to an alternate location from further study. The Corps has acknowledged that, while cost is a factor in its decision-making, cost would not be the sole reason for eliminating an alternative from further investigation.⁹³ Accordingly, the alternatives that were prematurely eliminated on the basis of cost should be retained for analysis during the DEIS.

170-45-NF,
FB, ND

Ironically, the Corps prematurely eliminated many other alternatives from consideration because they were not "proven methods" or a complete solution. Under this rationale, both the Dump and trucking from Dalecarlia should have been eliminated from further consideration. The Corps claims that retaining the Dump as an alternative is reasonable because the 20 year time frame

170-46-NB

⁸⁹ 1 *1995 Residuals Disposal Study* at 7-26; see Bill Bulman, *Outline Review of the 1995 Residuals Disposal Study* 3-5 (Aug. 7, 1996) (Attach. 3 to Comments Letter from Concerned Citizens to Corps (March 30, 2005)) (indicating that in 1995, the Corps eliminated both the Blue Plains and Dump alternatives from further consideration).

⁹⁰ See *1995 Residuals Disposal Study*.

⁹¹ Meeting Minutes of DC Water and Sewer Auth. Bd. of Dirs., Env'tl. Quality and Operations Comm. Meeting at 2 (Sept. 16, 2004).

⁹² *Alternative Screening Results* presentation from Sept. 28, 2004 meeting at 9.

⁹³ See Wash. Aqueduct Residuals FAQs, question 7, from Wash. Aqueduct website.

"allows time for future technology development."⁹⁴ Similarly, when discussing trucking from Dalecarlia, the Corps assumed that truck volume will probably not exceed the existing level of service and that volume may be reduced if new technologies can be implemented.⁹⁵ Despite its willingness to retain these two options on the basis that "new technologies" might make them better, the Corps eliminated many other alternatives on the basis of "unproven technologies". For example, the Corps eliminated barging was because, among other reasons, it was not a proven method.⁹⁶ The Corps eliminated all alternatives that recommended moving the intake structure on the basis that these alternatives would only provide a partial solution to the problem.⁹⁷ This inconsistent application of its own screening criteria shows how arbitrary the Corps' NEPA process has been. The Corps intentionally established narrow screening criteria in an effort to justify a pre-determined outcome. The Corps must examine suggested alternatives that could be combined with other factors to become a "reasonable" alternative. The Corps must take a hard look at prematurely eliminated alternatives including all piping alternatives,⁹⁸ barging,⁹⁹ moving the Water Treatment Plant upriver,¹⁰⁰ and relocating or redesigning the water intake structure.¹⁰¹ The Corps' inconsistent application of even its own unduly narrow screening criteria is unacceptable.¹⁰²

170-47-NB

D. The Corps Failed to Consider the No Action Alternative as a Serious Alternative, Despite the Requirement to Do So in NEPA, Even if that Option Contravenes the Deadlines in the FFCA

170-48-NB

The Corps has summarily rejected the "no action" alternative and described it as a "non-starter" because it would violate the NPDES permit, the FFCA, and the Clean Water Act.¹⁰³ The Corps

⁹⁴ Presentation from Sept. 7, 2004 public meeting at 3.

⁹⁵ *Emerging Issues* presentation from Sept. 28, 2004 meeting at 7.

⁹⁶ See 4 DEIS at 3-18.

⁹⁷ See 4 DEIS at 4-18 and tab. 2-2, alternatives P67, P76, P77, P81, P92.

⁹⁸ See Dec. 2004 Report, tab. 2-3, alternatives P1-P66, P74, P75, P86, P88-P90, P94, P95.

⁹⁹ See *id.*, alternative P73.

¹⁰⁰ See *id.*, alternatives P93, P91, P100, P102.

¹⁰¹ See *id.*, alternatives P67, P76, P77, P81, P92.

¹⁰² See Letter from Betty Hager Francis, Dir. of Pub. Works, to Richard Capka, Corps at 2 (May 2, 1994) (Attach. 12 to Comments Letter from Concerned Citizens to Corps (Mar. 30, 2005) and Ex. 4-3 from *1995 Residuals Disposal Study*).

¹⁰³ Dec. 2004 Report at 3-5. What the Corps fails to appreciate is that it is *required* to evaluate the environmental impacts of doing nothing, *i.e.*, continuing to discharge the residuals into the Potomac River, as one of the alternatives in the NEPA process. It does not matter that its NPDES permit and the FFCA would not allow for such a discharge.

misunderstands one of the fundamental purposes and goals of NEPA in rejecting this option so summarily. Under NEPA, the "no action" alternative is a serious alternative that cannot be summarily rejected simply because that option is inconsistent with a permit or order. "[E]ven if an alternative requires 'legislative action', this fact 'does not automatically justify excluding it from an EIS.'"¹⁰⁴ Section 1502.14(d) of NEPA *requires* the alternatives analysis in the EIS to "include the alternative of no action."

As discussed in CEQ guidance:

[I]t is difficult to think of a situation where it would not be appropriate to address a "no action" alternative. Accordingly, the regulations require the analysis of the no action alternative *even if the agency is under a court order or legislative command to act*. This analysis provides a *benchmark*, enabling decisionmakers to *compare the magnitude of environmental effects of the action alternatives*. It is also an example of a reasonable alternative outside the jurisdiction of the agency which must be analyzed. Section 1502.14(c). See Question 2 above. Inclusion of such an analysis in the EIS is necessary to inform the Congress, the public, and the President as intended by NEPA. Section 1500.1(a).¹⁰⁵

Acting in blatant disregard of these mandatory requirements in NEPA, the Corps summarily eliminated the "no action" alternative from further consideration. The Corps attempted to justify its position by stating that the no-action alternative "cannot be selected . . . because it would place [the Corps] in violation of the Federal Clean Water Act, the terms of their NPDES permit, and the Federal Facility Compliance Agreement issued [by] the EPA. Throughout the DEIS preparation process, EPA has confirmed that it would be unwilling to modify the NPDES permit to allow the [Corps] to return to a residuals disposal practice consistent with the No Action alternative."¹⁰⁶ However, that is not the point under NEPA. NEPA requires a federal agency to take a "hard look" at the likely environmental impact of its proposed action, including the alternative of doing nothing. "[A]n agency's refusal to consider an alternative that would require some action beyond that of its congressional authorization is counter to NEPA's intent to provide options for both agencies and Congress."¹⁰⁷

In this case, the Corps does not discuss the environmental impacts of the no-action alternative and does not indicate any intention to evaluate the environmental impacts of continuing to discharge residuals into the Potomac River as a benchmark against the environmental impacts of the other alternatives. NEPA requires such an analysis in order to provide a baseline of the likely

¹⁰⁴ *Northwest Coalition for Alternatives to Pesticides v. Lyng*, 844 F.2d 588, 592 (9th Cir. 1988).

¹⁰⁵ Forty Most Asked Questions Concerning CEQ's National Environmental Policy Act Regulations, 46 Fed. Reg. 18026 (Mar. 23, 1981) (emphasis added).

¹⁰⁶ Dec. 2004 Report at 3-5.

¹⁰⁷ *Natl. Wildlife Fed'n v. Natl. Marine Fisheries Serv.*, 235 F. Supp. 2d 1143, 1154 (W.D. Wash. 2002).

environmental impacts of the proposed action against the environmental impacts of continuing the current course of action.¹⁰⁸ The fact that the Corps might have to pay some fines for violating the deadlines in the FFCA (if EPA continues to refuse to consider the Corps' reasonable requests for an extension of those deadlines) has no bearing under the NEPA process.

E. The Dump Is Not a Reasonable Alternative and Was Correctly Eliminated in the DEIS

Another indication of the "sham" nature of the DEIS analysis is the Corps' continued, stubborn inclusion of the Dump¹⁰⁹ as a reasonable alternative throughout the EIS process. The Dump is not a reasonable alternative because of the very serious munitions issues that have been identified in the area of the proposed Dump.¹¹⁰ Even though the Corps has admitted in the DEIS that the Dump alternative cannot be selected,¹¹¹ we renew our opposition to the inclusion of the Dump in the final EIS, as it is not a reasonable alternative and should be eliminated from the EIS completely.¹¹² The D.C. Department of Health's Studies have proven that the Dump could never have been a viable alternative because of the probability that a substantial volume of chemical and high explosive munitions were dumped in the Rick Woods area on the Reservoir property.¹¹³

170-49-CA

Despite the Corps' knowledge of the potential burial of munitions *before* it began the NEPA process for the Residuals Project, the Corps acted as if the Dump was a "reasonable" alternative in order to keep the appearance of multiple "alternatives" on the table. During the November 16, 2004 public meeting, the Corps confirmed that the "Spring Valley Schedule and FFCA deadlines preclude Alternative A [the monofill] from being selected." The Corps knew of this problem before the scoping meeting and application of the screening criteria, yet the Corps considered this option to be a "reasonable" alternative. This simply does not make sense. Geophysical investigations are not scheduled to begin in this area until 2008, less than one year before the "preferred alternative" must be fully operational according to the Corps. The munitions issue alone should have eliminated the Dump alternative from the DEIS.

¹⁰⁸ See *League of Wilderness Defenders – Blue Mountains Biodiversity Project v. U.S. Forest Serv.*, No. Civ. 04-488-HA, 2004 WL 2642705 at *3 (D. Or. Nov. 19, 2004) (citation omitted).

¹⁰⁹ The Dump is the 80 foot tall, 30 acre monofill that the Corps has proposed constructing on the Dalecarlia Reservoir grounds. It would provide only a 20 year solution to the water treatment residuals disposal issue.

¹¹⁰ See Comments submitted by Concerned Citizens, tab 3 (Feb. 14, 2005) (Richard D. Albright, *History of My Effort to Get the Corps of Engineers to Clean Up Spring Valley, A Chemical Weapons Development and Test Site in the District of Columbia* ("Albright Report")).

¹¹¹ *Emerging Issues* presentation from Nov. 16, 2004 public meeting at 3 ("Spring Valley Schedule and FFCA deadlines preclude Alternative A from being selected.").

¹¹² See Discussion in Comments Letter from Concerned Citizens to Corps at 8-11 (Mar. 30, 2005)

¹¹³ See Albright Report.

The Corps ignored its own previous decision to eliminate an on-site landfill as an alternative. In November 1995, the Corps eliminated monofilling as an alternative after detailed analysis because of its "high cost, technical and management complexity."¹¹⁴ In other words, the Corps eliminated the Dump as an alternative 10 years ago, well before the recent discovery of potential munitions, but has offered no reason why the Dump is suddenly a "reasonable" alternative meriting closer scrutiny 10 years later, especially in light of the significant munitions problem. Even without the munitions issue, the Dump is not a reasonable alternative and should never have survived the screening process.

170-50-ND

Additionally, while the Dump is not a long term or permanent solution, it would be a permanent landscape feature. The visual impact of an 80 foot tall Dump and the environmental impact of clear-cutting 30 acres of trees causes us great concern. A 100 foot buffer of trees will not sufficiently screen the neighborhood.¹¹⁵ The Corps must evaluate the visual and environmental impact of the alternatives. Moreover, spending significant resources on building an unsightly Dump will only temporarily solve the problem. While destroying one of the few green spots for only a temporary solution, the razing of 30 acres of trees will take decades to replace. This would require restarting this entire process in 20 years.

170-51-BA

III. The NEPA Process Has Been Flawed From The Beginning and Needs To Be Restarted.

A. The Corps' Unduly Narrow "Purpose and Need" Statement Has Tainted the Entire Process

As described in our earlier comments, the statement of purpose and need in an EIS "shall briefly specify the underlying purpose and need to which the agency is responding in proposing the alternatives including the proposed action."¹¹⁶ The purpose and need statement provides the basis for determining which reasonable alternatives the agency shall rigorously explore.¹¹⁷ But, in stating the project's purpose and need, the Corps cannot define the purpose or objectives of its project so narrowly that "it precludes consideration of reasonable alternatives,"¹¹⁸ or "that only one alternative . . . would accomplish the goals of the agency's action, and the EIS would become a foreordained formality."¹¹⁹ The Corps used an overly narrow statement of purpose and need to develop unduly narrow screening criteria and has eliminated reasonable alternatives from

170-52-NB

¹¹⁴ *1995 Residuals Disposal Study*, Ex. 7-16 (indicating that the Monofill option earned the most points and was the least desirable alternative).

¹¹⁵ See Wash. Aqueduct Residuals FAQs, question 13, from Wash. Aqueduct website.

¹¹⁶ 40 C.F.R. § 1502.13.

¹¹⁷ See *Wyoming v. Dept. of Agric.*, 277 F. Supp. 2d 1197, 1222 (D. Wy. 2003).

¹¹⁸ *Id.* (citation omitted). See also *Simmons v. Army Corps of Eng'rs*, 120 F.3d 664 (7th Cir. 1997).

¹¹⁹ *Citizens Against Burlington, Inc., v. Busey*, 938 F.2d 190, 295 (D.C. Cir. 1991) (citation omitted).

consideration leaving trucking as the only alternative to meet the project's purpose and need. This violates NEPA.

According to the regulations, the Corps must:

(a) Rigorously explore and objectively evaluate *all reasonable alternatives*, and for alternatives that were eliminated from detailed study, briefly discuss the reasons for their having been eliminated. . . .

(c) *Include reasonable alternatives not within the jurisdiction of the lead agency.* . . .

(f) Include appropriate *mitigation measures* not already included in the proposed action or alternatives.¹²⁰

Instead, the Corps has engaged in a sham process that only looks at one alternative – on-site dewatering and trucking from Dalecarlia—instead of a reasonable range of alternatives. By inconsistently applying its own unduly narrow screening criteria the Corps has gone through the motions of keeping "reasonable" alternatives on the table that it knows are not reasonable.

170-53-NB

Before identifying a reasonable range of alternatives, the Corps first defined the purpose and need for the project in the Notice of Intent, published in the *Federal Register* on January 12, 2004, as follows:

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

- To allow Washington Aqueduct to achieve complete compliance with NPDES Permit DC 00000019 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)¹²¹

¹²⁰ See 40 C.F.R. § 1502.14.

¹²¹ 1 DEIS at ES-2.

When justifying its actions, the Corps went a step further by stating that the screening criteria embodied the purpose and scope of the project. It is a violation of NEPA to narrowly express the project purpose and need given the more general overarching objective of the project is to find alternative disposal options to the current practice of disposing water treatment residuals into the Potomac River.¹²² The screening criteria must be revisited because the Corps drafted them too narrowly.

170-54-NB

B. The Corps Utilized Inappropriate Screening Criteria.

The Corps impermissibly drew, without public comment, narrow screening criteria to limit the "purpose and need" of the project to the narrow goal of meeting the arbitrary deadlines and other conditions set forth in the FFCA as well as in the revised NPDES permit. For example, the Corps inappropriately included the arbitrary deadlines set in the FFCA in its screening criteria in order to prematurely eliminate reasonable alternatives from further consideration. The Corps presented the following screening criteria to only 15 people who were aware of and attended the January 2004 meeting:¹²³

170-55-NB

- Meets the FFCA schedule;
- Preserves reliability and redundancy of the system;
- Uses design and processes proven in the water treatment industry;
- Complies with NPDES Permit DC0000019;
- Considers economic effects;
- Avoids undue impairment of jurisdictional wetlands;
- Conforms with the Endangered Species Act;
- Avoids significant alternation of important cultural resources.¹²⁴

The Corps later added the following as an additional criteria, again without the benefit of public comment or input:

- Complies with existing plans and institutional considerations.¹²⁵

¹²² See *Davis v. Mineta*, 302 F.3d 1104 (10th Cir. 2002)(holding that the agency's purposes were broader and such a narrow definition of project needs would violate NEPA).

¹²³ It is doubtful whether the 15 people in attendance understood that the Corps was presenting "screening criteria" or whether the people understood how the criteria would be used in the NEPA process.

¹²⁴ *Draft Environmental Impact Statement for a Proposed Water Treatment Residuals Management Process* presentation from Jan. 28, 2004 meeting at 6.

The Corps should not have used artificial deadlines in the FFCA to eliminate reasonable alternatives from further consideration. The Corps' proposed schedule already demonstrates that the Corps will not be able to comply with the NPDES Permit by December 30, 2009. The Corps estimated that it would take one year to evaluate the alternatives, two years to design the project, and three years¹²⁶ to construct the facilities.¹²⁷ In order for the Corps to comply with the NPDES Permit discharge limits by December 30, 2009, construction of the preferred alternative would need to begin by January 1, 2007. That leaves only one year to finish the preliminary design, ~~final design, solicit bids, and award the contract, rather than the two years originally scheduled.~~¹²⁸ The Corps will not likely find a way to make up lost time, unless the Corps already made its decision and designed facilities long before presenting its preferred alternative in the EIS.

170-56-FB,
FA

The Corps cannot use artificial deadlines in the FFCA to prematurely and arbitrarily eliminate reasonable alternatives from further consideration. "[R]efusal to extend the scoping period, notwithstanding the protests of nearly all of the affected [interested parties], for the sole reason of meeting a self-imposed deadline was arbitrary and capricious."¹²⁹ The Corps has consistently asserted that the schedule set forth by the FFCA is mandatory and cannot be changed. This view is erroneous as evidenced by the FFCA itself and the fact that certain deadlines have already been extended. Additionally, the Corps has not presented any statute or regulation that requires compliance by the dates established in the FFCA.

170-57-FB,
FF, FC

C. The Corps' Failure to Adequately Involve the Public and Other Government Agencies Demonstrates the Flawed Nature of the Scoping Process, A Failure that Cannot be Retroactively Cured

170-58-NC

The Corps failed to provide an adequate scoping period in violation of NEPA in its rush to comply with self-imposed deadlines in the FFCA. Once an agency decides to prepare an EIS, the agency initiates the scoping process to determine the scope of issues to be addressed.¹³⁰ This

¹²⁵ Compliance with existing plans and institutional considerations was added to the presentation slides from the May 26, 2004 meeting. *Draft Environmental Impact Statement for a Proposed Water Treatment Residuals Management Process: Alternatives to be Evaluated in the Draft EIS* at 11.

¹²⁶ Bill Bulman even stated that 3 1/2 to 4 years "seems too optimistic, unless the plans and specifications are already complete." Bill Bulman, Outline Review of the *1995 Residuals Disposal Study 5* (Aug. 7, 1996) (Attach. 3 to the Comments Letter from Concerned Citizens to Corps (Mar. 30, 2005)).

¹²⁷ *Schedule* presentation from May 26, 2004 public meeting at 33; see Letter from Paul Hoff to David Arent (April 15, 2003) (Attach. 4 to Comments Letter from Concerned Citizens to Corps (Mar. 30, 2005)); *1996 Design Memorandum* at ES-6 ("Construction has been estimated to take 36 months and potentially longer if the work commences in the late fall/early winter season.").

¹²⁸ See *Schedule*, presentation from May 26, 2004 public meeting at 33.

¹²⁹ See *Wyoming v. Dept. of Agric.*, 277 F. Supp 2d at 1220.

¹³⁰ 40 C.F.R. § 1501.7.

scoping process must be "early and open," and the agency must solicit comments and input from the public and other state and federal agencies with the goal of identifying specific issues to be addressed and studied.¹³¹

The DEIS does not provide a clear picture as to what consultations the Corps has had with cooperating federal, state, and local government agencies, as required under NEPA. Despite repeated FOIA requests seeking information about these communications, and in light of the Corps' stated preference for trucking, it is not clear whether the Corps has consulted with *any interested agencies* about the likely environmental, health and safety impacts of the trucking option. For the air quality issues alone, the Corps should have contacted the EPA Region III Air Office, the Maryland Department of Environment (MDE) Air Quality Office, District of Columbia Department of Health Air Quality Office, Federal Highway Administration Air Quality Office, and the Council of Governments' Metropolitan Washington Air Committee.

170-59-QB

The communications that have been included in the DEIS instead appear to reinforce the conclusion that very few communications occurred with other agencies until fairly recently, rather than at the outset of the NEPA process as required by statute. For example, the Corps did not contact the District of Columbia Water and Sewer Authority (WASA) until July 28, 2004, to begin collecting information to complete the EIS.¹³² The Corps did not contact the U.S. Navy until December 13, 2004, to ask for consideration of locating a dewatering facility at the Carderock facility.¹³³ The Corp did not contact the City of Rockville until March 25, 2005,¹³⁴ to determine if the City might be able to accept the water treatment residuals from the Aqueduct. More importantly, it appears that none of these communications focused upon the environmental, health and safety impacts of putting so many trucks on local roads.

170-60-NC

During scoping, the lead agency invites the participation of other agencies and interested parties to participate in developing the EIS process.¹³⁵ The Corps identified a scoping period to last from January 12, 2004 until February 11, 2004.¹³⁶ However, it appears that the Corps did not intend to solicit information from the public or invite the public to participate in developing the EIS process during this time. Rather, the Corps merely presented information to 15 members of

¹³¹ *Id.*

¹³² *See* 2A DEIS, Appendix

¹³³ *See id.*

¹³⁴ *See id.*

¹³⁵ "Scoping is a process, not an event or a meeting." 40 C.F.R. 1501.7(a).

¹³⁶ The Corps scheduled the scoping period to last 30 days immediately following the publication of the Notice of Intent in the Federal Register on Jan. 12, 2004.

the public at one single meeting¹³⁷ on January 28, 2004 and has not engaged in any meaningful dialogue regarding the EIS process or environmental concerns regarding the Project.

The Corps mistakenly considers publication of a Notice of Intent in the *Federal Register* on January 12, 2004, publication in the *Washington Post* and *Northwest Current* on January 22, 2004, and sending 63 invitations to the January 28, 2004 "public scoping" meeting adequate notice to the public. The Council on Environmental Quality's ("CEQ's") own guidance makes it clear that a *Federal Register* notice is a *minimal* requirement that is not sufficient when a large number of individuals will be directly impacted by a project:

The Federal Register notice can be relied upon to notify others that you did not know about. But the Federal Register is of little use for reaching individuals or local groups interested in a site specific proposal. Therefore, notices in local papers, letters to local government officials and personal contact with a few known interested individuals would be more appropriate. *Land owners abutting any proposed project sit should be notified individually.*¹³⁸

170-61-NC

Even its most recent efforts to invite the community to the public meeting on May 17, 2005, do not comply with these CEQ requirements. The public notices that appeared in the *Bethesda Gazette*, the *Northwest Current* or the *Washington Post* on or about May 4, 2005 did nothing to *inform* the members of the community most likely to be impacted by the Corps' preferred alternative that the Corps was planning to send up to 132 trucks a day through their neighborhoods.

Although the Corps has held a number of meetings, by its own admission, the Corps did not intend for these meetings to fulfill NEPA requirements.¹³⁹ These meetings did not adequately involve the public in the scoping process because they occurred after the end of the 30 day duration of the scoping process and the format did not encourage an open dialogue with the public.¹⁴⁰ Instead, these meetings were held to *inform the public of the decisions the Corps had already made* regarding which alternatives to pursue and general progress to the public.¹⁴¹ For example, the May 26, 2004 meeting was held to "*communicate the results* of an initial project

¹³⁷ Memorandum for General Counsels, NEPA Liaisons and Participants in Scoping, Council on Env'tl. Quality, at § II.A (Apr. 30, 1981) (Attach. 20 to Comments Letter from Concerned Citizens to Corps (Mar. 30, 2005)).

¹³⁸ Memorandum for General Counsels, NEPA Liaisons and Participants in Scoping, Council on Env'tl. Quality (Apr. 30, 1981) (Attach. 20 to Comments Letter from Concerned Citizens to Corps (Mar. 30, 2005)).

¹³⁹ *See id.* (stating that the meetings subsequent to the Jan. 28, 2004 meeting were "not required by NEPA regulations").

¹⁴⁰ Ironically, the Corps is cited in the Memorandum for General Counsels as exemplifying a "successful model" which the Corps did not use here. *See* Memorandum for General Counsels, NEPA Liaisons and Participants in Scoping, Council on Env'tl. Quality, at II.B.5 (Apr. 30, 1981) (Attach. 20 to Comments Letter from Concerned Citizens to Corps (Mar. 30, 2005)).

¹⁴¹ *See* Wash. Aqueduct Residuals FAQs, question 6, from Wash. Aqueduct website.

alternatives screening process with the public to *disclose* the four alternatives that would be analyzed in detail in the Draft Environmental Impact Statement."¹⁴² The slides from this meeting only disclose the four alternatives selected from an initial pool of 26 alternatives and did not provide any information on the 23 eliminated alternatives. Similarly, the September 7, 2004 meeting was held to "*allow neighbors* who may not have been aware of the project details *to learn about project progress* so far, and personally interact with Washington Aqueduct staff and consultants."¹⁴³ The Corps had already determined the path it has chosen to pursue as defined by its overly narrow purpose and scope and did not adequately involve the public.

170-62-NB

The Corps' intention to only offer the single meeting in January 2004 to fulfill the NEPA requirement indicates that the Corps did not engage in a scoping process, but instead approached scoping as a public relations opportunity in which the Corps' predetermined decision would be presented to the public.¹⁴⁴ The Corps also chose to use an ineffective format for these meetings rather than utilizing the "successful model" cited by CEQ's guidance. The Corps admitted that the open house was an ineffective format for the meetings.¹⁴⁵ Attendees' comments also describe the ineffectiveness of the format and express concerns about the screening process and lack of information shared with the public.¹⁴⁶ The Corps cannot and has not cured this flawed process by extending the comment period or conducting additional "non-NEPA required" public meetings. NEPA's notice requirement ensures that interested parties are aware of and able to participate meaningfully in the entire EIS process, from start to end.¹⁴⁷ "What is important is that the notice actually reach the affected public."¹⁴⁸ In this case notice of the scoping process did not reach the affected public.

D. The Corps Failed to Consider Options that Would Reduce the Volume of Residuals

170-63-OA,
QA

According to the Corps' own Notice of Intent to Prepare a DEIS for a Proposed Water Treatment Residuals Management Process for the Washington Aqueduct, one of the primary objectives of

¹⁴² *Id.* (emphasis added).

¹⁴³ *Id.* (emphasis added).

¹⁴⁴ See Memorandum for General Counsels, NEPA Liaisons and Participants in Scoping, Council on Env'tl. Quality, at 3 (Apr. 30, 1981) (Attach. 20 to Comments Letter from Concerned Citizens to Corps (Mar. 30, 2005)). ("[S]coping is *not* simply another 'public relations' meeting requirement.") (emphasis added).

¹⁴⁵ Wash. Aqueduct Residuals FAQs, question 6, from Wash. Aqueduct website.

¹⁴⁶ Comments from Sept. 7, 2004 meeting; letter from Thomas Jacobus (Sept. 10, 2004) (Attach. 6 to Comments Letter from Concerned Citizens to Corps (Mar. 30, 2005)).

¹⁴⁷ See *Northwest Coalition for Alternatives to Pesticides v. Lyng*, 844 F.2d 588, 594-95 (9th Cir. 1988).

¹⁴⁸ Memorandum for General Counsels, NEPA Liaisons and Participants in Scoping, Council on Environmental Quality at II.A.4 (Apr. 30, 1981) (Attach. 20 to Comments Letter from Concerned Citizens to Corps (Mar. 30, 2005)).

the project was to reduce the volume of solids coming into the plant.¹⁴⁹ Earlier draft NPDES Permits likewise required the Corps to reduce the volume of incoming solids.

Using a combination of engineering or Best Management Practices, permittee is required to meet the effluent limits specified in Part I by reducing the amount of incoming solids by 85%. This reduction is based upon EPA's Best Professional Judgment and is consistent with EPA's removal efficiencies for municipal dischargers.¹⁵⁰

Additionally, the Corps was required to "perform a series of additional studies on sediments to augment and clarify the results performed in the 2001 Water Quality Studies. The results of the new studies are intended to better define the behavior of coagulant bearing sediments once they are discharged from the sedimentation basin."¹⁵¹ If these studies were performed, the DEIS did not discuss them. The Corps should be seriously considering alternatives that would reduce the overall volume of residues. Reducing the volume of residues coming into the plant clearly meets the purpose and need of the project.¹⁵² The Corps has failed to seriously evaluate dozens of alternatives that would meet this objective of this project. For example, the Corps eliminated further evaluation of any options relating to moving the intake structure or using a different type of coagulant.¹⁵³ "An agency may not 'disregard alternatives because they do not offer a complete solution to the problem.'"¹⁵⁴

170-64-EC

The Corps' failure to consider options that would reduce the volume of solids coming into the plant demonstrates the Corps' inconsistent and arbitrary application of the screening criteria and evaluation of alternatives that would meet the full purpose and need for the project.

170-65-NB

IV. Proposed Mitigation Measures

If the Corps fails to acknowledge the errors of this process, and insists upon proceeding with the dewatering and trucking alternative, it must take the following fundamental measures to mitigate the adverse environmental health and safety impacts of the trucking alternative. At a minimum, the Corps *must* do the following:

- Limit the hours of operation of the dewatering facility to 9 a.m. to 6 p.m.

170-66-GK

¹⁴⁹ 69 Fed. Reg. 1, 698-02 (Jan. 12, 2004).

¹⁵⁰ Draft Permit Fact Sheet, NPDES Permit Reissuance, Washington Aqueduct Water Treatment Plant, Washington DC at 20 (Dec. 17, 2002).

¹⁵¹ *Id.* at 22.

¹⁵² See *Intent to Prepare a Draft Environmental Impact Statement for a Proposed Water Treatment Residuals Management Process for the Washington Aqueduct, Washington, DC*, 69 Fed. Reg. 1698-02 (Jan. 12, 2004).

¹⁵³ See Dec. 2004 Report, tabs. 2-3 and 2-4.

¹⁵⁴ *Nat'l Wildlife Fed'n v. Nat'l Marine Fisheries Serv.*, 235 F. Supp. 2d 1143, 1154 (W.D. Wash. 2002)(citing *Natural Res. Def. Council v. Morton*, 458 F.2d 827, 836 (D.C.Cir. 1972)).

- Require community signoff on the architectural plans for the dewatering facility and take all reasonable steps to minimize the visual impact 170-67-BA
- Share the cost of maintaining roads (the truck hauling routes) with Montgomery County 170-68-GA
- Require the creation of a truck dispersal plan so that the trucks are dispersed over at least three major thoroughfares, only one of which is through Maryland 170-69-GD
- Require that all of the trucks used to dispose of the water treatment residuals be natural gas fueled in order to minimize adverse air quality impacts 170-70-GF
- Require that all truck drivers avoid using compression-braking ("Jake Brakes") or revving of their engines when shifting up to a "double clutch" 170-71-GC
- Require that all trucks be inspected quarterly to ensure that they are well maintained, with quiet mufflers and fully functioning brakes, and that proof of these inspections be maintained on the trucks at all times 170-72-GG
- Limit the hours of trucking to 9 a.m. to 2 p.m. and 4 p.m. to 6 p.m., while prohibiting truck trips during the hours of 7 a.m. to 9 a.m. and 2 p.m. to 4 p.m. (for school safety reasons) 170-73-GK
- Limit truck speed in all neighborhoods to 25 mph 170-74-GA
- Assist local municipalities to install special speed signage, flashing yellow warning lights, speed monitoring machines and increased police presence in all neighborhoods impacted by the trucking option. 170-75-GA

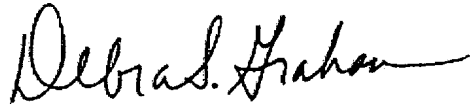
V. Conclusion

The Corps must restart the NEPA process and evaluate a range of reasonable alternatives, including piping to alternative locations, such as the David Taylor facility at Carderock or to private lands. The Corps must revisit the direct and cumulative impacts of its proposed trucking alternative, and properly evaluate and compare the true costs of the trucking alternative with other alternatives. The Corps cannot continue to force trucking on the community as the only reasonable alternative when the public has suggested other alternatives that should be explored further. The Corps must revisit its unduly narrow screening criteria that have improperly relied on the arbitrary deadlines and conditions set forth in the FFCA which have improperly driven this process thus far. Because of the fatal flaws in the NEPA process to date, the Corps must restart that process and develop a comprehensive approach that involves all stakeholders who desire a cost-effective and environmentally sound solution that fulfills the true purpose and need of this project.

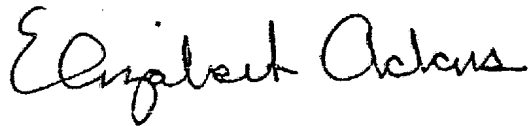
170-76-NG,
DM

Mr. Thomas P. Jacobus
July 5, 2005
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Very truly yours,



Debra Graham
debra_graham@comcast.net



Elizabeth Adams
ElizabethAdams@comcast.net

Attachments

cc: Michael C. Peterson, Environmental Engineer, Washington Aqueduct *(w/o Exhibit 1)*
The Honorable Anthony Williams *(w/o Exhibit 1)*
The Honorable Eleanor Holmes Norton *(w/o Exhibit 1)*
DC Councilperson Kathleen Patterson *(w/o Exhibit 1)*
DC Councilperson Carol Schwartz *(w/o Exhibit 1)*
The Honorable Chris Van Hollen *(w/o Exhibit 1)*
The Honorable Barbara Mikulski *(w/o Exhibit 1)*
The Honorable Paul Sarbanes *(w/o Exhibit 1)*
Montgomery County Councilperson Denis Howard *(w/o Exhibit 1)*
Montgomery County Councilperson Nancy Floreen *(w/o Exhibit 1)*
Montgomery County Planning Board Chairman Derick Bertage *(w/o Exhibit 1)*

July 6, 2005

Michael C. Peterson, Environmental Engineer
Washington Aqueduct

FROM:

RE: Public Comment on Draft Environmental Impact Statement (DEIS)

Below are my brief comments regarding the Draft Environmental Impact Statement (DEIS) for the proposed residuals management process:

- 1 The DEIS residuals management process that proposes a dewatering facility be built and the resulting residuals shipped off site by trucks does not contain any limitations on the amount of residuals produced and the number of trucks that would be used for shipping. The environmental impacts that this DEIS evaluates relies on projected estimates of the amount of residuals expected/projected to be produced now and into the future. It does not discuss any limitations on capacity of the dewatering facility. It appears that should the demand for water go up, the amount of residuals produced would go up along with an unbounded increase in the number of trucks needed to remove the resulting residuals. With no limitations on the capacity of the dewatering facility it is difficult to have faith in any of the estimated impacts (e.g., noise, air quality, public health, transportation, etc.) discussed in the DEIS . 171-1-GE,
EC
2. The DEIS provides little to no discussion regarding plans to reduce the amount of residuals produced at this facility. A great deal more thought should have been put into determining how to reduce the amount of residuals produced by this facility. 171-2-EC
3. There is not discussion in the DEIS of any limits on the number and quality of the trucks that are to be used to ship the residuals off site. There appears to be no specific requirements to assure that the trucks that are being used for shipping are maintained to minimize the amount of emissions produced. There is no discussion of considering or requiring alternative transportation that utilizes cleaner fuels. 171-3-GB
4. There appears to be no consideration of the impact the trucks will have regarding air quality and PM_{2.5} emissions. 171-4-GF

In conclusion, it appears that the DEIS was based on projected estimates of residual output with out any regulated limitations on the capacity of the facility. Without any specific limitations on the amount of residuals that can be produced at the facility or the number or trucks that can enter the D.C and Maryland streets the true environmental/health and safety impact that this

dewatering facility will have on the surrounding community cannot be truly evaluated. The proposal to build a dewatering facility at the plant and to ship the residuals off site using city and county residential streets is in no way optimum plan. It seems that the proposal to ship the residuals through the District of Columbia and Maryland residential arteries is a quick and dirty way to comply with the NPDES permit at the expense of the quality of life of the citizens (e.g., lowering air quality and public safety, and increasing the noise pollution and traffic congestion) not just in the surrounding neighborhoods but all along the transportation corridors proposed in the DEIS. I am certain that if more thought was put into solving the problem of removal of residuals a solution could be found that does not simply solve one problem by creating another.

171-5-GA

Mr. Thomas P. Jacobus
 General Manager
 Washington Aqueduct
 U.S. Army Corps of Engineers, Baltimore District
 5900 MacArthur Blvd., N.W.
 Washington, D.C. 200016

July 5, 2005

Dear Mr. Jacobus:

I live with my family in Westmoreland Hills and am writing to express my concern about the 80-foot industrial dewatering facility you are proposing behind Sibley Hospital (Alternative E) and the impact it will have on my neighborhood. I favor finding a piping solution that will send the residuals to a non-residential area closer to the beltway. I ask you to carefully review and respond to Concerned Neighbors' concerns that:

172-1-IA

- The DEIS contains virtually no analysis of environmental impacts of the Corps' preferred option. 172-2-QB
- The environmental impacts of the Corps' preferred 'trucking alternative' are profound in a region that is already suffering from severe non-attainment under Clean Air Act standards and serious traffic congestion. 172-3-QB
- The Corps' DEIS seriously mischaracterizes the true cost of the 'trucking alternative' by failing to include the cost of operating large diesel trucks indefinitely. 172-4-GI
- The entire process has been flawed, starting with the Corps' failure to involve the community when it started the scoping process for this project in January of 2004. The Corps pre-selected an outcome more than 10 years ago (trucking residuals through our neighborhoods) and crafted the NEPA process to fit their desired outcome. 172-5-ND
- The Corps has looked at a limited range of alternatives, raising concerns that the NEPA process was not properly followed. 172-6-NE

In addition, I am personally concerned about the safety and environmental implications of sending 132 trucks a day through Maryland and DC past at least 10 public and private schools. Your plan to build and operate a major industrial facility would be better suited to a non-residential area where the impact will be minimized.

172-7-GE

Yours sincerely

cc

The Honorable Chris Van Hollen
1419 Longworth House Office Building
Washington, DC 20515

The Honorable Barbara Mikulski
503 Hart Senate Office Building
Washington, DC 20510

The Honorable Paul Sarbanes
503 Hart Senate Office Building
Washington, DC 20510

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

Councilmember Nancy Floreen
100 Maryland Ave, 6th Floor
Rockville, MD 20850

July 4, 2005

Mr. Thomas P. Jacobus
 General Manager
 Washington Aqueduct
 U.S. Army Corps of Engineers, Baltimore District
 5900 MacArthur Blvd., N.W.
 Washington, D.C. 200016

Dear Mr. Jacobus:

We are residents of the Westmoreland Hills neighborhood.

We are writing to express our concern about the 80-foot industrial dewatering facility you are proposing behind Sibley Hospital (Alternative E) and the impact it will have on our neighborhood. We favor finding a piping solution that will send the residuals to a non-residential area closer to the beltway. We ask you to carefully review and respond to Concerned Neighbors' concerns that:

173-1-IA

• The DEIS contains virtually no analysis of environmental impacts of the Corps' preferred option.

173-2-QB

• The environmental impacts of the Corps' preferred 'trucking alternative' are profound in a region that is already suffering from severe non-attainment under Clean Air Act standards and serious traffic congestion.

173-3-QB

• The Corps' DEIS seriously mischaracterizes the true cost of the 'trucking alternative' by failing to include the cost of operating large diesel trucks indefinitely.

173-4-GI

• The entire process has been flawed, starting with the Corps' failure to involve the community when it started the scoping process for this project in January of 2004. The Corps pre-selected an outcome more than 10 years ago (trucking residuals through our neighborhoods) and crafted the NEPA process to fit their desired outcome.

173-5-ND

• The Corps has looked at a limited range of alternatives, raising concerns that the NEPA process was not properly followed.

173-6-NE

In addition, we are personally concerned about

• the environmental impact in a region that is already classified as being in severe non-attainment under the Clean Air Act.

173-7-GF

• the Air impact of trucking and potential increase in the number of asthma or cancer cases resulting from this volume of diesel emissions daily. Our son has asthma and we personally know the triggering effect of environmental factors on asthma.

173-8-KD

• the safety implications of sending 132 trucks a day through Maryland and DC past at least 10 public and private schools.

173-9-GG

Again, we ask that you reconsider this dewatering facility and the impact it will have on the surrounding neighborhoods.

Sincerely,

July 1, 2005

Michael C. Peterson
Washington Aqueduct
5900 MacArthur Blvd, NW
Washington, DC 20016-2514

michael.c.peterson@usace.army.mil

Dear Mr. Peterson,

This letter is in response to the DEIS for the Washington Aqueduct proposal to construct a thickening and dewatering facility nearby to the Brookmont residential enclave. In fact, I oppose strongly the construction of such a plant nearby any residential area.

174-1-IA

I write as a concerned citizen and as a part-time resident of Brookmont. I spent, and have spent, 1 to 3 days a week in my Brookmont residence for the past 15 years. I am concerned that the ACE proposal if acted upon will degrade our neighborhood, as well as the adjacent neighborhoods and roadways. I am also concerned as a citizen that the process for selecting these sites and the means by which the sludge will be disposed was undemocratic in all of its particulars.

174-2-NB

On the matter of air quality:

1. I see no accounting for the routine leakage of truck cargoes, nor any procedure for monitoring that eventuality.

174-3-GA

2. There appears to be no mention of the impact of the degradation of the roadways and its implication for air quality as a result of the truck traffic.

174-4-GF

3. There is no indication that ACE can or will regulate the conditions of the trucks over time.

174-5-GG

4. It is not clear that ACE will engage in routine air monitoring in the plant's location, and what it would do when unhealthy limits of the various pollutants are breached.

174-6-GF

On the matter of hazardous, toxic, and radioactive substances:

5. The various substances present in the incoming water and the dewaterization process must necessarily result in the magnification and accumulation of these undesirable and dangerous substances. How are these to be measured and their health risk determined? Given farmland runoff and the presence of five nuclear power plants to the north, it would appear that the sludge would have to be routinely and very carefully monitored. I

174-7-KA,
KB

believe that more has to be said about these issues. They have not been carefully addressed.

6. No doubt the sludge from dewatering and thickening plants elsewhere has been deposited in landfills or other sites for some time. I saw nothing in the ACE report to indicate that these sites had been studied and found to be perfectly safe.

174-8-KC

On site selection:

7. There is no doubt that the sites selected impinge dramatically on beautiful residential neighborhoods most of which obtained a good part of their value, both monetary and esthetically, by their isolation from the typical problems associated with urban pollution.

174-9-BB

On democratic process:

The presence of a sludge factory here is a serious violation of our privacy and is virtually equivalent to having the government exercising a “right” of eminent domain. The evidence presented by ACE as to the choice of site and the techniques to be used in disposing of the sludge has not achieved a full and honest hearing and investigation... The posting of notices of planning meetings was done in a manner so as to obscure the planning process. Arbitrary deadlines were issued by ACE which in part taunted the citizenry to act as environmental engineers. Instead of engaging in community organizing and inviting representatives from all of the regional organizations, both voluntary and governmental, ACE transformed the decision-making process into an adversarial one.

174-10-ND

In conclusion, I find it especially galling that ACE has failed to take seriously the major alternatives to locating the plant outside the Brookmont area when there are at least three other sites which are nonresidential—Carderock, the WSSC-River Rd plant and the Rockville city plant as well as various technological solutions which could be adopted. In any event, it is apparent that the selection of the Brookmont option is unnecessary and arbitrary

174-11-QC

I would appreciate a direct response to my concerns.

Copies to:

Thomas Jacobus, ACE
 The Honorable Chris Van Hollen
 The Honorable Barbara Mikulski
 The Honorable Paul Sarbanes
 SludgeStoppers

July 5, 2005

Mr. Thomas P. Jacobus
 General Manager
 Washington Aqueduct
 U.S. Army Corps of Engineers, Baltimore District
 5900 MacArthur Blvd. N.W.
 Washington, DC 20016

Dear Mr. Jacobus:

I am writing to express my concern regarding the proposed construction of the industrial dewatering facility behind Sibley Hospital along with your plan to truck the resulting residual waste through the streets of Washington, DC and neighboring Montgomery County. I favor finding a piping solution that will send the residuals to a non-residential area closer to the beltway and would ask that you review and respond to those issues raised by Concerned Neighbors that:

175-1-IA

The DEIS contains nearly no analysis of environmental impacts of the Corps' preferred option.

175-2-QB

The environmental impacts of the Corps' preferred "trucking alternative" are enormous given the region's severe non-attainment under Clean Air Act standards and the serious traffic congestion on the roads proposed for trucking.

175-3-QB

- The true cost of the "trucking alternative" has been under-estimated as the cost of operating large diesel trucks indefinitely has not been included.
- The entire process has been fundamentally flawed, beginning with the Corps' failure to appropriately involve the community when it started the scoping process for this project in January 2004.
- The Corps has summarily explored a limited range of other alternatives raising serious concerns that the NEPA process was not properly followed.

175-4-GI

175-5-ND

175-6-NE

In addition, I have grave concerns regarding the safety of our citizens in a community that has already witnessed more than one recent traffic death and countless other serious traffic accidents involving children and families when you are proposing adding a number of large trucks indefinitely to residential streets never built for this purpose in an area that encompasses more than 10 public and private schools.

175-7-GG

Again, I urge you to reconsider your proposed solution strategy for one that truly will serve the best interests of all stakeholders today and into the future. Thank you.

Sincerely,



Cc: Congressman Chris Van Hollen, Senator Barbara Mikulski, Senator Paul Sarbanes, Councilmember Howard A. Denis, Councilmember Nancy Floreen

Dear Mr. Jacobus:

Monday, July 4th, 2005

We are writing you with some urgency about the 80' high industrial dewatering facility you are proposing behind Sibley Hospital, and the terrible impact it will have on the area and our neighborhood!

We hope you will re-consider and choose a piping solution that would send the residuals to non-residential acreage closer to the Beltway.

176-1-DA,
QD

We and many others are concerned that your Alternative E of your Draft Environmental Impact Statement(DEIS) does not include full analysis of the site, its operating cost, and the health and safety hazards of sending daily well over 100 large, diesel-powered dump-trucks onto already congested Maryland and DC residential streets past nearly a dozen schools, literally thousands of homes, apartments and businesses, and, of course, the Sibley Hospital complex itself.

176-2-QB

(As you know, the region already is in non-compliance with provisions of the Clean Air Act, and we urge you to obtain updated situation and projection reports by the Environmental Protection Agency.)

176-3-GF

Thank you for your consideration.

Sincerely,

Copies to DC Mayor Anthony Williams, DC Delegate Eleanor Holmes Norton, DC Councilmembers Linda Cropp, Kwame Brown, David Catania, Phil Mendelson, Kathy Patterson and Carol Schwartz, Representative Chris Van Hollen, Senators Barbara Mikulski and Paul Sarbanes, and Montgomery County Councilmembers Howard Denis and Nancy Floreen

June 30, 2005

Mr. Thomas P. Jacobus
General Manager
Washington Aqueduct
U.S. Army Corps of Engineer, Baltimore District
5900 MacArthur Blvd., NW
Washington, DC 20016

Dear Mr. Jacobus:

I am tax-paying resident of Glen Echo Heights in Bethesda, MD. I am writing you to provide strong objection with your plans to build a water extraction facility on the Dalecarlia filtration plant grounds either overlooking Little Falls creek above Brookmont (Plan B), or on their 30-acre tract between Dalecarlia Parkway and Little Falls creek, behind Sibley Hospital (Plan E).

177-1-IA

Each of these plans would require numerous 10-ton trucks to travel through my and neighboring communities at the rate of more than one every hour (132 trucks per day). These trucks would take debilitating toll on the roads, traffic, and residential ambience of the neighborhoods along the way to the Capital Beltway.

177-2-GA

I urge to reconsider alternative plans that are less disruptive to these neighborhoods.

Sincerely,



CC: Honorable Chris Van Hollen
Honorable Barbara Mikulski
Honorable Paul Sarbanes

June 30, 2005

Mr. Thomas P. Jacobus
General Manager
Washington Aqueduct
U.S. Army Corps of Engineers, Baltimore District
5900 MacArthur Blvd, N.W.
Washington, D.C. 20016

Dear Mr. Jacobus:

We would like to express our strong opposition to the proposed “sludge” extraction facility proposed by the Army Corps of Engineers. I am informed that the Corps currently is planning on building it on the Dalecarlia filtration plant grounds either overlooking Little Falls creek above Brookmont (Plan B) or on your own tract between Dalecarlia Parkway and Little Falls Creek (Plan E). We are strongly opposed to either of these plans.

178-1-IA

Both of these plans would have trucks with sludge going through residential communities. Our neighborhood associations have done a very thoughtful job of educating us. We know that there are many other solutions which would be environmentally friendlier and which would have the trucks hauling the sludge away using a starting point closer to the Beltway. That way they would not have to travel through densely populated urban areas. In addition, using existing facilities, the Corps would not have to dig a long and expensive trench to the facility.

178-2-QC

We strongly encourage the Corps to carefully consider the alternatives so as not to further damage our communities.

Sincerely,

Cc Chris Van Hollen
Barbara Mikulski
Paul Sarbanes

July 5, 2005

Mr. Thomas P. Jacobus
General Manager
Washington Aqueduct
U.S. Army Corps of Engineers
5900 MacArthur Blvd., NW
Washington, DC 200016

Dear Mr. Jacobus:

As a resident of the Maryland neighborhood behind Sibley Memorial Hospital, I am writing to express my vehement opposition to the 80-foot-tall industrial dewatering facility proposed by the Corps for construction there (Alternative E). I strongly favor a piping solution to send residual waste to a non-residential area in closer proximity to the Capital Beltway. I ask you to carefully review and respond to the concerns raised by the group Concerned Neighbors, in that:

179-1-IA

--The DEIS contains virtually no analysis of environmental impacts of the Corps' preferred option.

179-2-QB

--The environmental impacts of the Corps' preferred 'trucking alternative' are truly profound in a region already suffering from serious traffic congestion and severe non-attainment of Clean Air Act standards.

179-3-QB

--The Corps' DEIS grossly mischaracterizes the true cost of the 'trucking alternative' by failing to include the impact of operating large diesel trucks indefinitely.

179-4-GI

--The entire process has been flawed, starting with the Corps' failure to involve the community at the outset of this project's scoping process in January 2004. It appears that the Corps essentially pre-selected an outcome (i.e., trucking residuals through our neighborhoods) more than 10 years ago and crafted the NEPA process to fit their desired outcome.

179-5-ND

--The Corps has looked at a limited range of alternatives, suggesting that the NEPA process was not properly followed.

179-6-NE

In addition, as a father of young children, I am personally concerned about the safety implications of sending 132 trucks a day through the Maryland suburbs where my family lives. The risks to all of us posed by such heavy traffic, on top of the already full-capacity levels of regular commuter and public transportation through our streets, are intolerable.

179-7-GE

Very truly yours, 

July 5, 2005

Mr. Thomas P. Jacobus
 General Manager
 Washington Aqueduct
 U.S. Army Corps of Engineers, Baltimore District
 5900 MacArthur Blvd., N.W.
 Washington, D.C. 20016-2514
 Or send an e-mail to their environmental manager:
 Michael.C.Peterson@usace.army.mil

Dear Mr. Jacobus:

I am writing to express my concern about the 80-foot industrial dewatering facility you are proposing behind Sibley Hospital (Alternative E) and the impact it will have on my neighborhood. I favor finding a piping solution that will send the residuals to a non-residential area closer to the beltway. I ask you to carefully review and respond to Concerned Neighbors' concerns that:

180-1-IA

- The DEIS contains virtually no analysis of environmental impacts of the Corps' preferred option.

180-2-QB

The environmental impacts of the Corps' preferred 'trucking alternative' are profound in a region that is already suffering from severe non-attainment under Clean Air Act standards and serious traffic congestion.

180-3-QB

The Corps' DEIS seriously mischaracterizes the true cost of the 'trucking alternative' by failing to include the cost of operating large diesel trucks indefinitely.

180-4-GI

The entire process has been flawed, starting with the Corps' failure to involve the community when it started the scoping process for this project in January of 2004. The Corps pre-selected an outcome more than 10 years ago (trucking residuals through our neighborhoods) and crafted the NEPA process to fit their desired outcome.

180-5-ND

The Corps has looked at a limited range of alternatives, raising concerns that the NEPA process was not properly followed.

180-6-NE

In addition, I am personally concerned about...

- Environmental impact in region that is already classified as being in severe non-attainment under the Clean Air Act

180-7-GF

Air impact of trucking and potential increase in the number of asthma or cancer cases resulting from this volume of diesel emissions daily

180-8-KD

The safety implications of sending 132 trucks a day through Maryland and DC past at least 10 public and private schools

180-9-GG

Combined health and safety impacts of having trucks enter the dewatering facility at the same time Sibley Hospital is engaged in a major expansion of its facility

180-10-BI

Sincerely,

CC:

The Honorable Chris Van Hollen
1419 Longworth House Office Building
Washington, DC 20515
<http://www.house.gov/writerep/>

The Honorable Barbara Mikulski
503 Hart Senate Office Building
Washington, DC 20510
<http://mikulski.senate.gov/contactme/mailform.html>

The Honorable Paul Sarbanes
503 Hart Senate Office Building
Washington, DC 20510
<http://sarbanes.senate.gov/pages/email.html>

Councilmember Howard A. Denis
Montgomery County Council
100 Maryland Avenue
Rockville, MD 20850 Councilmember.Denis@montgomerycountymd.gov

Councilmember Nancy Floreen
100 Maryland Ave, 6th Floor
Rockville, MD 20850
Councilmember.Floreen@montgomerycountymd.gov

From:
To: <Mischael C. Peterson @usace.army.mil>
Sent: Monday, July 04, 2005 5:59 PM
Subject: Indistrial dewatering plant

Dear Mr. Peterson:

We are writing you to express our strong concern about the proposed dewatering plant near Sibley Hospital and its impact on Westmoreland Hills, where we live. We note that there has been little or no involvement in this project by those whose lives and property values will be affected by it - i.e. no environmental impact assessment addressing the problems of heavy truck traffic, congestion, air quality, noise and others that we have not been made aware of.

181-1-QB

We understand that one alternative to trucking would be to pipe the residuals to a non-residential area. We would favor such a solution, but again, we have been left in the dark about this possibility.

181-2-GB

Please respond addressing our concerns.

This failed to go through on Email.

7/5/2005



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

JUN 27 2005

Mr. Thomas P. Jacobus *J. P. Jacobus*
General Manager
Washington Aqueduct
U.S. Army Corps of Engineers,
Baltimore District
5900 MacArthur Boulevard, NW
Washington, DC 20016

Re: Draft Environmental Impact Statement for the Washington Aqueduct Residuals Project.
CEQ #20050154

Dear Mr. Jacobus:

In accordance with the National Environmental Policy Act (NEPA), the Council on Environmental Quality (CEQ) regulations (40 CFR 1500-1508), and Section 309 of the Clean Air Act, the Environmental Protection Agency (EPA) has reviewed the Draft Environmental Impact Statement (DEIS) for the above referenced project.

The Washington Aqueduct removes sediment from water drawn from the Potomac River by adding aluminum sulfate as a coagulant. In the past the solids accumulated as part of this process were periodically flushed to the Potomac River. This practice was permitted under the Washington Aqueduct's former National Pollutant Discharge Elimination System (NPDES) permit. Under the current NPDES permit (issued March 19, 2003; amended and re-issued February 27, 2004), the allowable concentration of residuals that may be discharged by Washington Aqueduct to the Potomac River has been significantly reduced to levels consistent with the NPDES permits of other water treatment plants. The NPDES permit allows the Washington Aqueduct to select the method of treatment so long as the effluent limits in the NPDES permit, which were effective immediately, are achieved. EPA and the U.S. Army Corps of Engineers entered into a Federal Facilities Compliance Agreement ("FFCA") to establish a schedule to allow the Washington Aqueduct a reasonable time period to select and install treatment to comply with its NPDES Permit. The FFCA schedule takes into account the Washington Aqueduct's NEPA obligations and related regulations and guidance, as well as the procedures and time lines set out in the Federal Acquisition Regulations, the Department of Defense Acquisition Regulations, and the Department of the Army Acquisition Regulations.

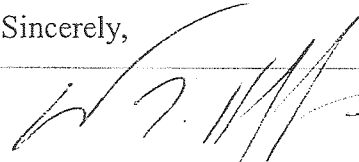
Based on our review of the DEIS, EPA has rated the environmental impacts of Alternatives E, the Lead Agency's preferred alternative, as "EC" (Environmental Concerns) and the adequacy of the impact statement as "1" (Adequate). EPA would also support a combination of alternatives or a phased selection and implementation of treatment alternatives so long as such



an approach is consistent with the requirements of NEPA and achieves the project purpose and need of compliance with the requirements of the NPDES permit within the time frame described in the FFCA. A copy of EPA's ranking system is enclosed for your reference. The basis for these ratings are contained in the attachment to this letter.

Thank you for the opportunity to offer these comments. If you have any questions, please contact Kevin Magerr at (215)814-5724.

Sincerely,

A handwritten signature in black ink, appearing to read 'W. J. Hoffman', written over a horizontal line.

William J. Hoffman, Chief
Environmental Programs Branch

Enclosures



U.S. Environmental Protection Agency National Environmental Policy Act (NEPA)

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Compliance and
Enforcement Home

Environmental Impact Statement (EIS) Rating System Criteria

National
Environmental
Policy Act Home

EPA has developed a set of criteria for rating draft EISs. The rating system provides a basis upon which EPA makes recommendations to the lead agency for improving the draft EIS.

Basic Information

- [Rating the Environmental Impact of the Action](#)

Where You Live

- [Rating the Adequacy of the Draft Environmental Impact Statement \(EIS\)](#)

Newsroom

RATING THE ENVIRONMENTAL IMPACT OF THE ACTION

Environmental Impact
Statements - Notices of
Availability

- **LO (Lack of Objections)** The review has not identified any potential environmental impacts requiring substantive changes to the preferred alternative. The review may have disclosed opportunities for application of mitigation measures that could be accomplished with no more than minor changes to the proposed action.

Submitting
Environmental
Impact Statements

- **EC (Environmental Concerns)** The review has identified environmental impacts that should be avoided in order to fully protect the environment. Corrective measures may require changes to the preferred alternative or application of mitigation measures that can reduce the environmental impact.

Obtaining
Environmental
Impact Statements

Comments on
Environmental Impact
Statements

- **EO (Environmental Objections)** The review has identified significant environmental impacts that should be avoided in order to adequately protect the environment. Corrective measures may require substantial changes to the preferred alternative or consideration of some other project alternative (including the no action alternative or a new alternative). The basis for environmental Objections can include situations:

EPA Compliance with
NEPA

1. *Where an action might violate or be inconsistent with achievement or maintenance of a national environmental standard;*
2. *Where the Federal agency violates its own substantive environmental requirements that relate to EPA's areas of jurisdiction or expertise;*
3. *Where there is a violation of an EPA policy declaration;*
4. *Where there are no applicable standards or where applicable standards will not be violated but there is potential for significant environmental degradation that could be corrected by project modification or other feasible alternatives; or*
5. *Where proceeding with the proposed action would set a precedent for future actions that collectively could result in significant environmental impacts.*

- **EU (Environmentally Unsatisfactory)** The review has identified adverse environmental impacts that are of sufficient magnitude that EPA believes the proposed action must not proceed as proposed. The basis for an environmentally unsatisfactory determination consists of identification of environmentally objectionable impacts as defined above and one or more of the following conditions:

1. *The potential violation of or inconsistency with a national environmental standard is substantive and/or will occur on a long-term basis;*
2. *There are no applicable standards but the severity, duration, or geographical scope of the impacts associated with the proposed action warrant special attention; or*
3. *The potential environmental impacts resulting from the proposed action are of national importance because of the threat to national environmental resources or to environmental policies.*

[Return to Top](#)

RATING THE ADEQUACY OF THE DRAFT ENVIRONMENTAL IMPACT STATEMENT (EIS)

- **1 (Adequate)** The draft EIS adequately sets forth the environmental impact(s) of the preferred alternative and those of the alternatives reasonably available to the project or action. No further analysis or data collection is necessary, but the reviewer may suggest the addition of clarifying language or information.
- **2 (Insufficient Information)** The draft EIS does not contain sufficient information to fully assess environmental impacts that should be avoided in order to fully protect the environment, or the reviewer has identified new reasonably available alternatives that are within the spectrum of alternatives analyzed in the draft EIS, which could reduce the environmental impacts of the proposal. The identified additional information, data, analyses, or discussion should be included in the final EIS.
- **3 (Inadequate)** The draft EIS does not adequately assess the potentially significant environmental impacts of the proposal, or the reviewer has identified new, reasonably available, alternatives, that are outside of the spectrum of alternatives analyzed in the draft EIS, which should be analyzed in order to reduce the potentially significant environmental impacts. The identified additional information, data, analyses, or discussions are of such a magnitude that they should have full public review at a draft stage. This rating indicates EPA's belief that the draft EIS does not meet the purposes of NEPA and/or the Section 309 review, and thus should be formally revised and made available for public comment in a supplemental or revised draft EIS.

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Last updated on Wednesday, April 6th, 2005
URL: <http://www.epa.gov/compliance/nepa/comments/ratings.html>

Detailed Comments
Draft EIS - Washington Aqueduct Residuals Project
June 27, 2005

General Comments

1. Clarity might be improved by grouping the analysis of Noise impacts with the analysis of Transportation impacts. That would allow greater ease of cross-reference for statements such as those related to the frequency of truck traffic.

182-1-GC

2. The Proposed Water Treatment Residuals Management Process - Alternatives Analysis Submitted in Fulfillment of the FFCA (December 2004 document) included a concept for truck traffic (Section 3.31.2). The concept integrated seven haul routes which could provide operational flexibility during changing traffic conditions. Further expressed, this strategy would offer the potential to disperse the volume of traffic over a wider network of roads. It is unclear whether this concept was carried forward in the DEIS, and if not, why not?

182-2-GD

3. The clarity of various discussions in the DEIS of impacts related to alternatives involving trucking could be improved by better consistency with respect to the types of trucks. For example, in Tables 4-1 and 4-2 in Section 4.4, discussing potential air emissions, the discussion of impacts assumes 20 trucks per day, five days per week using 11 cubic yard trucks. The discussion of noise impacts in Section 4.3 does not appear to identify the types of trucks being discussed, and it is not clear from the discussion whether the size of the truck would have an impact on noise. Although not specifically stated, Section 4.11 (transportation impacts) appears to assume use of 22 cubic yard trucks making an average of 8 trips per day up to 33 trips per day under peak conditions. In addition, clarity could be improved by stating whether the number of truck trips per day refers to round-trips to and from the facility or one-way trips from the facility. EPA assumes the reference is to round trips.

182-3-GE

4. EPA disagrees with the conclusion in Section 4.5.3.4 that implementation of Alternative D, the no action alternative, would have no significant impact on Aquatic Resources. Implementation of Alternative D essentially contemplates elimination of or noncompliance with the effluent limits set forth in the Washington Aqueduct's NPDES Permit. In 1996, Whitman, Requardt & Associates estimated an average daily accumulation of aqueous solids in the Dalecarlia sedimentation basins of at least 28,000 pounds and in the Georgetown sedimentation basins at 23,400 pounds. When fully implemented, the NPDES Permit will prevent discharge of these aqueous solids to the Potomac River. Implementation of the NPDES Permit will reduce the pollutant loading to the Potomac River, downstream portions of which are identified as impaired for sediment by Maryland's list of water quality limited segments pursuant to Section 303(d) of the Clean Water Act.

182-4-QB

5. Based on comments shared with EPA, there appears to be considerable public confusion regarding the role of the National Pollutant Discharge Elimination System Permit DC0000019 ("the NPDES Permit") and the Federal Facilities Compliance Agreement ("FFCA") with respect to the project. Accordingly, the EIS could be improved by a more detailed discussion of the project's purpose and need, specifically the need to comply with the NPDES Permit in a timely manner. The NPDES Permit was issued March 19, 2003. (It was amended and re-issued February 27, 2004.) It superseded two previously-issued NPDES permits (NPDES Permit No. DC0000019 (issued April 3, 1989) and NPDES Permit No. DC000329 (issued February 4, 1998)), one of which had been administratively extended beyond its expiration date since 1994.

182-5-QB

The public was given opportunity to comment on the NPDES Permit. EPA published a public notice of a 30-day comment period for the draft permit in the Washington Post and Washington Times on March 28, 2002 and extended this public comment period for an additional 60 days to June 28, 2002. EPA received comments from 52 interested parties. In response to comments received from the public, EPA amended the draft permit and fact sheet and offered a revised draft permit and fact sheet for public comment on December 18, 2002 until January 30, 2003. Notice of the December 2002, public comment period was published in the Washington Post and Washington Times. On January 21, 2003, EPA conducted a public hearing at Sibley Memorial Hospital in Washington, D.C. Three persons offered testimony during the public hearing. EPA received comments from 13 interested parties and the Commonwealth of Virginia.

The NPDES Permit issued in March 19, 2003 imposed effluent limits on the discharges from the Washington Aqueduct to the Potomac River and its tributaries. The NPDES Permit does not prescribe any treatment or recommended option for meeting the imposed effluent limits. Among other things, the NPDES Permit includes technology-based limits on total suspended solids ("TSS") and aluminum consistent with the requirements of the Clean Water Act. Section 301(b)(1)(A) (33 U.S.C. § 1311(b)(1)(A)) requires that all point sources achieve technology-based limits based on "best practicable control technology currently available" no later than July 1, 1977. Section 301(b)(2)(E) (33 U.S.C. § 1311(b)(2)(E)) requires that all point sources discharging "conventional pollutants," such as TSS, implement technology-based limits based on "best conventional pollutant control technology" no later than March 31, 1989. Thus, the effluent limits required in the Washington Aqueduct's NPDES Permit are required and overdue.

Because EPA has not promulgated industry-wide technology-based effluent limitation guidelines for water treatment plants, EPA calculated technology-based discharge limits for the Washington Aqueduct using best professional judgment. 33 U.S.C. § 1342(a)(2). In the course of developing technology-based effluent limits for the Washington Aqueduct, EPA conducted a survey of over 400 water treatment plants located in Region III. The permits for these facilities contained TSS limits similar to, if not more stringent than, the TSS limits that were placed in the Washington Aqueduct's NPDES permit. EPA also considered, among other things, technology transfer information and the fact that the NPDES permit for the nearby Washington Suburban Sanitary Commission Potomac River Water Filtration Plant includes the same limits as those in the Washington Aqueduct permit.

Because the Clean Water Act does not allow EPA to include a compliance schedule delaying attainment of the TSS discharge limits and the aluminum discharge limits in the Washington Aqueduct's NPDES Permit beyond the 1989 statutory deadline, See 33 U.S.C. § 1311(b)(2)(E); 40 C.F.R. §§ 122.47(a) & 125.3(a)(2)(i)(B) & (ii)(B), those permit limits were effective immediately. EPA and the Washington Aqueduct recognized that, in order to implement the NPDES Permit limits, the Washington Aqueduct must install treatment facilities that were not in place and comply with numerous statutory and regulatory requirements, including but not limited to the National Environmental Policy Act ("NEPA"). In other words, EPA and the Washington Aqueduct acknowledged that the Washington Aqueduct could not, as a practical matter, immediately comply with its NPDES permit limits. At the same time, it was recognized that it was impracticable to expect the Washington Aqueduct to cease operations while it selects and installs treatment technology to achieve the effluent limitations in the NPDES Permit because the ongoing operation of the Washington Aqueduct is necessary to provide a continuous supply of drinking water to the residents of Washington, D.C., Arlington County and the customers of the City of Falls Church. Accordingly, EPA and the Washington Aqueduct entered into the FFCA to provide an enforceable compliance schedule for achieving the numeric effluent limitations in NPDES Permit No. DC0000019 as expeditiously as possible and to provide environmentally protective conditions for the interim operation of the facility.

The phrase "voluntary agreement" used by some members of the public with respect to the FFCA reflects confusion regarding the nature of that document. EPA and the Washington Aqueduct entered into the FFCA pursuant to the Clean Water Act, 33 U.S.C. §§ 1251-1387, and Executive Order No. 12088 (Federal Compliance With Pollution Control Standards). The FFCA contains a "plan," as described in Section 1-601 of Executive Order No. 12088, for the Washington Aqueduct to achieve and maintain compliance with the NPDES Permit and the Clean Water Act.

The FFCA requires the Washington Aqueduct to comply with the discharge limitations in its Clean Water Act permit at one or more of the sedimentation basins within the permit term and no later than March 1, 2008 (roughly 60 months after issuance of the permit) and at all basins no later than December 30, 2009 (roughly 79 months after issuance of permit). Although EPA was not required to do so, EPA solicited public comment on the FFCA due to the significant public interest in the Washington Aqueduct. EPA's notice of availability of a draft FFCA and request for public comment was published in the Washington Post and the Washington Times on March 17, 2003. The comment period was 30 days, and EPA received comments from five persons

6. The DEIS includes photographs of current views in Section 3 and the visual simulations in Section 4, thus making comparison of "before" and "after" visuals somewhat more challenging than would seem necessary. Clarity could be improved by placing the photographs of the current views alongside or near the visual simulations for ease of comparison.

182-6-BD

7. Section 4.13 should identify whether there are any schools along any of the proposed trucking routes.

182-7-GD

8. The District of Columbia and the surrounding areas are in non-attainment of the National Ambient Air Quality Standard for Fine Particulate Matter of 2.5 micronmeters (PM2.5). EPA believes that the DEIS should include an analysis of the local PM2.5 impacts, if any, associated with the project.

182-8-GF

9. The Corps should investigate the use of Alum recycling as part of the solids processing facility. EPA recognizes that Alum recycling may present issues in connection with the drinking water process, however the Corps should evaluate whether an in depth analysis is appropriate.

182-9-GB

10. In an effort to minimize air quality issues, the Corps should control or minimize construction emissions through the use of the following Best Management Practices:

182-10-GF

- Utilize appropriate dust suppression methods during on-site construction activities. Available methods include application of water, soil stabilizers, or vegetation; use of enclosures, covers, silt fences, or wheel washers; and suspension of earth-movement activities during high wind conditions;
- Maintain a speed of less than 15mph with construction equipment on unpaved surfaces as well as utilize fuel with low or ultra-low sulfur content;
- Employ a construction management plan in order to minimize interference with regular motor vehicle traffic;
- Use electricity from power poles instead of generators whenever possible;
- Repair and service construction equipment according to the regular maintenance schedule recommended for each individual equipment type;
- Use low-VOC architectural materials and supplies equipment; and
- Incorporate energy-efficient supplies whenever feasible.

11. Noise minimization measures should be implemented during construction. These measures may include:

182-11-GC

- Maintenance of construction equipment and installation of mufflers to reduce noise;
- Time of day restrictions on construction and maintenance activities to eliminated noise during those time of day when it is considered to be most objectionable.

Proposed Site Location

1. One of the proposed sites for the thickening and dewatering facility borders the Capital Crescent Trail on the east. This is also called the Brookmont site, or the Northwest site. This trail is one of the most heavily used recreational trails in the metro area. What will be the noise and odor impact on the trail? The DEIS report states that the dewatering “facility is not expected to alter or influence neighboring land uses” and therefore has no significant long term direct adverse impacts. Can an 80 ft high building that is 258 ft long when the 4 gravity thickeners are included be insignificant to a neighborhood? The DEIS statement shows a lack of attention or accuracy to the true impact on the neighborhood.
2. The second of the proposed sites for the thickening and dewatering facility is located near Sibley hospital, called the East Dalecarlia Processing Site. How will the hours of operation, noise, light, and odor impact patients and visitors? The DEIS describes this site and its proximity to Sibley as making this a “commercial/industrial area”. With all due respect, these 2 uses are not compatible, nor does Sibley Hospital’s presence make this area “industrial”. The DEIS also states that the Corps will be using a cleared site at this location. When was this site cleared? For what reason? Did the Corps have permission to clear cut the trees? The report states that the Administration Building handling the weapons cleanup will be relocated before construction of the dewatering facility can begin. What happens to the weapons cleanup then? Does the Corp move that further into the woods thus having to cut more trees and clear more land? Don’t these 2 projects have incompatible uses? Doesn’t this also put this East site outside the timetable in the Federal Facilities compliance Agreement and thus require that it should have been screened out? In Volume I, section 4.8.3.5 of the DEIS, the Corps refers to trying to find the source of perchlorate contamination. This same section describes encountering an underground concrete building that contains an oily material. Shouldn’t the Corps know what this building is, how large it is, and what the oily substance is before deciding that this site or something near it is the correct site?
3. What will be the actual hours of operation of the facility? Will the hours vary from dry to wet seasons? What is the rationale for trucking more in wet seasons rather than storing the residuals as the Corps does for long periods when the sturgeons are spawning?

7. At the American Association of State Highway and Transportation Officials (AASHTO) annual meeting on April 18-22, Jeff Fontaine, director of Nevada's transportation agency, stated that "**the days of disregarding the community are over.**" (BNA Environment Report, May 6, p. 936).

- Why have you **failed to inform** the communities living adjacent to the preferred trucking routes, who would be most directly impacted by the Corp's trucking option, of your plans to ship up to 132 truckloads of muck a day through their neighborhoods?
- **Where** do your public notices give the communities any **actual notice** of your plans to ship this many **trucks** a day through their neighborhoods?
- Why do you continue to ignore the community?
- Why are you afraid to give the community actual notice of your plans?

8. Have you determined whether any single contractor can provide up to 132 trucks per day? If no single contractor can, how will that limit on availability affect the cost of shipping this volume of muck from the dewatering facility every year?

9. It is our understanding that the Corps intends to use **belt filter presses** rather than centrifuges in the dewatering facility because they are cheaper. Is this understanding correct?

10. According to the 1995 and 1996 reports, **special features will be needed in the trucks** if belt filter presses rather than centrifuges are used in the dewatering facility **in order to minimize seepage from the trucks**. Do existing trucks already have this special design feature? If not, what will be needed to **upgrade** the trucks to minimize seepage of muck onto local roadways? What will be the **cost**? Has this cost been included in the overall cost for the trucking option?

Analysis of Environmental, Safety and Neighborhood Impacts

1. What analysis have you done of the actual environmental impact of sending up to 132 trucks per day through residential neighborhoods? Have you **modeled the air quality impacts** of having these many additional trucks on neighborhood streets indefinitely? If not, why did you fail to run models of the air quality impact?
2. Emissions from trucks contain numerous **air toxics**, such as benzene, 1,3 butadiene, formaldehyde, acrolein, acetaldehyde, and diesel particulate matter.
 - What analysis have you done regarding **increased cancer risk** from these emissions?
 - What analysis have you done regarding the **likely increase in asthma cases**?

183-2-GE,
GF, KD

- What other analysis have you done regarding the likely environmental impact of the emissions from 132 trucks a day upon the air quality of the region?
 - What will this volume of emissions do to the region's existing **non-attainment status**?
 - What impact will these emissions have upon **global warming**?
 - **Where are these impacts discussed in the DEIS?**
3. The Washington DC area is designated as being in **severe non-attainment for ozone**. What impact will operating up to 132 ten ton dump trucks every day have on the region's current non-attainment status? Where is this impact analyzed in the DEIS?

4. Have downwind communities been notified regarding the potential air quality issues?

183-3-GF,
NC

5. The DEIS **fails to consider the large number of schools along the preferred trucking routes**. For example, the DEIS mentions Holton Arms along River Road, but it completely fails to mention the following schools that are located on or near the preferred trucking routes, including the substantial number of **school buses** that use River Road and/or Massachusetts Avenue every day. Other nearby schools include Wood Acres ES, Westbrook ES, Pyle MS, Westland MS, Little Flower School, Primary Day School, Whitman HS, Burning Tree ES, and Landon. What analysis have you done of having this many trucks using River Road or Massachusetts Avenue every day upon the **safety of our children** going to school?

183-4-GG

6. What **safety studies** have you done to assess the impact of this volume of truck traffic upon our neighborhoods and nearby schools? What traffic and safety studies have you done of the impact of this volume of trucks upon **traffic on the Beltway**?

183-5-GD,
GG

7. Michael Savonis, the **air quality leader in the Federal Highway Administration**, has stated that **air toxics** "pose one of the most difficult problems for us from a legal and public health perspective". (BNA Environment Reporter, May 6, p. 936).

183-6-GF

- Do you agree that air toxics must be considered during the NEPA process?
- Have you **consulted with the FHWA** regarding the likely air emissions impacts from this volume of trucks?
- Where in the DEIS did you consider the likely **impact of air toxics** upon the adjacent communities?
- What analysis has been conducted about the **health effects** for those living or working along the proposed truck routes?

8. What **noise studies** have been conducted to quantify the **decibel levels** along the 8 trucking routes, particularly at points of incline along the proposed routes? What is the difference in noise impact if you use 10 ton vs. 20 ton trucks? What other **mitigation measures** are you planning?
9. Has the Corps quantified the **seismic impact** that operating 132 ten ton dump trucks each day will have on homes located along the routes?
10. What are the **likely hours of operation** for the trucks? How were these hours of operation selected?

H

Full Cost of The Trucking Alternative

1. What is the **full cost of both constructing** the dewatering facility and **operating up to 34,000 ten ton trucks per year indefinitely**? **Where are the operating costs for the trucks described in the DEIS**? Have those costs been updated since the studies in 1995 and 1996, when gas cost only \$1.05/gallon? **Why have the annual operating costs for the trucks not been included in the listed "cost" of the trucking option**? If these costs are included, **what is the true cost of the trucking option**?

183-7-GI

2. What sites are being considered as the ultimate disposal site(s) for the residuals? How far away are these disposal sites?

183-8-PA

3. From the studies completed in 1995 and 1996, **isn't it true that the costs of the trucking alternative vary based on the distance of the ultimate disposal location**? How have you taken these costs into consideration in your analysis?
4. What other costs have changed from 10 years ago? For example, fuel was estimated at \$1.05/gallon; the cost is twice that now. What about other costs, such as driver and mechanic salaries, etc.?
5. Some schools buses and other vehicles are required to be **retro-fitted to reduce diesel emissions**. Will any of the proposed dump trucks need to be retro-fitted? If so, has that cost been factored into the analysis?
6. Why has the Corps used **11 year averages** of peak flows as opposed to 20 year average? How will the cost estimates or other projections change if based on 20 years?

183-9-GI

Other Background Questions

1. What provisions in federal **statutes** prohibit the discharge of water treatment residuals into the Potomac River? [none; the permit limits are not required by a statute and can be renegotiated]

2. Has the EPA developed **effluent guidelines** limiting the amount of pollutants discharged by water treatment facilities? [no]

183-10-MA,
JA

3. **Since the Federal Facilities Compliance Agreement is an agreement that you voluntarily entered into with EPA, why have you not renegotiated the deadlines in that agreement? Why have you not asked local members of Congress or the courts to assist you in obtaining an extension in the deadlines if necessary so that you could conduct a proper *environmental impact* analysis under NEPA?**

183-11-ND,
FF

4. What is the true "purpose and need" of this project? Is it to comply with the FFCA or to analyze alternatives to the current Potomac River disposal practices?
- By establishing an unduly narrow "purpose and need" for the EIS process, and inconsistently applying its own unduly narrow screening criteria, the Corps has predetermined the outcome -- trucking the residuals.
 - This unduly narrow purpose and need, together with the inappropriately narrow and inconsistently applied screening criteria, has foreclosed consideration of additional reasonable alternatives.
 - The record demonstrates that the Corps is merely going through the motions of the NEPA process without truly engaging in a meaningful analysis of the environmental impacts of a reasonable range of alternatives.

Communications With Other Agencies

1. Which cooperating federal, state and local **agencies** have you met with to discuss the **air quality impacts** of the trucking option? Have you met with the EPA Region III Air Office? The Maryland Department of the Environment (MDE) Air Quality Office? The DC Department of Health Air Quality office? The FHWA Air Quality Office? The Council of Governments? When did these meetings or conversations first occur? If not, why not?
2. Have you met with federal, state and local **agencies** that have jurisdiction over **road safety** issues? Which ones? When did these meetings or conversations first occur? If not, why not?
3. Have you met with federal, state and local **agencies** that have jurisdiction over **noise concerns**? Which ones? When did these meetings or conversations first occur? If not, why not?
4. From the limited correspondence that is included in the DEIS, it appears that the Corps did not begin to reach out to other interested agencies until **late in 2004 or early 2005**. Why is your **failure to involve "cooperating" agencies** as required by NEPA NOT a breach of the strict procedural requirements of NEPA?
5. What communications have you had with the **Montgomery County Council** about the preferred alternative, trucking? When did these communications occur? What

pipeline, the areas of potential concern identified in Section 3-7 would also need to be taken into consideration. These areas would either need to be avoided or evaluated if this alternative is selected. These potentially hazardous areas might have a possible direct impact on the construction of the pipeline and may pose concern to worker health and safety during construction activities.

A portion of the proposed pipeline route is located along the southwestern shoreline portion of the Anacostia Naval Station and the western shoreline portion of Bolling Air Force Base (AFB). Both facilities have a history of military industrial activities that have left behind old industrial sites and locations where hazardous substances may have been released into the environment. Both facilities currently implement Environmental Restoration Programs designed to identify, investigate, and cleanup former waste disposal sites. The proposed pipeline route is in proximity to environmental cleanup sites on both military installations.

Implementing this alternative will require careful communication with the Environmental Restoration Programs at both bases to determine the precise relationship of the pipeline location to their exact locations of the installation remediation areas.

Blue Plains AWWTP

No known impact on hazardous, toxic, or radioactive substances would be associated with constructing residuals dewatering facilities at this location.

Trucking Routes

See Alternative B discussion above.

Georgetown Reservoir

See Alternative A discussion above.

Dalecarlia Sedimentation Basins

See Alternative A discussion above.

It is our finding that Alternative C would have no significant long-term impact due to hazardous, toxic or radioactive materials, but would have a short-term significant impact with respect to hazardous, radioactive and/or toxic materials.

4.8.3.4 Alternative D—No Action Alternative

If the no action alternative were selected, there would be no impact, since this alternative assumes continued use of the Washington Aqueduct facilities with no changes.

It is our finding that Alternative D would have no impact due to hazardous, toxic or radioactive materials.

4.8.3.5 Alternative E—Dewatering at East Dalecarlia Processing Site and Disposal by Trucking

East Dalecarlia Processing Site

Although perchlorate has been observed in the groundwater in the vicinity of the East Dalecarlia Processing Site, as well as the vicinity of the sedimentation basins at the Dalecarlia WTP, no impact is expected for Alternative E due to perchlorate in the groundwater. Perchlorate is not regulated, however investigations are underway to work toward determining the source of the perchlorate contamination. This investigation is occurring regardless of the residuals project. Construction in the East Dalecarlia Processing

*This is
very light.
Hope you can
read it.
From Vol. 1
Section 4*

SECTION 4--IMPACT EVALUATION

Site will not likely reach the groundwater in this area due to the depth of the water table (greater than 26 feet). Therefore, exposure of workers to perchlorate is not expected.

On March 27, 2005, during the installation of a groundwater monitoring well on Washington Aqueduct property at the east Dalecarlia processing site, drillers encountered a concrete structure below the ground surface containing an oily material. This concrete structure appeared to be a remnant of a demolished Washington Aqueduct building. At the time of this printing, the concrete structure and its contents were under investigation. The location of this structure is outside of the area that would likely be developed for the proposed water treatment residuals processing facilities, and therefore no conflict with alternative E is anticipated. However, Washington Aqueduct will take all steps necessary to satisfy applicable regulations in managing the concrete structure and its contents.

Trucking Routes

See Alternative B discussion above.

Georgetown Reservoir

See Alternative A discussion above.

Dalecarlia Sedimentation Basins

See Alternative A discussion above.

It is our finding that Alternative E would have no impact due to hazardous, toxic or radioactive materials.

4.8.3.6 Forebay Residuals Treatment Option

It is our finding that Forebay residuals treatment option would have no significant impact due to hazardous, toxic or radioactive materials.

4.9 Soil, Geology, and Groundwater Resources

4.9.1 Definition

This section will evaluate the soil, geology and groundwater resources that may be impacted by the proposed alternatives. This section is of particular importance for evaluating the potential impact of constructing and operating the monofill and pipeline. For the monofill, issues related to slope stability, depth to bedrock, and the potential for interaction with existing surface soil and groundwater contamination may affect the facility permitting process and the implementation schedule.

4.9.2 Geology, Soils, and Groundwater Significance Criteria

The impacts associated with each alternative are defined based on one of the following criteria: no impact, no significant impact, or significant impact.

No Impact

A project alternative would be considered to have no impact if it does not result in any disturbance to protected soils, any interface with the groundwater table, any rock excavation, and the soils are suitable to support the proposed facilities.

ANC 3D 04
Testimony on May 17, 2005

Good evening and thank you for the opportunity to provide testimony before you today on the Army Corps' April 15 draft, Environmental Impact Statement for a Proposed Water Treatment Residuals Management Process for the Washington Aqueduct.

The Corps in the January 12, 2004 Federal Register announced this study, the goals of which are to thoroughly explore a broad range of alternatives to the current practice of flushing alum-treated drinking-water residuals into the Potomac River. In the course of determining the scope and content of its study the Corps is to consult widely with local government, community groups and citizens potentially affected by its actions. Despite what may have been its good intentions, the Corps has failed to do this.

184-1-NB,
NC

For several years prior to the EPA's issuance of the National Pollutant Discharge Elimination System (NPDES) Permit that prompted the EIS last January, my predecessor John Finney, who lived within blocks of the Aqueduct as do I, opposed the Aqueduct's efforts to institute trucking on its own.

184-2-IA

Through the Committee for Responsible Urban Disposal at Dalecarlia, or CRUDD, John and others argued that the introduction of a permanent trucking plan would simply replace one environmental bad practice with another equally bad environmental practice, albeit one that does not violate the Clean Water Act.

184-3-GF

With the draft EIS we now see that the trucking plan the Aqueduct was unable to institute on its own it seeks to impose on our neighborhood with the assistance of the very law, the National Environmental Protection Act, intended to protect citizens in a case such as this.

184-4-ND

First, I want to emphasize the Palisades community's longstanding opposition to the use of trucking by the Aqueduct, and to the introduction of any so-called "environmental solution" which will in practice result in the increased industrialization of our neighborhood and the neighborhoods of Spring Valley, and Brookmont and Westmoreland in Maryland.

Second, I want to focus on a significant change in the background conditions for the study which I believe render both Alternative E and Alternative B not only infeasible from a planning perspective but potentially hazardous -- in an imminent sense -- in the 2009 timeframe which we are all considering.

I want to focus on the Corps' recommended approach, Alternative E, which couples trucking to the construction of an 8-story facility behind Sibley Hospital on the north side of Little Falls Road. However all of what I have to say applies equally to Alternative B, which takes the same technical approach but locates the dewatering plant behind the main Aqueduct building to the west of the Crescent Trail.

Both Alternative E and Alternative B rely heavily on the Corps' use of Little Falls Road - - a roughly third-mile stretch of steep roadway which is currently too lightly paved for the carriage of the city's Metro buses -- for the back and forth transport of as many as 66 twenty-ton trucks a day full of residuals.

Those trucks would leave Little Falls Road and exit onto Dalecarlia Parkway, a two-lane rollercoaster of a road where cars routinely and gleefully exceed the 40-mile speed limit and then come screeching to a halt when they reach the stop sign at Loughboro Road.

Last fall two things happened. First, a Washington Business Journal article disclosed that Sibley Hospital has plans for a major renovation and expansion of its facilities in order to remain competitive in the changing market for health care. Sibley will unveil this fall detailed plans for the first phase of a fifteen-year "campus plan" which will eventually increase its patient facilities from the current 230 beds to the hospital's fully-licensed capacity of 328 beds, a 43 percent increase in patient capacity.

Right around the same time, in December, the Aqueduct announced that it would be adding Alternative E to its roster, ostensibly because of the reduced impact on the surrounding residential community.

My central question is this: How can local elected officials and neighbors possibly be expected to assess the impact of these two huge, prospective, capital-intensive and environmentally-intensive plans? The Army Corps is looking at a 2009 horizon, and the hospital is doing its detailed planning on a two- or three-year cycle and developing a larger plan that could extend through 2020.

Sibley executives have briefed a handful of elected officials and neighbors, including two ANC representatives and the president of the Palisades Citizens Association. These briefings, in January and February, included three or four large concept drawings which showed how the multi-year plan would unfold stage by stage. However briefees received no paper copies of anything we were shown. I attended three such briefings in an effort to understand and record for myself how Sibley's "concept" for the future would unfold.

One of Sibley's specific goals, and one which has been welcome by neighbors who have jostled with the hospital for years over issues of noise, lighting and visual camouflaging of the hospital's growing facilities, is the explicit focus on removing a majority of the new facilities to the rear-most -- or most northern -- location on the lot.

I am thus deeply concerned about the potential of any facility across Little Falls Road which could, intentionally or not, in any way reduce the hospital's flexibility with respect to its plans -- again, only conceptual at this stage -- to concentrate its new facilities along the Little Falls side of its property.

Here's what I know of their plans.

- The first step Sibley will take is to make a crook in Little Falls Road right where it leaves Dalecarlia so as to place the road along the back of the hospital's property line with the Army Corps.
- Construction of a three-story enclosed parking facility south of the new Little Falls Road.
- Construction of a 6- to 8-story office facility to the left of the covered garage.
- While Little Falls Road will crook around to the right behind both of those buildings, the hospital entrance itself will continue straight ahead and create an arc that ties into the existing driveway entrance from Loughboro, which is to receive minimal use once the new Dalecarlia entrance is complete
- Construction of a bus terminal on the hospital grounds roughly in front of the doctors' offices to gather all Metro buses into a single pick-up, drop-off and turnaround pad including layover.
- Request for a stop light at the new entrance of Sibley Hospital on Dalecarlia Parkway.

In Phase 2 of the hospital's plan it will tear down the existing auditorium and administrative offices -- once used as housing for nurses -- and begin construction of new patient housing.

All of what I have described to you will happen less than 100 yards from an 80-foot dewatering facility with three truck bays, where at peak times we can expect a truck either entering or leaving the road roughly every seven minutes. Were one to read the draft EIS alone one would have virtually no appreciation for the complexities and fluid conditions surrounding the site.

When I have asked Mr. Jacobus or Sibley chief operating officer Jerry Price why -- as we know the hospital will come before us in the fall to present its Phase 1 plan -- we should not be concerned with the many unknowns including critical traffic and safety issues associated with the interactions of these two prospective projects, I have been told only, "It's going to be fine. We have no problem with it."

I want to believe it. But as the single member ANC commissioner for the immediate neighborhood and as a neighbor of both of these facilities myself, I simply cannot accept this claim. Instead I must insist that Sibley Hospital be compelled to participate in this proceeding and disclose fully all plans and studies it has conducted to date with respect to its future campus plan.

These two major institutions are butted right up against each other, separated by a mere private road. Their relationship is close, which has many benefits and we are all in favor of having good relations with our neighbors and with important institutions of our community. However we also know that the D.C. council in 2002 approved \$40 million in tax-exempt bonds for Sibley to acquire from the Corps a coveted 8.5 acre piece of its campus on which it has since built a multi-story enclosed parking garage.

How close is too close, and where is the data we need -- not about what the traffic is like in and around Little Falls Road today but what it will consist of in 2009 -- to determine whether this collocation will be not only safe but workable for the hundreds of doctors and patients and Metro riders who will enter and exit the site every day?

Again, if the Army Corps insists on constructing an industrial facility behind a leading city hospital, I believe the burden should be on the Aqueduct and the hospital to together present a picture of how this can be done without jeopardizing the safety of the many patients and doctors, the cars, ambulances, Metro buses and even helicopters -- with whom it will be sharing what is essentially the hospital's driveway.

184-5-BI,
GA, GG,
BB

**Statement of
Regarding the Draft Environmental Impact Statement
for a Proposed Water Treatment Residuals Management Process
for the Washington Aqueduct**

May 17, 2005

My name is _____ I am a resident and member of the Overlook Homeowners Association, located in the Westmoreland Hills neighborhood of Bethesda, Maryland.

When I was younger, I resided briefly in a totalitarian country, whose leaders smiled and claimed that their citizens enjoyed a democratically elected government – meaning that the citizens were allowed to vote for the one and only candidate running for a particular office. This process reminds me of that time of my life because, from the outset, there was only one choice. The Corps' Washington Aqueduct has always intended to solve its sludge problem by building a massive sludge processing plant and trucking the sludge on our streets. We have never been offered a real choice in the matter. All the other alternatives are merely straw men. I have never been more keenly aware that none of you [the Corps of Engineers or the Washington Aqueduct] has been democratically elected or accountable to us. For if you were, I have no doubt that you would be voted out of office for both your preferred alternative and the methods by which you have pursued it.

Alternatives B and E

Now, I would like to address some of the issues raised by the proposed trucking alternatives – labeled Alternative B and the Corps' preferred Alternative E. The DEIS states that it will use 8 trucks/day to haul away dried sludge between the hours of 7am to 7pm, five days a week. It further states that this small volume of trucks has no significant impact on noise levels, air quality, traffic conditions, adjacent residential neighbors, or the health safety or welfare of road users.

Volume of Truck Traffic

1. Why do you keep talking about the impact of 8 trucks only? Isn't it true that the 8 truck figure refers only to large 20 ton trucks, going one way only, during the non-wet season? If you count return trips,

wouldn't we be talking about 16 truck trips a day using 20 ton trucks. Moreover, inasmuch as it is more likely that the corps would use 10 ton trucks, aren't we now talking 32 truck trips a day on average during the dry season?

2. During wet weather the the DEIS states that the Corps would need 33 trucks. It is unclear at this point whether the 33 trucks are 10 ton or 20 ton trucks. At a minimum, however, if we include return trips the number balloons to 66 truck trips could occur during the wet weather. Moreover, if the original number of trucks referred to 20 ton trucks and we convert to 10 ton trucks, then it is conceivable that we are looking at 132 truck trips a day during the wet season.
3. Why did you fail to include the environmental impact of the trucks needing to return to the dewatering plant? Why did you only include **one way trips** in your truck counts? Won't these trucks have an environmental, health and safety impact both coming from, and returning to, the dewatering facility? Why did you fail to consider these impacts?
4. How do these revised truck numbers affect the noise levels, air quality, and traffic conditions? Can you really say that 132 trucks or even only 66 trucks per day would have no significant impact on noise, air quality and traffic conditions. 185-1-GA,
GC, GF
5. The DEIS and the earlier 1995 and 1996 studies provided varying data based on dry and wet seasons. **How long will the wet season last**, thereby producing the greatest volume of residuals? 185-2-EC

Full Cost of The Trucking Alternative

1. What is the **full cost of both constructing** the dewatering facility and **operating** up to 132 ten ton trucks per day indefinitely? **Where are the operating costs for the trucks described in the DEIS?** Have those costs been updated since the studies in 1995 and 1996, when gas cost only \$1.05/gallon? **Why have the annual operating costs for the trucks not been included in the listed "cost" of the trucking option?** If these costs are included, **what is the true cost of the trucking option?** 185-3-AB, GI

- Have you notified the different communities along the Virginia trucking routes of your proposal? 185-4-NC
- Have you notified schools along the Massachusetts Route (Route C) of the trucking that will take place as children are walking to and from school? 185-5-NC,
GD
- Why have you **failed to inform** the communities living adjacent to the preferred trucking routes, who would be most directly impacted by the Corp's trucking option, of your plans to ship up to 132 truckloads of muck a day through their neighborhoods? 185-6-NC,
GE
- **Where** do your public notices give the communities any **actual notice** of your plans to ship this many **trucks** a day through their neighborhoods? 185-7-NC
- Why do you continue to disregard the community? 185-8-NC

Hauling Routes

1. Route C – trucks head north on Mass. Ave to Little Falls Parkway fails to consider the volume of pedestrian traffic from the many schools (Westland, Westbrooke, Little Flower), the large population that uses the buses, the proximity of the Little Falls library, and the fact that the intersection of Mass. Ave and Little Falls Parkway is also where pedestrians using the Little Falls Trail cross the street. 185-9-GD,
GG
2. Route B – River Rd route. I avoid this intersection because invariably it takes two cycles of the traffic light to get through it. 185-10-GD
3. Route A – Wisconsin Ave. Route. Inconceivable that this route would be chosen. As it is, citizens at Friendship Heights are up in arms over the increased traffic volume threatened by all the new construction. 185-11-GD
4. Routes heading south on Massachusetts Ave (Routes F, G, and H) are major innudated commuting routes . 185-12-GD





186-1-QA

November 15, 2004

Mr. Tom Jacobus
Chief, Army Corps of Engineers
Dalecarlia Water Treatment Plant
5900 MacArther Blvd
Bethesda, MD 20816

Dear Mr. Jacobus,

SludgeStoppers, a group of concerned citizens, hereby submits the following alternatives regarding the proposed Army Corps of Engineers Washington Aquaduct 'residuals and dewatering facility', aka Sludge Factory. As neighbors, friends, and voters, homeowners, and citizens of the area, we strongly oppose the planned development of a Sludge Factory in a residential neighborhood in Bethesda, or ANY residential neighborhood for that matter. We believe there are many superior alternatives and look forward to working with you to identify and realize such a solution.

The following pages contain 72 possible alternatives for your consideration. As you will see, many of them are variations on a theme, differing only in the size of the pipe, material of the pipe, route, etc. Nonetheless, each and every one is an alternative that should be considered.

We also feel that the time allowed for public submission of alternatives was unjustifiably short, as most residents of the affected area were not aware of or informed about the ACE plans with sufficient time to prepare detailed alternatives. Furthermore, critical information regarding previous studies was withheld.

To this end, we join in the chorus of other groups requesting an extension of 90 days for additional public input. If this decision is not in your hands, we kindly ask that you provide us with the authorities who can make such a decision.

Respectfully submitted,

SludgeStoppers
sludgestoppers@mac.com



SludgeStoppers

of Maryland and DC

Dalecarlia Residuals Alternatives

Because Intrusive Industrial Sludge Factories Don't Belong In Residential Neighborhoods, SludgeStoppers Respectfully Requests That The Army Corps Of Engineers Consider The Below Alternatives:

ID	Alternative Name
1	Single 12" Iron Pipe-in-Pipe Potomac
2	Single 12" Plastic Pipe-in-Pipe Potomac
3	Single 12" Stainless Pipe-in-Pipe Potomac
4	Single 12" Composite Pipe-in-Pipe Potomac
5	Single 6" Iron Pipe-in-Pipe Potomac
6	Single 6" Plastic Pipe-in-Pipe Potomac
7	Single 6" Stainless Pipe-in-Pipe Potomac
8	Single 6" Composite Pipe-in-Pipe Potomac
9	Trio 6-12-6" Iron Pipe-in-Pipe Potomac
10	Trio 6-12-6" Plastic Pipe-in-Pipe Potomac
11	Trio 6-12-6" Stainless Pipe-in-Pipe Potomac
12	Trio 6-12-6" Composite Pipe-in-Pipe Potomac
13	Single 12" Iron Pipe-in-Pipe Rock Creek
14	Single 12" Plastic Pipe-in-Pipe Rock Creek
15	Single 12" Stainless Pipe-in-Pipe Rock Creek
16	Single 12" Composite Pipe-in-Pipe Rock Creek
17	Single 6" Iron Pipe-in-Pipe Rock Creek
18	Single 6" Plastic Pipe-in-Pipe Rock Creek

ID	Alternative Name
19	Single 6" Stainless Pipe-in-Pipe Rock Creek
20	Single 6" Composite Pipe-in-Pipe Rock Creek
21	Trio 6-12-6" Iron Pipe-in-Pipe Rock Creek
22	Trio 6-12-6" Plastic Pipe-in-Pipe Rock Creek
23	Trio 6-12-6" Stainless Pipe-in-Pipe Rock Creek
24	Trio 6-12-6" Composite Pipe-in-Pipe Rock Creek
25	Single 12" Iron Pipe-in-Pipe Potomac Via Main
26	Single 12" Plastic Pipe-in-Pipe Potomac Via Main
27	Single 12" Stainless Pipe-in-Pipe Potomac Via Main
28	Single 12" Composite Pipe-in-Pipe Potomac Via Main
29	Single 6" Iron Pipe-in-Pipe Potomac Via Main
30	Single 6" Plastic Pipe-in-Pipe Potomac Via Main
31	Single 6" Stainless Pipe-in-Pipe Potomac Via Main
32	Single 6" Composite Pipe-in-Pipe Potomac Via Main
33	Trio 6-12-6" Iron Pipe-in-Pipe Potomac Via Main
34	Trio 6-12-6" Plastic Pipe-in-Pipe Potomac Via Main
35	Trio 6-12-6" Stainless Pipe-in-Pipe Potomac Via Main
36	Trio 6-12-6" Composite Pipe-in-Pipe Potomac Via Main
37	Single 12" Iron Pipe-in-Pipe Rock Creek Via Main
38	Single 12" Plastic Pipe-in-Pipe Rock Creek Via Main
39	Single 12" Stainless Pipe-in-Pipe Rock Creek Via Main
40	Single 12" Composite Pipe-in-Pipe Rock Creek Via Main
41	Single 6" Iron Pipe-in-Pipe Rock Creek Via Main
42	Single 6" Plastic Pipe-in-Pipe Rock Creek Via Main
43	Single 6" Stainless Pipe-in-Pipe Rock Creek Via Main
44	Single 6" Composite Pipe-in-Pipe Rock Creek Via Main
45	Trio 6-12-6" Iron Pipe-in-Pipe Rock Creek Via Main

ID	Alternative Name
46	Trio 6-12-6" Plastic Pipe-in-Pipe Rock Creek Via Main
47	Trio 6-12-6" Stainless Pipe-in-Pipe Rock Creek Via Main
48	Trio 6-12-6" Composite Pipe-in-Pipe Rock Creek Via Main
49	Dalecarlia to WSSC Potomac Over Interseptor
50	Dalecarlia to WSSC Potomac Inside Interceptor
51	Dalecarlia to WSSC Potomac Over Raw Water Conduit
52	Dalecarlia to WSSC Potomac In Raw Water Conduit
53	Dalecarlia to WSSC Potomac Via River Rd
54	Dalecarlia to New Carderock Over Interseptor
55	Dalecarlia to New Carderock Inside Interceptor
56	Dalecarlia to New Carderock Over Raw Water Conduit
57	Dalecarlia to New Carderock Inside Raw Water Conduit
58	Dalecarlia to FCWA Corbalis Via Little Falls
59	Dalecarlia to FCWA Corbalis Via Chain Bridge
60	Blue Plains Via Potomac Channel
61	Blue Plains Via Virginia Riverbank From Little Falls Dam
62	Blue Plains Via Virginia Riverbank From Chain Bridge
63	Blue Plains Via Virginia Riverbank From Key Bridge
64	Blue Plains Via GW Parkway From Little Falls Dam
65	Blue Plains Via GW Parkway From Chain Bridge
66	Blue Plains Via GW Parkway From Key Bridge
67	Raw Water Intake Improvements
68	Dalecarlia to Drained Georgetown 2
69	Smart Pumping
70	Georgetown Waterfront CSO Holding Tanks
71	Dalecarlia Campus Alternate Sites
72	Dalecarlia Campus Underground



SludgeStoppers

of Maryland and DC

Dalecarlia Residuals Alternatives

Because Intrusive Industrial Sludge Factories Don't Belong In Residential Neighborhoods, SludgeStoppers Respectfully Requests That The Army Corps Of Engineers Consider The Below Alternative:

Single 12" Iron Pipe-in-Pipe Potomac

1

ID:

Description:

Build a 12" iron pipeline inside the existing Potomac Relief Sewer to the Potomac Pumping Station and continue inside the Potomac Force Mains to Blue Plains WWTP. Use this pipeline to pump unthickened residual to BP and dewater at BP.



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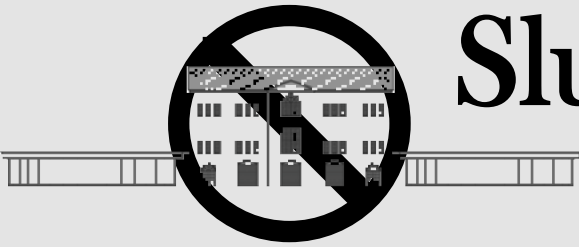
Single 12" Plastic Pipe-in-Pipe Potomac

2

ID:

Description:

Build a 12" HDPE (high density polyethylene) pipeline inside the existing Potomac Relief Sewer to the Potomac Pumping Station and continue inside the Potomac Force Mains to Blue Plains WWTP. Use this pipeline to pump unthickened residual to BP and dewater at BP.



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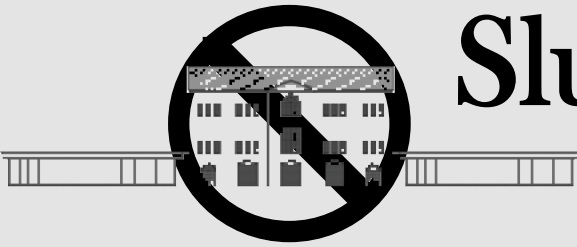
Single 12" Stainless Pipe-in-Pipe Potomac

3

ID:

Description:

Build a 12" stainless steel pipeline inside the existing Potomac Relief Sewer to the Potomac Pumping Station and continue inside the Potomac Force Mains to Blue Plains WWTP. Use this pipeline to pump unthickened residual to BP and dewater at BP.



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Single 12" Composite Pipe-in-Pipe Potomac

4

ID:

Description:

Build a 12" composite pipeline inside the existing Potomac Relief Sewer to the Potomac Pumping Station and continue inside the Potomac Force Mains to Blue Plains WWTP. Use this pipeline to pump unthickened residual to BP and dewater at BP. The emphasis in this alternative is on the use of composite piping that would be impervious to all known sewer environments.



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Single 6" Iron Pipe-in-Pipe Potomac

5

ID:

Description:

Build a 6" iron pipeline inside the existing Potomac Relief Sewer to the Potomac Pumping Station and continue inside the Potomac Force Mains to Blue Plains WWTP. Use this pipeline to pump unthickened residual to BP and dewater at BP.



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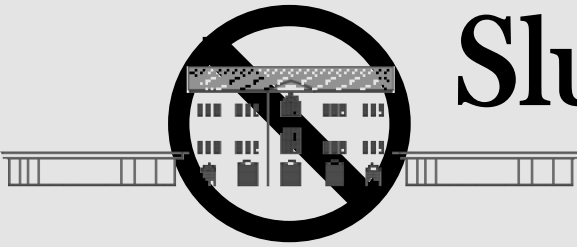
Single 6" Plastic Pipe-in-Pipe Potomac

6

ID:

Description:

Build a 6" HDPE (high density polyethylene) pipeline inside the existing Potomac Relief Sewer to the Potomac Pumping Station and continue inside the Potomac Force Mains to Blue Plains WWTP. Use this pipeline to pump unthickened residual to BP and dewater at BP.



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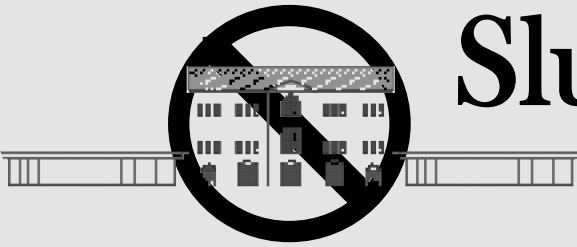
Single 6" Stainless Pipe-in-Pipe Potomac

7

ID:

Description:

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Single 6" Composite Pipe-in-Pipe Potomac

8

ID:

Description:

Build a 6" composite pipeline inside the existing Potomac Relief Sewer to the Potomac Pumping Station and continue inside the Potomac Force Mains to Blue Plains WWTP. Use this pipeline to pump unthickened residual to BP and dewater at BP. The emphasis in this alternative is on the use of composite piping that would be impervious to all known sewer environments.



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Because Intrusive Industrial Sludge Factories Don't Belong In Residential Neighborhoods, SludgeStoppers Respectfully Requests That The Army Corps Of Engineers Consider The Below Alternative:

Trio 6-12-6" Iron Pipe-in-Pipe Potomac

9

ID:

Description:

Build a 6-12-6" trio of iron pipes inside the existing Potomac Relief Sewer to the Potomac Pumping Station and continue inside the Potomac Force Mains to Blue Plains WWTP. Use this pipeline to pump unthickened residual to BP and dewater at BP. The three pipes would be nestled in the crown of the existing conduits and would provide bi-directional redundancy and flexible flow rate capacity.



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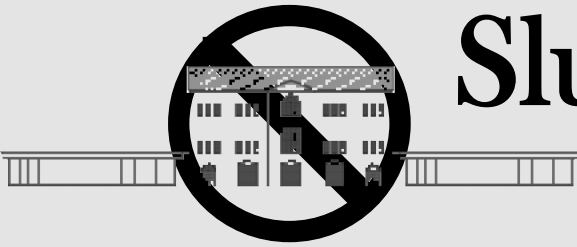
Trio 6-12-6" Plastic Pipe-in-Pipe Potomac

10

ID:

Description:

Build a 6-12-6" trio of HDPE (high density polyethylene) pipes inside the existing Potomac Relief Sewer to the Potomac Pumping Station and continue inside the Potomac Force Mains to Blue Plains WWTP. Use this pipeline to pump unthickened residual to BP and dewater at BP. The three pipes would be nestled in the crown of the existing conduits and would provide bi-directional redundancy and flexible flow rate capacity.



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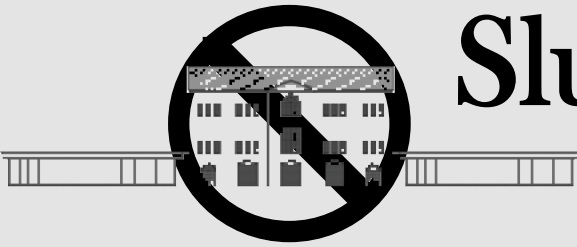
Trio 6-12-6" Stainless Pipe-in-Pipe Potomac

11

ID:

Description:

Build a 6-12-6" trio of stainless steel pipes inside the existing Potomac Relief Sewer to the Potomac Pumping Station and continue inside the Potomac Force Mains to Blue Plains WWTP. Use this pipeline to pump unthickened residual to BP and dewater at BP. The three pipes would be nestled in the crown of the existing conduits and would provide bi-directional redundancy and flexible flow rate capacity.



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Trio 6-12-6" Composite Pipe-in-Pipe Potomac

12

ID:

Description:

Build a 6-12-6" trio of composite pipes inside the existing Potomac Relief Sewer to the Potomac Pumping Station and continue inside the Potomac Force Mains to Blue Plains WWTP. Use this pipeline to pump unthickened residual to BP and dewater at BP. The emphasis in this alternative is on the use of composite piping that would be impervious to all known sewer environments.



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Because Intrusive Industrial Sludge Factories Don't Belong In Residential Neighborhoods, SludgeStoppers Respectfully Requests That The Army Corps Of Engineers Consider The Below Alternative:

Single 12" Iron Pipe-in-Pipe Rock Creek

13

ID:

Description:

Build a 12" iron pipeline inside the existing Upper Potomac Interceptor to the Rock Creek Pumping Station and continue inside the Potomac Force Mains to Blue Plains WWTP. Use this pipeline to pump unthickened residual to BP and dewater at BP.



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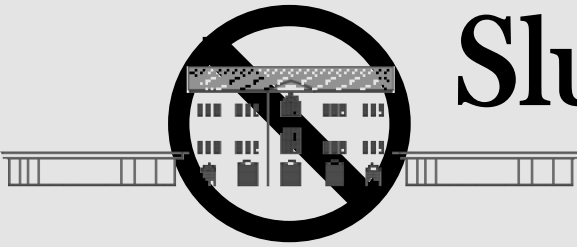
Single 12" Plastic Pipe-in-Pipe Rock Creek

14

ID:

Description:

Build a 12" HDPE (high density polyethylene) pipeline inside the existing Upper Potomac Interceptor to the Rock Creek Pumping Station and continue inside the Potomac Force Mains to Blue Plains WWTP. Use this pipeline to pump unthickened residual to BP and dewater at BP.



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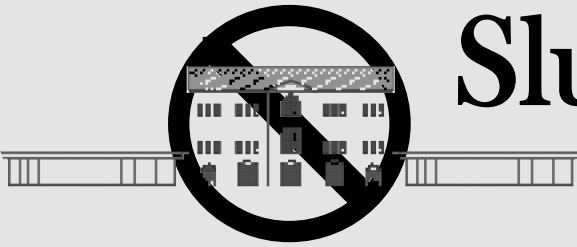
Single 12" Stainless Pipe-in-Pipe Rock Creek

15

ID:

Description:

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Single 12" Composite Pipe-in-Pipe Rock Creek

16

ID:

Description:

Build a 12" composite pipeline inside the existing Upper Potomac Interceptor to the Rock Creek Pumping Station and continue inside the Potomac Force Mains to Blue Plains WWTP. Use this pipeline to pump unthickened residual to BP and dewater at BP. The emphasis in this alternative is on the use of composite piping that would be impervious to all known sewer environments.



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Single 6" Iron Pipe-in-Pipe Rock Creek

17

ID:

Description:

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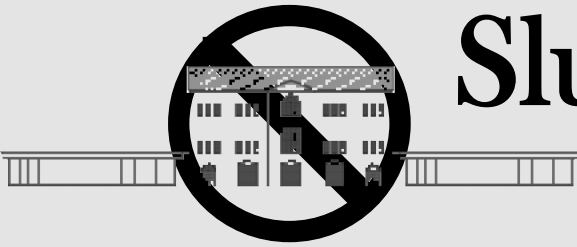
Single 6" Plastic Pipe-in-Pipe Rock Creek

18

ID:

Description:

Build a 6" HDPE (high density polyethylene) pipeline inside the existing Upper Potomac Interceptor to the Rock Creek Pumping Station and continue inside the Potomac Force Mains to Blue Plains WWTP. Use this pipeline to pump unthickened residual to BP and dewater at BP.



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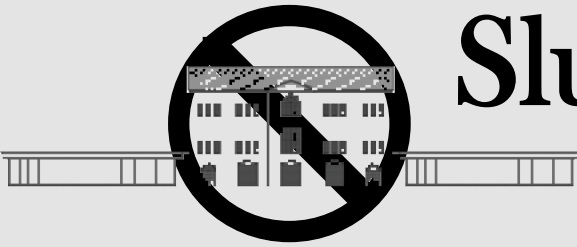
Single 6" Stainless Pipe-in-Pipe Rock Creek

19

ID:

Description:

Build a 6" stainless steel pipeline inside the existing Upper Potomac Interceptor to the Rock Creek Pumping Station and continue inside the Potomac Force Mains to Blue Plains WWTP. Use this pipeline to pump unthickened residual to BP and dewater at BP.



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Single 6" Composite Pipe-in-Pipe Rock Creek

20

ID:

Description:

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Trio 6-12-6" Iron Pipe-in-Pipe Rock Creek

21

ID:

Description:

Build a 6-12-6" trio of iron pipes inside the existing Upper Potomac Interceptor to the Rock Creek Pumping Station and continue inside the Potomac Force Mains to Blue Plains WWTP. Use this pipeline to pump unthickened residual to BP and dewater at BP.



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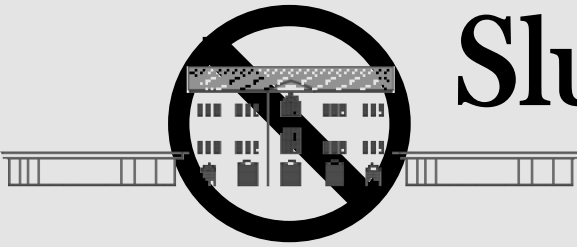
Trio 6-12-6" Plastic Pipe-in-Pipe Rock Creek

22

ID:

Description:

Build a 6-12-6" trio of HDPE (high density polyethylene) pipes inside the existing Upper Potomac Interceptor to the Rock Creek Pumping Station and continue inside the Potomac Force Mains to Blue Plains WWTP. Use this pipeline to pump unthickened residual to BP and dewater at BP.



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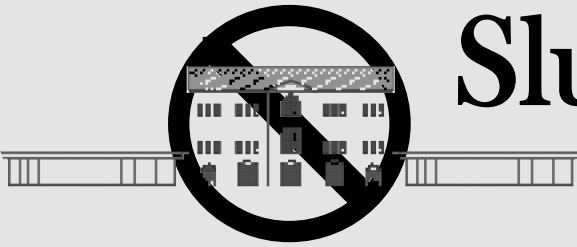
Trio 6-12-6" Stainless Pipe-in-Pipe Rock Creek

23

ID:

Description:

Build a 6-12-6" trio of stainless steel pipes inside the existing Upper Potomac Interceptor to the Rock Creek Pumping Station and continue inside the Potomac Force Mains to Blue Plains WWTP. Use this pipeline to pump unthickened residual to BP and dewater at BP.



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Trio 6-12-6" Composite Pipe-in-Pipe Rock Creek

24

ID:

Description:

Build a 6-12-6" trio of composite pipes inside the existing Upper Potomac Interceptor to the Rock Creek Pumping Station and continue inside the Potomac Force Mains to Blue Plains WWTP. Use this pipeline to pump unthickened residual to BP and dewater at BP.



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Because Intrusive Industrial Sludge Factories Don't Belong In Residential Neighborhoods, SludgeStoppers Respectfully Requests That The Army Corps Of Engineers Consider The Below Alternative:

Single 12" Iron Pipe-in-Pipe Potomac Via Main

25

ID:

Description:

Build a 12" iron pipeline inside the existing Potomac Relief Sewer to the Potomac Pumping Station and continue inside the B Street Trunk Sewer to the Main Sewage Pumping Station then to Blue Plains WWTP. Use this pipeline to pump unthickened residual to BP and dewater at BP.



SludgeStoppers

of Maryland and DC

Dalecarlia Residuals Alternatives

Because Intrusive Industrial Sludge Factories Don't Belong In Residential Neighborhoods, SludgeStoppers Respectfully Requests That The Army Corps Of Engineers Consider The Below Alternative:

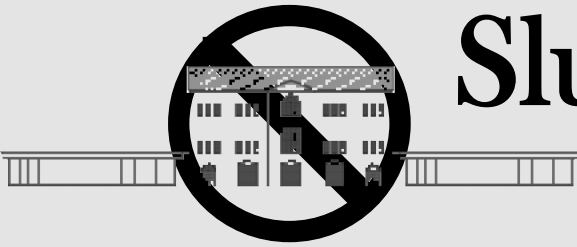
Single 12" Plastic Pipe-in-Pipe Potomac Via Main

26

ID:

Description:

Build a 12" HDPE (high density polyethylene) pipeline inside the existing Potomac Relief Sewer to the Potomac Pumping Station and continue inside the B Street Trunk Sewer to the Main Sewage Pumping Station then to Blue Plains WWTP. Use this pipeline to pump unthickened residual to BP and dewater at BP.



SludgeStoppers

of Maryland and DC

Dalecarlia Residuals Alternatives

Because Intrusive Industrial Sludge Factories Don't Belong In Residential Neighborhoods, SludgeStoppers Respectfully Requests That The Army Corps Of Engineers Consider The Below Alternative:

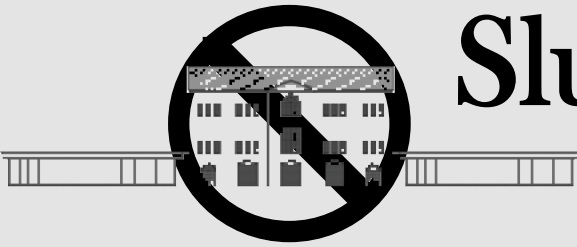
Single 12" Stainless Pipe-in-Pipe Potomac Via Main

27

ID:

Description:

Build a 12" stainless steel pipeline inside the existing Potomac Relief Sewer to the Potomac Pumping Station and continue inside the B Street Trunk Sewer to the Main Sewage Pumping Station then to Blue Plains WWTP. Use this pipeline to pump unthickened residual to BP and dewater at BP.



SludgeStoppers

of Maryland and DC

Dalecarlia Residuals Alternatives

Because Intrusive Industrial Sludge Factories Don't Belong In Residential Neighborhoods, SludgeStoppers Respectfully Requests That The Army Corps Of Engineers Consider The Below Alternative:

Single 12" Composite Pipe-in-Pipe Potomac Via Main

28

ID:

Description:

Build a 12" composite pipeline inside the existing Potomac Relief Sewer to the Potomac Pumping Station and continue inside the B Street Trunk Sewer to the Main Sewage Pumping Station then to Blue Plains WWTP. Use this pipeline to pump unthickened residual to BP and dewater at BP. The emphasis in this alternative is on the use of composite piping that would be impervious to all known sewer environments.



SludgeStoppers

of Maryland and DC

Dalecarlia Residuals Alternatives

Because Intrusive Industrial Sludge Factories Don't Belong In Residential Neighborhoods, SludgeStoppers Respectfully Requests That The Army Corps Of Engineers Consider The Below Alternative:

Single 6" Iron Pipe-in-Pipe Potomac Via Main

29

ID:

Description:

Build a 6" iron pipeline inside the existing Potomac Relief Sewer to the Potomac Pumping Station and continue inside the B Street Trunk Sewer to the Main Sewage Pumping Station then to Blue Plains WWTP. Use this pipeline to pump unthickened residual to BP and dewater at BP.



SludgeStoppers

of Maryland and DC

Dalecarlia Residuals Alternatives

Because Intrusive Industrial Sludge Factories Don't Belong In Residential Neighborhoods, SludgeStoppers Respectfully Requests That The Army Corps Of Engineers Consider The Below Alternative:

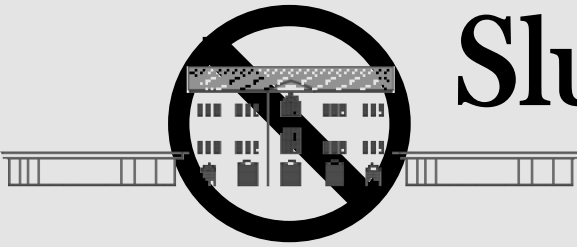
Single 6" Plastic Pipe-in-Pipe Potomac Via Main

30

ID:

Description:

Build a 6" HDPE (high density polyethylene) pipeline inside the existing Potomac Relief Sewer to the Potomac Pumping Station and continue inside the B Street Trunk Sewer to the Main Sewage Pumping Station then to Blue Plains WWTP. Use this pipeline to pump unthickened residual to BP and dewater at BP.



SludgeStoppers

of Maryland and DC

Dalecarlia Residuals Alternatives

Because Intrusive Industrial Sludge Factories Don't Belong In Residential Neighborhoods, SludgeStoppers Respectfully Requests That The Army Corps Of Engineers Consider The Below Alternative:

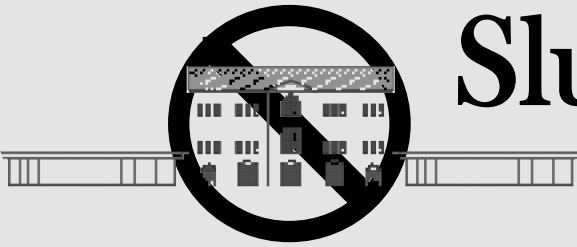
Single 6" Stainless Pipe-in-Pipe Potomac Via Main

31

ID:

Description:

Build a 6" stainless steel pipeline inside the existing Potomac Relief Sewer to the Potomac Pumping Station and continue inside the B Street Trunk Sewer to the Main Sewage Pumping Station then to Blue Plains WWTP. Use this pipeline to pump unthickened residual to BP and dewater at BP.



SludgeStoppers

of Maryland and DC

Dalecarlia Residuals Alternatives

Because Intrusive Industrial Sludge Factories Don't Belong In Residential Neighborhoods, SludgeStoppers Respectfully Requests That The Army Corps Of Engineers Consider The Below Alternative:

Single 6" Composite Pipe-in-Pipe Potomac Via Main

32

ID:

Description:

Build a 6" composite pipeline inside the existing Potomac Relief Sewer to the Potomac Pumping Station and continue inside the B Street Trunk Sewer to the Main Sewage Pumping Station then to Blue Plains WWTP. Use this pipeline to pump unthickened residual to BP and dewater at BP. The emphasis in this alternative is on the use of composite piping that would be impervious to all known sewer environments.



SludgeStoppers

of Maryland and DC

Dalecarlia Residuals Alternatives

Because Intrusive Industrial Sludge Factories Don't Belong In Residential Neighborhoods, SludgeStoppers Respectfully Requests That The Army Corps Of Engineers Consider The Below Alternative:

Trio 6-12-6" Iron Pipe-in-Pipe Potomac Via Main

33

ID:

Description:

Build a 6-12-6" trio of iron pipes inside the existing Potomac Relief Sewer to the Potomac Pumping Station and continue inside the B Street Trunk Sewer to the Main Sewage Pumping Station then to Blue Plains WWTP. Use this pipeline to pump unthickened residual to BP and dewater at BP. The three pipes would be nestled in the crown of the existing conduits and would provide bi-directional redundancy and flexible flow rate capacity.



SludgeStoppers

of Maryland and DC

Dalecarlia Residuals Alternatives

Because Intrusive Industrial Sludge Factories Don't Belong In Residential Neighborhoods, SludgeStoppers Respectfully Requests That The Army Corps Of Engineers Consider The Below Alternative:

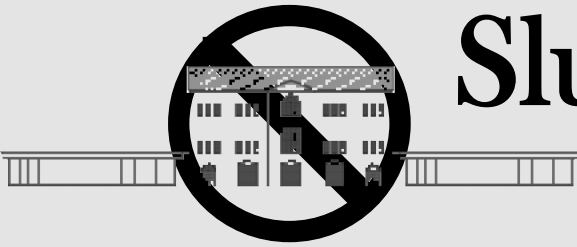
Trio 6-12-6" Plastic Pipe-in-Pipe Potomac Via Main

34

ID:

Description:

Build a 6-12-6" trio of HDPE (high density polyethylene) pipes inside the existing Potomac Relief Sewer to the Potomac Pumping Station and continue inside the B Street Trunk Sewer to the Main Sewage Pumping Station then to Blue Plains WWTP. Use this pipeline to pump unthickened residual to BP and dewater at BP. The three pipes would be nestled in the crown of the existing conduits and would provide bi-directional redundancy and flexible flow rate capacity.



SludgeStoppers

of Maryland and DC

Dalecarlia Residuals Alternatives

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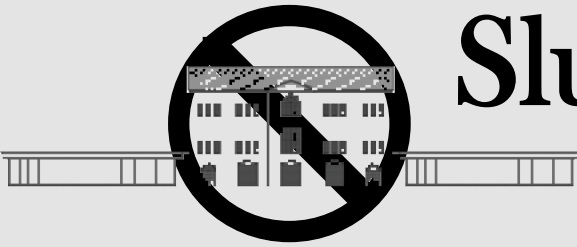
Trio 6-12-6" Stainless Pipe-in-Pipe Potomac Via Main

35

ID:

Description:

Build a 6-12-6" trio of stainless steel pipes inside the existing Potomac Relief Sewer to the Potomac Pumping Station and continue inside the B Street Trunk Sewer to the Main Sewage Pumping Station then to Blue Plains WWTP. Use this pipeline to pump unthickened residual to BP and dewater at BP. The three pipes would be nestled in the crown of the existing conduits and would provide bi-directional redundancy and flexible flow rate capacity.



SludgeStoppers

of Maryland and DC

Dalecarlia Residuals Alternatives

Because Intrusive Industrial Sludge Factories Don't Belong In Residential Neighborhoods, SludgeStoppers Respectfully Requests That The Army Corps Of Engineers Consider The Below Alternative:

Trio 6-12-6" Composite Pipe-in-Pipe Potomac Via Main

36

ID:

Description:

Build a 6-12-6" trio of composite pipes inside the existing Potomac Relief Sewer to the Potomac Pumping Station and continue inside the B Street Trunk Sewer to the Main Sewage Pumping Station then to Blue Plains WWTP. Use this pipeline to pump unthickened residual to BP and dewater at BP. The emphasis in this alternative is on the use of composite piping that would be impervious to all known sewer environments.



SludgeStoppers

of Maryland and DC

Dalecarlia Residuals Alternatives

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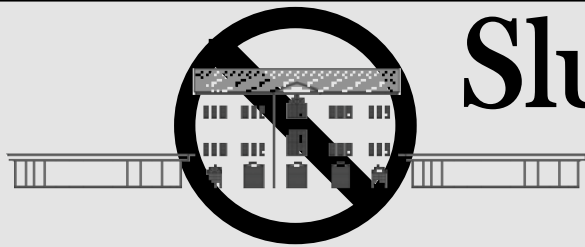
Single 12" Iron Pipe-in-Pipe Rock Creek Via Main

37

ID:

Description:

Build a 12" iron pipeline inside the existing Upper Potomac Interceptor to the Rock Creek Pumping Station and continue inside the B Street Trunk Sewer to the Main Sewage Pumping Station then to Blue Plains WWTP. Use this pipeline to pump unthickened residual to BP and dewater at BP.



SludgeStoppers

of Maryland and DC

Dalecarlia Residuals Alternatives

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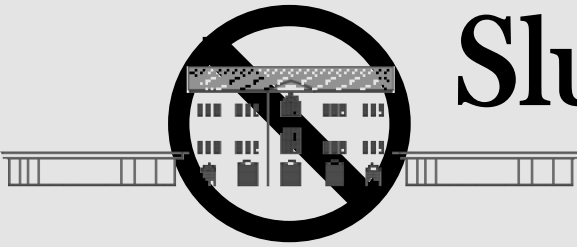
Single 12" Plastic Pipe-in-Pipe Rock Creek
Via Main

38

ID:

Description:

Build a 12" HDPE (high density polyethylene) pipeline inside the existing Upper Potomac Interceptor to the Rock Creek Pumping Station and continue inside the B Street Trunk Sewer to the Main Sewage Pumping Station then to Blue Plains WWTP. Use this pipeline to pump unthickened residual to BP and dewater at BP.



SludgeStoppers

of Maryland and DC

Dalecarlia Residuals Alternatives

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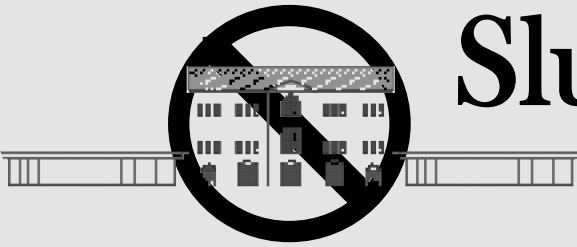
Single 12" Stainless Pipe-in-Pipe Rock Creek Via Main

39

ID:

Description:

Build a 12" stainless steel pipeline inside the existing Upper Potomac Interceptor to the Rock Creek Pumping Station and continue inside the B Street Trunk Sewer to the Main Sewage Pumping Station then to Blue Plains WWTP. Use this pipeline to pump unthickened residual to BP and dewater at BP.



SludgeStoppers

of Maryland and DC

Dalecarlia Residuals Alternatives

Because Intrusive Industrial Sludge Factories Don't Belong In Residential Neighborhoods, SludgeStoppers Respectfully Requests That The Army Corps Of Engineers Consider The Below Alternative:

Single 12" Composite Pipe-in-Pipe Rock Creek Via Main

40

ID:

Description:

Build a 12" composite pipeline inside the existing Upper Potomac Interceptor to the Rock Creek Pumping Station and continue inside the B Street Trunk Sewer to the Main Sewage Pumping Station then to Blue Plains WWTP. Use this pipeline to pump unthickened residual to BP and dewater at BP. The emphasis in this alternative is on the use of composite piping that would be impervious to all known sewer environments.



SludgeStoppers

of Maryland and DC

Dalecarlia Residuals Alternatives

Because Intrusive Industrial Sludge Factories Don't Belong In Residential Neighborhoods, SludgeStoppers Respectfully Requests That The Army Corps Of Engineers Consider The Below Alternative:

Single 6" Iron Pipe-in-Pipe Rock Creek Via Main

41

ID:

Description:

Build a 6" iron pipeline inside the existing Upper Potomac Interceptor to the Rock Creek Pumping Station and continue inside the B Street Trunk Sewer to the Main Sewage Pumping Station then to Blue Plains WWTP. Use this pipeline to pump unthickened residual to BP and dewater at BP.



SludgeStoppers

of Maryland and DC

Dalecarlia Residuals Alternatives

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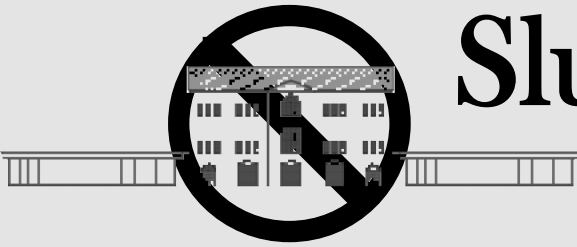
Single 6" Plastic Pipe-in-Pipe Rock Creek Via
Main

42

ID:

Description:

Build a 6" HDPE (high density polyethylene) pipeline inside the existing Upper Potomac Interceptor to the Rock Creek Pumping Station and continue inside the B Street Trunk Sewer to the Main Sewage Pumping Station then to Blue Plains WWTP. Use this pipeline to pump unthickened residual to BP and dewater at BP.



SludgeStoppers

of Maryland and DC

Dalecarlia Residuals Alternatives

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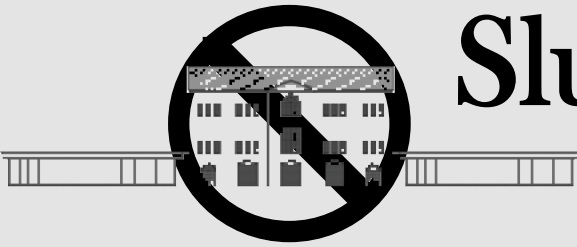
Single 6" Stainless Pipe-in-Pipe Rock Creek
Via Main

43

ID:

Description:

Build a 6" stainless steel pipeline inside the existing Upper Potomac Interceptor to the Rock Creek Pumping Station and continue inside the B Street Trunk Sewer to the Main Sewage Pumping Station then to Blue Plains WWTP. Use this pipeline to pump unthickened residual to BP and dewater at BP.



SludgeStoppers

of Maryland and DC

Dalecarlia Residuals Alternatives

Because Intrusive Industrial Sludge Factories Don't Belong In Residential Neighborhoods, SludgeStoppers Respectfully Requests That The Army Corps Of Engineers Consider The Below Alternative:

Single 6" Composite Pipe-in-Pipe Rock Creek Via Main

44

ID:

Description:

Build a 12" stainless steel pipeline inside the existing Upper Potomac Interceptor to the Rock Creek Pumping Station and continue inside the B Street Trunk Sewer to the Main Sewage Pumping Station then to Blue Plains WWTP. Use this pipeline to pump unthickened residual to BP and dewater at BP.



SludgeStoppers

of Maryland and DC

Dalecarlia Residuals Alternatives

Because Intrusive Industrial Sludge Factories Don't Belong In Residential Neighborhoods, SludgeStoppers Respectfully Requests That The Army Corps Of Engineers Consider The Below Alternative:

Trio 6-12-6" Iron Pipe-in-Pipe Rock Creek
Via Main

45

ID:

Description:

Build a 6-12-6" trio of iron pipes inside the existing Upper Potomac Interceptor to the Rock Creek Pumping Station and continue inside the B Street Trunk Sewer to the Main Sewage Pumping Station then to Blue Plains WWTP. Use this pipeline to pump unthickened residual to BP and dewater at BP.



SludgeStoppers

of Maryland and DC

Dalecarlia Residuals Alternatives

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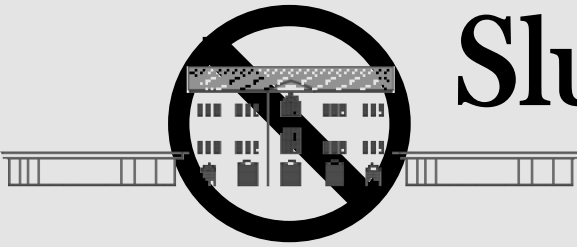
Trio 6-12-6" Plastic Pipe-in-Pipe Rock Creek
Via Main

46

ID:

Description:

Build a 6-12-6" trio of HDPE (high density polyethylene) pipes inside the existing Upper Potomac Interceptor to the Rock Creek Pumping Station and continue inside the B Street Trunk Sewer to the Main Sewage Pumping Station then to Blue Plains WWTP. Use this pipeline to pump unthickened residual to BP and dewater at BP.



SludgeStoppers

of Maryland and DC

Dalecarlia Residuals Alternatives

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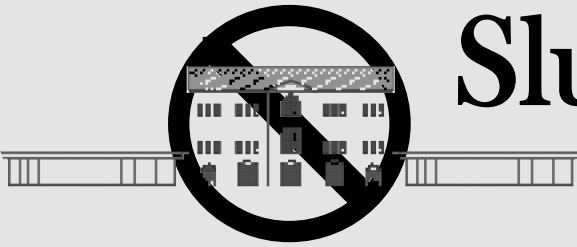
Trio 6-12-6" Stainless Pipe-in-Pipe Rock Creek Via Main

47

ID:

Description:

Build a 6-12-6" trio of stainless steel pipes inside the existing Upper Potomac Interceptor to the Rock Creek Pumping Station and continue inside the B Street Trunk Sewer to the Main Sewage Pumping Station then to Blue Plains WWTP. Use this pipeline to pump unthickened residual to BP and dewater at BP.



SludgeStoppers

of Maryland and DC

Dalecarlia Residuals Alternatives

Because Intrusive Industrial Sludge Factories Don't Belong In Residential Neighborhoods, SludgeStoppers Respectfully Requests That The Army Corps Of Engineers Consider The Below Alternative:

Trio 6-12-6" Composite Pipe-in-Pipe Rock Creek Via Main

48

ID:

Description:

Build a 6-12-6" trio of composite pipes inside the existing Upper Potomac Interceptor to the Rock Creek Pumping Station and continue inside the B Street Trunk Sewer to the Main Sewage Pumping Station then to Blue Plains WWTP. Use this pipeline to pump unthickened residual to BP and dewater at BP.



SludgeStoppers

of Maryland and DC

Dalecarlia Residuals Alternatives

Because Intrusive Industrial Sludge Factories Don't Belong In Residential Neighborhoods, SludgeStoppers Respectfully Requests That The Army Corps Of Engineers Consider The Below Alternative:

Dalecarlia to WSSC Potomac Over Interceptor

49

ID:

Description:

Build a new single, double, or quad pipeline on top of the Potomac Interceptor to the WSSC Potomac Water Filtration Plant for dewatering, considering all applicable sizes - 6", 12", 24" etc, and materials - iron, HDPE, stainless steel, and composite, etc.



SludgeStoppers

of Maryland and DC

Dalecarlia Residuals Alternatives

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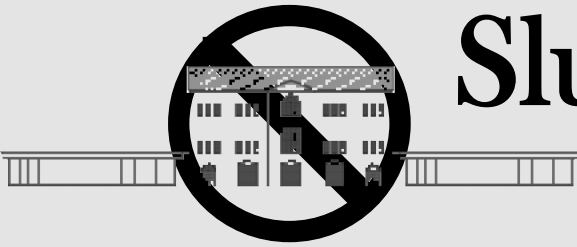
Dalecarlia to WSSC Potomac Inside Interceptor

50

ID:

Description:

Build a new single, double, or quad pipeline inside the Potomac Interceptor to the WSSC Potomac Water Filtration Plant for dewatering, considering all applicable sizes - 6", 12", 24" etc, and materials - iron, HDPE, stainless steel, and composite, etc.



SludgeStoppers

of Maryland and DC

Dalecarlia Residuals Alternatives

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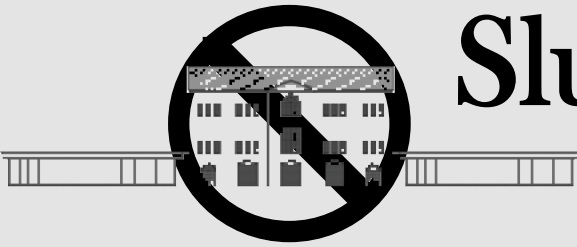
Dalecarlia to WSSC Potomac Over Raw Water Conduit

51

ID:

Description:

Build a new single, double, or quad pipeline over the Great Falls raw water conduits, to the WSSC Potomac Water Filtration Plant for dewatering, considering all applicable sizes - 6", 12", 24" etc, and materials - iron, HDPE, stainless steel, and composite, etc.



SludgeStoppers

of Maryland and DC

Dalecarlia Residuals Alternatives

Because Intrusive Industrial Sludge Factories Don't Belong In Residential Neighborhoods, SludgeStoppers Respectfully Requests That The Army Corps Of Engineers Consider The Below Alternative:

Dalecarlia to WSSC Potomac In Raw Water Conduit

52

ID:

Description:

Build a new single, double, or quad pipeline inside one of the Great Falls raw water conduits, to the WSSC Potomac Water Filtration Plant for dewatering, considering all applicable sizes - 6", 12", 24" etc, and materials - iron, HDPE, stainless steel, and composite, etc.



SludgeStoppers

of Maryland and DC

Dalecarlia Residuals Alternatives

Because Intrusive Industrial Sludge Factories Don't Belong In Residential Neighborhoods, SludgeStoppers Respectfully Requests That The Army Corps Of Engineers Consider The Below Alternative:

Dalecarlia to WSSC Potomac Via River Rd

53

ID:

Description:

Build a new single, double, or quad pipeline along River Road, to the WSSC Potomac Water Filtration Plant for dewatering, considering all applicable sizes - 6", 12", 24" etc, and materials - iron, HDPE, stainless steel, and composite, etc.



SludgeStoppers

of Maryland and DC

Dalecarlia Residuals Alternatives

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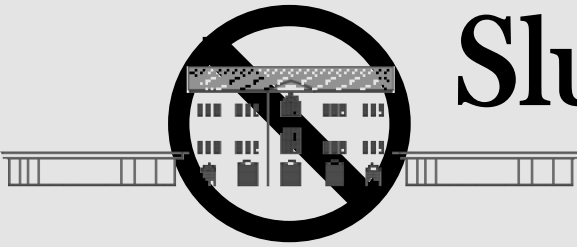
Dalecarlia to New Carderock Over Interceptor

54

ID:

Description:

Build a new single, double, or quad pipeline on top of the Potomac Interceptor to a new thickening and dewatering plant on the Carderock Navel Research Center grounds, considering all applicable sizes - 6", 12", 24" etc, and materials - iron, HDPE, stainless steel, and composite, etc.



SludgeStoppers

of Maryland and DC

Dalecarlia Residuals Alternatives

Because Intrusive Industrial Sludge Factories Don't Belong In Residential Neighborhoods, SludgeStoppers Respectfully Requests That The Army Corps Of Engineers Consider The Below Alternative:

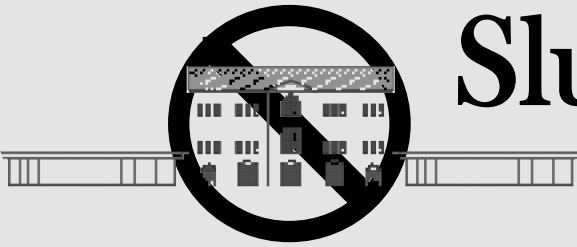
Dalecarlia to New Carderock Inside Interceptor

55

ID:

Description:

Build a new single, double, or quad pipeline inside the Potomac Interceptor to a new thickening and dewatering plant on the Carderock Navel Research Center grounds, considering all applicable sizes - 6", 12", 24" etc, and materials - iron, HDPE, stainless steel, and composite, etc.



SludgeStoppers

of Maryland and DC

Dalecarlia Residuals Alternatives

Because Intrusive Industrial Sludge Factories Don't Belong In Residential Neighborhoods, SludgeStoppers Respectfully Requests That The Army Corps Of Engineers Consider The Below Alternative:

Dalecarlia to New Carderock Over Raw Water Conduit

56

ID:

Description:

Build a new single, double, or quad pipeline above the Great Falls raw water conduit to a new thickening and dewatering plant on the Carderock Naval Research Center grounds, considering all applicable sizes - 6", 12", 24" etc, and materials - iron, HDPE, stainless steel, and composite, etc.



SludgeStoppers

of Maryland and DC

Dalecarlia Residuals Alternatives

Because Intrusive Industrial Sludge Factories Don't Belong In Residential Neighborhoods, SludgeStoppers Respectfully Requests That The Army Corps Of Engineers Consider The Below Alternative:

Dalecarlia to New Carderock Inside Raw Water Conduit

57

ID:

Description:

Build a new single, double, or quad pipeline inside the Great Falls raw water conduit to a new thickening and dewatering plant on the Carderock Naval Research Center grounds, considering all applicable sizes - 6", 12", 24" etc, and materials - iron, HDPE, stainless steel, and composite, etc.



SludgeStoppers

of Maryland and DC

Dalecarlia Residuals Alternatives

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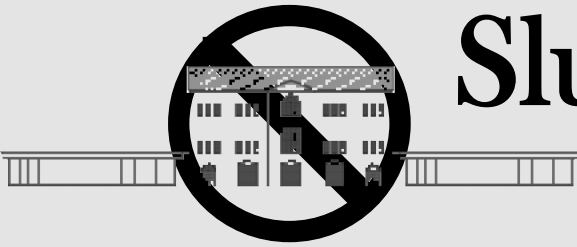
Dalecarlia to FCWA Corbalis Via Little Falls

58

ID:

Description:

Build a new single, double, or quad pipeline across the Potomac at Little Falls dam, to the FCWA Corbalis Water Filtration Plant for dewatering, considering all applicable sizes - 6", 12", 24" etc, and materials - iron, HDPE, stainless steel, and composite, etc.



SludgeStoppers

of Maryland and DC

Dalecarlia Residuals Alternatives

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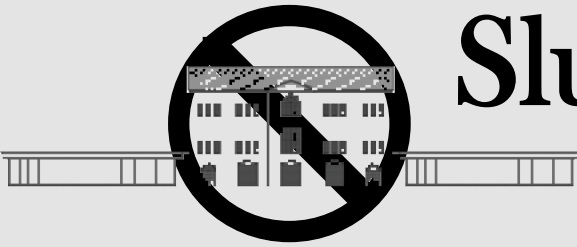
Dalecarlia to FCWA Corbalis Via Chain Bridge

59

ID:

Description:

Build a new single, double, or quad pipeline across the Potomac at the Chain Bridge, to the FCWA Corbalis Water Filtration Plant for dewatering, considering all applicable sizes - 6", 12", 24" etc, and materials - iron, HDPE, stainless steel, and composite, etc.



SludgeStoppers

of Maryland and DC

Dalecarlia Residuals Alternatives

Because Intrusive Industrial Sludge Factories Don't Belong In Residential Neighborhoods, SludgeStoppers Respectfully Requests That The Army Corps Of Engineers Consider The Below Alternative:

Blue Plains Via Potomac Channel

60

ID:

Description:

Build a new single, double, or quad pipeline and lay it in the Potomac Channel from Dalecarlia to Blue Plains for dewatering, considering all applicable sizes - 6", 12", 24" etc, and materials - concrete, iron, HDPE, stainless steel, and composite, etc.



SludgeStoppers

of Maryland and DC

Dalecarlia Residuals Alternatives

Because Intrusive Industrial Sludge Factories Don't Belong In Residential Neighborhoods, SludgeStoppers Respectfully Requests That The Army Corps Of Engineers Consider The Below Alternative:

Blue Plains Via Virginia Riverbank From
Little Falls Dam

61

ID:

Description:

Build a new single, double, or quad pipeline from Dalecarlia, across the Potomac at Little Falls Dam, then down the Virginia riverbank to a river crossing near Blue Plains for dewatering, considering all applicable sizes - 6", 12", 24" etc, and materials - concrete, iron, HDPE, stainless steel, and composite, etc.



SludgeStoppers

of Maryland and DC

Dalecarlia Residuals Alternatives

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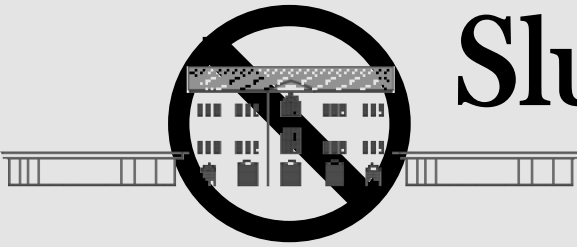
Blue Plains Via Virginia Riverbank From Chain Bridge

62

ID:

Description:

Build a new single, double, or quad pipeline from Dalecarlia, across the Potomac at Chain Bridge, then down the Virginia riverbank to a river crossing near Blue Plains for dewatering, considering all applicable sizes - 6", 12", 24" etc, and materials - concrete, iron, HDPE, stainless steel, and composite, etc.



SludgeStoppers

of Maryland and DC

Dalecarlia Residuals Alternatives

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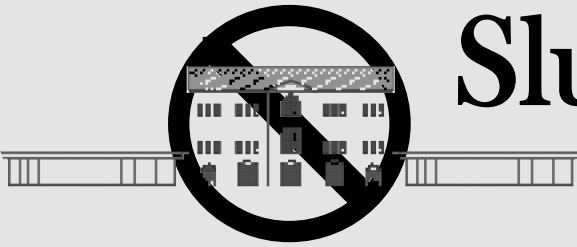
Blue Plains Via Virginia Riverbank From Key Bridge

63

ID:

Description:

Build a new single, double, or quad pipeline from Dalecarlia, across the Potomac at Key Bridge, then down the Virginia Riverbank to a river crossing near Blue Plains for dewatering, considering all applicable sizes - 6", 12", 24" etc, and materials - concrete, iron, HDPE, stainless steel, and composite, etc.



SludgeStoppers

of Maryland and DC

Dalecarlia Residuals Alternatives

Because Intrusive Industrial Sludge Factories Don't Belong In Residential Neighborhoods, SludgeStoppers Respectfully Requests That The Army Corps Of Engineers Consider The Below Alternative:

Blue Plains Via GW Parkway From Little Falls Dam

64

ID:

Description:

Build a new single, double, or quad pipeline from Dalecarlia, across the Potomac at Little Falls Dam, then down the GW Parkway to a river crossing near Blue Plains for dewatering, considering all applicable sizes - 6", 12", 24" etc, and materials - concrete, iron, HDPE, stainless steel, and composite, etc.



SludgeStoppers

of Maryland and DC

Dalecarlia Residuals Alternatives

Because Intrusive Industrial Sludge Factories Don't Belong In Residential Neighborhoods, SludgeStoppers Respectfully Requests That The Army Corps Of Engineers Consider The Below Alternative:

Blue Plains Via GW Parkway From Chain Bridge

65

ID:

Description:

Build a new single, double, or quad pipeline from Dalecarlia, across the Potomac at Chain Bridge, then down the GW Parkway to a river crossing near Blue Plains for dewatering, considering all applicable sizes - 6", 12", 24" etc, and materials - concrete, iron, HDPE, stainless steel, and composite, etc.



SludgeStoppers

of Maryland and DC

Dalecarlia Residuals Alternatives

Because Intrusive Industrial Sludge Factories Don't Belong In Residential Neighborhoods, SludgeStoppers Respectfully Requests That The Army Corps Of Engineers Consider The Below Alternative:

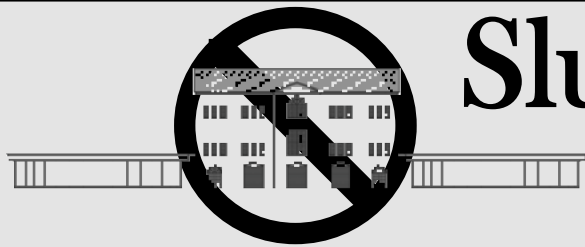
Blue Plains Via GW Parkway From Key Bridge

66

ID:

Description:

Build a new single, double, or quad pipeline from Dalecarlia, across the Potomac at Little Falls Dam, then down the GW Parkway to a river crossing near Blue Plains for dewatering, considering all applicable sizes - 6", 12", 24" etc, and materials - concrete, iron, HDPE, stainless steel, and composite, etc.



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Dalecarlia Residuals Alternatives

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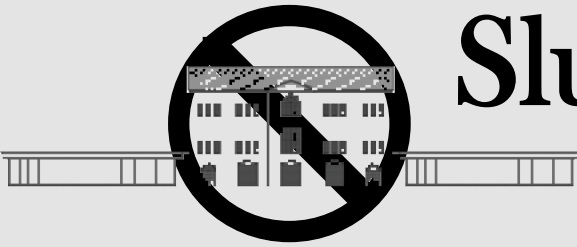
Raw Water Intake Improvements

67

ID:

Description:

Regardless of the residual processing solution selected, efforts should be made to improve the quality (lower the residual content) of the raw water BEFORE it is sent to Dalecarlia. All solutions researched by FCWA for their intake should be reviewed for the Washington Aquaduct.



SludgeStoppers

of Maryland and DC

Dalecarlia Residuals Alternatives

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Dalecarlia to Drained Georgetown 2

68

ID:

Description:

Implement plate settlers or other high efficiency technologies at Dalecarlia and/or Georgetown basins such that Georgetown 2 can be drained and the new thickening and dewatering plant built on the floor of the basin, below grade and out of site.



SludgeStoppers

of Maryland and DC

Dalecarlia Residuals Alternatives

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Smart Pumping

69

ID:

Description:

For any or all piping solutions put forth, investigate the engineering issues associated with 'smart pumping', or the co-utilization of existing pipelines for different purposes, ie: a pressurized sewer line could be used for primary transport, but when needed, would be temporarily converted to a residual pipeline for a day or portion thereof to drain a residual holding tank/basin with the contents being intelligently redirected at the processing plant to the most appropriate treatment facility for the contents.



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Dalecarlia Residuals Alternatives

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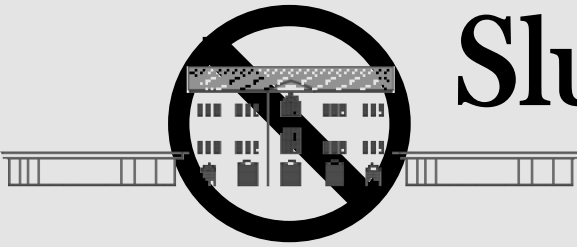
Georgetown Waterfront CSO Holding Tanks

70

ID:

Description:

In conjunction with the DCWASA CIP, utilize or expand upon the current 58 MG Georgetown Waterfront CSO holding tank to store the residual flushes, then dewater the holding tank in a controlled manner via new or existing pumping stations and pipelines to Blue Plains for final processing.



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Dalecarlia Residuals Alternatives

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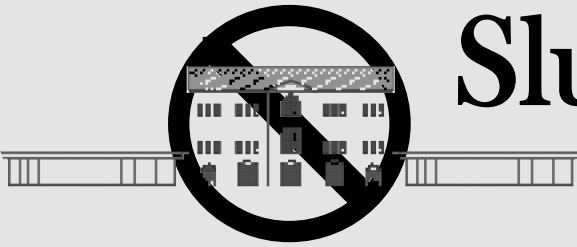
Dalecarlia Campus Alternate Sites

71

ID:

Description:

Only as a last resort, build the thickening and dewatering plant on the Dalecarlia property, but on one of several alternative sites further away from residential property.



SludgeStoppers

of Maryland and DC

Dalecarlia Residuals Alternatives

Because Intrusive Industrial Sludge Factories Don't Belong In Residential Neighborhoods, SludgeStoppers Respectfully Requests That The Army Corps Of Engineers Consider The Below Alternative:

Dalecarlia Campus Underground

72

ID:

Description:

Only as the very last resort, build the thickening and dewatering plant on the Dalecarlia property, but underground. Build the equipment 'floors' in a shaft dug from the back lot metro fill. Dewatered cake could easily be brought to the surface via conveyor belt. The shaft fill would be used to build a high berm surrounding the facility which would be heavily planted.